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Before the Committee on Appropriations

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Fiscal Year 1976

94*th* CONGRESS, FIRST SESSION

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Part 3 DEPARTMENT OF THE NAVY

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETY-FOURTH CONGRESS

FIRST SESSION

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF DEFENSE FOR THE FISCAL YEAR ENDING JUNE 30, 1976, AND FOR OTHER PURPOSES

Printed for the use of the Committee on Appropriations

PART 3—DEPARTMENT OF THE NAVY

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

THURSDAY, FEBRUARY 27, 1975

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m. in room 1223, Everett McKinley Dirksen Office Building, Hon. John L. McClellan (chairman) presiding.

Present: Senators McClellan, Inouye, Young, and Fong.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

STATEMENT OF HON J. WILLIAM MIDDENDORF II, SECRETARY OF THE NAVY

ACCOMPANIED BY:

ADM. JAMES L. HOLLOWAY III, U.S. NAVY, CHIEF OF NAVAL OPERATIONS

GEN. ROBERT E. CUSHMAN, JR., U.S. MARINE CORPS, COMMANDANT OF THE MARINE CORPS

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

MAJ. GEN. W. F. SIMLIK, U.S. MARINE CORPS, FISCAL DIRECTOR OF THE MARINE CORPS

REAR ADM. S. S. FINE, U.S. NAVY, ACTING DIRECTOR OF BUDGET AND REPORTS, OFFICE OF THE NAVY COMPTROLLER

BRIG. GEN. E. R. REID, JR., U.S. MARINE CORPS, LEGISLATIVE ASSISTANT, HEADQUARTERS, MARINE CORPS

CAPT. H. L. TERRY, U.S. NAVY, HEAD, CONGRESSIONAL AND POLICY COORDINATION BRANCH, OFFICE OF CHIEF OF NAVAL OPERATIONS

CAPT. J. J. McHUGH, U.S. NAVY, SPECIAL COUNSEL TO THE CHIEF OF NAVAL OPERATIONS, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

LT. COL. J. E. TOTH, U.S. MARINE CORPS, PLANS DIVISION, HEADQUARTERS, MARINE CORPS

COMDR. J. E. BLASKO, U.S. NAVY, OFFICE OF THE NAVY COMPTROLLER

G. I. LOSE, SPECIAL ASSISTANT, OFFICE OF THE SECRETARY OF DEFENSE (COMPTROLLER)

R. C. GREEN, CONGRESSIONAL AND POLICY COORDINATION BRANCH, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

BUDGET REQUEST

Chairman McClellan. The subcommittee will come to order.

This morning we will hear testimony from the Honorable J. William Middendorf II, Secretary of the Navy; Adm. James L. Holloway III, Chief of Naval Operations; and Gen. Robert E. Cushman, Jr., Commandant of the Marine Corps, in support of the fiscal year 1976 budget request for the Department of the Navy.

Very well, Mr. Secretary, you are our first witness this morning.

PREPARED STATEMENT

Do you have a prepared statement?

Secretary Middendorf. Yes, sir, I do. I have a summary statement, and I have a more complete statement which I would like to submit for the record.

Chairman McClellan. We will let the complete statement, together with your biographical sketch, be printed in full in the record.

[The biography and statement follow:]

THE HONORABLE
J. WILLIAM MIDDENDORF II
SECRETARY OF THE NAVY

J. William Middendorf II was born in Baltimore, Maryland, on 22 September 1924, and received a Bachelor of Naval Science degree from Holy Cross College, Worchester, Mass. in 1945, and a Bachelor of Arts degree from Harvard University in 1947. In 1954 he received an M.B.A. from New York University Graduate School of Business Administration.

His college education was interrupted in 1943 by his enlistment in the U.S. Navy's V-12 Program at Harvard. He transferred to the NROTC program at Holy Cross College in 1944 and was commissioned an Ensign in 1945. He served in the Pacific on board a landing craft (LCS-53) from 1945 to 1946 as an engineering and communications officer, and then returned to Harvard.

In 1969, Mr. Middendorf left a distinguished career as one of America's leading financial specialists to become the U.S. Ambassador to the Netherlands. In this capacity, he conducted an active balance of payments program, promoting American exports of industrial, military, and agricultural goods, receiving the Superior Honor Award from the State Department for his efforts. At the same time, he maintained an active interest in programs and issues where American interests were affected by NATO and European Common Market decisions.

He was appointed Under Secretary of the Navy in 1973 and was sworn into office on 3 August 1973 by Secretary of Defense Schlesinger. He is the first Under Secretary of the Navy to hold a Naval Science Degree. One of his direct ancestors, Captain William Stone, was one of America's first naval officers, commanding the original HORNET, which is believed to be the first ship of the new Continental Navy to put to sea (February 1776).

Mr. Middendorf is a composer of music and has written a number of symphonies and marches, one being "The Holland Symphony" written for Queen Juliana of the Netherlands and played over Dutch National T.V. The marches were written for the Navy and the Marine Corps after he became Under Secretary of the Navy.

He is Chairman of the Board, Wolf Trap Foundation, a private, non-profit foundation established at the request of the Secretary of the Interior to be in charge of all selection and presentation of programs given at Wolf Trap Farm Park for the Performing Arts, the Nation's first and only national park dedicated to the performing arts.

Mr. Middendorf is married to the former Isabelle Paine of Newton, Mass. They have five children, Frances, Martha, Amy, John W. IV, and Ralph Henry.

Mr. Middendorf became Acting Secretary of the Navy on 8 April 1974. On 15 May 1974 he was nominated by President Nixon to be the Secretary of the Navy. He was confirmed by the Senate on 6 June and assumed office on 10 June 1974.

STATEMENT OF THE HONORABLE J. WILLIAM MIDDENDORF II

Mr. Chairman

It is a great privilege to make my first report to you on the Department of the Navy's proposed budget for fiscal year 1976, the transition period beginning 1 July 1976 and ending 30 September 1976 (FY-7T), and the authorization request for Fiscal Year 1977. Accompanying me are Admiral J. L. Holloway III, The Chief of Naval Operations, and General R. E. Cushman, Jr., The Commandant of the Marine Corps. Together we will provide an overview of Navy and Marine Corps programs and their budgetary implications. It is also our intention to report on the current posture of the Navy and Marine Corps, to share our concerns, and articulate the challenges as we see them.

The role of the Navy and Marine Corps, as it is with each of the other Services, is to support national policy in the common defense of our country, its people and our vital interests. Historically, the three principal naval missions have been control of the sea, projection of power ashore and the overseas presence of our forces in time of peace. Since the Korean War, a fourth naval mission, that of strategic deterrence, has been an added requirement of national military strategy. The Executive Branch shares with the Congress a constitutional responsibility for successful fulfillment of these tasks and, to this end, I value the advice, counsel, and support of this Congressional body.

Some may ask, why do we need sea power? I believe, and history attests, that the answer is clear and compelling. First, United States sea power is a

uniquely flexible tool for implementing national policy and offers these singular advantages:

- o The ability to operate without diplomatic constraints, base rights, overflight privileges or the pressures of host countries.
- o The ability to move wherever national interests dictate, and without prior agreement from any foreign power, a credible military force over 71% of the earth's surface and project power ashore to areas which contain 85% of the world's population.
- o The ability to provide Military Presence without an automatic commitment of forces.
- o The ability to clearly demonstrate U.S. interests and capability, without disclosing precise intentions.

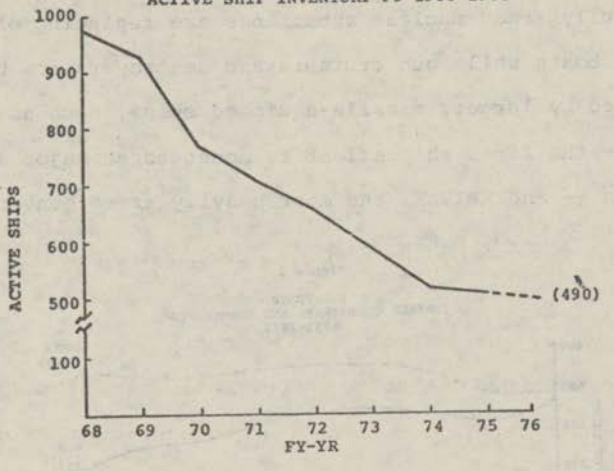
Additionally, the United States is growing increasingly dependent on foreign sources of raw materials and energy. Of 71 strategic raw materials and metals which are vital to the economic base of our country, 68 are imported, all or in part, by sea. In 1973, for example, the U.S. imported more than 50 million tons of these strategic raw materials valued in excess of $4B. In 1974 our energy imports were valued at approximately $25B; we imported more than 2 billion barrels of crude oil and refined products supplying 35% of our oil demands. Almost all of this came to us by sea.

At the end of World War II, the United States Navy and Marine Corps team was the largest and strongest of its kind in the world. Its ability to control the seas and project power ashore was undisputed. In the years that followed, the United States retained a position of

naval preeminence, despite a reduction in force levels. Although we built our first surface-to-air guided missile ships during the Korean War, the war was fought with World War II vessels. In the post-Korean period, Soviet development of nuclear weapons caused strategic requirements to become dominant. We spent vast sums of money in building a ballistic missile submarine fleet. This expensive program was followed by a decade-long period during which our attention was focused on supporting national policy in Southeast Asia. Southeast Asia operations absorbed the money and attention which might otherwise have been given to a fleet modernization program. In 1968, for instance, our fleet of 976 ships had attained an average age of 18 years. It was clear that fleet modernization was overdue, but it was also recognized that funding a fleet modernization program while maintaining force levels would be difficult because of changing national priorities and attitudes. Accordingly, a conscious decision was made to accept the short term risk involved in reducing force levels by decommissioning the ships approaching retirement age, and using the money which resulted from that action to build more powerful ships, albeit fewer in number. As a result, since that time, we have experienced a marked decline in our ship force level (see Figure 1). We have dropped from an active fleet of 976 ships in 1968 to a projected active force level of 502 ships on 30 June of this year. Our present Navy has the fewest number of ships in the active fleet since a year and a half before Pearl Harbor. Next year the Navy is projected to dip below a force level of 500.

Figure 1

ACTIVE SHIP INVENTORY FY 1968-1975

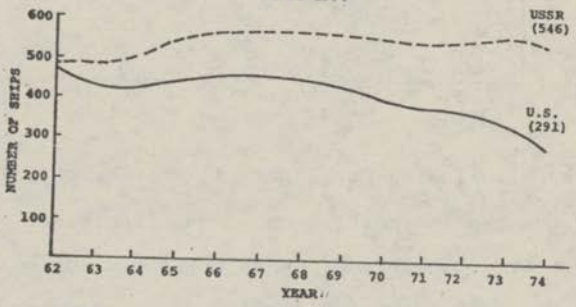


In the years following World War II, the Soviet Union significantly changed its perception of the importance of sea power. Formerly, the primary mission of the Soviet Navy was to serve as a coastal defense force in support of Soviet land forces. It had a large number of small ships and submarines which did not conduct extended world-wide operations. However, in the intervening years, and especially after the Cuban Missile Crisis in 1962, an intensive effort was made to build forces which could serve as an instrument of Soviet national power in peace-time, as well as deny United States control of the sea in wartime. Admiral Gorshkov, Commander-in-Chief of the Soviet Navy, has stated that his aim is not to challenge the United States Navy for worldwide domination, but to be able to achieve local superiority when required. Since 1970, the Soviet Navy has not grown in overall numerical strength, but has made giant strides in improving its capabilities to match its expanded missions. Figure 2 shows the comparative totals of U.S. and USSR surface

combatants and submarines for 1962-1974. Larger, more powerfully armed nuclear submarines are replacing older diesel boats while gun cruisers and destroyers are being replaced by larger, missile-equipped ships, such as KARA -- the first ship afloat to mount three major missile systems -- and KRIVAK, the most heavily armed conventional

Figure 2

U.S./USSR
SURFACE COMBATANTS AND SUBMARINES
1962-1974

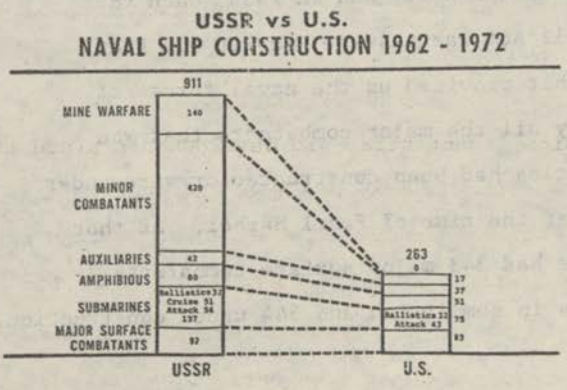


surface ship in any navy displacing less than 4,000 tons. Soviet ships, submarines, and aircraft mount a formidable antiship cruise missile capability. Only our carrier force can presently "out gun" the Russian surface-to-surface missile capability. In the air warfare area, the Russians have started producing a second generation ship designed primarily for carrying aircraft, the KIEV class, a clear signal that this warfare area, too, will not escape Soviet competition. The Soviets have an eminently powerful, offensive Navy, whose expanded capabilities I view as one of the most significant strategic developments since the end of World War II. They have expanding capabilities not only in navy, but in merchant marine, fisheries and oceanographic research areas as well. The Soviet Union has increased operations of its fleet in out-of-home areas by fifty percent in the last six years. They have

established, where none existed ten years ago, a continuous naval presence in the Mediterranean Sea and the Indian Ocean, as well as a growing naval presence in the strategically important Caribbean Sea and waters near the coast of West Africa. Soviet nuclear submarines armed with long range nuclear strategic missiles regularly patrol our coasts and their surface ships deploy to every corner of the world's oceans. The mid-September visit of a Soviet naval task force to Cuba marked the twelfth such deployment since 1969 and represents a dramatic example of the Soviet Navy's expanding blue water capability. There is direct and abundant evidence that the Soviets have fully embraced the concept of sea power and have established themselves as a major maritime power.

Analysis of U.S. and Soviet military production rates indicates that the Soviets are quantitatively outproducing us in all but a few categories of military equipment. During the ten year period 1962-1972, for instance, the USSR outbuilt us in every category of ship, except aircraft carriers, and overall by a margin of 3.5 ships to 1.0. Figure 3 shows this comparison.

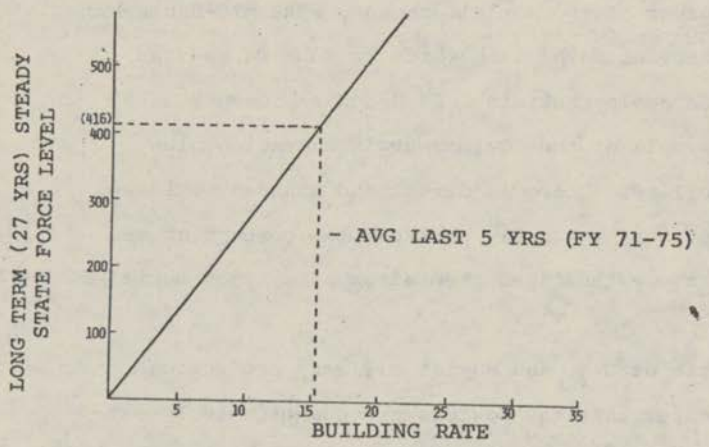
Figure 3



During the past five years, FY 71-75, Congress has authorized a Navy shipbuilding program averaging 15.4 ships per year. Figure 4 shows that this building rate will sustain a fleet size of just 416 ships.

Figure 4

FORCE LEVELS VS BUILDING RATES
(AVG SHIPLIFE 27 YRS)



Where do we stand? We are at the crossroads of naval construction history. We have less ships than we had in 1940. The Soviet Navy has nearly twice as many major surface combatants and submarines as we do. We have a situation that somewhat parallels the naval posture this country had in 1934, when the Vinson-Trammell Act was passed. For it was that legislation that provided us the naval forces of WWII as nearly all the major combatants that won the naval battles had been constructed or were under construction at the time of Pearl Harbor. At that time, 1941, we had 343 major surface combatants and submarines in commission and 344 under construction.

The combined effects of our recent reduction in force levels and low building rate, if allowed to go uncorrected, would be tantamount to an abandonment of United States naval preeminence. Congressional support for the Department of the Navy's current construction plan (i.e., 23 ships in FY-76, 30 in FY-77) is essential if we are going to rebuild the fleet and diminish the risk that was temporarily accepted when the total fleet number was almost halved.

Historically, the fortunes of nations have prospered and their international relations have flourished with the help of strong navies that were able to defend their home shores, their commerce, and their political interests abroad. The strength of our Navy is central to our nation's role of Free World leadership. Our preeminence in naval power has continued unchallenged for three decades...until now. While we have not been challenged in conflict, we are being challenged in world opinion as Soviet naval forces display increasing presence and capability in the oceans of the world. While I think Americans see the danger of permitting our edge of naval superiority to decline, they may not fully appreciate the diminishing trend in the numbers of our naval forces and the concurrent increase in the capabilities of the Soviet Fleet. In addition, there are obvious growing interests in ocean resource development taking place throughout the world, and, it must be clearly recognized that our Navy's lead in ocean engineering may be outdistanced in the face of the flourishing ocean technology of

other nations determined to add that same dimension of sea power to their economic and military capabilities. In view of these growing challenges, I believe our Nation cannot afford any diminution of the fleet modernization program.

LONG TERM CONCERNS

FORCE LEVELS

Inflation

I have described the decision reached by Navy planners to reduce force levels so that the money saved could be devoted to a fleet modernization program. The benefits we expected from this "money saved" have not been fully realized, since our previous programs, for FY-75 and prior, have been hard hit by the inflation which has impacted on our overall national economy.

Various costing index clauses are incorporated into our shipbuilding contracts. Two of the primary indices, provided by the Bureau of Labor Statistics (BLS) measure the changes in shipbuilding material and labor costs. In June 1974, based upon mid-year data, it was estimated that the shipbuilding industry would have an overall combined labor and material cost growth of 11.25%. Two months later revised BLS indices showed a shipbuilding growth of 15.7% with material costs alone escalating to an unprecedented 22.7% rate of growth. As a result, real program values under a level fiscal funding profile have declined; we simply do not have the purchasing power we had predicted.

I have used shipbuilding industry trends to highlight how seriously inflation is hitting the Navy, but all procurement programs are similarly affected. Our principal

need is to retain the momentum we have only just begun to realize in the Navy's ship and aircraft modernization programs.

TITLE VIII

I would like to comment on the Department of Defense Appropriation Authorization Act of 1975 (Public Law 93-365) which contains the new and significant TITLE VIII section entitled "Nuclear Powered Navy." This law applies to aircraft carriers, major surface combatants which may either support aircraft carriers or operate independently, and strategic and attack submarines. The true funding impact of TITLE VIII must be recognized in the Navy shipbuilding appropriation. Nuclear ships are more expensive to build. Depending on the type of ship, the initial construction cost is 30 - 50% more than a conventionally powered ship with the same weapons system. This higher initial cost includes the expense of nuclear fuel for up to 13 years of normal operation, whereas the initial construction cost for conventionally powered ships does not include the expense of buying or delivering their fuel. Thus, on a life cycle basis, while the comparative cost for nuclear ships is higher, the tactical flexibility of nuclear powered warships, combined with their reduced oil dependency, makes nuclear propulsion highly desirable for our strike force ships. Nonetheless, TITLE VIII will be expensive to implement. The Nuclear Powered ship construction program must be adequately funded and not permitted to impact adversely on the rate of the Navy's overall balanced shipbuilding program.

Multi-year Authorization Concept

The multi-year ship authorization concept, if legislated, will help to ameliorate our shipbuilding problems, and it is one which I fully support. It has the potential to contribute to stability in the shipbuilding industry, result in production cost savings, and improve the efficiency of Navy shipbuilding programs by providing optimum program value per dollar spent. Long term shipbuilding programs would also permit shipyard managers to plan for commitment of construction facilities, manpower skills and capital. On the other hand, a multi-year ship authorization plan must also provide sufficient flexibility so that it can be modified to reflect unpredictable changes in threat, advances in technology, changes in national requirements and other dynamic conditions.

MANPOWER AND PERSONNEL

Requirement

Long term manpower requirements are a matter of continuing concern and study. The ability of the Navy and Marine Corps to perform well rests on the material condition of our equipment and the skill with which we are able to acquire and develop personnel to operate and maintain that equipment. Due to technological changes, the skill requirements for Department of the Navy military and civilian personnel continue to rise. For example, TITLE VIII nuclear legislation will further intensify the need for highly skilled civilian shipyard personnel and increase the requirements for nuclear trained officer and enlisted personnel. Advances in weapons sophistication must be constantly weighed against the skill of our people to maintain the systems. The accurate definition of long term civilian and military skill require-

ments is a continuing challenge, but essential in an era of rapid technological advance. This is particularly true in the military sector which is basically a closed manpower system requiring longer lead times for skill development. Within this area, it is particularly important to determine whether the present military personnel structure can be changed to coincide with future manpower demands within fiscal and end strength constraints. The Navy's goals are to ensure that future manpower requirements are identified in a timely manner and that major programs are analyzed in terms of our abilities to fund, acquire, train and retain the skills necessary to sustain future Naval requirements and commitments.

Career Attractiveness

Positive action is required to improve the attractiveness of Navy and Marine Corps careers. Accordingly, I endorse the Department of Defense Human Goals Credo and support those programs which provide equal opportunity and enhance individual dignity. Additionally, I request Congressional recognition of the unique conditions of Naval service. Long sea tours and lengthy absences from home port, which have been the result of reduced force levels with no corresponding reductions in our continuing worldwide commitments, have a specific adverse effect on the attractiveness of a Navy career. To offset these hardships we have prepared Sea Pay Legislation which we hope to introduce in the 94th Congress in the near future. I urge your favorable consideration of this proposal.

The recent petroleum crisis has also had a serious impact on the officer and senior enlisted personnel manning situation in nuclear powered ships. The nation's

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need for alternative energy sources has created a sharply increased civilian demand for experienced nuclear trained personnel to enter the rapidly expanding civilian nuclear power industry. As a result of growing demand and high salary offers, an increasing number of our small, nuclear trained officer cadre and experienced enlisted personnel are leaving the service in favor of more financially attractive civilian job opportunities. Nuclear trained submarine officers remaining on active duty currently face a period of continuous sea duty for a ten-year period. We are working hard to find a solution to reverse the increased sea duty/decreased retention spiral that could force us to tie up nuclear ships. A legislative proposal has been prepared and will be submitted to establish a Nuclear Career Incentive Pay system for these highly skilled officers. Maximum Selective Reenlistment Bonus awards and continued proficiency pay should provide for increased retention of experienced nuclear trained enlisted personnel.

Of equal importance are the adverse effects on morale which have been generated by the real and perceived changes in servicemen's benefits. In recent years, Congress has done a splendid job in making military pay standards more competitive, particularly for junior officers and enlisted men. However, in the view of many, these monetary gains have been partially offset by the piecemeal changes in the traditional privileges and benefits which have been associated with military life. The Department of the Navy will actively participate in the Department of Defense's year long Quadrennial Review of Military Compensation

which will, among other things, examine the effectiveness of the present system of pay and benefits. It is expected that the results of this study will lend some stability to this important area and thereby enhance the attractiveness of a military career.

The Reserve Forces

In accordance with the Total Force Policy, the Department of the Navy is placing increased reliance on its Reserve Forces. It is recognized that the Reserves will be the initial and primary source of active force augmentation in time of mobilization or national emergency.

During FY-76, some Reserve elements will be realigned. New missions and forces will be assigned. Eight Patrol Gunboats (PG), three amphibious ships (two LPA and one LKA), and one Helicopter Combat Support Squadron (HC) will be added. On the other hand, Construction Battalions will be reduced in number from 17 to eight; Naval Reserve destroyers will drop from the current 35 to 30; the Mine Warfare force will decrease from 31 to 22 ships as nine Coastal Minesweepers will be decommissioned; the carrier based S-2E reserve ASW Squadrons will be phased out.

Another Naval Reserve initiative will man some active force surface combatants at their Regular Navy wartime complement on an 80% active duty and 20% Selected Reserve basis. This concept will be tested in five destroyers in FY-76 and FY-77.

In addition to the realignment of missions and forces we have looked hard at our mobilization requirements against our current active force levels. The combined effort, impacted by inflation, results in an approximate 21,000 man reduction in total Reserve end strength in FY-76 to about

92,000. It should be mentioned, however, that RPN and O&MNR funding has been increased 7% to $500M to accommodate inflation and to improve readiness and training.

Reassessment of Reserve capabilities and missions is a major part of the current OSD "Total Force Study" of the Guard and Reserve. This study, as well as the Navy's separate assessment of the role and mission of the Naval Reserve in the Total Force, is scheduled for completion in time for FY-77 planning.

The Marine Corps Reserve will remain relatively stable under the 4th Division/Wing Team concept with emphasis on increasing combat to support ratios. I am encouraged by the recent increases in non-prior service recruiting and by the overall reenlistment rate in Marine Reserves. Current end-strength deficiencies will not be resolved immediately, but a gradual and orderly growth is planned to attain full mobilization requirements in the Marine Corps Selected Reserve by the end of FY-78.

THE MORE IMMEDIATE OUTLOOK

FORCE READINESS

All Volunteer Force Implementation

Although it is still too early to pass final judgment on the implementation of the all volunteer force concept, it appears to be working. Navy and Marine Corps recruiters have exceeded their goals in recent months. The Marine Corps has not only met this year's requirements but is also overcoming last year's shortfall. The overall numbers of quality recruits is up. In the first six months of FY-75 the percentage of high school graduates recruited by the Navy was 68.1%. The percentage of high school graduates entering

the Marine Corps has remained constant at 54.4%, but the percentage of Marine recruits in mental category IV has declined to 4.9% from a 7.6% average rate experienced during the same period one year ago. Navy mental category IV accessions have remained low with only 5.9% recruited in the first six months of FY-75.

Although the Navy is experiencing reenlistment shortfalls in some critical sea-going skills, recent reenlistment rates for other skilled people have been encouragingly high. These reenlistment rates, like the recent recruiting rates, are no doubt driven partially by the general economic conditions presently existing in the civilian market. As long as current trends continue the Services will derive the benefits associated with higher average skill and experience levels. These, in turn, have a potential salutary effect on force readiness.

Overhaul and Rework Backlog Trends

Backlogs in ship overhauls and aircraft reworks continue to have a severe impact on force readiness. While the numbers of aircraft operating beyond normal maintenance periods have begun to diminish slightly, the overall backlog remains just under 20%. The trend in ship overhaul backlogs (i.e., those ships overdue for overhaul by at least one fiscal year) continues to increase. In FY-75, an additional 16 ship (15 active, 1 reserve) overhauls have been deferred. Ten (9 active, 1 reserve) deferrals resulted from the escalation of the cost and size of the work packages of ships already in overhaul. Six additional overhauls were deferred when Congress reduced O&MN funding for the year by $107M. The present backlog of active and reserve ships overdue

for overhaul is 74 -- a significant proportion (13%) of our fleet.

Civilian Ceiling Controls

Effective maintenance contributions by Navy shipyards have been hampered by the imposition of reductions in civilian personnel ceilings. In response to existing legislation, the civilian work force in Navy industrial activities will be reduced to 60,685 by the end of FY-75 -- a reduction of about 6% in eight months. Imposition of these ceilings has come at a time when naval shipyards have increased their apprentice training program to a level of 5,200 employees, up some 1,800 from a year ago. Since the apprentice trainees are protected by Civil Service Commission regulations from most Reduction In Force (RIF) actions, lower personnel ceilings must be achieved by reducing the number of full time production workers, who, in many cases, are the newly trained journeymen who have just completed apprentice training. The development of skills required for the complex work assigned to naval shipyards can best be obtained through apprenticeships and is essential in the long range. However, under current restraints, this large scale training effort is detrimental to near term fleet support, and it has compounded the backlog of work problem in the shipyards. I, therefore, request that Congress remove the ceiling controls from Navy industrially funded activities and permit us to base employment levels on customer workload. By so doing, a potential for improving shipyard management and reversing the current increasing trend in ship overhaul backlogs will be created.

Goals

Achieving maximum force readiness within the manpower resources and budget constraints directed by Congress is our goal. The Department of the Navy will bend every effort to ensure that the all volunteer force concept becomes a success. Long term, quality recruiting and high reenlistment rates, combined with a viable, modern and effective fleet, will be the standard against which our success is measured. At the same time aggressive actions will be taken to reduce ship and aircraft overhaul and rework backlogs by improved management of manpower assets, matching them to workload requirements to the best of our ability.

Rapid development of world crises is a reality of today's world. The Navy and Marine Corps' ability to contribute to the national military strategy depends directly on the immediate readiness of our forces. Thus, realization of our goal of maximum readiness of the forces is essential.

SUPPORT COSTS

Combat to Support Ratios

I recognize that Congress is sensitive to the issues related to Navy and Marine Corps support costs. We are actively seeking ways to lower these costs by making our management techniques more efficient and reducing the numbers of people and facilities not essential for the accomplishment of our combat mission. I think we have made improvements in this area. Our progress is manifested by our plans to phase out the proficiency payment program except for nuclear trained enlisted personnel, saturation divers and limited special duty

assignment payments; reduce graduate education student loads to 1,058 in FY-76 and 970 in FY-77; and adjust our officer strengths downward as follows:

	FY-76	FY-77
Navy	64,380	62,371
USMC	18,572	18,467

Headquarters Reductions

During the period July 1969 to December 1973 manpower reductions of approximately 30% were achieved in those headquarters activities under the command of the Chief of Naval Operations, and were accompanied by extensive fleet and shore activity reorganizations and consolidation. Management headquarters activities of the Marine Corps were reduced by approximately 25% during the same period, and were extensively reorganized to achieve a more efficient and responsive organization. Manpower economies were also made in the Navy Secretariat offices during the same period. More recently, the "surface" type commands, consisting of amphibious type commands, Cruiser-Destroyer type commands, and Service Force type commands have been disestablished and in so doing the functions of the six disestablished commands have merged into two new commands. This consolidating merger was fully completed in the Atlantic Fleet, 1 January 1975 and will be accomplished in the Pacific Fleet by 1 July 1975.

A concentrated effort has been made to reduce Department of the Navy manpower in the Standard Metropolitan Statistical Area (SMSA) which includes the District of Columbia and the areas surrounding, including Quantico,

Virginia, and Indian Head, Maryland. The following table displays our progress in that regard.

Total DON Personnel in SMSA

	Military	Civilian	Total
1969	31,923	47,989	79,912
1974	23,519	37,283	60,802
% Change	-26.3	-22.3	-23.9

Of the total personnel noted in the foregoing table, the following were associated with headquarter's staffs.

DON Headquarter's Personnel

	Military	Civilian	Total
1969	7,207	18,058	25,265
1974	5,602	12,000	17,602
% Change	-22.3	-33.4	-30.3

Reductions in headquarters staffing and further realignments are subjects of continuing review and study. In view of the considerable reductions, realignments, and consolidations of headquarters and staff activities in recent years, I recommend that any further reductions be made cautiously and only after the impact of past actions has been carefully assessed.

Management Improvements

The Department of the Navy has vigorously pursued a number of programs with the view of lowering support costs or improving its management structure so that better support is achieved. Some of the more important programs are listed in the following paragraphs.

The Department of the Navy has taken positive action to reduce the backlog of shipbuilder claims. During

CY-74 claims of approximately $360M were settled. The following table shows progress in this regard.

Shipbuilder's Claims
(calendar year)

	1974	1975
Backlog on 1 Jan	$552M	$228M
Increase in value of existing claims during the year	$ 36M	--
Add'l claims received during the year	0*	--
Backlog on 31 Dec	$228M	**

* No new claims over $1M reported in CY-74.
** It is anticipated all claims currently in hand will be settled by end CY-75; however, additional claims now unknown may be filed during CY-75.

In addition, some progress has been made in the deposition of shipbuilder's appeals before the Armed Services Board of Contract Appeals (ASBCA). The following table shows the disposition of $48 million by ASBCA final decision or out-of-court settlement of appeals during calendar 1974.

ASBCA Shipbuilder's Appeals

	1974	1975
Backlog on 1 Jan	$696M	$682M
Increase in value of existing claims during the year	$ 33M	--
Add'l appeals received during the year	$ 1M	--
Backlog on 31 Dec	$682M	*

* Several ASBCA decisions and settlements are anticipated during 1975, the amounts of which are presently unknown.

Among the specific management actions taken to reduce the Departments' claims settlements backlog were: highlighting the settlement of claims as a Management by Objective item to the Deputy Secretary of Defense, active management by the Naval Material Command's Claims Review Board (composed of senior procurement specialists), and the consolidation of all contract appeal attorneys in the Office of the General Counsel to ensure the high quality preparation of claims appeals. The Department of the Navy's actions to settle and prevent claims in CY 73-74 have undergone GAO review and its report, I understand, is favorable and should be distributed in early CY-75.

In order to reduce the backlog of unreworked aircraft to an acceptable level we are initiating changes in depot level rework practices. The Progressive Aircraft Rework (PAR) and Aircraft Condition Evaluation (ACE) techniques are being consolidated into a Standard Depot Level Maintenance (SDLM) Program, resulting in an overall reduced work content for reworked aircraft. Under SDLM work packages are being tailored to individual aircraft based on the results of stringent pre-work inspections. Phased maintenance and increased funding for engineering analysis of reliability based data should reduce overall maintenance requirements.

SDLM is a step toward the application of the airline MSG-2 maintenance concept. While SDLM cancels the term ACE, it does not eliminate the benefits obtained from the ACE practice. SDLM differs from ACE by providing for a deep look at the structural integrity of individual aircraft and also provides for the installation of change kits--both

major shortcomings of ACE. Unnecessary component repair frequently performed concurrently with PAR will be discontinued under SDLM. SDLM is being implemented on approximately one-third of the aircraft reworks in FY-75 program, and will be extended to all reworks in FY-76.

A review of the Department of the Navy's organization, management and procedures as they relate to weapons system acquisition has been made by the Navy and Marine Corps Acquisition Review Committee (NMARC). Over the past six months, this top-level civilian committee has reviewed our procurement, production, cost, research and development, test and evaluation methods and has made over 200 recommendations in a draft report which is in the final stages of preparation at this time. I am in agreement with most of the preliminary recommendations, which I found very helpful, and have already established a mechanism for their prompt screening and rapid implementation. As a result, I expect that we will improve our ability to introduce effective weapons systems, equipment and material in an efficient and timely manner at optimum cost.

Effective 1 February 1975, the separate budget offices under the Comptroller of the Navy and the Chief of Naval Operations were combined into a single budget office. This consolidation is in consonance with the desire of the Congress expressed in the Conference Report on the FY-75 Appropriations Bill.

The Navy has made a conscientious effort to reduce energy consumption and conserve critical energy resources. In FY-74, the Department of the Navy reduced its energy consumption by 24% over that of the preceding year. For

the first quarter of FY-75 energy consumption has been reduced to even lower levels (25.7% below FY-73 baseline). Representative of the actions which helped achieve the FY-75 savings were the scheduling of fleet operations to minimize non-productive transit times and developing mini-fleet exercises which could be conducted inport or at training facilities ashore. The FY-76 and FY-77 budgets contain MILCON funding (MCON, MCNR) for energy saving programs in the amount of $31.7M and $59.7M respectively. These programs are expected to achieve a savings in energy worth an equal amount of money over a five year period.

Dangers in Reducing Support Establishment

As with headquarters staffing, the Department of the Navy has taken extensive cuts and made major adjustments in its support establishment ashore. In 1973 and 1974 the number of Navy shipyard and base closures was extensive. In my view, we are very close to the optimum shore support/fleet operations ratio. Accordingly, I foresee few major reductions in our industrial yards and other shore facilities in the near future. We will look to adjustments of a fine tuning nature within the structure of our present shore establishment to meet changes in workload and maintain the support of our present Navy force levels. In striking a balance between our shore establishment and our requirements for fleet support, we have been mindful of the requirements of a larger operating force as well as the surge capability required in times of crisis.

STRATEGIC SUMMARY

The Navy-Marine Corps team has historically demonstrated that it can be called upon and counted upon in times of

crisis. Our sailors and marines are highly skilled and technically trained. Together they provide a uniquely capable force which contributes indispensably to national defense. Recent world events have again shown the inherent flexibility of naval forces and clearly demonstrated their unique, essential contribution to our overall military posture. It was the credible presence of the Navy and Marine team in the recent Mediterranean crises (i.e., Arab Israeli War, Cyprus Crisis) that provided the national command authorities a most flexible and potent force for stabilizing those situations. Nevertheless, we would be wise to recall again the recent significant trends in Soviet naval power. In the past decade, Soviet naval capability has expanded and is evidenced by a significant increase in warship capability, concomitant increase in at-sea and out-of-area operations and an increase in the use of Soviet naval forces to support Soviet foreign policy. To compound the problem this growth comes precisely at a time when the United States and the Free World have become increasingly dependent upon raw materials imported from across the high seas.

There is a basic asymmetry in dependence upon the continued freedom of the sea between the United States and the Soviet Union. The United States and its allies are particularly dependent upon the seas; we are dependent on commerce; we are dependent upon the flow of supplies to and from one part of the world to other parts of the world. Soviet ability to deny the Free World the use of the seas, would be in itself a major blow

irrespective of the probability that the Soviet Union and its allies might not be able to use the seas themselves.

Our programs for the future have been carefully developed, and with the assistance of the members of this Congress in their support of the Department of the Navy's FY-76 and FY-7T budgets, we will be able to transform the planned modernization programs and force level increases from paper to reality during the next decade. To do so will enable the Department of the Navy to continue its vital support of national strategy, to maintain a strong, viable deterrent posture despite Soviet maritime expansion.

THE FY-76 AND TRANSITION BUDGETS, FY-77 AUTHORIZATIONS

Having outlined for you my assessment of the Department of the Navy's current and projected deterrence posture in light of our national objectives, I should like now to present an overview of our FY-76 and transition budget requests, and those FY-77 programs for which we are requesting authorizations. In so doing I will describe the elements of the requests which address our long term requirements, namely the investment and research and development programs designed to maintain the Navy and Marine Corps team as a viable instrument of national policy into the decade ahead. Finally, I will discuss our request for operating and maintenance requirements necessary to ensure the near term readiness and consequent capabilities of our fleet.

Our FY-76 request is $33.7 billion in total obligation authority, as compared to requests of $29.0 billion in

FY-75 and $27.5 billion in FY-74. For the three month transition period, FY-7T, we are requesting $7.4 billion. Despite the evident dollar increases as compared to prior years these requests are necessary to maintain the momentum of our naval force modernization programs and to ensure the readiness of our fleet in spite of the heavy inflationary pressures which have dramatically decreased the real program value of all appropriated funds.

INVESTMENT--FORCE MODERNIZATION

$12.91 billion or 38% of our overall budget request for FY-76 is programmed in procurement appropriations accounts which, in their aggregate, represent our investment in force modernization. For the transition budget we are requesting $1.95 billion and in FY-77 our investment program subject to Congressional authorization this year totals $10.80 billion. The following table presents a summary of these requests by appropriation account.

Department of the Navy Investment Program

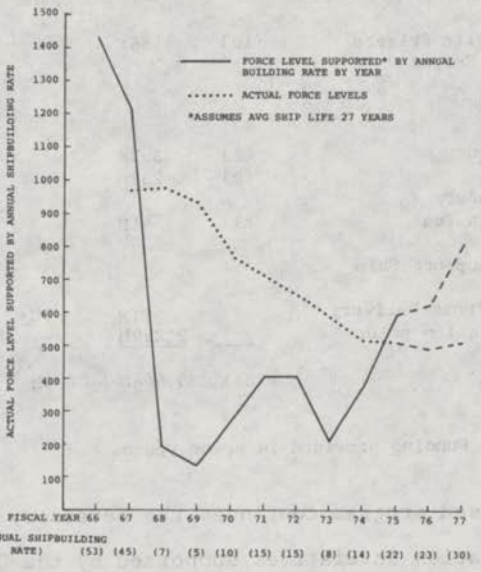
	Amount Requested ($ Billions)		
Account	FY-76	FY-7T	FY-77
Shipbuilding & Conversion (SCN)	5.45	.47	4.83
Aircraft Procurement (APN)	3.08	.60	2.76
Weapons Procurement (WPN)	1.22	.33	2.44
Other Procurement, Navy (OPN)	1.98	.49	--
Procurement, Marine Corps (PMC)	.29	.04	.07
Sub-total Procurement	12.02	1.93	10.10
Military Construction (MCON, MCNR)	.89	.02	.70
Total Investment	12.91	1.95	10.80

You will be examining our requests in each of these accounts in detail during the weeks ahead. Today, I will briefly describe the most significant aspects of each with particular emphasis on the highlights of the FY-76 program.

Shipbuilding and Conversion

As you know during this calendar year we will drop below a 500 ship active fleet--the smallest force since 1939. I consider it essential that we halt any further decline and reverse the current trend. It is also essential that the past deliberate decisions, to reduce near term force levels, in order to ensure that adequate modernization programs were carried out, receive the continuing support of the Congress as our programs are developed. Figure 5 displays the ship force levels and building rates for the period FY 66-77 (projected).

Figure 5



The FY-76 shipbuilding program includes 23 new construction ships and the FY-77 proposed authorization includes 30 new ships. The following table summarizes the FY 76-7T-77 shipbuilding program.

DEPARTMENT OF THE NAVY
FY 76-7T-77 SHIPBUILDING PROGRAM

Combatant Ships	FY-76 Number	FY-76 Cost*	FY-7T Cost*	FY-77 Number	FY-77 Cost*
TRIDENT Ballistic Missile Submarine	(1)	560M	--	(2)	1,221M
Advance Procurement		43M	253M		166M
SSN 688 Class Attack Submarine	(2)	439M	--	(3)	598M
Advance Procurement		102M	189M		190M
VSS/V/STOL Support Ship Multi-Purpose Carrier					60M
Advance Procurement					
(CVNX) Attack Carrier					350M
Advance Procurement					
CGN (Formerly DLGN) Nuclear Combatant Cruiser	(1)	257M			
PHM Patrol Hydrofoil Missile Ship	(2)	83M		(9)	390M
Advance Procurement			24M		
FFG-7 Guided Missile Frigate (formerly Patrol Frigate)	(10)	956M	--	(11)	1,233M
Support Ships					
AD, Destroyer Tender	(2)	393M			
AO, Fleet Oiler	(2)	232M		(2)	199M
AS, Submarine Tender				(1)	227M
T-ATF, Fleet Ocean Tug	(3)	41M			
ATF, Fleet Tug				(1)	28M
AGHS, Hydrofoil Support Ship (conversion)				(1)	33M
Craft/Outfitting/Post Delivery		71M	8M		134M
Cost Growth/Escalation prior		2,269M	--		--
TOTAL	(23)	5,446M	474M	(30)	4,829M

*Excludes Advance Funding provided in prior years.

The proposed program continues the necessary naval force modernization initiatives supported by the Congress over the recent years. Our shipbuilding program has evolved from 14 new ships and $3.5 billion in FY-74 to 22 ships and $3.2 billion in FY-75. This year's program requires $3.18 billion for 23 new ships. The additional $2.27 billion requested in FY-76 is needed to cover a $1.35 billion deficiency in FY-74 and prior programs plus $.92 billion to cover deficiencies in the FY-75 program. The unexpected

inflation, changed market conditions, and necessary program changes, which have caused these deficiencies, have been matters of concern. Before I proceed with the highlights of our recommended new ship construction program, I want to explain, in some detail, this prior year problem.

$2.27 billion is a lot of money but this is the amount necessary to restore full funding to the SCN account for the FY-75 and prior year ships authorized by Congress. It is essential that we provide for these fact-of-life increases in order to continue building the ships authorized and to maintain the shipbuilding momentum for the future Navy so necessary for the assurance of an adequate maritime posture of our country.

At the heart of our prior year problem is the unanticipated and unbudgeted effect of inflation. Our prior year shipbuilding requests were based on the best estimate for projecting inflation at the time. The FY-74 shipbuilding program, for example, was prepared in CY-72 well before the current inflationary trend. Annual inflation Bureau of Labor Statistics (BLS) indices on the order of 4½% a year were representative of the estimates of both government and industry as we planned and budgeted for the escalation clause of a contract at that time for out year requirements in an atmosphere of wage and price controls. We simply did not have the capability to predict accurately the increase in the composite shipbuilding material and labor index experienced in FY-74, which rose by 16%.

In the fall of last year when it was clear that inflation had broached upward from all previous estimates, revised budget preparation guidance was promulgated

directing a submission of revised best estimates of program costs. Every program was carefully examined and, utilizing the best information available. The additional funds required aggregated to $2.269B (rounding to 2.27B supra) to fully fund FY-75 and prior programs based on present estimates of the inflation increase each year through the period required to complete their construction. The following table displays these revised estimates.

Budgeted through FY-75	Current Estimate	Cost Increases Expected				
		Escalation	Economic & Inflation	Program Changes	Claims	Total
14,391.5M	16,660.8M	(1,149.8)	(755.6)	(213.9)	(150.0)	(2,269.3M)

The Navy, of course, is not the only agency or business affected by the economic conditions we are experiencing. Every segment in our economy has been affected. What is unique about the shipbuilding program, however, is the fact that we are obligated to estimate the costs of our capital intensive shipbuilding account over such a long period of time. For example, the Navy estimated the costs of the carrier NIMITZ in the fall of CY-64 for submission of the budget for FY-66. Congress actually appropriated money for the NIMITZ in the appropriation act of 1967. The letter of contract for construction was signed 16 May 1968. The NIMITZ is planned for delivery in July 1975. Thus, a period of eight years will have elapsed since Congress appropriated the funds and the ship was delivered. Such a ship, with its long construction time, unlike tanks or airplanes, is exposed over a much longer period of time to the effects of inflation. In the particular case of the FY 75 and prior year ship programs they have experi-

enced the most virulent inflation of the post-war period. While we do the very best we can, an extreme change in economic conditions such as we are experiencing has created this severe problem.

There are several factors which have influenced these cost changes. Contractors have reported increased lead time in procuring material for their subcontractors. Time is money. Because of unpredictable economic factors, subcontractors have often resorted to the practice of determining their price on delivery instead of a fixed price commitment when the contract is signed.

To the degree that our present estimates are accurately predicting the economic trends of the future, the restoration of full funding to the SCN appropriation in this year's budget will be achieved. However, as pointed out previously, the long time between appropriation and completion of construction of a naval ship clearly leaves a degree of uncertainty.

In addition to the problem of properly funding our ongoing ship programs, the Navy has not been unmindful of the potential negative impact that inflation has on business relationships with the shipbuilding industry. As you know, the Navy has been intensively studying and correcting a variety of causes which has burdened our relationship in the past. Owing to the length of most shipbuilding programs they are more prone to problems posed by a fluctuating economy and, therefore, as a matter of course, employ escalation provisions in our contracts. However,

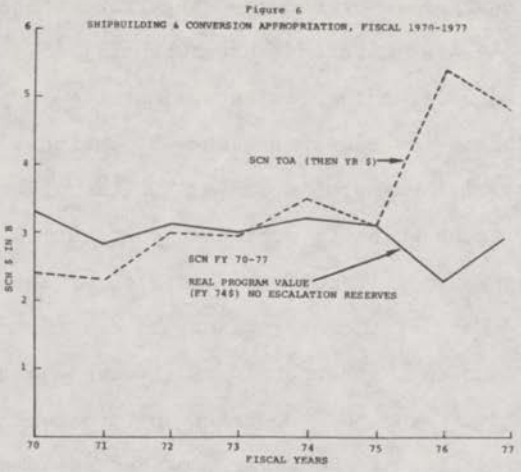
the formulas used in the past have occasionally failed, and in the current environment would most certainly not suffice. Therefore, we have developed new approaches which, while still tied to the Bureau of Labor Statistics indices, will provide a basis for reimbursement to the contractor that more realistically tracks the manner in which contract funds are expended. Revised procedures have been incorporated in the recent TRIDENT contract and are being incorporated in all Requests for Proposal. In addition to escalation, however, we have addressed ourselves to a wide variety of improvements based on analysis of the problems encountered in the past.

First of all, we are carefully selecting the proper form of contract for the procurement in question. Cost type contracts are used in most lead ship activity and the design is monitored both by the Navy and frequently by another shipbuilder who studies the output of the lead ship contractor to determine its applicability to other yards. The first of the follow ships is scheduled at a time when the design is substantially complete and construction well along on the lead ships. Specifications and quality control requirements are being carefully monitored so as to eliminate misunderstandings which have occurred in the past. We are also addressing ourselves to the administration of changes and, while this is very difficult in the shipbuilding industry, both we and the shipbuilders are approaching the problem with due respect and attention is being given early in the program rather than after the fact.

These changes in procedures, together with the fact that in 1974 we have made a substantial reduction in the outstanding claims against the Navy, provide the basis for the future whereby business relationships will be much improved. On the other hand, I want to be quick in reminding you that there are many programs, still current, based on procedures of the past. Many of these programs are continuing economic burdens to the shipbuilders involved, and the Navy is addressing each contract in turn, maintaining the interest of the Government but responding to legitimate requests for adjustment.

To summarize, funds to restore the prior program to full funding are required if we are to continue the major ongoing programs such as TRIDENT, CGN 38, and DD 963 Class ships without canceled contract options with subsequent claims, higher costs and loss of naval capabilities. We are taking positive management actions to eliminate some of the root causes of the prior year problem and to guard against a recurrence of the magnitude now before us. In this respect our FY 76-77 requests reflect our best cost estimates for the full funding of our new construction ship programs including our best estimate of a reasonable reserve for the impact of inflation. Figure 6 illustrates the real program value represented by this request.

Figure 6
SHIPBUILDING & CONVERSION APPROPRIATION, FISCAL 1970-1977



Our FY-76 program provides for continued procurement of the TRIDENT ballistic missile submarine. The Congress authorized and funded the construction of the lead ship in FY-74 and two additional vessels in FY-75. In FY-76 we are requesting full funding for the fourth ship, and advance procurement funds for the fifth through seventh ships. In FY-7T we are requesting advance procurement funds for the fifth through ninth ships. In FY-77 we are requesting authorizations for full funding of the fifth and sixth ships and advance procurement funds for the seventh through tenth ships. This program procures ships at the rate of three every two years with the total procurement number remaining open.

With respect to high speed nuclear attack submarines, our FY-76 request will fund the 27th and 28th ships of the LOS ANGELES (SSN-688) Class. We expect to deliver the first three ships of this class during FY-76. For FY-7T, $189 million advance procurement is requested, along with authorization for an additional three ships of

this class in FY-77. They will comprise one of the most formidable, flexible, and effective weapon systems in our fleet inventory.

Our FY-76 request will provide for construction of the CGN-42 (formerly DLGN-42), the fifth ship of the VIRGINIA Class nuclear combatants programmed in accordance with Congressional directions. In addition, the FY-77 authorization will initiate advance procurement for a CVNX attack carrier, which in conformance with TITLE VIII would be nuclear powered. We are examining alternatives for other nuclear warships and anticipate recommending a more definitized program for nuclear powered ships to you next year.

The FY-76 shipbuilding program, as noted earlier, has been modified by fiscal realities. Inflation has impacted severely on our ability to acquire reasonably priced ships without a severe loss in required capability. In addition, the Navy, in line with Congressional mandates, has specifically modified its plans for an air capable sea control ship. The Sea Control Ship program, per se, has been terminated. We are studying alternatives to provide for a more capable multi-purpose ship within realistic funding parameters. Our studies are scheduled to be completed in April 1975 and we will provide you, as directed, with the results and our recommendations. In view of our pressing need for complementing our reduced CV force with a lower cost yet capable multi-purpose ship we are requesting $60 million for advance procurement authorization in FY-77.

Fleet surface combatant modernization will continue in the non-nuclear surface ship area, specifically in the

newly redesignated guided missile frigate (FFG-7) and the guided missile hydrofoil (PHM) programs. Together, these two programs in FY 76-77 comprise 32 ships at a cost of nearly $2.66 billion, exclusive of advance funding provided in prior years.

In addition to our FY 76-77 requested investment in combatant ships, we are requesting FY 76-77 funding of $1.15 billion for 12 new support ships. Our request includes $393 million for two destroyer tenders, the first four ships in a new class of fleet oilers, continued procurement of the second through fifth ships in a class of new fleet ocean tugs started last year, a submarine tender, and the first support ship for hydrofoil craft. These ships are required to achieve a balance between offense and support in our modern Navy and to modernize a rapidly aging support force.

The increasing cost of trained military manpower have prompted us to employ alternatives to reduce personnel in various support functions. The Navy has expanded the use of civil service crews to man certain types of ships used for support of the fleet peripheral operations. At the present time some of our oilers, fleet tugs, and cable layers are being operated in this capacity by our Military Sealift Command. This mode of operation has met fleet standards of dependability and professionalism, and has also produced significant savings in operating costs.

Our sealift forces comprise government owned or chartered cargo ships and tankers operated by civilian crews under the command and control of the Military Sealift Command (MSC). This is an industrially-funded

operation, and operating costs are defrayed by charges to user activities.

Sealift assets are critical to our ability to maintain a sustained volume of supplies to overseas areas in contingency situations. In that regard, I am concerned about the small number of suitable ships available on short notice for charter from the U.S. Flag merchant fleet. Some improvement will be provided by nine shallow draft tankers scheduled for delivery and subsequent charter to MSC in FY-75. These ships were acquired through a build and charter arrangement which does not involve any capital investment by the Defense Department. As a result of Congressional interest in this program, the Navy has drafted proposed legislation which will be submitted to Congress in the near future. This legislation provides for Congressional review and approval of all Defense actions to secure ships by build and charter procurement. I urge your favorable consideration of the proposed legislation as it provides an efficient and economical means to improve our sealift capability.

Finally we are requesting that the Shipbuilding and Conversion, Navy appropriation be changed to a continuing "no year" appropriation. The current five year limitation on the availability of funds under this appropriation has proven to be too short to cover the long term building programs to completion and has made the administration of an already complex program much more difficult. The requested change would allow funds which have been appropriated and which are being requested to remain available through the extended ship construction periods which we are experiencing in this area.

Aircraft Procurement

In support of Navy and Marine aviation forces we are requesting $3.08 billion for FY-76 and $.6 billion for the transition budget. For FY-77 authorization we are requesting $2.76 billion. These funds will provide for continued procurement of new aircraft and update and extension of service life of some existing aircraft in addition to supporting continued improvement of our aircraft parts inventory and procurement of aviation support equipment. The procurement program includes a total of 338 aircraft for FY-76, 75 aircraft for FY-7T, and 294 for FY-77 and is displayed in the following table.

Aircraft Procurement, Navy
($ Millions)

	FY-76		FY-7T		FY-77	
	Quantity	Cost*	Quantity	Cost*	Quantity	Cost
A-4M	24	67				
A-6E	12	151				
EA-6B	6	117	1	13	6	104
A-7E	30	160	6	36	30	169
F-14A	36	599	9	132	36	576
CH-53E		20			17	115
UH-1N	24	30	6	7	28	27
AH-1J	16	40	6	11	23	56
P-3C	12	172	3	61	12	180
S-3A	41	483				
E-2C	6	154	1	22	6	126
COD					12	151
VTAMX	15	9	3	5	15	12
T-34C	115	30	36	10	109	27
EC-130Q	1	21				
KC-130R			4	40		
Aircraft Mods		489		149		596
Spares		359		70		366
Support		176		44		254
	338	3077	75	600	294	2759

* Exclusive advance funding in prior years

With three exceptions, the recommended aircraft procurement program includes continued production of existing aircraft. I will briefly discuss the three

new programs and comment on a few of the more significant continuing programs.

One new procurement program is proposed for FY-76, the VTAMX. This new multi-engine trainer which is required to replace aging S-2 aircraft in the pilot training command will greatly reduce fuel consumption and cost to train students in the multi-engine phase. Two new aircraft are included in the FY-77 authorization request, the CH-53E and a new carrier on board delivery (COD) aircraft. The CH-53E is the Navy and Marine heavy lift helicopter. Advance procurement funding for the CH-53E is included in the FY-76 program with procurement of 17 aircraft proposed for FY-77. Initial procurement of the new COD aircraft is recommended for FY-77. The existing C-1 and C-2 aircraft cannot adequately support our carrier forces into the late 70s.

The FY-76 recommended procurement of the A-4M for Marine light attack squadrons restores the 24 aircraft deferred in the FY-75 budget. Without this procurement, the Marine all A-4M active A-4 force, which will be attained through prior procurement, cannot be maintained.

The FY-76 procurement of 16 AH-1J (Improved) helicopters continues to build toward previously approved attack helicopter levels. The AH-1J (Improved) provides approximately a threefold increase in capability over current AH-1J's and has provisions for later configuration of the TOW anti-armor missile system.

The total F-14 program now planned is 390 aircraft. This is an increase of 56 aircraft from the total program presented last year and is intended to provide for 18 squadrons (14 Navy and 4 Marine) and the necessary pipeline and

training aircraft in support. Congress has funded 234 of these aircraft through FY-75 and over 100 have been delivered to date. We are requesting procurement of 36 F-14s in FY-76, with additional procurement at a production rate of three aircraft per month for the FY-7T and FY-77 programs. While the Fleet introduction is continuing this year, we have had two recent operational accidents with the aircraft; however, the safety record of the F-14 is superior to the F-4 at the same point in its introduction cycle. Although the total F-14 procurement program is increased, additional fighter procurement will still be required to meet modernization requirements of the Navy and Marine fighter forces. We are currently involved in reviewing proposals for a lower cost complement to the F-14

For FY-76 we are requesting procurement of 41 S-3A twin jet carrier ASW aircraft. This buy will complete the 187 total procurement program.

Previous plans for additional procurement of C-9B and CT-39 aircraft have been cancelled because of the decision to consolidate all Department of Defense airlift aircraft under a "single manager."

Details of each aircraft procurement program will, of course, be covered by the program sponsor and other Navy and Marine witnesses in subsequent hearings.

Weapons Procurement

This year, we are requesting $1.22 billion for the procurement of missiles and other weapons. This is a substantial increase over last year's WPN budget of $735 million, and is largely accounted for by the repricing of missile programs, production start-up costs for the TRIDENT I missile, initiation of full

procurement of HARPOON and SIDEWINDER AIM-9L; limited procurement of CONDOR missiles, and procurement of extended range Standard 2 missiles for operational evaluation. In the transition budget, we are requesting $333 million and our FY-77 authorization request totals $2.44 billion dominated, of course, by initial production of the TRIDENT I missile. I would like to comment briefly on a few of our weapons programs.

- TRIDENT I. Increasing SLBM range and, hence, usable SSBN patrol area, is one way to maintain the high survivability of our sea-based deterrent force. The TRIDENT I missile will provide a significant increase in range and, as a consequence, an enormous increase in patrol area. We have budgeted $237 million in FY-76 and $182 million in FY-7T for procurement of guidance systems and other components to support TRIDENT schedules, to initiate buildup of missile support facilities and to support start-up of the missile production line. We plan to commence TRIDENT I missile procurement in FY-77 and are requesting authorizations in the amount of $1.3 billion for this purpose.

- POSEIDON. As previously reported to the Congress, the Navy has completed a comprehensive program review and analysis to determine why the success rate of operational tests of POSEIDON has been somewhat less than originally projected. Based on findings of this reliability review, a POSEIDON modification program was designed to incorporate necessary improvements in the POSEIDON missile. This program provides for modifying new production missiles as well as those missiles already delivered, and we have budgeted funds for this purpose. Modified missiles are now deployed on some

ships and operational testing has resumed. While they form an admittedly small data base, test results to date have been encouraging. All deployed POSEIDON submarines will be armed with modified missiles. The appropriate Congressional committees have been and, of course, will continue to be kept informed of our progress in this matter.

- HARPOON. With the development program showing satisfactory progress in meeting performance milestones, HARPOON pilot production was initiated last year. We expect to begin operational evaluation of these missiles this summer and to have results in hand by the year's end. Thus, the basis will be provided for initiation of full production of HARPOON and its introduction in the Fleet in FY-76. Unfortunately, the HARPOON program has not escaped the scourge of cost growth. We are in process of examining the extent of a procurement cost growth, and we are also reappraising our procurement objective requirements. The results of this determination, as a matter of course, will be made available to you fully.

- CONDOR. During the past year we have carefully restudied the requirements for CONDOR missiles while attempting to accommodate to the FY-75 Congressional concerns. The success of this program, now in OPEVAL, and particularly CONDOR's extraordinary accuracy demonstrated in test firings, have led to our current request for an initial procurement of 405 missiles in the near term (FY-76, FY-7T, and FY-77). The CONDOR procurement objectives

are determined by analysis that considers not only the missile's cost, high kill probability, and long-range standoff capabilities, but also the other anti-ship and anti-land weapons including those which are less costly and capable. Because of this, we believe that a valid requirement exists for CONDOR and that we have abided by your guidance to avoid redundancy in missile procurement.

- SIDEWINDER. The procurement of AIM-9L, the latest and most effective member of the reliable SIDEWINDER family of short range missiles, begins in FY-76 as follow-on for the Navy's AIM-9H. Besides being common to meet Navy, Marine and Air Force requirements, the AIM-9L is a strong contender in the European market, for installation on aircraft replacing European F-104 aircraft, and for European co-production.

- STANDARD MISSILE. The TERRIER surface-to-air missile system deployed on our newly-designated cruisers (formerly frigates) currently use the SM-1(ER) missile, which is a semi-active homing missile. This missile will be superseded by the SM-2 extended range missile, the first procurement of which occurs in FY-76. With the mid-course command guidance capability of SM-2(ER), TERRIER ships will have a maximum range capability of about double that of SM-1(ER), thereby reinstating a fleet long range surface-to-air capability that has been seriously reduced with the phase out of TALOS ships.

Other Procurement, Navy

The FY-76 request of $1.98 billion in this appropriation is $.4 billion higher than requested for FY-75 largely due to inflationary factors. We are requesting $491 million for the transition period.

Nevertheless, our FY-76 program is designed to enhance readiness levels and further fleet modernization. In the readiness area, funding increases of $81 million for Air Launched Ordnance and $25 million for Sonobuoys will permit progress toward attainment of full readiness objectives. A significant increase of $30 million over FY-75 levels is proposed for necessary automotive, construction, and forklift vehicles. Major modernization programs include shipboard components, ship sonars, ASW electronics, communications and crypto equipment, surface missile system equipment, and TRIDENT backfit support equipment.

Among the most important programs in the FY-76 request are: Air Launched Ordnance ($196 million), Reactor Plant Equipment ($194 million), Sonars ($175 million of which $84 million is for the BQQ-5), TRIDENT Support less spares ($62 million), TRIDENT Backfit ($61 million), Sonobuoys, ($83 million), CAESAR ($72 million), and OPN Spares and Repairs Parts ($133 million).

Procurement, Marine Corps

The FY-76 request is for a total of $285.8 million, and $43.8 million is required for the transitional budget. $69.9 million is addressed for the FY-77 authorization items: weapons, combat vehicles and guided missiles.

Modernization of Marine Corps ground forces parallels that of aviation forces as we continue our measured program to upgrade both active and reserve forces. The three year Marine Corps' buy of M60A1 tanks, and associated recovery vehicles, will be completed in FY-76. $92.4 million is being requested this year for the final 154 M60A1 tanks and 15 M88 tank recovery vehicles.

Complementing the M60A1 tank in the Marine Corps' anti-armor arsenal are the TOW heavy assualt/anti-tank weapon, and the lighter DRAGON missile. Funds of $3.3 million for FY-76 and $2.8 million for FY -7T are requested for TOW and $32.6 million in FY-76 and $7.6 million in FY-7T for DRAGON.

Among other important programs included in the Marine Corps' FY-76 request are: $29.3 million for ammunition, $38 million for improved communications electronics equipment, $22.6 million for Support Vehicles and $41.4 million for engineer equipment and a wide range of command support and general supply material.

RESEARCH AND DEVELOPMENT

Turning to our Research and Development program, I cannot overemphasize the importance of continuing a level of technological advancement which will permit our naval forces to meet the challenges of the future.

Our FY-76 RDT&E,N program contains a request for total obligational authority of $3.52 billion--an increase of $466 million over that appropriated for FY-75. The transition period FY-7T request is for $904 million while the authorization requested for FY-77 is $3.8 billion. The increase in FY-76 is in part the result of some revision of funding responsibilities between appropriations. However, the technology base programs of Research and Exploratory Development show an increase which continues into the out years. Research has been increased from $119 million to $131 million and Exploratory Development from $289 to $322 million. In the past years, these programs have maintained a level or near level funding profile which has resulted in an erosion of real effort

in the technology base. The reversal of this funding trend is indicative of our determination to avoid falling behind in this vital area.

The bulk of the increase is in the Advanced and Engineering Development Categories which in the budget period comprise about 70% of the Navy R&D budget request.

In these categories, the major strategic programs we are pursuing are the TRIDENT missile and submarine. We are also pursuing additional strategic programs such as SLBM accuracy improvements, the SANGUINE Extremely Low Frequency (ELF) strategic communication system and the Sea Launched Cruise Missile.

While our principal program development in aviation R&D in FY-76 will be the Navy Air Combat Fighter, we will continue V/STOL technology and developments to provide the advanced V/STOL aircraft needed for both the Marine Corps and the Navy. We are continuing development of the LAMPS MK III ship-based helicopter to perform both the surface combatant and carrier helicopter missions. It's development is a cooperative effort with the Army UTTAS program, and the commonality is expected to produce a commensurate reduction in unit costs. Other programs include development of the Tactical Airborne Signal Exploitation System (TASES), and further investigation of the use of helicopters by the Reserves on merchant ships in the Sea Control mission.

Our surface warfare R&D programs will be devoted to such diverse weapons systems as AEGIS; improvements to our existing guns and missile systems; and development of advanced weapons systems, such as the light weight torpedo and the sea-launched cruise missile. Our surface platform R&D will include the Advanced Hydrofoil, Surface Effect Ship, and Amphibious Assault Landing Craft.

ASW efforts will range from surveillance programs such as the Surveillance Towed Array Sensor (SURTASS) to improvements in the MK-46 torpedo and development of an advanced lightweight torpedo as its replacement.

These and other Department of the Navy R&D programs will be discussed in detail by the Assistant Secretary of the Navy for Research and Development when he appears before the Committees of Congress.

* * * *

I have described for you our commitment to ensuring that we provide the future generation with a modern, highly capable and technologically superior Naval force. The sum of our procurement and research and development requests constitutes almost 49% of our FY-76 budget and is devoted to this purpose. But we have another responsibility, to ensure that our current forces are ready to meet the full spectrum of potential challenges to our national interests. The remaining portions of our budget request are dedicated to this end, and I would like now to briefly discuss the principal elements included therein.

OPERATING--FORCE READINESS

For the funds required to man, operate, and maintain our forces in being and planned to be introduced in the near term we are requesting approximately $17.26 billion in FY-76 and $4.58 billion in the transition period. For FY-77 we currently project a requirement for about $17.75

billion for these accounts exclusive of further escalation costs. An overview of the operating funds, personnel strengths, and forces supported is provided in the following table. Fiscal Year 1975 is included for comparative purposes.

Department of the Navy
Operating Funds, Personnel Strengths, and Forces
FY 75-77

	FY-75	FY-76	FY-7T	FY-77
Military (Active) Pay ($B)	7.61	7.61	1.94	7.62
Military (Reserve) Pay ($B)	.29	.26	.09	.27
Other Operating Accounts ($B)1/	8.09	9.39	2.55	9.86
Total Operating Funds	15.99	17.26	4.58	17.75
Active Military End Strength	732,493	724,954	732,358	743,651
Reserve Military End Strength	145,035	124,911	125,284	127,784
Civilian End Srength	318,274	322,067	322,883	328,474
Total Personnel	1,195,802	1,171,932	1,180,525	1,199,909
Active Fleet (Number of Ships)	502	490	494	509
Naval Reserve Force (Number of Ships)	65	63	63	63
Active Aircraft Inventory2/	6,247	6,125	6,133	6,030

1/ Includes the following: O&MN, O&MMC, O&MNR, O&MMCR, and NPR.
2/ Includes Navy/Marine Reserve Aircraft

Manpower costs, military and civilian, comprise the single most important element of operating accounts. For FY-76 we are requesting a Navy military active duty end strength of 528,651 down about 7,500 from FY-75 levels. For the transition period we are requesting an end strength of 535,860 and for FY-77 our authorization request is 546,005. For the Marine Corps active forces our requested strengths remain about level with that provided in FY-75, about 196,400.

With respect to reserve strengths in FY-76, we are requesting authorization for a Naval Reserve drill pay average strength of 94,000, down about 18,000 from FY-75 levels. In the transition period and in FY-77 we are planning an average strength of 92,000. We are in the process of completing a reorganization of the Naval Reserve with emphasis on mission oriented units. At the same time we are also performing a detailed review of our mobilization system including the validation of specific Selected Reserve requirements. The 94,000 average strength for the Naval Reserve requested for FY-76 appears to be an appropriate target until such time as the Navy's mobilization validation and the OSD Study of the Guard and Reserve are approved. For the Marine Corps Reserve we are proposing an average strength of about 33,500 man years in FY 76-77, slightly increased from the FY-75 level of 31,700 man years.

Civilian personnel levels are projected to increase somewhat -- from 318,000 to 328,000 in FY-77. These increases provide, for the most part, the required work force to support our planned improvements in readiness related ship and aircraft overhaul and rework programs.

With respect to our operating and maintenance requirements to support the programmed Navy and Marine combat forces we are requesting about $9.3 billion in FY-76 and $2.5 billion in the transition period. These amounts include civilian personnel costs contained in the annual accounts. For FY-76 our request is approximately $1.3 billion higher than that provided in FY-75. This higher funding request reflects our continuing

concerted efforts to improve the maintenance and support of the fleet in order to achieve and maintain acceptable readiness levels in the face of rapidly escalating costs. In this regard some $450 million of the requested increase is directly attributed to the annualized impact of FY-75 wage and price increases.

The most significant single element in our FY-76 request for Operations and Maintenance Navy is related to the ship depot maintenance program which increases from $1.46 billion to $1.88 billion. Funding at this level will provide for 85 ship overhauls compared to 80 in FY-75, as well as accommodating the increased costs associated with inflation and the increased complexity (scope) of planned overhauls and alterations. If the commercial and naval shipyards had the work force capacity, we would have requested an even higher funding level to further reduce the current backlog of ship overhauls to which I previously referred. In order to alleviate the shortages of skilled workers in our naval shipyards we propose to increase about 4,000 men in FY-76 and 4,000 in FY-77. With the present unemployment rates we are experiencing there is a double dividend here--the provision of additional jobs with good job security thereby lessening the numbers of people drawing unemployment compensation or on welfare, and increasing the capacity of the shipyards so sorely needed. Given this increased base we intend to make progress over the next several years towards improving the unsatisfactory backlog position in which we find ourselves today. With respect to shortages in skilled manpower in the commercial shipyards, we are preparing

proposed legislation, in cooperation with the Department of Labor, to be forwarded soon, which would establish a training program to relieve these shortages.

In terms of readiness, the outlook for aircraft maintenance is somewhat brighter. The FY-76 aircraft rework and maintenance program is budgeted at $701.5 million, an increase of $74.6 million over FY-75. Almost $60 million of this is dedicated to increased repair of aviation components now in backlog which will significantly contribute to improving aircraft material readiness. In addition, increased airframe reworks will be attainable through a combination of increased funding and incorporation of revised depot maintenance practices such as the Standard Depot Level Maintenance (SLDM) program, which I have mentioned previously.

Finally our requests in the annual accounts include a significant (25%) increase in Reserve force operating funds to further improve their readiness posture.

CONCLUSION

Mr. Chairman, I think the need for a strong United States Navy and Marine Corps team is more evident today than ever before. We have reached a sensitive juncture in naval history. Our ability to carry out our missions is, and will continue to be, under active challenge. I am confident that with the advice and counsel of the Congress and with your full support of the Department of the Navy's proposed FY-76 and 7T budget and FY-77 authorization request, that we can meet the challenge.

It has been a privilege to appear before you today. I value the opportunity to highlight some of the principal factors bearing on our budget request as well as to share with you some of my concerns.

At this time, subject to your concurrence, I would recommend that Admiral Holloway and then General Cushman present their statements, after which we would be pleased to respond to your questions.

Thank you, Mr. Chairman.

BUDGET REQUEST

Chairman McCLELLAN. You may proceed, Mr. Secretary.

Secretary MIDDENDORF. Following me, Admiral Holloway and General Cushman have summary statements.

Chairman McCLELLAN. Very well.

Secretary MIDDENDORF. Mr. Chairman, it is a great privilege to make my first report to you on the Department of the Navy's proposed budget for fiscal year 1976, the transition period, and the authorization request for fiscal year 1977. With me today are the Chief of Naval Operations, Admiral James L. Holloway III; and the Commandant of the Marine Corps, General Robert E. Cushman, Jr.

The mission of the Navy and Marine Corps, as it is with each of the other services, is to support national policy in the common defense of our country, its people, and our vital interests. The executive branch shares with the Congress a constitutional responsibility for insuring that the armed services are prepared to carry out their respective missions, and in that regard, I seek the advice and counsel of this congressional body.

NEED FOR SEAPOWER

Some may ask, why do we need seapower? I believe, and history attests, that the answer is clear and compelling. First, U.S. seapower is a uniquely flexible tool for implementing national policy and offers these singular advantages:

The ability to operate without diplomatic constraints, base rights, overflight privileges, or the pressures of host countries.

The ability to move wherever national interests dictate, and without prior agreement from any foreign power, a credible military force over 71 percent of the Earth's surface, and project power ashore to areas which contain 85 percent of the world's population.

The ability to provide military presence without an automatic commitment of forces.

The ability to clearly demonstrate U.S. interests and capability, without disclosing precise intentions.

SOURCES OF NATURAL RESOURCES

Second, the United States is growing increasingly dependent on foreign sources of raw materials and energy. Nearly all of the strategic raw materials and metals which are vital to our economic base are imported in whole or in part; and virtually all, 98 percent, by sea. Additionally, last year we imported more than 2 billion barrels of crude oil and refined petroleum products, supplying 35 percent of our oil demands and costing about $24 billion to the Nation. Almost all of this came to us by sea.

In recent years, much has been written and discussed about the trends which have characterized the changes "in size and capabilities of the United States and the Soviet naval forces. Without belaboring the details, the predominant trend in our own Navy has been the rapid decline in force levels with a concomitant reduction in our flexibility to respond to the direction of the national command authority.

On the Soviet side, we have witnessed a series of well-defined improvements in capability in almost every area of naval endeavor, starting really with the big buildup following the Cuban missile crisis. If these trends were to remain unchanged, we would, at some point, have an inferior force which would be unable to carry out its responsibilities in a manner heretofore guaranteed, thereby severely reducing the numbers of opinion available to play our role in the international arena. We must reverse these trends, and we will. The situation is serious and demands our most careful and specific attention. It comes down to our fundamental need for more ships. We have in last 6 years cut the size of our Active Fleet by one-half. This year our active ship force level will dip below 500. We accepted the risk of a temporary reduction in force levels in order to modernize our fleet. The reversal of this trend has now been started. In the last 3 years, the annual construction rate for new ships has gone from 10 in fiscal year 1973 to twenty-two in fiscal year 1975. The fiscal year 1976 shipbuilding program proposes 23 new construction ships, while the fiscal year 1977 authorization request is for 30. In my judgment, it is critical that we together preserve this shipbuilding momentum in order to insure maritime superiority.

NEW SHIP CONSTRUCTION

Chairman McCLELLAN. At the moment, your request is for 22 in 1975, and you want 23 more in 1976. Is that correct?

Secretary MIDDENDORF. That is right. The fiscal year 1976 shipbuilding program proposes 23 new construction ships, while the fiscal year 1977 authorization request is for 30.

Chairman McCLELLAN. Those will be in addition to the 23?

Secretary MIDDENDORF. No. We dropped down to—well, before the Vietnam buildup, we averaged about 42 ships a year.

Chairman McCLELLAN. An increase of that number of ships each year?

Secretary MIDDENDORF. No. In other words, we have requested the construction of 22 new ships in 1975; and in 1976, we will request an additional 23 new ships.

Senator YOUNG. Can the Secretary give us some idea of the kind of ships these 23 will be?

Secretary MIDDENDORF. Yes. The 23 new ships include one Trident submarine, two 688 class submarines, one nuclear guided missile frigate—to be redesignated as a nuclear combatant cruiser (CGN), two patrol hydrofoils (PHM), and 10 guided missile frigates (PF).

In addition to that, we will ask for two support ships of the destroyer tender category, two fleet oilers, and three fleet ocean tugs.

That is 23 for fiscal 1976.

Senator YOUNG. Is that hydrofoil a prototype?

Secretary MIDDENDORF. No, sir. We have already built one of the Pegasus class hydrofoils, constructed it at Boeing out in Seattle as an R. & D. ship. Later in the testimony I would like to get into the matter of the hydrofoil situation.

MOTHBALL FLEET

Senator FONG. Have you taken any ships out of mothballs?

Secretary MIDDENDORF. No, sir, we have 256 combatant and auxiliary ships in mothballs.

Senator FONG. What is the average age of those ships?

Secretary MIDDENDORF. The average age of the combatant ships in mothballs is about 29 years. Admiral Holloway could answer the question better than I. I talked yesterday with Admiral Buckley in charge of our Board of Inspection and Survey and he tells me that it is impossible to take any of these older ships out to operate with the fleet because of their lack of modern radar and sensors. We couldn't match any equipment that the Soviets have which, because of the technology improvements over the last 30 years, are substantially better than ours.

Admiral HOLLOWAY. Mr. Chairman, could I amplify the Secretary's statement.

What the Secretary's statement says is that we are asking for new procurement of 23 ships in the fiscal 1976 program and new procurement of 30 ships in 1977, but that will not increase the number of ships in the Active Force by that number. They will simply replace older ships that will drop out.

Chairman MCCLELLAN. I understand.

Secretary MIDDENDORF. We are now retiring about 4 percent of the Active Fleet a year because of age and obsolescence. So it means that about 10 are going out each year.

Chairman MCCLELLAN. And in about 25 years you will have to replace the fleet, proceeding on that basis?

Secretary MIDDENDORF. Yes, on what you might call a "rotating" or phased based.

Chairman MCCLELLAN. You replace it about every quarter of a century?

Secretary MIDDENDORF. Yes, sir.

Chairman MCCLELLAN. Proceed.

INFLATION IN SHIPBUILDING

Secretary MIDDENDORF. Like every other budget, the Department of the Navy budget has been dramatically affected by the impact of inflation and changing market conditions. To illustrate this point, I would emphasize that in June 1974 the Bureau of Labor Statistics estimated that the shipbuilding industry would have an overall combined labor and material cost growth of 11.25 percent. Two months later revised indices showed a shipbuilding growth of almost 16 percent with material costs alone exceeding an unprecedented 22 percent of growth rate.

The Navy, by its mission, is the most investment-intensive and long leadtime of all the services and, therefore, the real program value of its funding for prior years has suffered the greatest reduction. Accordingly, the budget includes additional funds, especially in the shipbuilding and conversion and weapons procurement programs to cover the deficiencies in fiscal year 1975 and prior years brought on by unexpected inflation. I will break those down in a moment. I would like to take a minute and comment on the increase in SCN funds requested for this year.

The budget request for the SCN appropriation is $5.445 billion. Of this amount, $3.17 billion is for new ships, approximately the same amount as last year, and $2.269 billion is requested for 1975 and prior year programs in order to bring the account to a fully funded posture. It is essential that we provide for these fact of life increases in order to

continue building the ships authorized and to maintain the shipbuilding momentum for the future Navy so necessary for assurance of an adequate maritime posture for our country.

At the heart of our prior year problem is the unanticipated and unbudgeted effect of inflation. Our prior year shipbuilding requests were based on the best estimate for protecting inflation at the time. The fiscal year 1974 shipbuilding program, for example, was prepared in calendar year 1972, well before the current inflationary trend. The annual inflation Bureau of Labor Statistics (BLS) in indexes of 4¼ percent a year, which were the official base we used, were representative of the estimates of both government and industry as we planned and budgeted for the escalation clause of a contract at that time for out year requirements in an atmosphere of wage and price controls. In fiscal year 1974, we simply did not have the capability to predict accurately the explosion in the composite shipbuilding material and labor indexes, which rose by 16 percent.

ESTIMATING COST INCREASES

Chairman McCLELLAN. Let me ask you, do you procure these ships by contract to shipbuilders?

Secretary MIDDENDORF. Yes, sir, they are on a fixed price, for the most part fixed price incentive fee contract, which is a fixed price type of contract.

Chairman McCLELLAN. They are not let to the lowest bidder then?

Secretary MIDDENDORF. I would say we use the Bureau of Labor Statistics as the escalating factor. They give us the figure and that figure is given to the shipyards in what we call escalation in the outyears after the contract is let. He is entitled to that. Most of the shipbuilding contracts are given out by the Navy in that fashion.

Chairman McCLELLAN. They make a bid on the basis of what it would cost to build the ship at present, and then take care of these advances by a provision in the contract, and if labor or material go up, the Government takes care of that?

Secretary MIDDENDORF. That is right.

Chairman McCLELLAN. In addition to the original bid?

Secretary MIDDENDORF. That is right. It is a previously agreed on statistic or measurement, yes, sir.

In the fall of last year when it was clear that inflation had broached upward from all previous estimates, revised budget preparation guidance was promulgated directing a submission of revised best estimates of program costs. Every program was carefully examined and, utilizing the best information available, the additional funds required aggregated to $2.269 billion to fund fully the fiscal year 1975 and prior programs based on present estimates of the inflation increase each year through the period required to complete their construction.

The Navy, of course, is not the only agency or business affected by the economic conditions we are experiencing. Every segment in our economy has been affected. What is unique about the shipbuilding program, however, is the fact that we are obligated to estimate the costs of our capital intensive shipbuilding account over such a long period of time. For example, the Navy estimated the costs of the carrier *Nimitz*, which is now planned for delivery in July 1975—it is undergoing sea trials this weekend—in the fall of calendar year 1964

for submission of the budget for fiscal year 1966. Congress actually appropriated money for *Nimitz* in the appropriation act of 1967. Thus, a period of 8 years will have elapsed since Congress appropriated for funds and ship delivery. Such a ship, with its long construction time, unlike tanks or airplanes, is exposed over a much longer period of time to the effect of inflation. In the particular case of the fiscal year 1975 and prior year ship programs they have bridged entirely the most virulent inflation of the post-war period.

There are several factors which have influenced these cost changes. Contractors have reported increased lead time in procuring material for their subcontractors. Time is money. Because of unpredictable economic factors, subcontractors have often resorted to the practice of determining their price on delivery instead of a fixed price commitment when the contract is signed.

To the degree that our present estimates are accurately predicting the economic trends of the future, the restoration of full funding to the SCN appropriation in this year's budget will be achieved. However, as pointed out previously, the long time between appropriation and completion of construction of a naval ship clearly leaves a degree of uncertainty.

In addition to the problem of properly funding our ongoing ship programs, the Navy has not been unmindful of the potential negative impact that inflation has on business relationships with the shipbuilding industry. As you know, the Navy has been intensively studying and correcting a variety of causes which has burdened our relationship in the past. Owing to the length of most shipbuilding programs they are more prone to problems posed by a fluctuating economy, and therefore, as a matter of course, employ escalation provisions in our contracts.

CONTRACT NEGOTIATIONS

Senator YOUNG. I am not clear how you contract to build, say, a carrier. Is it a negotiated price?

It is pretty much to put it on a bid basis for the whole thing?

Secretary MIDDENDORF. Yes, sir, it is negotiated but they make the bid and not often do you have multichoices with a carrier. In fact, we won't today because we are down to one major shipyard that can build a carrier, Newport News, unless the economy works in substantially the other direction and other yards see fit with cancellation of ULCC's and LLG contracts to come in and bid, but Newport News is nuclear qualified. I don't know the situation back in 1966, when these contracts were let, whether or not there was more than one yard. I know today there is only one yard—only two yards—in a position to bid on these major nuclear contracts.

Senator YOUNG. One or two bids? Is that all you get?

Secretary MIDDENDORF. Yes.

Senator YOUNG. How about the subcontract? Do you have one prime contractor and then the prime contractor handles totally the contract free from your supervision on the subcontracts?

Secretary MIDDENDORF. Unless it is Government supplied material. The Navy itself has 40,000 contracts out right now just with different suppliers. But on a ship construction program, I believe I am right,

the contractor himself would do the subcontracting of the material the Government did not supply.

Admiral HOLLOWAY. Yes, sir, whenever we can we go to competitive bids for the construction of ships and for the simpler kinds of ships that do not require, as the Secretary said, a nuclear capability in the shipyard, we may get three or four bids and we take the low one normally of the qualified bidder. In the case of Newport News Shipbuilding & Drydock they were, at the time that the *Nimitz* bids were being asked for, the only shipyard in the country which had the capability of constructing a nuclear powered carrier of that size.

CARRIER BUILDING CAPABILITY

Senator YOUNG. Does the Navy have a shipyard of its own that could build a carrier?

Admiral HOLLOWAY. We do have shipyards that have built carriers in the past, and there have been other commercial yards so capable, but it would take a good many years to get any of our Navy shipyards such as Puget Sound, developed to the point where they could undertake the construction of a large nuclear powered carrier. If it requires Newport News 6 or 7 years to construct a *Nimitz* class ship it would take, in my estimation, Puget Sound perhaps 8 or 9 years to do so because they do not have that capability in their yard at the present time. We would have to increase facilities, bring in additional skills, and buildup the work force, which takes time.

Senator YOUNG. What recourse, if any, is there if the cost of the ship would appear to be excessive?

Admiral HOLLOWAY. I think that if we had to procure a ship from a sole source, and if that sole source was gouging the Government in the Navy's judgment—that is making use of their sole source position to overcharge us—in my opinion we would simply not award the contract.

We negotiate a price on major ships such as the *Nimitz*. The Navy Sea Systems Command experts go over the yard's capabilities, and based upon what experience has shown what a ship like that should cost, we negotiate a fixed price incentive contract. If the contractor is able to build the ship for a lesser amount of money his profit will increase in accordance with a previously negotiated sharing formula. In the same manner, if costs increase, the profit decreases until at the ceiling price profit becomes zero.

LOSSES ON SHIPBUILDING CONTRACTS

Chairman MCCLELLAN. Under those circumstances, when you have only one source, there is no reason for the contractor to ever lose money, is there? He can always be assured of getting full pay plus profit?

Admiral HOLLOWAY. There is a way that he can lose money. That is, if he does not manage his shipyard well and get the productivity out of his work force that he should, like any poor businessman who has signed a contract, he can lose money.

Chairman MCCLELLAN. Well, there is no reason for him to lose if he is a good businessman.

Admiral HOLLOWAY. You are absolutely right, Mr. Chairman.

Senator FONG. Well, you investigate him either way, if he makes too much money and if he doesn't make enough money, or loses money. Doesn't he usually come to us and ask for an appropriation? Isn't there something like a renegotiation on post-investigation to look at the whole structure?

Admiral HOLLOWAY. Yes, Senator. If he loses money, a contractor will normally submit a claim and these claims are very carefully reviewed and I think the Secretary will probably cover the subject of shipbuilders' claims later. These claims are submitted, almost invariably, whenever a shipbuilder fails to make a clear profit.

In some cases his failure to make a profit may be the fault of the Government in that we have not delivered major Government furnished equipment (GFE) components of the ship on time.

This slows down construction, as the Secretary said, time is money. If the Government has contributed to the construction time of the ship causing cost overruns, then the claims should be settled in the contractor's behalf to the extent of the Government liability.

In many cases lack of profit can be a case of poor management, or low productivity of his work force. If the loss occurs because the contractor was a poor businessman, as the chairman indicated, we would hope the claim would not be settled in his behalf.

Senator FONG. If he had a great profit, what would you do then?

PROFITS ON SHIPBUILDING CONTRACTS

Admiral HOLLOWAY. Senator, I don't think that has happened lately. I would like to answer that for the record, if I could, because I am not familiar with that, because it would be a unique situation.

[The information follows:]

Shipbuilding contracts for the most part are of a fixed-price incentive type. Under this type of contract there is negotiated at the outset a target cost, a target profit, a price ceiling (but not a profit ceiling or floor), and a formula for establishing final profit and price. After performance of the contract, the final cost is negotiated and the final contract price is established in accordance with the formula. When the final cost is less than target cost, application of the formula results in a final profit greater than the target profit; conversely, when final cost is more than target cost, application of the formula results in a final profit less than target profit, or even a net loss. Thus, within the price ceiling the formula provides for the Government and the contractor to share the responsibility for costs greater or less than those originally estimated.

As stated there is not a limit on profit nor is there a limit on loss if costs exceed ceiling price on any particular contract. The Government is protected from excessive profits in the contractor's overall operations by the Renegotiation Act of 1951, as amended (50 U.S.C. App. 1211—1233). As provided for in the Act, the Renegotiation Board reviews profits on renegotiable contracts and subcontracts aggregating more than $1 Million in a fiscal year in order to eliminate excessive profits therefrom. Such review involves consideration of financial statements and other information furnished by both contractors and the Navy.

BIDDING ON PRIVATE SHIPBUILDING CONTRACTS

Chairman MCCLELLAN. Senator Inouye.

Senator INOUYE. In recent years private ship owners have reported, because of the present shipyards being so busy filling Government contracts, they are unable to bid for private shipbuilding. As a result,

many of our companies have been forced to build their ships in foreign lands. That being the case, why don't you upgrade your in-house shipbuilding capacity or capability?

Secretary MIDDENDORF. Senator, we have made a study of that recently and I think GAO has also. The best information we have is that to build a ship in a naval shipyard, and we have eight of them including the one in Hawaii, it would cost 30 percent more than private yards.

We have two yards now that we could probably break into nuclear shipbuilding programs, Puget Sound and Mare Island, and probably Portsmouth Navy Yard in New Hampshire. At an early point we could probably employ Philadelphia Naval Shipyard for conventional ships. But, recognizing the taxpayers' interest in this, I think it would be considered imprudent for us, at this stage, to go ahead with naval shipyards for anything other than repair.

As you know, the navy yards do 70 percent of all of the repair, overhaul, of our ships, and 30 percent of it is done in the private shipyards.

Senator INOUYE. If that is competitive, what are the reasons for this 30 to 100 percent differential in shipbuilding?

Secretary MIDDENDORF. Well, in my opinion, and by the way, if I can digress for a minute, Newport News testified they were losing 6 percent on Government business this year when they testified before Congressman Bennett's subcommittee on sea power hearings. I don't know of many cases where any of these private shipyards are making any money at this stage of the game. It is certainly not any significant money. I think that is because of the tremendous run up in the material costs that nobody could have foreseen and they are stuck on it right now.

Just to finish what was said, the Navy shipyards, or the problem with putting new construction in a repair facility is that whenever a ship is in need of repair it takes priority over new construction. So the folks that are working on the new ships drop them and go over to repair the ship which has a hole in it. So as a result the costs are substantially greater in new construction because time being money, the schedules slip. In addition, there is the civil service aspect. The people in the naval shipyards are paid a salary that is steady. In comparison just this last month, the Newport News Shipyard announced a layoff of 2,000 workers down there.

So the folks down there have a turnover rate and turbulence and not the more-or-less set career they would get in working for the Navy shipyards.

NAVAL SHIPYARD PERSONNEL REDUCTIONS

Senator INOUYE. In the Navy shipyards, you still have reductions in force, too?

Secretary MIDDENDORF. Yes, sir. We have about 63,400 workers now in our eight naval shipyards, and we were asked to reduce it by about 2,700. We would like relief on that.

Senator INOUYE. As far as the rates they should be comparable or below the private sector, because the blue collar has to keep in line with the private sector; isn't that right?

Secretary MIDDENDORF. Yes sir, for comparable skill level. However, the difficulty we have in that civil service folks work longer in their

jobs and therefore have more seniority on the average. For example, there is a 4-percent turnover rate per month in Pascagoula Shipyard, where we build our DD–963s. That is 50 percent a year.

The lower skills are the ones that turn over so rapidly there.

Senator FONG. Some of your yards do not have the complement to really make them efficient, is that correct? They tell me, for example, Pearl Harbor needs 7,000 people to make it efficient, but we don't have 7,000, only 5,000.

Secretary MIDDENDORF. Yes, sir. We we're asked to reduce the number of the workers last year and we did. We would like some relief on that if we could by a few thousand, that is the industrially funded areas, because we have so many overhauls postponed and we have 59 active ships now awaiting overhaul.

Senator FONG. You don't have enough personnel and you really have a high overhead. Where you need personnel to really take care of overhead, in the case of Pearl Harbor, for example, you don't have enough men there to really cut the overhead down, is that a problem?

Secretary MIDDENDORF. To develop an economy of scale, yes. You have to have the manning level to spread the writeoff of overhead and to provide maximum efficiency of operations.

U.S. MERCHANTMEN CONSTRUCTED OVERSEAS

Chairman MCCLELLAN. Mr. Secretary, did I understand that private shipbuilders go into the foreign market and have them built less expensively than they can here? Is that what you said?

Secretary MIDDENDORF. I think the Senator said that, sir.

Chairman MCCLELLAN. I am asking you if that is correct.

Senator INOUYE. I said, Mr. Chairman, because our United States shipyards have been so busy fulfilling Government contracts in recent years, they have not been able to submit bidders for private shipbuilding. So many companies have had to go out, I should say, and get their ships built.

Chairman MCCLELLAN. Are you saying they must turn to other sources—other countries—because we don't have capacity available here?

Secretary MIDDENDORF. No, sir, Mr. Chairman. They went to foreign builders because they were cheaper. The capacity was always available in this country. If I could postulate on the future, I would say that situation will get even better in the near future. I have been in touch, because it is my business to, of course, I have been in touch with the shipowners, tanker fleet owners, and they are canceling orders right and left. There are ships commissioned for $75 million now for sale for $36 million, and have not yet gone into service.

Many of the ULCC's and some LNG's have been canceled and my opinion is the impact on our yards 2 years ago and last year are being relieved by the recession and the surplus of world oil. I feel that we are going to be in much better shape as far as shipyard capacity is concerned.

Furthermore, in looking at the number of men-days Newport News has scheduled, that we will be operating on 2 years from now or 3 years from now, we see a substantial decline in their employment down there.

Electric Boat is the only one of the major yards which is going to show any increase over the next 2 or 3 years and it will peak out.

IDLE CAPACITY

Chairman McClellan. Didn't you just state that situation will get better?

Secretary Middendorf. Yes, sir.

Chairman McClellan. How is it getting better if people continue to be laid off?

Secretary Middendorf. I meant, Mr. Chairman, better as far as available capacity. Electric Boat will be hiring more people. That is the only one of our yards that shows this trend. Pascagoula and others will show a decline. The reason for Electric Boat going up is because of the submarine contracts they have with us up there.

We are fortunate, one of the pluses that came out of closing of the base at Quonset is that all of that capacity is available to Electric Boat and they hired 1,800 people and set up a marvelous welding school and have 11,000 applications up there for a possible 3,000 jobs.

Those are first-class people they are taking on. In fact, I wrote the Governor last week congratulating him on setting up a program for welding, where, when we inspected the welds we found they were some of the best welds we had ever seen in any of our shipbuilding programs.

COST FORMULAS

Chairman McClellan. Please return to your statement.

Secretary Middendorf. However, the formulas used in the past have occasionally failed, and in the current environment would most certainly not suffice. Therefore, we have developed new approaches which, while still tied to the Bureau of Labor Statistics indexes, will provide a basis for reimbursement to the contractor that more realistically tracks the manner in which contract funds are expended. Revised procedures have been incorporated in the recent Trident contract. Requests for proposal on major ships will incorporate appropriate escalation provisions reflecting the most current Navy policy. In addition to escalation, however, we have addressed ourselves to a wide variety of improvements based on analysis of the problems encountered in the past.

First of all, we are carefully selecting the proper form of contract for the procurement in question. Cost-type contracts are used in most lead-ship activity and the design is monitored both by the Navy and frequently by another shipbuilder who studies the output of the lead-ship contractor to determine its applicability to other yards. For example, an R. & D. project, a first ship.

CHANGE ORDER PROVISIONS

Senator Young. Can I ask you one more question?

In a ship that takes 7 years to build, don't you have many change orders during that time to take advantage of more modern developments?

Secretary Middendorf. Yes, sir. But the total change orders, I believe on the carrier *Nimitz* that we are now taking on sea trials, came to approximately $29 million, and that is all.

Admiral HOLLOWAY. Senator, if I could expand on that. This is the most difficult problem for the Chief of Naval Operations, because changes to ships during the period of construction are very expensive. We try to hold down those changes as much as we can.

At the same time, we do not want to deliver a ship to the operating forces which is obsolete. So, we don't make changes to that ship unless we feel the exchange is absolutely essential to enhance the military capabilities of that ship, or to correct a construction fault which may have been overlooked in the design.

But it is a source of trouble to us constantly. We work very hard and we exercise our best professional judgment in trying to limit the number of changes to only those which are necessary to make it a usable ship.

Senator YOUNG. Thank you, Mr. Chairman.

PROGRESSIVE SHIPBUILDING MANAGEMENT

Secretary MIDDENDORF. As a result of programs we initiated, we have now reduced change orders to half the rate of 10 years ago. That was one of the major factors in the growth of the costs before. These are being fully monitored so as to eliminate misunderstanding which occurred in the past. We are certain this is very difficult and attention is being given early in the program rather than after the fact.

These changes in procedures together with the fact that in 1974 we have made a substantial reduction in the outstanding claims against the Navy, provide the basis for the future, whereby business relationships will be much improved.

On the other hand, I want to be reminding you that there are many programs, still current, based on procedures of the past. Many of these programs are continuing economic burdens to the shipbuilders involved, such as Newport News, and the Navy is addressing each contract in turn, maintaining the interest of the Government but responding to legitimate requests for adjustment.

We are taking positive management action to eliminate some of the root causes of the prior year problem and to guard against a recurrence of the magnitude now before us. In this respect, our fiscal year 1976–77 requests reflect our best cost estimates for the full funding of our new construction ship programs including our best estimate of a reasonable reserve for the impact of inflation.

In order to provide some stability for the shipbuilding industry, I urge strong support for the multiyear ship authorization concept. If legislated, this change to the current approval procedures would help significantly in ameliorating our shipbuilding problems. It has the potential to stabilize the shipbuilding industry, save production costs, and improve the efficiency of Navy shipbuilding programs by providing optimum program value per dollar spent. Congressional authorization of long-term shipbuilding programs would also permit shipyard managers to plan for timely commitment of construction facilities, manpower skills and capital, resulting in greater efficiencies and economies of production.

The detailed provisions of the Department's proposed budget appear in the written statement which I have submitted for the record. Appropriate sponsors will, in the coming weeks, testify as to the budget

details. At this time, however, I would like to summarize some of the more important programs.

Our budget supports the Trident modernization program and provides for continued procurement of the Trident ballistic missile submarine. This program procures ships at the rate of three every 2 years with the total procurement number remaining open.

The patrol hydrofoil missile, PHM, program is a cooperative NATO development effort which provides a small, fast surface combatant, armed with the Harpoon antiship missile. PHM–1 was launched last November as the class prototype. Four ships were funded in the fiscal year 1975 budget and the fiscal year 1976 budget requests $83 million for two additional vessels.

Our F–14 aircraft procurement program is now planned for a total of 390 aircraft. This is an increase of 56 aircraft over the total program presented last year and is intended to provide for 18 squadrons—14 Navy and 4 Marine—and the necessary pipeline and training aircraft in support. Although the total F–14 procurement program is increased, additional fighter procurement will still be required to meet modernization requirements of the Navy and Marine fighter forces. As you know, we are currently involved in reviewing proposals for a lower cost complement to the F–14.

LOWER-COST F–14 COMPLEMENT

Senator YOUNG. When do you expect to complete that review?

Secretary MIDDENDORF. This spring, Senator. I asked Admiral Kidd yesterday when he felt he could complete that and he felt between early March and the 1st of June.

Chairman MCCLELLAN. This is the "17" aircraft? What do you call it?

Secretary MIDDENDORF. Navy variants of the YF–16 and YF–17 prototype aircraft.

Chairman MCCLELLAN. You will be making a selection between the "16" and "17," one built by General Dynamics and the other one by Northrop, is it?

Secretary MIDDENDORF. Yes, sir.

Chairman MCCLELLAN. You will be making that decision this spring—within the next 2 or 3 months?

Secretary MIDDENDORF. Yes.

Senator YOUNG. I think the question whether or not they have to select the "16" and how it will be changed for aircraft purposes?

Secretary MIDDENDORF. Yes, sir, the "16" and the "17" prototypes were being examined by the Air Force. Neither the 16 nor the 17 version for the Air Force was suitable for the Navy, because neither of those versions had the equipment to operate from carriers.

So last fall, the Navy asked those two contractors to propose versions that would be suitable for carrier operations and which would fulfill Navy requirements. This request to the contractors for both of the types of aircraft was made before the Air Force selected the "16." So we still have both the 16 and 17 Navy version proposals coming to us.

The proposals are now in the hands of our Source Selection Council, which is a group of professional and technical people who deter-

mine if the aircraft will satisfy Navy requirements and they are due to report out to our Source Selection Authority on the 7th of March. That will be their first report on the "Navyized" versions of the F–16 and F–17.

We expect that there will be some more deliberations subsequent to this first reporting out of the contractor's proposal.

Chairman McClellan. Will there be any fundamental changes in the basic plane in adapting them to the Navy's use?

Secretary Middendorf. Mr. Chairman, I think that there will have to be some fundamental changes somewhere. As a matter of fact, one of the contractors is offering several models of aircraft because of problems he has encountered in making the plane, in his opinion, suitable for carrier operations.

At this time, since I have not seen the proposals and will not see them until they are given to the Source Selection Authority, I can't tell you just how extensive those modifications will be.

COMMONALITY OF AIR FORCE AND NAVY AIRCRAFT

Chairman McClellan. We had a problem several years ago with one plane that was to have commonality for both the Air Force and the Navy. I think it was demonstrated there that the commonality theory did not work in practice.

Here we have both the Navy and Air Force needing a plane, a fighter plane. Yours is to be a fighter plane, is it not?

Secretary Middendorf. Yes, sir. The Navy desires an aircraft which can be both fighter and attack.

Chairman McClellan. And the Air Force's is a fighter plane. It is desirable, if it can be done, to use the same plane. I don't know whether it is practical, but in theory, it would seem the best course.

The Air Force has accepted the General Dynamics plane on the basis that it excels in performance as regards the Air Force purposes. If the Navy buys the same plane, it seems there will be some savings for the Government. No one, however, expects you to select the Air Force plane if you do not think it is the best one for the Navy mission.

I don't know how it will be resolved, perhaps you do not know yourself. But I think the position of Congress may be to support procurement of this weapon.

I do not mean that a possible savings in this regard should be ignored. I don't know—maybe the Navy and the Air Force each take pride in having their own particular weapon. If that is the case, I think it is important to take a little pride in the economy as well. You might keep that in mind as you make your decision.

Secretary Middendorf. Thank you, Mr. Chairman.

PROCUREMENT PROGRAM

For fiscal year 1976 we are requesting procurement of 41 S–3A twin jet carrier based ASW aircraft. This buy will complete the currently planned procurement program of 187 aircraft.

Advance procurement funding for the new Navy and Marine heavy lift helicopter, the CH–53E, is included in the fiscal year 1976 program with procurement of 17 aircraft proposed for fiscal year 1977.

The Harpoon antiship missile development program is showing satisfactory progress in meeting performance milestones though it, too, has encountered rising costs, and they have been substantial. Harpoon pilot production was initiated last year, and we expect to begin operational evaluation of these missiles this summer and to have results in hand by the year's end. Thus, the basis will be provided for initiation of full production of Harpoon and its introduction in the fleet in fiscal year 1976.

The 3-year Marine Corps' buy of M60A1 tanks, and associated recovery vehicles, will be completed in fiscal year 1976; $92.4 million is being requested this year for the final 154 M60A1 tanks and 15 M88 tank recovery vehicles.

In order to maintain an essential technology base, our research and development programs include the new antiair and antimissile Aegis system; improvements to our existing guns and missiles; the development of advanced weapons systems, such as the lightweight torpedo and the sea-launched cruise missile. Our surface platform research and development efforts will include the advanced hydrofoil and the surface effect ship. The surface effect ship program continues in the advanced developmental stage. Two 100-ton craft were completed in 1972 and continue to undergo testing to reduce the technical risks associated with this technology, before a request for funds is submitted to build a prototype ship for this new concept, which shows great promise.

Finally, the Navy is working toward the development of a single helicopter to perform both Lamps MK III and carrier-based helicopter missions. Commonality between this and the Army UTTAS helicopter is expected to produce a commensurate reduction in unit costs.

Aside from the budget, our near term goal is, of course, the achievement of maximum force readiness with the manpower resources and budget constraints directed by Congress. Rapid development of world crises is a reality in today's world. The Navy and Marine Corps' ability to contribute meaningfully to our national military strategy depends directly on the readiness of our forces in being.

At the same time, the Department of the Navy has vigorously pursued a number of programs with the view of improving its management structure so that better support is achieved. Among these initiatives has been a positive action program to reduce the backlog of shipbuilder's claims. During calendar year 1974, for instance, claims of approximately $360 million were settled. In addition, a review of the Department of the Navy's weapons systems acquisition procedures has been made by the Navy and Marine Corps Acquisition Review Committee. This is what we call the NMARC. Jim Roach and some distinguished men from industry came in and made 200 recommendations to the Navy Department and we were very happy with their recommendations.

ACQUISITION REVIEW

The Navy has a substantial program for reviewing and implementing them, especially in the procurement area, and the research, production, and costs areas. As a result, I expect that we will improve our ability to introduce effective weapons systems, equipment, and material in an efficient and timely manner at optimum cost.

In addition, military and civilian personnel requirements are a matter of continuing interest and review. The ability of the Navy and Marine Corps to perform well rests on the material condition of our equipment and the skill with which we are able to acquire and develop our personnel to operate and maintain that equipment. Due to technological changes, the skill requirements for Department of the Navy military and civilian personnel continue to rise. For example, title VIII legislation will further intensify the need for highly skilled civilian shipyard personnel and increase the requirement for nuclear trained officer and enlisted personnel.

As you know, these are all major ships which are required by law to be nuclear. Advances in weapons sophistication, to meet the growing threat, must be constantly balanced against the skill of our people to maintain the systems. In this regard, I am encouraged by the recent increased recruiting and reenlistment results achieved by the Navy and Marine Corps. Not only are the numbers up but the quality, also. Continuation of these trends will provide higher average skill and experience levels with concomitant salutary effect on readiness.

Effective maintenance contributions by Navy shipyards have been hampered by the imposition of reductions in civilian personnel ceilings. Since the apprentice trainees are protected by Civil Service Commission regulations from most reduction in force actions, lower personnel ceilings must be achieved by reducing the number of full-time production workers, who, in many cases, are the newly trained journeymen who have just completed the expensive apprentice training. The development of skills required for the complex work assigned to naval shipyards can best be obtained through apprenticeships and is an indispensable part of all-shipbuilding programs. However, under current restraints, this large scale training effort is detrimental to near term fleet support, and it has compounded the backlog of work problems in these shipyards. I, therefore, request that Congress remove the personnel ceiling controls from Navy industrially funded activities and permit us to base unemployment levels on customer workload, which we discussed earlier.

RESERVE FORCES

In accordance with the total force policy, the Department of the Navy is placing increased reliance on its Reserve Forces. It is recognized that the Reserves will be the initial and primary source of active force augmentation in time of mobilization or national emergency.

For fiscal year 1976, some Reserve elements will be realined. New missions and forces will be assigned including eight patrol gunboats, three amphibious ships and one helicopter combat support squadron. On the other hand, construction battalions will be reduced, Naval Reserve destroyers will drop in number from 35 to 30, and carrier-based S–2E reserve ASW squadrons will be phased out.

In addition to the realinement of missions and forces, we have looked hard at our mobilization requirements against our current Active Force levels. The combined effort, impacted by inflation, results in a planned reduction in reserve end strength in fiscal year 1976 to about 92,000. It should be mentioned, however, that total reserve funding

has been increased to improve readiness and training. I think increased to $500 million.

The Marine Corps Reserve will remain relatively stable under the 4th Division/Wing Team concept with emphasis on increasing combat to support ratios. There is about 33,000 in the Marine Reserves. I am encouraged by the recent increases in non-prior-service recruiting and by the overall reenlistment rate in Marine Reserves. Current end strength deficiencies will not be resolved immediately, but a gradual and orderly growth is planned to attain full mobilization requirements in the Marine Corps Selected Reserve by the end of fiscal year 1978.

Mr. Chairman, this concludes my statement.

Chairman McCLELLAN. Thank you very much.

Tell me, what is the present strength of the Navy?

PERSONNEL STRENGTHS

Secretary MIDDENDORF. 536,000 men and women on active duty.

Chairman McCLELLAN. Does that include the Marines?

Secretary MIDDENDORF. The Marines have another 198,000.

General CUSHMAN. 196,000.

Secretary MIDDENDORF. Excuse me.

Chairman McCLELLAN. What reduction has been made in the Navy's personnel strength during the past 2 years?

Secretary MIDDENDORF. We came down from 750,000 to this figure.

Chairman McCLELLAN. During what time span was that reduction made?

Secretary MIDDENDORF. Since 1970, I believe. I have it here now; 776,000 in July 1969.

Chairman McCLELLAN. Down to 536,000?

Secretary MIDDENDORF. That is right.

Chairman McCLELLAN. And the Marines?

General CUSHMAN. The Marine Corps at the high point in 1969 was 317,000 Marines, and we have come down to the neighborhood of 196,000 about 3 years ago and it has stayed relatively stable, and I hope it will remain so.

Chairman McCLELLAN. Under present conditions, do you feel this level of personnel is adequate, taking into account the number of ships you have and so forth?

General CUSHMAN. Well, I can answer for the Marine Corps that it is an adequate number for peacetime, too. To actually fill our peacetime tables of organization takes 212,000, but we have not been allowed to budget for that many. We have not been authorized that many. We would have difficulty recruiting that many.

I am satisfied with the personnel as they are. We can carry out our peacetime missions and with the Reserve backing us up, we would have no trouble filling up should more serious trouble occur.

Chairman McCLELLAN. Do you have a good reserve to fall back on?

General CUSHMAN. Yes, sir.

Chairman McCLELLAN. Very well.

Mr. Secretary, do you have any comment on the Navy's strength with regard to its adequacy for present conditions?

Secretary MIDDENDORF. We are asking, Mr. Chairman, for a slight increase in fiscal year 1977 to about 546,000 to man the new ships that we are bringing in.

Chairman McClellan. If new ships are added, you must increase personnel?

Secretary Middendorf. Yes, slightly.

Chairman McClellan. But ordinarily, it is pretty stable?

Secretary Middendorf. This is a good range, I think, for the present size of the Navy. I might say, also, that first term reenlistment rates are up from 17 percent in fiscal year 1971 to about 40 percent, due to the added incomes, I would say, plus the recession situation.

Chairman McClellan. Any questions, gentlemen?

Senator Inouye. May I ask the admiral a question?

Chairman McClellan. Yes, certainly.

CARRIER VULNERABILITY

Senator Inouye. Yesterday at our hearing on Defense R. & D., we were told that your large carriers are very vulnerable to missile attack at the present time, and at the present time the defense is most inadequate.

Do you have any comments to make on that?

Admiral Holloway. Yes, Senator. I think all ships at sea are vulnerable to missile attack. The carrier is probably the least vulnerable of all of our ships. It is the aircraft that fly off of the carrier that tend to reduce the vulnerability of the fleet in general.

We don't conceive of making carriers more invulnerable by putting more armorplate on them. They are already heavily protected by armor and other damage control systems. We do have what we call antimissile deception devices, but our approach to decreasing the vulnerability of naval forces is to destroy the hostile forces from which those missiles would be launched. That is best done by the combination of aircraft carriers and their strike aircraft or antisubmarine warfare forces, and the Harpoon missile.

Senator Inouye. I asked it because the vulnerability to missile attack has been used as one of the major arguments against further increase in the large carrier force supporting your submarine force.

But you say the carrier is the least vulnerable?

Admiral Holloway. Yes, sir, because the carriers through fighter aircraft, can shoot down enemy missile-carrying aircraft before they reach the launch point, which can be as far away as 300 miles.

The carrier's attack aircraft, with antiship missiles and bombs, can destroy hostile surface platforms, such as missile equipped cruisers, before the enemy forces can come within their missile range of our ships.

What I consider to be a greater threat than the surface ships is the submarine, and the carriers embarked ASW aircraft are able to seek out and destroy submarines in midocean areas, beyond the range of these enemy submarines' cruise missiles.

Senator Inouye. What is the total price tag for the 1976–77 ship procurement program?

Secretary Middendorf. $5.44 billion; $2.3 billion is to take care of the deficiency in prior year accounts. The shipbuilding account is $3.17 billion, which is the same figure for last year, and down about $300 million from the year before.

I would like to say something else about the new carriers. One does not say they are unsinkable, but the *Forrestal* and the *Enterprise* both

had substantial damage to their decks caused by explosion of bombs triggered by a fire on the flight deck. That was before any of these new sprinkler systems and other new safety devices were installed in the last couple of years.

There were nine major explosions on the deck of the *Enterprise*, which was the equivalent of about six antiship missile warheads. Nevertheless, had it been a wartime situation that ship could have been able to operate planes within a matter of hours, I am told.

In addition, the new carriers that are being built have extensive underwater side protection systems designed to defeat penetration by an enemy torpedo. Additionally, there are over 200 watertight compartments which isolate flooding and battle damage to small areas in the event of a hit. How many torpedoes it takes to sink it, I don't know. But they tell me it would be [deleted] before it would slow down. When you get [deleted] torpedoes into a carrier of that sort with this ASW capability, I think it would be a very unusual case. The submarine would have, by that time, been identified after the first firing position.

Chairman McClellan. How about air to surface bombing?

Secretary Middendorf. The chance of an airplane getting over a carrier with the aviation team aboard, I think, would be a difficult accomplishment. At least we hope so.

Chairman McClellan. That is the purpose of the carrier—you have fighter planes to protect it?

Secretary Middendorf. Yes, sir.

Chairman McClellan. Senator Young.

Senator Young. You are bringing back memories of World War II when it took the British a day or two to sink the *Bismark*, which was a ship that was really great, and it almost got back to France.

Chairman McClellan. All right, thank you very much, Mr. Secretary.

PREPARED STATEMENT OF ADMIRAL HOLLOWAY

We will now hear from Admiral Holloway.

You have a rather lengthy statement. It will be printed in full in the record and you can summarize.

Admiral Holloway. Thank you, Mr. Chairman.

[The statement follows:]

BIOGRAPHICAL SKETCH OF

ADMIRAL JAMES L. HOLLOWAY III, U. S. NAVY
CHIEF OF NAVAL OPERATIONS

Admiral James L. Holloway III became the 20th Chief of Naval Operations on 1 July 1974, relieving Admiral Elmo R. Zumwalt, Jr.

Admiral Holloway came to his present position with an extensive background in Navy program planning and management and with broad experience in command of major fleet units during combat operations, as well as a long and distinguished career in Naval Aviation. He is also the first nuclear power-trained officer to rise to the Navy's top uniformed position. His principal assignments have included command of the nuclear aircraft carrier USS ENTERPRISE, command of an aircraft carrier Division, Deputy Commander in Chief Atlantic and U.S. Atlantic Fleet, Commander of the U.S. Seventh Fleet during Vietnam and, most recently, duty as Vice Chief of Naval Operations.

Following graduation from the U.S. Naval Academy in June 1942 as a member of the accelerated World War II class of '43, Ensign Holloway served on destroyers in both the Atlantic and Pacific theaters. As gunnery officer of USS BENNION (DD-662), he participated in the capture of Saipan, the Southern Palau Islands and Tinian, the Leyte landings and in the Battle of Surigao Straits, the last major engagement between two surface fleets. For service while aboard BENNION, he was awarded the Bronze Star Medal and the Navy Commendation Medal, each with Combat "V".

After the war, he underwent flight training and was designated a Naval Aviator in January 1946. He flew Curtiss Hell Divers from the carrier USS KEARSARGE, served as an instructor in the air training command and on the staff of the Chief of Naval Air Basic Training in Pensacola, Florida.

Next, Lieutenant Commander Holloway transitioned to jet fighters and deployed for two tours of combat duty in Korea aboard the carriers USS VALLEY FORGE and USS BOXER. For his action in combat he was awarded the Distinguished Flying Cross and three Air Medals.

More significant aviation duty came in August 1958 when, as Commanding Officer of Attack Squadron EIGHTY-THREE, Commander Holloway participated with the U.S. Sixth Fleet in the Lebanon landings. Transiting the Suez Canal in the carrier USS ESSEX, His A-4 Skyhawk squadron became a part of the Seventh Fleet during the Quemoy-Matsu crisis in October 1958.

Two tours of duty in Washington, D.C., began in January 1959, first as Executive Assistant to the Deputy Chief of Naval Operations for Air and then as a student at the National War College (Class of 1962).

In July 1962, Captain Holloway took command of the seaplane tender USS SALISBURY SOUND, which was serving as flagship of Commander Patrol Force, U.S. Seventh Fleet.

After instruction in the nuclear reactor program under Admiral Hyman G. Rickover, Captain Holloway became Commanding Officer of USS ENTERPRISE, the Navy's first nuclear powered carrier in July 1965. He commanded her for two full combat tours in the Vietnam conflict, during which ENTERPRISE was awarded the Navy Unit Commendation and won the coveted "E" award for ranking first in battle efficiency among attack carriers in the Pacific Fleet. For his leadership, Captain Holloway received the U.S. Legion of Merit and was personally decorated by General Thieu, President of the Republic of Vietnam.

In May 1966, he was selected for promotion to Rear Admiral. At age 44, he was one of the youngest naval officers of those times to be selected for flag rank.

Rear Admiral Holloway reported to Washington in 1967 and served in the office of the Chief of Naval Operations where he established and served as Program Coordinator of the Nuclear Attack Carrier Program in addition to duty as Director of the Strike Warfare Division. It was in this latter assignment that he originated the CV (multi-purpose carrier) concept which, as a result of reduced carrier force levels, is now being implemented in the fleet. In this concept, the roles of strike and anti-submarine warfare are combined by tailoring the multi-purpose carrier's aircraft complement according to the particular task or mission assigned and the anticipated threat in its operating area. For his service as Director, Strike Warfare, he was awarded the Navy's Distinguished Service Medal.

In August 1970, Rear Admiral Holloway took over as Commander Carrier Division Six and, while embarked in the carrier USS SARATOGA, he directed operations in the eastern Mediterranean during the Jordanian crisis in the fall of 1970. He was awarded a second Distinguished Service Medal for his performance of duty.

Following promotion to Vice Admiral and duty as Deputy Commander in Chief Atlantic and U.S. Atlantic Fleet, he returned to command at sea in May 1972 as Commander, U.S. Seventh Fleet. For directing Seventh Fleet operations in the Vietnam war, and particularly the highly successful Naval air operations, from May 1972 to August 1973, and the strategically important mine warfare operations in North Vietnam, Vice Admiral Holloway was awarded his third Distinguished Service Medal.

On 1 September 1973, he was promoted to Admiral and became Vice Chief of Naval Operations, the post he held until assuming the Navy's top uniformed position on 1 July 1974.

Admiral Holloway was born in Charleston, South Carolina, on February 23, 1922, the son of Admiral James L. Holloway, Jr., U.S. Navy (Retired) and the late Jean Hagood Holloway. He is married to the former Dabney Rawlings, the daughter of Rear Admiral Norborne L. Rawlings (Retired) and Mrs. Rawlings of Washington, D.C. The Holloways have two daughters, Lucy Holloway Lyon and Jane Meredith Holloway.

STATEMENT

OF

ADMIRAL JAMES L. HOLLOWAY, III, U.S. NAVY

CHIEF OF NAVAL OPERATIONS

Mr. Chairman, it is an honor to present to you and the members of the committee my report in support of the Navy's fiscal year 1976 and Transition budgets and the 1977 authorization requests. In this, my first report as the Chief of Naval Operations, I have evaluated the Navy's posture and its needs in the context of its missions.

I. INTPODUCTION

The Navy exists to provide a fleet which is ready effectively to carry out its missions in support of national strategy and foreign policy. Our Navy missions are planned to be conducted within the framework of the military strategy, in joint operations with other services and in combined operations with our allies. We therefore view our mission responsibilities in the context of the total forces available; and the Navy budget is developed within this broad context. Our planning is strongly influenced by the fact that the Navy is hardware intensive. Our programs represent a long-term investment in forward deployed forces, which is amortized over a period of decades. Moreover, naval combatant units -- especially ships -- require long lead times from budget decisions until we see units in being. Thus, today's decisions affect not only tomorrow's readiness but also impact directly on the long-term capability of the United States to remain a maritime power. Accordingly, Navy planning carefully weighs both current and future requirements. These requirements are defined with a keen awareness of the total maritime environment, the growing capabilities of potential adversaries, and worldwide strategic trends and their implications.

This report to the Congress describes the Navy's missions, assesses our capabilities and deficiencies, and reviews pertinent trends. It then outlines our current planning for maximizing the navy's potential; presents a summary of Navy's progress in key areas; and reviews the challenges we face. The report concludes with a discussion of how the budget supports our efforts to meet those growing challenges.

II. NAVY MISSIONS IN SUPPORT OF NATIONAL STRATEGY; CAPABILITIES AND DEFICIENCIES

Strategic Deterrence.

The Navy mission of sea-based strategic deterrence contributes significantly to the total U.S. strategic posture. The increased national reliance on sea-based strategic systems stems from their ability to provide a wide range of response options from mobile, submerged systems which cannot themselves be targeted by strategic nuclear weapons. This ability to survive a preemptive attack provides stability and strengthens our deterrent posture.

The highest national priority is accorded to the support of our POLARIS and POSEIDON ballistic missile submarines. The same priority is assigned to the development and construction of the follow-on TRIDENT System. This priority is necessary to ensure the quality and state of readiness essential to effective deterrence.

The Fleet Ballistic Missile (FBM) force is of highest quality and is performing its strategic deterrence mission. Should deterrence fail, the force is ready and capable of discharging its responsibilities. Our POLARIS/POSEIDON submarines are considered invulnerable today. However, we cannot guarantee their invulnerability in the future, especially in view of the increased Soviet interest and efforts in antisubmarine warfare. For this reason, we are continuing the development and procure-

ment of the TRIDENT System with its quiet, mobile submarine platform and long range strategic missiles.

Sea Control.

"Sea control" is the generic term used to describe those functions which must be performed in order to ensure our use of selected sea areas and lines of communication, as required by national interests. The immediate objective of sea control is the neutralization of air, surface, and subsurface threats which would seek to deny us the use of the seas.

Sea control is the fundamental mission of the U.S. Navy. It is a basic prerequisite for the projection of power from the sea against hostile shores. A credible sea control capability permits the achievement of national objectives through the use of naval presence forces during peacetime; and is essential to support our diplomacy in crises short of major war. It also enhances the survivability of our strategic deterrent SSBNs.

Sea control is also a prerequisite to the conduct of sustained overseas operations by U.S. military forces; and to the continued survival of the U.S., of the NATO Alliance, and of other U.S. allies in war.

Our sea control forces are designed to fight successfully at extended distances from the U.S. homeland. Built-in endurance, flexibility and the capability to prevail against the increasingly capable systems arrayed against them are the major design criteria of our sea control forces.

Modern sea control capability depends on the ability to conduct fully coordinated offensive warfare in three basic areas: air, surface, and submarine. We concentrate on destroying hostile delivery platforms in all three areas. With the advent of the tactical missile -- which may be launched from nearly all platforms -- we are also concentrating on the ability to defeat the incoming weapons themselves. No longer is there a clear distinction among the major warfare areas, for success in combat

increasingly depends upon the coordinated employment of all forces available against a multi-faceted threat. Timely warning of the potential threat, provided by modern ocean surveillance systems, can greatly enhance the combat effectiveness of our offensive forces.

The effectiveness of our sea control forces therefore requires highly integrated combat and ocean surveillance systems interconnected by rapid, high capacity, reliable, and secure information transfer networks. (This is equally important during rapidly changing peacetime crisis situations, where actions and reactions may well determine whether a particular crisis shall degenerate into open warfare.)

The long range offensive power of our multipurpose aircraft carriers (CVs) is the unequalled and central element of our sea control capability in high threat areas. The carrier air wings are tailored to conduct coordinated offensive operations against hostile aircraft, surface ships and submarines. The impending fleet deployment of the new long range S-3A aircraft will do much to increase our sea-based ASW capabilities.

Our attack submarines (SSNs) are second to none as high quality ASW platforms capable of operating in forward, high threat areas which might be untenable for other forces. SSNs are also highly effective in anti-surface ship warfare and in open ocean operations. Increased emphasis is being placed on utilizing the unique capabilities of SSNs in direct support of our surface task forces. A continuing need exists to upgrade sensors and weapon systems in these ships to keep pace with a growing and increasingly more sophisticated threat.

The continued introduction of the P-3C maritime patrol aircraft, with its more accurate navigation system and superior localization capability, is providing an excellent complementary ASW force to the fixed Undersea Surveillance System. Our ASW forces working together provide an excellent capability. To

increase P-3C sea control capabilities we plan to provide it with the HARPOON anti-ship missile.

To improve the capabilities of our undersea and surface ocean surveillance systems, we are modernizing our current systems. At the same time, we are looking to the development and procurement of systems to provide tactical information to the commander-at-sea.

The surface combatant force is, at this time, greatly in need of modernization in AAW, ASW and offensive capabilities. New ships are entering the fleet, but the majority of them are particularly limited in the capability to attrite a preemptive anti-ship missile attack, and they are generally out-ranged by our potential opponents in anti-ship weaponry. Development and installation of close-in defensive and long-range offensive systems in as many platforms as practicable is an urgent requirement.

Power Projection.

The Navy mission of projecting power ashore is provided by our capability to conduct offensive carrier strike, and amphibious assault operations, against hostile shores. This mission is planned for conduct in areas which would be subject to intense sea- and land-based threat conditions. Sea-based power may be projected in precise applications through the full spectrum of conflict. Depending on the situation, this mission would utilize sea control forces, Fleet Marine Forces, amphibious and mine warfare forces.

Our carrier striking forces and the Navy/Marine Corps amphibious assault team have no equal in the projection of sea-based power. Many of our personnel have a high level of recent combat experience in projection operations. While the amphibious force may be termed the newest of all of the surface units in terms of ship age, the capacity of this force will not approach its potential until the long-delayed general purpose assault

ships (LHA's) are delivered. To improve the capability for naval fire support in amphibious assault operations, the new technologies for major caliber lightweight guns and guided projectiles -- some with extended range -- promise significant advances. The mining and mine countermeasures experience gained in Southeast Asia and Suez Canal operations has validated imaginative new operational concepts such as helicopter mine sweeping. The invaluable operational and technical experience we have gained in these operations far outstrips that available from routine training exercises.

Presence.

An important mission of the Navy is "peacetime presence," which simply means providing a U.S. presence in key overseas areas, in support of our foreign policy objectives. The United States historically has used presence of naval forces to deter actions hostile to our national interests, to provide visible assurance of our commitments to allies and friendly nations, and to project a stabilizing influence during crises. The crisis management role of naval forces is one of their most important during peacetime. As the Secretary of Defense recently noted, when the United States has found it necessary to establish a presence in a threatened area, naval forces have been the indispensable ingredient in the exercise of American power.

Additionally, presence forces have, over the years, provided humanitarian assistance to other nations during national disasters. Overseas naval presence forces encompass those continuing deployments in support of commitments, periodic deployments for exercises with naval forces of allied and friendly nations, and surge deployments in response to those international crises which seriously impinge on U.S. interests.

Presence forces possess to varying degrees the capability to conduct sea control or power projection operations. It is these warfighting capabilities of presence forces that make

such forces credible instruments of crisis management by national authorities. Depending on their numerical strength and specific employment, these forces can constitute an earnest of larger force deployments, or form a unit whose military strength is adequate to accomplish the assigned task of assurance, deterrence, or promotion of stability. Their success is largely dependent upon their credibility, as viewed by potential adversaries or third parties.

Of our overseas military deployments, naval forces are least affected by diplomatic constraints, base rights, overflight privileges and other factors not under U.S. control. Forward-deployed naval forces allow us to demonstrate U.S. interest while retaining the flexibility to change force visibility and composition as required by the situation. It is significant to note that of the 27 major overseas crises since World War II which have involved the employment of U.S. military forces in a stabilizing or deterrent role, naval forces have acted as the principal element of those forces in 25 cases. Their influence was instrumental -- if not decisive -- in supporting the diplomatic peacekeeping efforts of U.S. authorities aimed at averting open conflict and supporting U.S. interests.

But I must point out that the Navy's ability to deter hostilities or prevent infringement of our national interests is no longer clear cut and unambiguous. To be effective, the Navy's non-nuclear deterrence capability must consist of three elements. First, the forces on the scene must be powerful enough to prevail when challenged. Our current forces are powerful, but relative to expanding Soviet naval power, our advantage is, in some areas, now very thin. During the 1973 Arab-Israeli War, the Sixth Fleet was, for the first time, confronted by a heavily armed, highly capable, and numerically superior Soviet Mediterranean Fleet.

Second, because it is contrary to United States policy to strike a blow without warning, we must be able to sustain a surprise attack and still retaliate.

Third, our deployment forces must be backed up by a substantial surge capability, ready to augment and sustain the forces on the scene. Having reduced the active ships in the Navy from 976 in 1968 to just over 500 ships today with no corresponding reduction in our deployment commitments, the Navy's reservoir of surge capability has been reduced as far as it is prudent to go.

It can, therefore, be appreciated that our presence requirements are an important consideration in our force planning. And I must point out that these vital presence operations place strenuous requirements on fleet personnel, particularly when rigid commitments must be continually met. As a forward deployed force, the Navy accepts this fact of life. However, reduced force levels generate pressures for more flexibility in discharging our peacetime presence commitments. By introducing such flexibility into our deployments we can increase both the benefits of presence operations and the capability to be more responsive to unforeseen developmemts. We are working to introduce such increased flexibility into our peacetime deployment practices.

Mobility.

Sealift is the major mobility force available to support the deployment and resupply of U.S. forces both in contingency situations and in major war. It is, therefore, of paramount importance to be able effectively to employ sealift assets in key strategic areas. Primary emphasis is placed on the ability to support a NATO mobilization contingency. The identified movement requirement for this contingency is of such a great magnitude that sealift is essential. The rapid build-up of forces which can be initially projected by air and sea would quickly deplete

stocks of prepositioned war reserve material. This requires the establishment of an assured surface pipeline to replenish stocks and build up levels adequate for high intensity combat.

During the past year, we undertook a reexamination of how sealift can better contribute to early force closures. Our study looked at NATO deployment requirements and examined the effects of reducing the time required to move units from home station to seaports of embarkation. By applying reasonable standards for such movement, the study concluded it was possible to attain nearly total force closures prior to onset of hostilities -- given the established planning guidelines. A variety of innovative techniques were used to accelerate movement from home stations to the sealift ships. In addition, maximum use was made of the more capable ships in the U.S. merchant fleet. We are actively addressing the advantages of this sealift strategy with other services and the Joint Chiefs of Staff to work toward realizing this potential for improvements in deployment by sea.

We are also making other efforts to attain an assured responsive sealift within the constraints of available U.S. shipping and at minimum cost.

Overall Assessment of U.S. Naval Adequacy

A great deal has been said in recent years concerning the relative capabilities of the U.S. and Soviet navies. In my judgment, much of this discussion is misdirected. The question is not which navy is "number one." That grossly oversimplifies a highly complex situation. I believe the proper question -- and one of great importance to the country -- is whether the U.S. Navy can adequately carry out its missions and tasks in support of our national strategy.

The answer to that question is a qualified "yes."

Qualified, because there are an infinite number of sets of circumstances in which a U.S. - Soviet conflict could be cast. But I consider that today, by a small margin in sig-

nificant scenarios -- particularly those involving vital U.S. national interests -- the U.S. Navy could successfully carry out its mission against the Soviet threat, but not without suffering painful losses.

A second qualifier must refer to this particular moment in time. Today we have the forces which provide the capability for marginal success. But further erosion of our force levels -- or even maintenance of our status quo -- in the face of the continued growth of Soviet maritime capability could reverse the balance of success which currently resides in our favor; and, under these circumstances, the U.S. would no longer be able to prevail at sea in the defense of our most vital national interests.

III. MARITIME VIEW OF STRATEGIC TRENDS

Continuing Expansion of Soviet Maritime Capabilities

Over the past decade, the Soviet Navy has evolved from a force principally oriented to the defense of Soviet maritime frontiers to a navy additionally capable of waging war on a much broader scale. Further, it now acts as an important instrument of Soviet foreign policy in peacetime and during crisis situations where Soviet interests are involved. In planning to counter this growing challenge to the U.S. Navy's capability to carry out its own missions, we must carefully examine the trends and develop balanced estimates of Soviet naval capabilities for the future. The paragraphs that follow summarize our evaluation.

The best evidence indicates that the Soviets will continue to expand their already impressive maritime and naval capabilities. The Soviet Navy appears to receive budget allocations sufficient to continue and maintain the momentum of development, construction and operations established over the last decade.

The Soviet Navy is not without its deficiencies, however. Its primary shortcomings today include the lack of sea-based

fixed wing tactical air support, a very limited capability to project power ashore, and limited mobile logistic capabilities to support combat operations at great distances from the Soviet Union.

Measured in numbers, the Soviet submarine force has gradually declined in the past ten years, while major surface combatants have remained about level. Soviet Naval Aviation, on the other hand, has increased during the period, largely due to the addition of ASW aircraft and helicopters. More important than numbers, however, are the increased capabilities evident in the newer submarine types which have become operational. These include the world's largest and fastest submarines and the only submarine presently capable of submerged launch of cruise missiles.

Developments in the surface forces of the Soviet Navy have been equally impressive. Here, too, we have witnessed a substantial improvement in Soviet capabilities. The KIEV Class carriers will give the Soviet Navy its first sea-going, tactical air support capability. With the two MOSKVA Class helicopter carriers, introduced in 1967, the Soviets have gained the operational experience which is vital to advanced carrier designs. Three classes of cruisers have become operational since 1965. The newest is the KARA Class CLGM. Along with the other new cruisers, it is armed with surface-to-surface (SSMs) and surface-to-air missiles (SAMs), ASW weapons, and guns, providing a formidable response to threats from any quarter. Four new or modified classes of destroyers have appeared during the same period. The Soviets have also constructed a new class of small combatant, the NANUCHKA patrol boat, armed with both SSMs and SAMs.

Soviet Naval Aviation (SNA) has remained essentially constant in numbers of strike aircraft over the past ten years, with the BADGER aircraft comprising the main element of this force.

The new supersonic, swing-wing, BACKFIRE air-to-surface missile (ASM) bomber is probably just becoming operational. The arrival of this long-range, highly capable aircraft in the Soviet Navy's inventory will represent a major improvement in open-ocean attack capabilities. Its unrefueled combat radius, from bases in the Soviet Union, covers all of the major Atlantic sealanes leading to Europe and extends Pacific Ocean coverage to Hawaii. The substantial increase in SNA numbers is accounted for by the introduction of three fixed-wing aircraft and one helicopter to the ASW forces. The MAY and BEAR F aircraft significantly extend the ASW search capabilities of the Soviets. The HORMONE helicopter provides the Soviets with their first effective shipborne ASW helicopter.

Particularly germane to an evaluation of Soviet trends is the increasing capability for surveillance and tracking of U.S. naval forces provided by various Soviet ocean surveillance assets, including reconnaissance aircraft and other systems.

In support of Soviet foreign policy, the Soviet Navy in calendar year 1974 increased its out-of-area (beyond home waters) ship days by six percent over 1973. The Indian Ocean area showed a 17 percent increase while the Pacific had an increase of 15 percent. The Mediterranean still accounts for more ship days than any other single area.

The Soviet Union has attained the status of a major maritime power with speed and apparent coordination of purpose. It possesses world-spanning commercial shipping and fishing industries, broadly based and effective shipbuilding capabilities, and vigorous world-wide oceanographic programs.

It is noteworthy that the Soviet Union has seen advantage in achieving major maritime power status despite its lack of essential dependence on the seas. The extent to which all the Soviet elements of maritime power contribute to world perceptions, to the expansion of Soviet influence, and to Soviet naval cap-

abilities, constitutes a central concern as we look to the future. This present concern is underscored by the construction of aircraft carriers with inherent capabilities which increase substantially Soviet naval flexibility.

Peoples Republic of China Maritime Capabilities

The Peoples Republic of China (PRC) Navy is a numerically large surface force intended primarily for coastal defense. China has committed herself to creating a larger and modernized Navy, and in recent years has built a number of naval vessels of native design. Some of the new units have capabilities which exceed those required for coastal defense. However, the numbers of patrol craft (mostly missile fitted) being produced indicate that close-in defense retains a higher priority in naval planning. Annual output of these craft has increased significantly each year since 1969. The small but improving PRC Navy air arm has the capability to contribute to open ocean defense. The PRC now has a force of 60 submarines, comprising the backbone of its naval capability.

U.S. and Allied Dependence on Sea Lines of Communication

In contrast to the Soviet Union, the United States and her allies are greatly dependent on the seas for commercial transactions, raw materials and security arrangements. Recent statistics indicate that the U.S. imports about 30 to 40 percent of its current oil consumption. The "blueprint analysis" for Project Independence has predicted that in 5 years -- and even under the most optimistic assumptions -- this dependence will still be at 25 percent. (Under pessimistic assumptions, and during the same period of time, our dependence would continue rising to 48 percent.) Over 15 percent of our oil imports come from the Persian Gulf area. Over two-thirds of western European oil consumption in 1973 came from the Persian Gulf, while at the same time Japan was importing 76 percent of its energy needs from that area.

The U.S. depends upon the sea for the import, in whole or in part, of many strategic materials (including 98 percent of cobalt, 70 percent of manganese, 74 percent of bauxite and 93 percent of chromite requirements). In 1973, U.S. seaborne commerce represented over one-fifth of the more than three billion metric tons that moved across the oceans of the world.

The sea lines of communication that provide the avenues of peaceful transport for commerce and energy resources also support the U.S. national strategy. A basic precept of that strategy is forward defense; and an inherent requirement of this precept is the capability to assure the rapid and sustained reinforcement and resupply of our own forward deployed forces, while contributing to the resupply of overseas allies. The sheer volume of ammunition and petroleum products consumed by modern military forces can be provided on a sustained basis only by sea transport. This fundamental fact has been demonstrated during the regional conflicts in Korea and Southeast Asia and the two World Wars of this century.

Today we find that a credible capability to utilize and protect the Atlantic and Mediterranean sea lines of communications remains a keystone of the NATO strategy. This capability is also essential to the credibility of our staying power in crises short of major war. This circumstance is not lost on potential adversaries. To the extent that NATO's sea lines of communications are perceived as vulnerable, the credibility and psychological cohesion of the NATO alliance will be eroded. It is, therefore, a vital interest of the U.S. to maintain the ability to use the seas as necessary -- in peace, in crisis, and in war.

Change and Uncertainty

Change and uncertainty are continuing hallmarks of the international environment. But changes affect us more today because we live in a world that has become highly interdependent in its political, economic, and security relationships. As a

consequence, the U.S. must observe carefully crises that are distant geographically, but near in terms of their potential impact on U.S. interests. We continue to face uncertain peacetime situations such as the confrontation of Greece and Turkey over Cyprus, and the fragile truce in the Mideast. We observe that some of our allies are experiencing economic strain, not only in Europe but also in the Far East, Latin America, and other areas of importance to the United States. At the same time, we see increased fighting in Vietnam and Cambodia, profound changes in Portugal, and political instability endemic in large parts of the Third World.

We also observe that since World War II the U.S. Navy has been called upon to respond quite often in times of crises. This is understandable. Because of the political freedom inherent in sea-based mobility, naval forces can respond effectively in support of our diplomatic and peace-keeping efforts. In many crises, naval forces have responded because they were the only forces available which could be effectively brought to bear. And in others, naval forces have acted in concert with U.S. land-based forces.

But reaction by U.S. forward-based forces will be more difficult in the future. The U.S. has a much smaller overseas base structure and there are uncertainties for the future. More changes may be in prospect. Greece is currently reviewing the status of its NATO relationships and bilateral U.S. base arrangements. We are now renegotiating base rights with both Spain and Portugal, with key bases such as the Azores and Rota at stake. The base structure in Thailand has been substantially reduced. The continuing uncertainties surrounding our employment of overseas facilities place a premium on the political mobility of forward-deployed naval forces.

In summary, there is no persuasive indication that the future international situation will be characterized by any

more stability than prevails at present. There is a continued and increasing reliance on the world's sea lines of communication as economic interdependence grows, and the industrialized nations become increasingly reliant on imported raw materials. The capabilities of our potential adversaries are growing, and the U.S. Navy's ability to support management of crises takes on increased significance. This, plus future uncertainties surrounding our overseas base structure, underscores the importance of mobile sea-based forces. In the face of these trends, and with a diminished fleet in being, the U.S. Navy must give the most careful attention to ensure it remains capable of discharging its responsibilities with the limited assets available.

IV. MAXIMIZING NAVY POTENTIAL

Although the planned Navy force will increase our capabilities and numbers of ships, that rate is less than optimal, when measured against the increasing demands being placed on our naval power. Constrained by economic and fiscal realities, the planned Navy programs do support modernized and expanded forces which will attain the minimum required capabilities. But as we rebuild for the future, the Navy must also be ready to carry out its missions today. Therefore, we have a pressing obligation to maximize our current potential.

To accomplish this objective, we first must identify and capitalize on the total capabilities of the active and reserve components of the Navy, as well as the relevant capabilities of other U.S. services and the forces of our allies. In order to give this approach substance, I have established a Total Force Development Group in my headquarters.

Next, we must develop innovative concepts to achieve maximum integration of the capabilities inherent in our existing general purpose naval forces. As I mentioned earlier, we are refining the employment of our highly capable attack submarines

in direct support of surface forces. The most effective use of carrier aircraft -- such as the EA-6B, E-2C, F-14, and A-6 -- in both anti-submarine and anti-missile roles is being examined, as is the integration of the P-3C maritime patrol aircraft into an anti-ship strike role with the HARPOON missile.

Thirdly, we must exploit the wide range of capabilities inherent in particular units. Our development of the multi-purpose carrier (CV) provides a good example of how we can vary the mix of embarked air wings from an emphasis on sea control to one which maximizes power projection. We will seek to increase operational flexibility in all our multi-purpose ships. Our approach to the VSTOL Support Ship -- elaborated later in this statement -- is another example of this concept.

Furthermore, given our reduced aircraft carrier force levels, our surface combatants must take on a greater share of open ocean and forward area sea control responsibilities. This requires not only sufficient numbers of open ocean combatants, but also increased offensive capabilities for all surface ships. Medium and long-range tactical cruise missile systems would accomplish this latter goal.

V. NAVY PROGRESS AND CHALLENGES

It is appropriate that I report to you in this statement on the Navy's more significant recent accomplishments. I believe it equally appropriate to summarize some of our current and future challenges.

Accomplishments.

During the past year our fleet ballistic missile submarines have continued their contribution to deterrence by their many successful and uninterrupted patrols.

We are nearing completion of our Suez clearance efforts, culminating a project of important intenational significance. Thousands of pieces of live ordnance and ten sunken wrecks

were cleared from the Canal under U.S. Navy supervision. In addition, we conducted a thorough mine-sweeping effort with specially configured mine countermeasure helicopters. These operations, conducted within funds provided by the State Department, were accomplished with no loss of life or injury to Americans.

Evacuation of civilians from Cyprus was accomplished by naval forces in an environment of intense air and ground combat operations on that island. This operation involved SIXTH Fleet amphibious units, who evacuated over 750 civilians from the Cyprus ports of Dhekelia and Akroteri.

Despite two recent accidents, the fleet introduction of the F-14A/PHOENIX system must be counted a major achievement. This system gives us a quantum increase in fleet anti-air warfare capabilities. And carrier operations have gone extremely well with the two F-14 squadrons deployed aboard USS ENTERPRISE.

The S-3A program continues on its successful schedule leading towards the first operational deployment next summer. Fleet introduction took place in February 1974 at NAS North Island, California, in accordance with a schedule which was developed in late 1969.

The TRIDENT System program achieved significant milestones during 1974. The contract for the lead ship, authorized in FY 74, was awarded to the Electric Boat Division of General Dynamics in July 1974. The Operational Systems Development Program contract for the TRIDENT I (C-4) missile was awarded to Lockheed Missiles and Space Company in August 1974. In addition, efforts at the TRIDENT Support Site at Bangor, Washington, are proceeding on schedule.

The Navy has made some progress in coping with the complex and difficult personnel procurement and retention problems largely associated with the cessation of the manpower draft at the end of calendar year 1972. Our expanded and improved efforts

are showing positive results, but we need to make further progress, especially in terms of quality. The bonus programs approved by the Congress last year have been most helpful.

Challenges.

Our most important challenge is that of maximizing our readiness to meet the Navy's undiminished mission responsibilities with our diminished force levels.

One of the gravest challenges facing the Navy is that of inflation. Navy fiscal year 1975 appropriations are deeply eroded by the inflationary spiral which has far exceeded the guidelines which governed that budget's formulation.

This can be accommodated in three ways:

- By stretching out programs; i.e., reducing the quantity of procurement in the budget year and programming additional quantities in future years;

- By cancelling approved programs and applying funds made available thereby to other programs; and

- By requesting additional funds for those vital programs which must be carried out if the Navy is to fulfill its mission.

Navy's response to inflation has taken account of all alternatives. Major emphasis has been placed on reducing quantities, rather than cancelling programs. The net effect will be further delays in the planned modernization of equipment, aircraft and ships with a concomitant effect upon current and future readiness. The increasing costs of ship and aircraft maintenance have forced us to defer overhauls in order to fund the ships and aircraft already in overhaul, or of higher priority. In the area of minor procurement (ammunition, spare parts and auxiliary support equipment), reductions have delayed achievement of inventory objectives, reduced fleet support and combat sustainability, and degraded operational readiness of ships and aircraft. Absorbing the inflationary impact on major procurement has resulted in

procurement of fewer weapons. Real inflation is running on the order of 15% compared with the 3.5 to 6.0% projected in past budget submissions. The inflationary impact on major RDT&E programs must be absorbed in terms of stretchouts and delayed introductions which have a very serious effect in the long term.

The Navy shipbuilding program has been hit hardest by inflation, which is running at a substantially higher rate in the shipbuilding industry than it has in the economy at large. The current and future cost increases, when combined with the long building period of ships, compound the inflationary impact on both ship programs now under contract, and approved programs not yet awarded.

Additional funding above that currently in hand is needed to carry out ongoing programs. Inasmuch as these higher costs are, in the main, the result of inflation, and funds are required to meet contractual obligations, failure to meet them can result in costly claims against the government, other legal actions, or the severe impact of cancellation charges if contracts must be terminated.

The short fall in the shipbuilding accounts arises essentially because reserves budgeted for projected inflation have proven inadequate in the light of burgeoning, and totally unanticipated shipbuilding inflation rates. Though budgeted reserves were developed on the basis of long range economic predictions provided the Navy by responsible agencies in the Executive Branch, past experience provided an inadequate guide to the exceptionally rapid rate of cost increase in the shipbuilding industry. There is no doubt that if the Navy were required to absorb such increases within budgeted or programmed funds, we would have to reduce further urgently needed modernization programs, with far-reaching consequences for Navy's fundamental mission capabilities.

In the face of inflation and its impact on our programs, planning for and executing balanced modernization of the fleet becomes a particularly challenging undertaking. The Navy must have a sufficient number of ships. But numbers alone cannot meet our requirements. We must have a proper balance among types of ships -- that is, carriers, surface combatants, submarines, amphibious and support ships. And within a constrained budget, we must also have a balance between high performance, expensive ships and the less expensive ones we can procure in quantity. Balanced programs of this nature will enable the Navy to achieve a modernized fleet, rebuilt to the size appropriate for the future.

There are other factors which affect our shipbuilding programs. Title VIII of the fiscal year 1975 authorizing legislation requires that all strike force ships procured in subsequent years' appropriations be nuclear powered. I am in full agreement with the intent of this policy. Nuclear propulsion imparts large benefits in mobility and staying power to our strike force combatants. However, it is recognized that nuclear ships have high unit acquisition and operating costs; and, therefore, we must also be permitted to acquire adequate numbers of the less expensive ships which we sorely need. An all-nuclear strike force requires additional funding, over and above that originally planned for a "mixed" force; and this increased fiscal requirement must be accommodated if we are to build and maintain an adequate Navy for the 1980s and beyond.

A valuable tool toward accomplishment of this goal would be a multi-year shipbuilding authorization. The concept for such an authorization originated in the Congress, and I support its intent and philosophy. In a letter dated December 6th, 1974, I responded to an inquiry from Chairman Bennett of the House Armed Services Subcommittee's Seapower Subcommittee, advising him of

my concurrence with this concept, based largely on the following considerations:

- Authorization of such programs by the Congress would constitute approval in principle of long-term shipbuilding planning.

- Presentation in the form of a long-term plan would provide the Congress, and the country, with a broad perspective of proposed programs and thus provide a better understanding of the rationale supporting the current and budget years' programs.

- Clear-cut, long-term programs would also improve the ability of the shipbuilding industry to plan ahead for the use of capital, facilities and manpower.

- Such approach would also allow Navy planners to determine the most favorable acquisition rates and strategies, as well as the most efficient and economical application of programmed funding; and would facilitate timely planning for the distribution of RDT&E funds for preliminary and contract ship design.

As enclosures to my letter I forwarded a representative five-year SCN program, along with suggested legislative language. I solicit your support of this concept as a means of ensuring a healthy future Navy supported and supplied by a national shipbuilding industry ready, willing and able to accommodate our programs on as broad and capable a competitive base as possible.

The challenge of maintaining a technological advantage relative to the Soviets has been a fact of life for some years. In this period of a reduced fleet, it becomes a matter of the utmost importance. Every effort must be made in our R&D program to retain the technological lead over potential opponents in those areas where we have such a lead, and to try to gain this advantage where we do not have it.

As we look to future operational challenges, we anticipate that new design and modernized Soviet submarines will be faster,

quieter and more survivable, with a capability of operating at greater depths.

The continued development of new concepts and integrated tactics in the face of a changing, complex threat will require consistently applied initiative and innovative thinking.

During the past year the Navy has made some progress in improving its mission readiness. The Fleet Commanders-in-Chief have taken a wide range of actions to address our skill shortages by emphasizing improved fleet training and qualification practices, as well as by focusing on retention of our best people. We have also taken steps at the Washington level to assist the operational commanders in achieving a comprehensive upgrading of fleet readiness. But we have much more to do, and this will present a continuing challenge.

The Navy shares expressed Congressional interest in assuring that the military services maximize their combat capability within approved manpower and dollar authorizations. Significant progress has been made in reducing "overhead" manpower in recent years, especially in headquarters activities. It is recognized that arbitrary adjustments could be made in the combat/support ratio by applying various essentially intuitive planning factors. However, the Navy believes its ongoing Ship, Squadron and Shore Manpower documentation programs, based upon rigorous methodology and proven industrial engineering techniques, are proceeding toward the identification of minimum manpower requirements in a systematic and reliable way. This process is producing a determination of the optimal combat and support manpower mix in which we have a high degree of confidence.

The active military strength of the Navy in fiscal year 1976 will be about 250,000 less than that required in 1969, at the peak of Southeast Asia operations. As our force level starts to rebuild toward a 600-ship Navy, one of our greatest challenges will be to attain a stable force of career personnel. Such a

force comprises a baseline number of personnel, properly distributed by experience level, which must be maintained to meet our peacetime operational commitments in the most cost-effective manner, while providing the experience base necessary for force expansion. Management actions required to accommodate the last five years of declining strength as well as uncontrolled factors such as precipitous budget reductions, changing enlistment and reenlistment propensities, and large changes in the size of the Navy, have resulted in a career force that is not well distributed by skill and by experience level (length of service). We are hopeful that a period of improved stability will permit the satisfaction of predictable and achievable Navy manpower requirements. Only in this way can a well balanced, stable, effective career force be obtained.

VI. MAJOR ASPECTS OF THE NAVY BUDGET

General Overview

The FY 1976 Navy Budget reflects the continuing policy of achieving the most reasonable balance between modernization and maintenance in order to permit the Navy to meet its world-wide commitments while looking to future capabilities.

The budget provides a balanced response to combat and support requirements. It reflects further necessary reductions in the shore establishment and headquarters activities. At the same time, it recognizes that we must retain a sufficient surge capability and an effective, combat-capable command and control structure.

To meet the challenge of inflation, the Navy's FY 1976 budget request includes provisions for projected inflation in major and minor procurement. It also presents the requirement for over $2.3 billion to fully fund authorized FY 1975 and prior year shipbuilding and conversion programs. Most of the FY 1975 programs are not yet under contract. The ship main-

tenance and modernization request is for $389 million more than that appropriated in FY 1975, reflecting the increased emphasis on ship maintenance. This request does not project future inflation, in accordance with budget guidance for operating accounts.

The 15 percent increase in funds requested for FY 1976 for Research, Development, Test and Evaluation over that appropriated by Congress in 1975 will continue to provide the Navy with the means to develop future weapon systems, and to improve existing systems, at a rate which will maintain a level of technology equal or superior to any, while assuring proper attention to reliability and maintainability features. This FY 1976 program has again been effectively merged into the overall Department of Defense Research and Development Program, so as to insure compatability and absence of duplication of effort.

Programs

A brief review of selected programs supported in the Navy budget follows. Where appropriate, the authorization requests for fiscal year 1977 are also included.

TRIDENT System.

The TRIDENT submarine building rate has been slowed to a program of three every two years, compared to the two per year rate which was presented last year. This revised building rate reduces near term funding at the sacrifice of some measure of timely force modernization and some increase in total program costs.

Our FY 1976 budget request contains $2,146M in TRIDENT Program acquisition costs. $820M of this total request is for RDT&E for the submarine, the TRIDENT I missile, and the TRIDENT II missile. $1130M is for procurement including inflationary cost increases projected for the three ships funded in FY 1974 and FY 1975; completion of funding for the fourth ship, advance procurement of long lead components for the fifth, sixth and seventh ships; TRIDENT I missile production start-up costs; and military con-

struction and construction planning. Our Transition budget contains $623M in TRIDENT Program acquisition costs, including advance procurement of long lead components for the fifth through ninth ships.

The FY 1977 authorization request contains $3433M in TRIDENT Program acquisition costs including RDT&E for the submarine, the TRIDENT I missile, and the TRIDENT II missile. $2708M of this is for procurement, including funding the fifth and sixth ships, advance procurement of long lead components for the seventh through tenth ships, submarine outfitting, procurement of 98 missiles, and military construction and construction planning.

POLARIS/POSEIDON Conversion.

The POLARIS to POSEIDON conversion program is nearing completion. Of the 31 authorized conversions, 23 have been completed, six are in progress, one will start in April 1975 and the 31st will start in early FY 1976. The last conversion will be completed in January 1977. Funding for the POSEIDON conversion program, except for outfitting and post delivery costs, was completed in FY 1975. However, an additional $95.1M will now be needed to complete the program. We plan to finance $32.7M of that amount through reprogramming. The balance is included in the FY 1976 budget. This inflationary impact has caused the start date of the last conversion to be be delayed from its original schedule.

Aircraft Carrier Replacement Program.

The Navy's carrier replacement program is structured to support a 12 carrier force level. The Secretary of Defense has approved retention into the 1980s of a thirteenth carrier to be maintained in a special category -- without a dedicated air wing, and not to be deployed overseas on a routine basis. As the Secretary of Defense has mentioned, retaining the thirteenth carrier will enhance our flexibility. We will retire the two

remaining small HANCOCK Class carriers in FY 1976. In FY 1977, one of the MIDWAY Class (either ROOSEVELT or CORAL SEA) will be retired. With the retirement of the second of these two carriers in 1981, we would have a force of thirteen carriers: eight FORRESTAL Class, MIDWAY and four large nuclear powered carriers. The question of when MIDWAY will be retired will be the subject of continuing review.

The third carrier of the NIMITZ Class, VINSON (CVN-70), will be operational in 1981. Our efforts are continuing in the conceptual update and program definition of the carrier which follows VINSON. This carrier, to be started in FY 1978, would be operational in 1985 when USS FORRESTAL (CVA-59) is 30 years old.

To support our preliminary and contract design efforts for this carrier, $8M is requested in the FY 1976 RDT&E budget. To purchase long lead items for this replacement carrier, $350M is requested for authorization in FY 1977.

I urge the Congress to regard this program as being one of the highest priority. The striking power of our carriers is the present margin of balance in our naval adequacy, and a primary force supporting U.S. military strategy and national policy.

VSTOL Support Ship (VSS).

Through Congressional actions, FY 1975 SCN funding for the lead Sea Control Ship was denied and FY 1974 SCN for long lead procurement deferred until such time as the concept was completely validated and the optimum aircraft fully defined and justified to the Congress. Additionally, it was recommended that the Navy investigate the design for a low cost, small carrier equipped with catapults and arresting gear capable of accommodating a mix of currently available aircraft, including the S-3A ASW aircraft.

The Navy is conducting conceptual studies of a more capable ship for the review and concurrence of Congress. One of the

ship designs selected for study will be capable of operating S-3A aircraft and will retain the capability of operating VSTOL/VTOL aircraft. Cost and effectiveness of the ship versions under study will be compared over a range of multi-mission capabilities. The designation VSTOL Support Ship (VSS) has tentatively been assigned to identify this multi-mission ship.

The objective of VSS development is to provide a highly capable air platform with the ability to respond to a wide variety of offensive and defensive mission requirements against less than maximum threats, and at a cost significantly lower than that of an aircraft carrier. Although austere in design, this light aviation platform must be sufficently capable to carry out, in concert with other naval units, a variety of missions. It is planned that the VSS will be deployed in a major role in sea control, amphibious assault, close air support of amphibious assault, mine countermeasures, and low intensity AAW operations.

A total of $60 million is included in the FY 1977 authorization request for the procurement of long lead time items for the initial VSTOL Support Ship.

Guided Missile Cruiser (CGN) (formerly Guided Missile Frigate (DLGN))*

The FY 1976 SCN request includes $257M to fully fund the fifth and last CGN-38 Class ship, CGN-42. We are convinced that approval of this ship is essential to provide an orderly transition from the high capabilities of this ship class to future surface combatants, while avoiding a gap in the procurement of surface combatants capable of operating effectively in high threat areas.

*Nomenclature change of certain ship classes, designed to be more accurately descriptive of their capabilities and to conform to international usage, will become efective in the Navy on 1 July 1975. Both the old and the new nomenclature are cited in this statement.

Guided Missile Frigate (FFG) (formerly Patrol Frigate (PF))

The Congressional reduction from seven to three FFG's in the FY 1975 SCN budget has caused some delay in the award of the first follow ships in order to ensure proper program continuity and least cost production. The lead FFG-7 Class ship is under construction at Bath Iron Works in Maine, and to date is essentially on schedule. This ship is intended as the primary replacement for World War II destroyer classes, and will be the workhorse of the open ocean sea control forces. The FY 1976 budget contains a request for the authorization and funding of $956M for 10 follow ships; 11 additional FFG's and funding of $1233.3M require authorization in the FY 1977 program.

Guided Missile Patrol Hydrofoil (PHM).

The Patrol Hydrofoil Missile (PHM) will make available to the Navy an innovative new capability not provided by existing ship types. With its offensive armament (8 HARPOONS) combined with high speed (over 45 knots), this ship will add a new dimension to surface warfare.

The program is a cooperative NATO development effort with the U.S., Germany (FRG), and Italy jointly participating in the design stage of the PHM. For the production stage, the U.S. and FRG are currently the active participants; however, Italy has indicated that it will be unable to participate further.

Two prototype PHMs were funded in R&D in prior years and four production PHMs were funded for FY 1975.

PHM-1 construction fabrication problems, as well as cost growth and escalation, have resulted in program delay and restructuring. The problems with PHM-1 have been largely solved; PEGASUS has been launched and is commencing trials and operational evaluation. Upon successful completion of this phase of the program (about September 1975) and upon

approval from the Secretary of Defense for follow-on production, a production contract will be negotiated.

In order to phase gradually into the full production process, we are asking for only two PHMs in FY 1976. Along with this request, we have included funds for production tooling to support the follow-on production program. This action is intended to keep our options open and, at the same time, emphasize to the FRG our full commitment to the PHM program.

The $219M requested for FY 1976 would provide $11M in RDT&E to continue test and evaluation of PHM-1, $125M for cost growth and escalation, and $83M for the construction of two additional follow ships.

The $24M requested in the Transition Budget is for long lead material for the planned FY 1977 production buy. Assuming that the program proceeds as now structured, we are requesting an authorization of $390 million for 9 ships in FY 1977.

SSN-688 Class Submarine.

The SSN-688 program continues the procurement of this latest class of nuclear propelled attack submarine, which was first authorized by the Congress in FY 1970. The FY 1976 budget provides for two additional ships,the 27th and 28th of the class.

Following FY 1976, our current plan is to procure five 688-Class SSNs every two years for the remainder of the five year planning period. The FY 1976 and Transition budgets provide $1,003 million for escalation, outfitting, and post-delivery costs on prior year ships; completion of the funding for the two SSNs in the FY 1976 program; long lead time funding of the three SSNs planned for FY 1977; and partial long lead time funding of the two SSNs planned for FY 1978. The $815M requested for authorization in FY 1977 would provide for outfitting and post-delivery costs on prior year ships, funding for three more SSNs, completion of long lead time funding of

the two SSNs planned for FY 1978, and for long lead time funding of three SSNs in FY 1979.

F-14A Aircraft.

Last year marked a major change in emphasis in the F-14A program -- from development to operational employment. Last fall the first two F-14A squadrons deployed to the Western Pacific in USS ENTERPRISE. The third and fourth squadrons are in training and the fifth and sixth squadrons are now transitioning. Through December 1974, Fleet F-14 aircrews had logged 10,100 operational/training sorties and 17,000 flight hours.

We are exceptionally pleased with the F-14's performance in fleet operations. Fleet maritime defense exercises have clearly established the F-14's large increase in capability. The task group commander aboard ENTERPRISE has reported that lethal hits were scored in every live missile exercise and the PHOENIX missile in carrier operations is demonstrating reliability equal to that experienced during the R&D flight program.

Navy Fighter Weapons School pilots, who regularly dogfight against the F-14, attest to the F-14's superb capability to defeat the current and predicted threats.

Fleet operations have not, however, been trouble-free. In January 1975, two F-14's embarked in ENTERPRISE were lost due to fire and flight control failure. A comprehensive investigation into the causes of these losses is underway. It should be noted that F-14 operational losses at 1.1 per 10,000 hours are considerably below planned peacetime attrition rates and one-fourth that experienced by the F-4 program during its introduction to the fleet.

The F-14A/PHOENIX weapon system has achieved an impressive firing record of 90% success rate in 58 valid PHOENIX firings. Fleet utilization rates and maintenance manhours per flight

hour are those one would expect of a mature program, rather than aircraft commencing initial deployments.

A total of 234 F-14A's have been funded to date (twelve research and development and 222 production aircraft. In the FY 1976 and Transition budgets, we are requesting a total of $758.1M for 45 additional aircraft and related support, of which $26.5M is required for initial spares.

S-3A Aircraft.

The S-3A, employing the most modern passive and active search sensors, will give us a vastly increased sea-based ASW capability. As I mentioned previously, fleet introduction of the S-3A is continuing on schedule, with the first squadron in training.

A total of 146 S-3A's, including 8 RDT&E aircraft, have been funded. The FY 1976 budget request provides $482.9M for 41 additional aircraft and related support. FY 1976 and Transition budgets further provide $33.9M for initial spares.

HARPOON Missile.

The HARPOON continues its very successful performance in test and evaluation. This autonomously radar-guided missile will provide an effective 60-mile striking range against surface ships on the open ocean. HARPOON will provide an urgently needed increase in our offensive capabilities. The surface and submarine launched versions utilize a solid rocket booster and a turbojet flight sustainer; the air-launched version operates without the initial rocket boost. There has been significant procurement cost growth in the program. Accordingly, we are now assessing the resultant impact on our procurement schedule. Our FY 1976 and Transition budget requests are for 365 missiles and $185M; the FY 1977 request is for authorization of 420 additional HARPOONs and $172M.

CONDOR Missile.

The CONDOR, an air-launched stand-off missile, provides a unique capability against near-shore or inland targets which are heavily defended. Utilizing the missile's electro-optical guidance and on-board data link, the air crew can remotely control CONDOR to its 60-mile range without entering the target's surface-to-air defense envelope. The FY 1976 and Transition budget requests are for the first 243 production missiles and $96M; 162 missiles and $48M are requested for authorization in FY 1977.

Destroyer Tender (AD).

This two-ship program continues the Tender acquisition program at the rate required for replacement of these aging fleet assets. The AD has the essential capability to provide intermediate level repair and maintenance services to destroyer types and other surface combatants in peacetime; but the principal requirement for this ship stems from its ability to serve as a forward deployed, mobile repair base in wartime. The newer classes of AD's have the expanded capability required to support not only gas turbine powered ships such as the FFG-7 Class frigate and the Spruance Class destroyer, but nuclear powered surface combatants such as the CGN. The FY 1976 and Transition budgets provide $393.2M for two of these modern tenders.

Fleet Oiler (AO).

As long as we have fossil-fueled ships and jet aircraft at sea, we will require means for providing them with fuel in open ocean and forward sea areas. The AO performs this essential function. While the AO, like the commercial tanker, can transport liquid fuels from point-to-point shore stations, only the AO and multi-product underway replenishment ships have the unique capability rapidly and efficiently to transfer fuel to combatant ships underway. We are requesting authorization

and funding of $231.8M for two of these badly needed ships in the FY 1976 budget, and authorization of $198.5M for an additional two in FY 1977, as the start of a modest replacement program for fleet oilers which are approaching or have exceeded their maximum useful service lives.

Research and Development.

In addition to some systems already discussed, our R&D program encompasses a broad range of advanced vehicles and systems, from the Navy Air Combat Fighter and V/STOL developments, to the Quickstrike Mine and the Advanced Lightweight Torpedo.

As an adjunct to the strategic ballistic missiles, we have currently under development a Sea Launched Cruise Missile. When launched from the torpedo tube of a submerged submarine this missile can place a nuclear warhead on a strategic target up to 2000 miles away. There will also be a shorter range tactical variant designed to increase our conventional offensive capabilities. The program is currently in its validation phase intended to demonstrate the attainment of missile performance objectives.

We have several advanced ship types now developing. In our investigations of the Surface Effect Ship concept, we are continuing to increase our knowledge of this technology so that we might better understand its application to Navy missions.

In surface weapons development, there are two additional systems not previously discussed. The AEGIS weapon system will be capable of launching and controlling the STANDARD missile, as well as ASROC and HARPOON weapons. AEGIS with its ability to track multiple targets and control a number of missiles simultaneously, will provide future ships with an anti-air area defense weapon system capable of meeting the anticipated threat.

Navy Total Force

Navy Total Force Policy.

The Navy is organized in accordance with the Department of Defense Total Force Policy which emphasizes the need to plan for optimum use of available resources to meet our security requirements. These resources include active and reserve military forces of the United States and U.S. allies, as well as the resources of other government agencies and allied non-military capabilities.

I view a dynamic Security Assistance Program as a major facet of our Total Force policy. By assisting the naval forces-in-being among our allies and friends, we supplement the U.S. Navy's capability to achieve the readiness levels necessary to protect U.S. essential interests worldwide. Concomitantly, this program encourages our allies to bear a larger share of the total defense burden.

The Navy Total Force is defined by the Navy's equipment inventory, consisting predominantly of ships and aircraft. This inventory is organized into active Navy forces and Naval Reserve forces, which are structured and manned to complement each other in capability across the spectrum of naval warfare, and to achieve maximum readiness, flexibility and capability from available resources. We recently conducted a major review of our approach to the Naval Reserve, which resulted in the promulgation of an updated -- and I believe substantially improved -- Naval Reserve policy. Consistent with that policy, we are taking steps to increase the readiness of our Naval Reserve Forces; to relate them more directly to our inventory of ships, aircraft, and support equipment; and to integrate them fully into our strategic planning. These steps are intended to make the Reserves full partners in the Navy's Total Force; to give them roles which are militarily

meaningful in all cases; and to increase their contribution to our wartime and contingency capabilities.

Summary of Current Naval Reserve Restructuring Actions.

The new Naval Reserve structure provides for a significant increase in the number of mission-capable and task performing units. Refinements and adjustments are being made on a continuing basis to insure that the Naval Reserve keeps pace with total Navy requirements. The transition to the new organization is being conducted on a phased basis. As the new units are established and activated, manning is accomplished mainly by transfer from the old units -- primarily the Surface Divisions -- to the extent the qualifications of the personnel fit the requirements of the new units. The personnel resources in some geographical locations are not sufficiently available to meet the skill requirements of the new units, making it necessary to relocate some units to sites where the personnel resources are known to be available. The reorganization's overall effect will be to enhance the Reserve's effectiveness in providing manning for naval combatant and essential support units upon mobilization.

Readiness

Because the Navy exists to provide a fleet which is ready to carry out its missions on short notice, "Fleet Readiness" is my single most important concern. Many considerations must go into the process of assessing Fleet Readiness. Since a number of these are not quantifiable, any evaluation of Fleet Readiness is necessarily a subjective process. In order to improve our assessment process, we are reviewing our fleet reporting and evaluation system.

In the process of improving readiness, we sometimes find that relatively simple procedural changes can enhance readiness at little or no increased cost. More often, however, improvements in key elements of readiness require the allocation of scarce

financial and manpower resources, with trade-offs and predicted benefits subject to some uncertainties. Nevertheless, through the Navy chain of command I am heavily emphasizing that our attention and energies must be focussed on attaining maximum possible readiness within the limits of resources available to us.

In the paragraphs that follow, I summarize our major fleet readiness problems and describe our actions to rectify them.

Major Fleet Readiness Problems.

Fleet operational training readiness continues to be severely constrained due to shortfalls in personnel, maintenance and force levels.

Logistics readiness to support fleet and fleet support activities continues to be degraded as a result of funding and military and civilian personnel deficiencies, compounded by double digit inflation. The size of the bow-wave of deferred maintenance funding has been a recognized and recurring readiness deficiency for some time. Although the level of maintenance has been and is programmed to continue increasing, an apparent decrease in the bow-wave has not been realized. This is due to a variety of factors, including increased unit prices, increased scopt of repair work, increased scope of alterations, and legislative restrictions on shipyard personnel levels.

A reduction in aircraft material readiness has been experienced over the past five years, caused primarily by a steady increase in the "Not Operationally Ready, Supply" (NORS) rate. Since FY 1974, this has been partially offset by a reduction in the "Not Operationally Ready, Maintenance" (NORM) rate.

There continue to exist critical shortages of middile grade, experienced petty officers. This is exacerbated by a serious mismatch of distributable skills in 45 undermanned enlisted ratings.

While there are excesses in other ratings, and in some non-designated categories, these are insufficient to meet the Navy's needs. The planned Navy manpower level for FY 1976 is set below that specified in the unit manning documents by about 13,000 billets. Any reduction beyond this would cause severe degradation of readiness, operational capability, and equipment maintainence. The FY 1976 manpower budget is consistent with Congressional guidelines to reduce manpower costs. Where possible, we have decided not to request manpower required fully to man units in order to limit manpower costs and provide overall balance with other programs. This billet shortfall represents a calculated risk designed to obtain an optimum personnel-hardware balance within resources assigned. Within approved manpower levels, overall fleet manning as of December 1974 was about 96 percent. However, a number of fleet units continue to experience significant quantitative or qualitative personnel deficiencies.

Management Actions Being Taken.

There are several management actions being taken, and planned, to improve fleet readiness. As part of my management-by-objectives plan, I have established a series of objectives designed to have beneficial effects on fleet readiness in both the near and the long term. Three of these objectives are:

- CNO Objective 1, "Retention of Career Personnel," recognizes the basic truth that solution of personnel problems is a prerequisite to continued progress in all other areas of the Navy. The desired end of this program is the attainment of personnel stability through the reenlistment of top quality personnel in proper balance and in the required numbers.

- CNO Objective 2 deals with Fleet Employment Policies and seeks to establish new employment concepts that will satisfy the broadest range of commitments without exceeding reasonable demands on fleet resources.

- CNO Objective 3 deals with the development of a comprehensive program to promote an early improvement in material condition. Program development is already underway.

Budget Contributions and Goals.

The Navy's FY 1976 budget proposal will address a number of the most significant readiness deficiencies I have cited above.

The anticipated bow-wave of deferred active ship overhauls for FY 1975 is 62 ships. The FY 1976 budget provides for 85 ship overhauls, while reducing the bow-wave to 54 ships. Within funding and manpower restraints we anticipate that the bow-wave in FY 1980 will be lower than it is now. Over the past few years, emphasis on ship maintenance has increased, growing from 4.5 percent of the Navy budget in FY 1972 to a planned 6.1 percent in the FY 1976 budget. To the degree that inflation continues, however, we can expect further stretchout of our fleet maintenance improvement objectives.

Our goal is to improve the utilization of our people by reducing the distributable skill mismatches by five percent a year. Steps to achieve this goal include controlling reenlistment in our over-manned ratings at the first reenlistment point, giving the highest priority to training in ratings where we have the most serious shortages, and selective emphasis in recruiting to ensure meeting our input requirements in the critical, hard-to-fill seagoing ratings.

Except for certain selected items, the FY 1976 air munitions budget provides munitions for attainment of the FY 1976 portion of our inventory objectives and replacement of approximately 11,000 short tons of items consumed in operational readiness training. Approximately 50 percent is allocated to the procurement of new technology, sophisticated weaponry such as Walleye II with extended range data link, Rockeye Cluster Bomb and Anti-Personnel/Anti-Material Cluster Bombs. These weapons, with the exception of Rockeye, are entering initial production phase in FY 1976. They

will provide enhanced stand-off and kill capability designed for least-cost-per-kill, and reduction of pilot and aircraft attrition in combat.

The ship gun budget will achieve or maintain our inventory objectives for 3"/50 and 76MM ammunition, and maintain the FY 1975 funded posture for the 5"/38 and 5"/54 ammunition programs.

In aircraft material readiness, we anticipate a decrease in both NORM and NORS rates. The NORM rate is estimated to improve due to the application of phased maintenance procedures, wider use of the reliability-based airline maintenance concept, and other actions. Predicated on an increased output at the depot level, the NORS rate will also improve if the FY 1976 budget for our Aircraft Reworks and Maintenance Program is sustained.

The Navy has recently completed an in-depth review of our requirements for petroleum products. This review resulted in an updated validation of prepositioned war reserve requirements. The conversion of all active regular Navy ships and fuel storage facilities to Diesel Fuel Marine are scheduled to be completed in FY 1976.

The overall goal for secondary item material availability is substantially higher than current availability. Funding is programmed in FY 1976 to increase this level of support to approach the overall goal by end of FY 1977. However, increased production costs and production lead times continue to jeopardize our ability to attain planned goals.

Manpower, Training and Personnel

Manpower Requirements.

Manpower costs continue to increase as a reflection of the current state of the national economy and are a major consideration in balancing Navy programs. Total military and civilian manpower costs now represent about 45% of the total Navy budget.

I can assure the Congress that we are making every feasible effort to minimize Navy manpower costs.

The planned FY 1976 active military strength of 528,651 personnel continues the annual downward trend. Navy manpower has been reduced by about one-third since FY 1969. Manpower requirements will increase slowly during the next five years, however, as we man new ships in building toward a 600-ship Navy.

Training and Education.

Surveys have confirmed that training and education are important incentives to the best of our nation's youth. Since the Navy is required to compete with the other services and the civilian market for people, we are improving the quality of Navy training to engender a sense of professionalism and pride in work which will satisfy our people, and at the same time upgrade fleet readiness.

In recent years the Navy has taken significant steps in moving from fully funded, full-time academic education programs to a program that stresses individual participation on a part-time basis. The Navy Campus for Achievement (NCFA) establishes policy, coordinates, and exercises management control over a number of these partially funded education and training programs. The programs under the NCFA are available to individuals who are sufficiently motivated to commit their off-duty hours to study in their selected field, and some personal funds to pay for a portion of their tuition, books, supplies and fees. Navy personnel are encouraged to further their education and training in programs which serve both their personal needs and the needs of the Navy. The Navy continues some full-time, fully funded programs for officers where necessary to insure that the required specialities and sub-specialities are obtained. In addition, the Navy Enlisted Scientific Education Program (NESEP) is conducted as an officer procurement program which

provides selected highly qualified enlisted career personnel with a fully subsidized scientific or engineering education, leading to a baccalaureate degree and a commission as an officer, in one of the highly technical areas for which the Navy has continuing and extensive personnel needs.

Under the Total Force Policy there is increased interaction between the training of active duty personnel and Naval Reserve Personnel. Consistent with this concept, a Naval Reserve education and training program was established on 17 June 1974 which now embraces 115 Naval Reserve units and 3,123 pay billets. Reservists performing active duty for training are being accommodated in naval education and training activities and, where transportation is available, units and individuals can be trained during weekend drills.

A continuing series of management actions is being employed to improve our training management. Staffing requirements are being reduced by the use of computers and related technology. And simulators are being used where appropriate to reduce operating expenses -- both in fuel and personnel.

In summary, the Navy has a substantial and balanced, but lean, training and education program reflecting the austerity of the times, but specifically designed to provide maximum return on the funds expended.

Improving Attractiveness of a Navy Career.

The Navy, as a hardware-intensive service, is critically dependent upon the successful procurement and retention of requisite numbers of quality people. If we are to meet our personnel requirements we must be able to offer working conditions and incentives that make us competitive with the other services and the civilian manpower market. This task is most difficult in peacetime, because of the unique Navy role as a sea-going service and the special hardships that involves -- including long family separations. Our basic objective has been and

remains to improve the attractiveness of the Navy as a career for high quality young people.

We have made considerable progress in obtaining and keeping such people, but much remains to be accomplished. We must recognize rigors of life at sea, work toward a more adequate sea/shore rotation for our people, and provide meaningful compensation for necessary sea duty assignments.

One of the most positive influences on morale, and on the selection of a military career, is provided by career benefits. The perception that such benefits as health care, exchange and other privileges will continue is a very important factor, not only in our retention efforts but also in recruiting.

We realize that we cannot compete with civilian industry on an equal basis. We also know that our people are not simply civilians in uniform. These dedicated people must be given every consideration. They go where told, no matter how unpleasant. And they do what is ordered, even if it means at risk of life. Therefore, we must ensure that these dedicated people are properly appreciated and compensated. And I believe we must have the full support of the Congress if we are successfully to cope with the the problems of attracting and retaining adequate numbers and quality of personnel to man the fleet and essential supporting activities.

VII. CONCLUSION

Prior to its submission to the Congress, the proposed Navy budget was subjected to a rigorous process which leaves it constrained yet forward-looking. It reflects both our need to meet Navy readiness requirements and the revalidation of essential prior year programs. The impact of inflation on our planning is severe and is felt in all areas; and the budget recognizes these harsh realities of current life.

At the same time, the Navy budget is based on our best military judgment. While being responsive to Congressional concerns, it is also responsive to Navy mission requirements. The result is a finely balanced, closely integrated array of programs and objectives.

The Navy, in the past few years, has experienced calculated and necessary reductions in ship levels and the transition to an all volunteer force. We are now in a period of consolidation and in the first steps of executing a Congressionally endorsed plan to rebuild a modernized, increased force.

Today we can accomplish our mission. We are facing our current responsibilities squarely and with confidence. Nevertheless, if current adverse trends were to continue, Soviet maritime power could gain a clear military advantage. Thus, the full support of the Congress for the Navy budget - now and in the critical years just ahead - is essential if we are to maintain the same degree of confidence in the future. In short, and in a very real sense, the proposed Navy programs reflect acute awareness that the United States will continue as a maritime nation which must continue to possess the requisite maritime power.

Thank you, Mr. Chairman.

Admiral HOLLOWAY. Mr. Chairman, I am honored to appear before you and the members of this committee in support of the Navy budget. It is both a privilege and a major responsibility to present my report on the posture of the U.S. Navy.

In my first report as the Chief of Naval Operations, I believe it is most appropriate to outline for you the naval philosophy which I believe should guide our efforts. It is this philosophy which forms the foundation upon which I approach my responsibilities. Thus in this summary statement, Mr. Chairman, I shall deal with some rather basic questions: What is the Navy's primary mission? Is that mission relevant in today's world? What size should the Navy be? And, finally, can the Navy carry out its mission?

First, we must remind ourselves that the primary mission of the U.S. Navy is to gain and maintain control of the seas, and to utilize that control in support of national policy. By "control of the sea" I mean the assurance that we will have continued free use of international waters wherever and whenever required by our essential national interests. The Navy's mission is conducted within the framework of our overall military national strategy, in joint operations with other services and in combined operations with our allies. I do not envision the U.S. Navy fighting an isolated war at sea with the Soviet Navy.

Chairman MCCLELLAN. Why do you say that? If you don't envision it, why do you prepare for it? There is a possibility, at least?

Admiral HOLLOWAY. No, sir. What I am saying is I do not see a conflict between the U.S. Fleet and the Soviet Fleet without the air forces and the armies, and all of the other weapons systems and political influences that each country has, also being brought to bear.

Chairman MCCLELLAN. You mean with other weapons being brought into play besides the Navy's, besides just the two fleets meeting each other and battling it out?

Admiral HOLLOWAY. Yes, sir.

Chairman MCCLELLAN. I see. All right.

Admiral HOLLOWAY. Into the foreseeable future, I am convinced there will be no diminution of the national requirements for this Navy mission. Indeed, a number of trends suggest it will increase. The United States is essentially an island nation. Two of our States lie overseas. Much of our foreign trade is intercontinental. The United States is not independent in terms of raw materials. As the Secretary mentioned, we must import 35 percent of our current oil consumption. By volume, 99 percent of our overseas trade is carried by ship. Economic interdependence is a fact of modern-day life.

Our political and security relationships equally involve us overseas. The United States has defense treaties with 43 other nations, and 41 of these lie overseas. The validity of these security arrangements depend absolutely upon our ability to maintain the integrity of our sea lines of communication. In fact, the integrity of our sea lanes is a prerequisite to the conduct of all major overseas operations. The mechanization and firepower of modern military forces require resupply of ammunition and petroleum products in such quantities that the great bulk of these combat consumables can only be carried by ships.

CONTROL OF THE SEAS

Control of the seas is also required before the Navy can conduct its other missions, such as tactical airstrike and amphibious operations.

Our foreign policy, international trade, and import needs determine our overseas commitments and the pattern of our essential sea lines of communications. Threats to the security of these vital overseas areas and the connecting sea lanes must be considered as threats not only to our allies, but more fundamentally to our security.

In peacetime the function of the Navy is to maintain a creditable military presence overseas in those areas of critical importance to us and our allies, both to reassure our friends and to deter potential adversaries.

For years the presence of our naval forces on station in the Mediterranean, the western Pacific, and more recently, periodic deployments in the Indian Ocean, have given our national authorities a credible, reliable and very flexible instrument for the support of our foreign policy and provided an underpinning for our diplomatic efforts to maintain peace and stability in areas that matter to us.

We need only to scan the globe to see its surface pocked with trouble spots: Ethiopia, the Middle East, Cyprus, South Vietnam, Cambodia. If we reflected upon this catalog of turbulent areas, we will realize it is no less broad in span than the range of our geography that has affected our interests with regularity since World War II.

In addition, since the oil embargo of 1973 our interest in the Indian Ocean has grown considerably. Our presence there is to demonstrate our concern for the security of the vital oil routes from the Persian Gulf, and to reassure our friends in the Middle East of our continuing interest in their security as well.

MAURITIUS DISASTER ASSISTANCE

Senator YOUNG. Mr. Chairman, may I ask a question?

Chairman MCCLELLAN. Of course.

Senator YOUNG. Did the aircraft carrier *Enterprise* and task force help the people in the Indian Ocean islands during a typhoon?

Admiral HOLLOWAY. Yes, sir, the *Enterprise* did contribute greatly to the relief and restoration of vital services in Mauritius and it has since left that area and at the present time is leaving the Indian Ocean.

I might say our Government received some very fine messages of appreciation from the authorities in Mauritius for our response to them in a critical period of need.

Senator YOUNG. I would think that even India would have something nice to say about that, wouldn't they?

Admiral HOLLOWAY. I think, Senator, maybe they just didn't say anything bad. I could provide copies of those messages from the authorities for the record if you think it would be appropriate.

Senator YOUNG. It is not necessary, but I am happy to hear that response.

DIMINISHING OVERSEAS BASE STRUCTURE

Admiral HOLLOWAY. But the ability of the U.S. forces to support our interests around the world, and to maintain our essential commitments, is becoming increasingly difficult.

For today we have a diminishing overseas base structure, with additional uncertainties for the future:

Our relationships with Turkey are under stress.

Greece is reviewing the status of her NATO relationships, and bilateral U.S. base arrangements.

We are currently renegotiating base rights with both Spain and Portugal, with key bases such as the Azores and Rota at stake.

The base structure in Thailand has been substantially reduced in the past several years.

The Navy must not only provide a worldwide peacetime military presence, but must always be prepared to carry out its combat functions across a broad range of potential conflict scenarios. Maintaining this readiness posture is increasingly complicated by the continuing growth of the Soviet Navy—not so much in increased numbers of ships as in the steadily improving quality of their forces which translates into significant advances in overall war-fighting capability in its broadest strategic sense.

Thus, it is against this background of undiminished commitments, a troubled world, and growing Soviet maritime capabilities, that we assess the adequacy of our own naval resources. Clearly, the challenge is formidable. This year we have 502 ships. In fiscal year 1976 the Navy will have 490 ships, the lowest total in the active fleet since 1939.

Certainly our newer ships are more powerful and capable than those they replace. But the tasks are greater and geography has not changed. The Navy must still cover the same broad ocean areas. And this means we must be concerned with numbers as well as with capabilities. We need ships in a proper balance among types; that is, carriers, surface combatants, submarines, amphibious and support ships. And within a constrained budget, we need a careful balance between expensive, high performance ships and the less expensive ones we can procure and deploy in greater numbers. It is these two kinds of balances that go into the careful development of our shipbuilding programs. These programs will enable the Navy to achieve a modernized fleet rebuilt to the size appropriate for the future.

EFFECTIVE FLEET SIZE

What should the size of the Navy be? First, it should include as a priority national program, an adequate strategic fleet ballistic missile submarine force. Second, it should be large enough to maintain in peacetime, effective naval forces in the Eastern Atlantic, the Mediterranean, and the Western Pacific, including periodic presence in the Indian Ocean.

By effective naval forces I mean deployed fleets:

Offensively powerful enough to prevail over potential hostile forces routinely deployed to the area.

Defensively strong enough to absorb a first blow and survive a surprise attack to retire for reinforcement and redeployment.

And a fleet logistically equipped to operate in their area of responsibility in spite of the loss of forward bases through either political or military action.

The Navy must be large enough to reinforce those forward deployed forces in time of crises and alert, and to have enough ships of the right

kinds to carry out—in conjunction with the other services—the tasks demanded by national strategy.

All this requires about 600 capable ships. To attain a fleet of this size, our shipbuilding program must average at least 30 ships per year. Inflation has severely constrained our fiscal year 1976 program to a level of 23 ships. I am encouraged that the fiscal year 1977 program of 30 ships will start us along the path toward a properly sized Navy.

But ships and aircraft alone cannot do the job. We can never realize the full potential of those modern weapons systems without the capable people to maintain and operate them to the limits of their design capability.

We must establish in the Navy a competent corps of career professionals. We must recruit high quality young men and women, and reenlist a high enough percentage of the best.

To do this in the all volunteer atmosphere is demanding. We cannot compete in the civilian manpower market on an equal basis. Service people are not simply civilians in uniform. They must go where they are ordered in spite of separation, inconvenience or discomfort. And they must carry out their military orders even though it may mean at the risk of their lives. This takes a special kind of person and we must provide an ample compensation which will show him his dedication is appreciated. In short, we must strive to make a service career as attractive as we can within the unavoidable limitations imposed by military life.

I am a realist. In spite of expanding commitments, diminishing force levels, increasing Soviet capabilities and the challenge of the All-Volunteer Force, we in the Navy must face today and the immediate future with what we have in hand. We cannot wait for more ships and more people. We must concentrate on getting the most we can out of what we have in order to provide for the highest possible level of capability today.

FLEET READINESS

To this end, I am emphasizing fleet readiness as our highest priority concern. We must always keep before us the fundamental fact that the U.S. Navy exists solely for the purpose of maintaining a fleet ready to carry out its missions in support of our national interests. The effectiveness of all we do must be measured against this criterion. I am focusing on this, as we implement our total force policy. Consistent with our philosophy of realizing maximum capabilities from available assets, we are taking steps to increase the readiness of our Naval Reserve Forces; to relate them more directly to our inventory of ships, aircraft, and support equipment; and to integrate them fully into our strategic planning. These steps are intended to make the Reserves full partners in the Navy's total force; to give them roles which are militarily meaningful in all cases; and to assure a real contribution of each reservist to our war-time and contingency capabilities.

Mr. Chairman, I have been most encouraged this past year as we have seen previously authorized programs come to fruition. The initial fleet introduction of the highly capable F–14/Phoenix system was signalled with the deployment of two F–14 squadrons in the Pacific Fleet. Fleet introduction of the advanced ASW carrier aircraft, the S–3A, was commenced. The first Patrol Hydrofoil Missile Ship, PEGASUS,

and the first of the 688-class of nuclear-powered attack submarines, *Los Angeles*, were both launched in 1974. We have placed in commission U.S.S. *California* (DLGN–36) and U.S.S. *South Carolina* (DLGN–37) representing a new class of nuclear-powered guided missile frigates.

CAUTIOUS OPTIMISM

With calendar year 1974 marking the Navy's second full year in the new all-volunteer Force environment, I am cautiously optimistic. In the aggregate, our statistics are encouraging. We met over 98 percent of our recruiting goal. Our career petty officers reenlisted at a rate of 82 percent. And our first-term eligibles reenlisted at a rate of almost 40 percent, a four-fold improvement since 1970. Although much more needs to be done to stabilize our personnel force and balance our skill requirements, I am proud of our accomplishments, because this has been an all Navy effort.

As I mentioned previously, Mr. Chairman, it is readiness to accomplish our missions, both now and in the future, that is my single most important concern. And I am sure that you share this concern. This leads to my final question: Can the Navy carry out its missions and tasks in support of our national strategy today?

My answer to that question is a qualified "Yes".

Qualified because there is an infinite number of circumstances in which a United States-Soviet conflict could be cast. But, I consider that today, by a small margin in significant scenarios—particularly those involving vital U.S. national interests—the U.S. Navy could successfully carry out its mission against the Soviet threat, but not without suffering painful losses.

A second qualifier must refer to this particular moment in time. Today we have the forces which provide the capability for marginal success. But, further erosion of our force levels, or even maintenance of the status quo in the face of the continued growth of Soviet maritime capability, could reverse the balance of success which currently resides in our favor. Under these projections the United States would no longer be able to prevail at sea in the defense of our most vital national interests.

FORWARD-LOOKING CONSTRAINT

The Navy budget which I am here to support is keyed to the qualifications I have given in answering that important question. The programs and activities supported by this budget are considered constrained yet forward looking. They reflect the basic needs to meet our readiness requirements as well as the revalidation of essential prior year programs. I believe the budget is responsive, both to congressional concerns and to Navy mission requirements. It represents a finely balanced, closely integrated array of programs and objectives which are based on military judgment and have been given the closest scrutiny.

In conclusion, Mr. Chairman, the Navy, after undergoing calculated and necessary reductions in force levels, and the transition to an all volunteer force, is in a period of consolidation as it takes the first steps in execution of its congressionally-endorsed plan to rebuild a modernized, increased force level.

Today we can accomplish our mission. We are facing our current responsibilities squarely and with confidence. Nevertheless, if current adverse trends were to continue, Soviet maritime power could gain a clear military advantage.

Thus, the full support of the Congress for the Navy budget—now and in the critical years just ahead—is absolutely necessary if we are to maintain the same degree of confidence in the future. In short, and in a very literal sense, the proposed Navy programs represent a reaffirmation of U.S. determination to remain a maritime power whose ability to use the seas for its essential national purposes can be successfully challenged by no one.

Thank you, Mr. Chairman.

Chairman McCLELLAN. Thank you very much.

INDIAN OCEAN OPERATIONS

I have only one or two questions at this time. What is this island in the Indian Ocean?

Admiral HOLLOWAY. Diego Garcia.

Chairman McCLELLAN. You spoke of India awhile ago. India does not want us in that Indian Ocean, does she?

Admiral HOLLOWAY. No, sir. I believe that you are correct, Mr. Chairman. They would prefer to maintain what they refer to as a zone of peace in the Indian Ocean than have it occupied only by the nations who border on the ocean itself.

Secretary MIDDENDORF. Plus the Soviets who are there.

Chairman McCLELLAN. The Soviets are in there?

Secretary MIDDENDORF. Yes, sir, ranging widely throughout the entire Indian Ocean now with a number of ships including missile ships.

Chairman McCLELLAN. Briefly, Admiral, do you have budget requests for the improvement of that Island? I am sure it will be an issue in Congress.

Admiral HOLLOWAY. Yes, when the President submits it to Congress again.

Chairman McCLELLAN. It is not in this year's budget?

Admiral HOLLOWAY. It is in this year's budget. The President has, as you know, told the Congress that it is in the national interest that we should expand our facilities there.

Chairman McCLELLAN. If it is in the budget, it is in our national interests to go in, isn't that your position?

Admiral HOLLOWAY. We think it is.

Admiral COOKE. The fiscal 1975 program was approved by the Congress. It was authorized by the Congress but it required that the President come back with the finding that it was in the national interest before we go ahead with the 1975 program. Diego Garcia is in the 1976 Navy request.

Chairman McCLELLAN. One faction contends that it is imperative that we protect our lines of commerce by establishing a base at Diego Garcia. The opposition feels that if we make this development improvement, it is apt to be regarded as an encroachment on Russia, and will provoke a situation with them.

I would appreciate your comments on this. It would cost a great deal of money to establish such a base.

Admiral HOLLOWAY. We anticipate the total cost as about $35 million in order to provide a logistics support facility for the fleet. It will not be a base in the terms that we will maintain military forces on that island at all times. At the present our national policy is to deploy a military, militarily significant task force, into the Indian Ocean about once every 3 months to remain there for 30 to 60 days. We have carried out this policy, as the record will show, since the October 1973 war to provide a U.S. presence in the area.

We believe that the Soviets will continue to maintain a presence in the Indian Ocean and probably build up their presence for the reason that the Indian Ocean represents the principal warm weather route between the Soviet fleets, the European fleet in the Atlantic and the Asiatic fleet in the Pacific. We see most of their inter-fleet transfers going through the Indian Ocean today.

This route is very important to the Soviets and as a consequence they are cultivating nations on the littoral of the Indian Ocean. It is our opinion that the Soviets will be in the Indian Ocean, whether we put U.S. forces in there or not.

We are deploying U.S. naval forces to the Indian Ocean now, and we are supporting them from our base at Subic in the Philippines. That arrangement is very expensive in terms of fuel and numbers of support ships.

MUTUAL INTERNATIONAL INTERESTS

Chairman MCCLELLAN. Why is it necessary for us to maintain a fleet in that ocean?

Admiral HOLLOWAY. Because, Mr. Chairman, we want to demonstrate to the Soviets that we have a capability of defending our lines of communication through the Persian Gulf. Secondly, we want to demonstrate to our friends on the southern tier of the Middle East, the Saudi Arabians, and the Bahrian (Iranians), that we can provide a military presence there in support of our friendship with them, and our mutual interests.

Chairman MCCLELLAN. We will explore this further throughout the course of our hearings, but I would like a brief outline now.

Admiral HOLLOWAY. I would like to add that the line of communications from Subic Bay now is about 4,200 miles to the Persian Gulf. By putting this 480,000 tank barrel farm on Diego Garcia, or increasing it from the present 60,000 barrels, we will be able to cut down the line of communication by about 3,000 miles. The taxpayer will benefit by not having to pay for carrying of that oil to our fleet in the Indian Ocean for that lengthy distance.

In other words, we will be able to use a smaller number of fleet oilers between the fleet and Diego Garcia. That is a savings, as we will keep fleet elements in the Indian Ocean on a periodic basis in any case anyway.

As long as it is in the national interest and in accord with national policy to do so, I think the taxpayer might as well get the benefit of having a good tank farm 1,800 miles southeast of Saudi Arabia and 1,000 miles south of India. Furthermore I don't think that Diego Garcia is in close proximity to be as provocative as has been implied.

In addition, we hope to extend the runway from the present 8,000 feet to about 12,500 feet, and to dredge the harbor.

Senator INOUYE. Why are you insisting on extending that runway?

Admiral HOLLOWAY. We have this situation——

Senator INOUYE. This is why some of the opponents are suggesting that it is going beyond the logistical mission. Do you want to have a capability to support nuclear carrying planes, for example?

Admiral HOLLOWAY. Sir, I recognize the fact that extension of a runway, in some minds, is related to B–52 operations. The extension of the runway and strengthening of the runway and the increasing of the size of the parking areas is for several purposes.

One, it will permit the use of larger logistic aircraft and such as the C–141 and C–5 aircraft, which have much more cargo carrying capacity than the C–130's that normally operate into Diego Garcia now.

Second, when a carrier task force is in the vicinity, we can fly the carrier's aircraft into the field at Diego Garcia and land them there in order to reduce the deck load on the carrier so that when it comes in and anchors in the lagoon, maintenance work can be done on the carrier much more easily.

This is what we would normally do in Subic Bay and in Yokosuka in Japan and at our own Continental U.S. bases. We move the aircraft off of the carrier to permit routine maintenance on the ship and to the aircraft.

We need the additional length in runway as a safety factor for some of our high performance carrier jets such as the F–4's.

Senator INOUYE. Thank you.

Chairman MCCLELLAN. Senator Young.

DUAL CAPABILITIES

Senator YOUNG. Back during the McNamara days most of the emphasis was on nuclear capability for all of the services. After a time we learned we could have a conventional war. Isn't the Navy capable of both conventional and nuclear war?

Admiral HOLLOWAY. Yes, Senator. The Navy is capable of war operations across the spectrum of warfare. We have the ballistic missile submarine force now consisting of Poseidon and Polaris and in the future we hope the Trident, that is dedicated to the sole purpose of nuclear warfare, primarily as a deterrent force.

Today our carrier aircraft have the ability to deliver nuclear bombs or nuclear depth charges. Our destroyers have the capability of firing antiaircraft missiles with nuclear warheads or depth charges with nuclear explosives, but they do not have the ability to bombard land targets with nuclear weapons.

[Deleted] as you have implied, on reliance of nuclear weapons at sea has diminished since our involvement in Vietnam.

We do maintain the nuclear capability in our fleet and at the present time the Department of Defense, with the Services and the Joint Chiefs of Staff participating, is reviewing the whole concept of nuclear weapons employment. I think it will tend to support what you have indicated, that our use of nuclear weapons would be only under the most specific kinds of circumstances and that our general purpose forces in other than nuclear war, would rely primarily on conventional weapons.

Senator YOUNG. Thank you.

REASONS FOR PROJECT DEVELOPMENT

Chairman McClellan. I don't want to belabor this right now, but I do want to get a proper concept of it. The purpose of developing this project is for two primary reasons. First, it does have an economic factor in it, which is a favorable aspect; $35 million is proposed to develop this site. How long would it take to recoup that figure in savings from the operations and its benefits?

Admiral Holloway. Mr. Chairman, I can't answer that specifically.

Chairman McClellan. I understand that. Will you prepare the information for the record, please.

Admiral Holloway. Yes, sir.

[The information follows:]

[Deleted.]

NAVAL PRESENCE IN AREA

Chairman McClellan. As I understand it, the second reason for it is simply to establish our presence over there as a naval power for the benefit of our allies and to demonstrate that we are present if needed for military purposes.

Admiral Holloway. Mr. Chairman, I would like to rephrase that, and say that we are already under Presidential direction to establish ourselves as a naval power in the Indian Ocean, because since October 1973 we have maintained powerful naval forces there.

Chairman McClellan. I am trying to understand the reasons for this.

Admiral Holloway. Having established that policy, an expanded Diego Garcia facility would permit us to carry out that policy more efficiently by not having to have that force supported all the way from the Philippines.

Chairman McClellan. You are going back to the economic factor.

Admiral Holloway. Yes, sir.

Chairman McClellan. But I am talking about from a military standpoint, why do we need to be there?

Admiral Holloway. For the purposes you have stated, to enable us to maintain a powerful naval presence in the Indian Ocean, if the President should so desire.

Chairman McClellan. What advantage would it give us in the event of another World War?

Admiral Holloway. It would enormously enhance our ability to protect the lines of communication in the Indian Ocean. [Deleted.]

Senator Inouye. This Island is much more than just a logistical support island, isn't it?

Admiral Holloway. Senator, in peace time we would look at it as a logistical support base. If we pose the question: Would it be of use in a World War?

Yes, it would. [Deleted.]

NUMBER OF SHIPS IN MOTHBALL FLEET

Senator Inouye. The question I am about to ask may not be relevant, but I believe it was stated in response to a question. Because of the

age of the ships in mothballs, there is almost no use for them in your missions. How many ships do you have in that category?

Secretary MIDDENDORF. 256.

Senator INOUYE. What do you intend to do with them?

Secretary MIDDENDORF. We asked for contractors to come in and buy them for scrap, many of them, and we have gotten bids on quite a number. Four of the battleships from World War II, *New Jersey*, *Iowa*, *Wisconsin* and *Missouri* we are keeping for naval gunnery support in case of a Marine Corps projection of power ashore in some future war, just as the *New Jersey* was useful in the last war. It did cost $24 million, as I recall, to bring that ship back and about a year in overhaul, in order to be able to render service out there for that short period of time. I suspect that would be the case again, only inflated today. Most of the other ships, or the most interesting thing that you and I would look at because of the shortage of platforms, would be the *Essex* class carriers, CV's of World War II fame. There were so many of them built. They just don't seem to be able, just the ability to get them "up to scratch" today probably would cost $220 million or $400 million, to get them into shape to operate with the fleet.

The trouble is for $400 million you would be a long way home toward building a new ship with a 25-year service life. So that would just, I think, as the Secretary of the Defense said, it is kind of irresponsible for recommending putting that kind of money into old ships.

SHIP LEASING

Senator INOUYE. Some of these old ships are now being leased to other countries under the leasing program.

Secretary MIDDENDORF. Yes.

Senator INOUYE. A few of these have been involved in a little controversy in the Pacific, and in Latin America, and we are receiving bundles of mail.

Secretary MIDDENDORF. You mean the Ecuador situation?

Senator INOUYE. Yes.

Now, can't we put in some sort of provision in there that these ships cannot be used to manhandle our ships? It is rather ironic, and almost inexplicable to our constituents that our ships are being held up by our own naval ships.

Admiral HOLLOWAY. Well, if that is the case, it is outrageous. I agree with you. You are asking whether there is legally anything we can do about it.

Senator INOUYE. Can't we put conditions on it? I notice even with conditions, these countries have flaunted all of them. For example, we had a ship in Greece. It would have to be reapplied, supposed to apply every 5 or 6 years, and they had control over the ship without any of the applications for over 5 years.

Can't we do anything about this? Once we hand over the wheel, do we lose control over the ships?

Admiral HOLLOWAY. Could I attempt to answer, Mr. Secretary?

Secretary MIDDENDORF. Yes.

Admiral HOLLOWAY. We of course do provide military assistance to other countries which in our best judgment are going to remain

friends and allies of ours, and will use this military equipment in support of the alliances that I mentioned. But, as you pointed out, this may change. I think we have a very good example today of such a situation. We could write the agreement of a ship turnover that this ship will never be used against U.S. interests. But I think we have to realize, human nature being what it is, if a country chooses to go to war with us, they will probably use everything they can and when they go into a fight for their own survival they will probably set aside those provisions.

We have seen Turkey using U.S. arms and equipment in support of their operations on Cyprus. I believe that is one of the principal reasons for our ceasing all military aid and support of Turkey. This can be a tool through which we could try to control the use of our equipment by these countries. It would not have an immediate effect, but if we turn off the flow of spare parts, within a period of time these weapons systems would cease to function.

Senator INOUYE. Thank you very much.

So our mothball ships are costing us a lot of money but not producing anything.

COST OF SHIP REACTIVATION

Admiral HOLLOWAY. No; not producing anything. Some of the ships, under emergency conditions, will be called back. I would like to supply an estimate of cost for bringing back particular classes of those ships. It might be very interesting.

[The information follows:]

Ship Type	Rough Estimates Of Activation Cost ($M)*	Average Activation Time (Months)	Current Average Age (Years)
Aircraft Carrier (CVA, CVS)	(44-80)		31.6
Battleship (BB)	(17-26)		32.0
Cruiser (CA)	(13-18)		28.7
Other Cruiser (CC, CLG)	(13-19)		30.0
Submarine (SSN, SSG)	(26-36)		21.2
MLSF Ship (AE, AF, AO)	(6-12)	[Deleted]	32.1
Auxiliary Support Ship (AD, AG, AR, AS, ATA, ATF)	(6-8)		30.2
Amphibious Assault Ship (LCC, LPA, LKA, LPSS, LSD, LST)	(6-14)		30.2
Amphibious Support Ship (ANL, APB, ARB, ARL)	(4-6)		30.9
Mine Warfare Ship (MSO)	(4-6)		20.6

[Deleted]

* Additional costs to adequately modernize these ships would be incurred, varying with the ship type and with individual ships. The aircraft carriers have been overtaken by technological advances in modern aircraft and therefore could never be adequately modernized to operate the current aircraft inventory due to lack of available growth potential.

U.S. NAVAL BASES IN INDIAN OCEAN

Senator YOUNG. One question, Mr. Chairman. What naval bases do we have that we could use in the Indian Ocean, and what bases do the Soviets have?

Admiral HOLLOWAY. Senator, we have leased a base area in Bahrain where we support a command ship and two destroyer-type ships. One is a World War II destroyer and one of more recent design built in 1955. Both are equipped with 5-inch guns. They do not have over-the-horizon antiship missiles. They would not be effective in the Strait of Hormuz area which is probably one of the most important straits in the world, with about 20 million barrels of oil per day going through to supply oil to the free world. That is the general area that our Indian Ocean forces are theoretically there to defend.

Senator YOUNG. That is all we have except Subic Bay?

Admiral HOLLOWAY. We have nothing else permanent except in Subic Bay. We bring the fleet around periodically when as ordered by the President.

Senator YOUNG. What do the Russians have?

Admiral HOLLOWAY. The Russians spent substantial money in rebuilding the port at Berbera, Somalia [deleted]. In addition, they have just spent substantial amounts of money lengthening the airfield at Mogadisio to [deleted].

As we know, Somalia has practically no naval forces themselves, so there is every indication that this is for the Soviets' own use. The Soviets also have access to the Port of Aden in South Yemen on the Gulf of Aden near the entrance to the Red Sea; and with the opening of the Suez Canal this spring, the Soviet naval presence in the Indian Ocean could be substantially enhanced.

Senator YOUNG. Thank you.

Chairman MCCLELLAN. Very well. Thank you very much.

BIOGRAPHY AND PREPARED STATEMENT OF GENERAL CUSHMAN

Now we will hear from General Cushman.

General CUSHMAN. Mr. Chairman and members of the committee, I appreciate this opportunity to present my fourth and final annual report on the posture of the Marine Corps and to testify in support of our proposed program and budget.

I shall be brief, relying on my written statement to provide you with greater detail.

[The biography and statement follows:]

BIOGRAPHY OF ROBERT E. CUSHMAN, JR., GENERAL, U.S. MARINE CORPS, COMMANDANT OF THE MARINE CORPS

General Robert E. Cushman, Jr., who earned the Navy Cross—the nation's second highest combat award—during World War II, became the Commandant of the Marine Corps on Jan. 1, 1972. He was nominated for the post while serving in his third year as Deputy Director of the Central Intelligence Agency.

General Cushman served in Vietnam as the Commanding General of the III Marine Amphibious Force, which was the largest combined combat unit ever led by a Marine.

During his career, General Cushman commanded the 3rd, 4th and 5th Marine Divisions, and was also the Commanding General of Marine Corps Base, Camp Pendleton, Calif. As a colonel, he served with the Central Intelligence Agency in

1949–1951. He served four years (1957–1961) on the staff of the then Vice President Richard M. Nixon, as Assistant to the Vice President for National Security Affairs.

On Dec. 7, 1941, he was a captain aboard the USS Pennsylvania at Pearl Harbor serving as commander of the ship's Marine Detachment. For two years during WW II in the Pacific, he commanded the 2nd Battalion, 9th Marine Regiment, 3rd Marine Division. He was a 29-year-old lieutenant colonel.

General Cushman earned the Navy Cross for extraordinary heroism from July 21 to Aug. 20, 1944, during the recapture of Guam. His 2nd Battalion was ordered to seize and hold a strongly organized and defended enemy strongpoint which had held up the Marine advance for three days, and at one point during the fighting, the Japanese pushed back the flank of the battalion. LtCol Cushman personally led a platoon into the gap and repelled the hostile force. The strongpoint was overcome with the annihilation of one enemy battalion and the rout of another.

Robert Everton Cushman, Jr. was born Dec. 24, 1914 in St. Paul, Minn. He attended Central High School there and at age 16, before graduating, was appointed to the U.S. Naval Academy. Upon graduation (10th in his class), he was commissioned a Marine second lieutenant on June 6, 1935.

General Cushman and his wife, the former Audrey Boyce of Portsmouth, Va., have two children, Roberta Lind and Robert E., III.

STATEMENT OF ROBERT E. CUSHMAN, JR., GENERAL, U. S. MARINE CORPS

Mr. Chairman...Members of the Committee:

I appreciate this opportunity to present my fourth and final annual report on the posture of the Marine Corps.

The past four years have been ones of remarkable and often unexpected change on the world scene, particularly in the dynamics of international power relationships. We can anticipate that this dynamism and unpredictability will continue in the years ahead.

I believe it to be a certainty, however, that the United States will continue to be a leading power in this changing world -- economically, politically, and militarily. In particular -- as a free people determined to survive in a world of vigorously competing interests -- we must maintain our position as a military power second to none.

The United States is a maritime nation. Accordingly, a vital aspect of our overall military power is the strength of our Naval forces.

Amphibious capability is indispensable to these Naval forces. To selectively project power ashore in support of National policy, we must have this capability.

The Marine Corps, as an integral part of the Navy-Marine Corps amphibious team, has been, is now, and will continue to be one of the Nation's soundest investments. The three active Marine divisions and aircraft wings have been repeatedly validated -- together with the Reserve division and wing -- by the Unified Commanders and the Joint Chiefs of Staff for over two decades. As a minimum, we have needed these forces continuously through all the changes in threat estimation and corresponding variations of National security strategy since

the early 1950's. Given the relatively unchanging facts of our insular geography and continuing overseas interests, I expect the need to persist.

Keyed to this assertion, I will highlight those specific Marine Corps characteristics and functions which I believe are most pertinent to our abiding National security needs.

The preeminent Marine Corps characteristic is readiness. The inherent nature of crisis situations in which amphibious operations may be required demands it. We have long held the expectation of being the "first to fight."

A second time-honored characteristic is versatility. Marine forces are organized, equipped, trained, and readied to cover the widest possible spectrum of crisis situations. This varies from an all-out NATO combat role at one extreme, to a finely tuned reminder of U.S. concerns by means of an off-shore amphibious presence role at the other extreme. Marines are prepared for varied crises, varied climes, and varied mobility methods. The most general purpose of all general purpose forces, Marine forces have been designed to interface efficiently for joint command and control with forces of the Army, Navy, and Air Force. While we expect our amphibious capability to have the broadest utility, we are capable of deploying to the scene of combat by whatever means of strategic mobility are available and suited to the crisis at hand.

A third characteristic is the unique forcible entry capability of Marine forces. Outside of the Navy-Marine Corps amphibious team, possibly in conjunction with Army Airborne forces, no other combination of forces is presently capable of spearheading a significant opposed operation of this type.

A fourth characteristic might well be termed our trademark: the air-ground team concept that we conceived and have been perfecting for more than four decades. In the Marine Corps, air and ground forces are integrated into a single entity under a single commander, using a single command and control system. Team training at all levels -- within and between units -- ingrains the shared habits and values that distinguish a team from a mere collection of specialists.

These four characteristics relate primarily to the operational responsibilities of the Marine Corps. There are institutional responsibilities as well. One of these is our advisory function in the joint decisionmaking process. Operating in all three mediums and interfacing smoothly with all other Services, Marines tend to have a unique land-sea-air perspective that has a helpful, sometimes catalytic effect in joint deliberations at all levels.

Another of our institutional responsibilities is the development of joint doctrine, tactics, techniques, and equipment for landing forces in amphibious operations. A laboratory of combined arms integration that is without parallel, the Marine Corps has made numerous innovative contributions to military doctrines, tactics, and hardware that have proven useful to all of our Armed Forces -- and to our allies as well. Significantly, many of these contributions have provided "missing links" between the dimensions of warfare of primary interest to the larger Services.

In describing these characteristics and functions of the Marine Corps, I have not just been recounting past history. I am pleased to be able to report again this year that, despite certain problems and resource constraints, the Marine

Corps is ready and capable of carrying out all aspects of its role as the Nation's versatile amphibious force-in-readiness.

In consideration of the present world situation and our past experiences, we have developed our FY 1976/197T force within fiscal realities governed by the following three policies:

- Marine Corps combat forces will be maintained at the highest attainable state of readiness.

- These forces will consist of balanced air and ground combat, combat support, and combat service support units, all of which are capable of rapid deployment and operations in an expeditionary environment.

- The base and logistic structure will be capable of providing sustained support for the combat units, while retaining a training and logistic readiness capability to permit rapid attainment of a fully-structured force.

The remainder of my report will assess in greater detail the current posture of the Marine Corps and present an overview of what our ongoing and proposed programs will provide.

INFLATION

Inflation has been the single most significant factor impacting on Marine Corps posture this year. With each passing month, our dollars are worth substantially less. This loss in buying power, coupled with outlay control and other budgetary restrictions, has required extensive management actions to insure funding of our most critical requirements. While I realize that every American and every part of the Government is suffering to varying degrees from inflation, I would be remiss if I did not describe its special effects on our stock-in-trade, combat effectiveness and readiness.

In the Operations and Maintenance Appropriation, the major impact of inflation has been to require significant funding realignments and program decrements. An example is the Real Property Maintenance Program. The existing backlog of maintenance is projected to increase significantly through FY 1976 due to erosion of purchasing power, with commensurate impact on mission accomplishment at Marine Corps activities.

In the Procurement Appropriation, the major impact has been to delay the procurement of combat-essential items from current and prior years to the outyears. Such actions degrade our capability to meet in-service schedules that are based on the projected threat, thus creating a potential for serious degradation of readiness in the period ahead.

In the Military Personnel Appropriation, the major impact is the funding realignments forced upon us by inflationary increases in the costs of transportation.

Because the Marine Corps is manpower intensive and lean even in the best of times, inflationary impact has driven us to manpower-related actions earlier than the other Services. For example, we already maintain the highest enlisted-to-officer ratio of any of the Services -- approaching 10:1 -- and have the smallest percentage of enlisted in the top six pay grades. Our promotion cycles, as evidenced by our low percentages of top grade enlisted men and senior officers, are already extended to the maximum extent feasible without seriously affecting morale and performance incentives. Further reductions in average grade or officer strengths would affect the Marine Corps' capability to recruit and retain well qualified individuals -- with consequent long-term effects on the quality of our manpower.

In the past two years, we have reduced our PCS program below the level required to correct all but the most essential grade and skill imbalances. If allowed to persist, these imbalances can lead ultimately to degradation of our personnel readiness. To rectify this problem, we are requesting funds in the FY 1976 program to return to a normal PCS travel program.

I am happy to announce a number of management and efficiency measures which have resulted in economy and streamlining, taken early last year at a time before the full impact of inflation was realized:

Restructuring actions, including my decision to eliminate three artillery headquarters, using those manpower spaces to create three new self-propelled artillery batteries.

- Logistics management actions, including my approval of a plan to provide equal or better logistic support at reduced cost. Specifically, this action will:

-- Reduce supply levels through increased reliance on DOD integrated materiel managers.

-- Consolidate certain management elements within the Marine Corps; and

-- Reduce management headquarters and supply storage areas to the minimum required to support the Marine Corps structure.

We have reached a watershed in belt-tightening measures. We are at the point where further cuts in our support structure will sacrifice our capacity for the rapid expansion essential to meet wartime requirements. Short of cutting combat manpower, including the elimination of combat units, there is no remaining potential for further economies of significance. On this score, our non-forward-deployed combat forces have already been

thinned out to the limits of prudence. The point of diminishing returns on all other fronts having been passed, we are now at the juncture where further erosion of funding will slice into vital muscle -- our combat battalions and squadrons.

OPERATIONS

The initial years of this decade found the Marine Corps disengaging from the war in Southeast Asia and redirecting its primary emphasis from the Pacific towards other areas of the world. For over thirty years, the situation in the Western Pacific required us to focus our efforts in that area. However, with world power relationships in a state of unpredictable flux, the role of the Marine Corps in our National strategy has been watchfully evolving in some new directions.

Subject to my concerns about the potential impact of inflation discussed a moment ago, I am confident that Fleet Marine Forces worldwide will be able to meet existing commitments in 1975. The division-wing teams on the East Coast and in the Western Pacific are ready to meet contingency plan requirements anywhere in either hemisphere. The division-wing team on the West Coast will not be fully manned, but could be readied for deployment through emergency manpower actions. Marine forces afloat with the Second, Sixth, and Seventh Fleets are maintained at a high state of readiness. It was one of these forces -- the Marine Amphibious Unit embarked with the Sixth Fleet -- that played a key role in the emergency evacuation of 752 American and foreign nationals from Cyprus during the crisis on that island in July of last year.

COMBINED ARMS AIR-GROUND TEAM TRAINING

Marine Corps training is mission-oriented, concentrating on programs designed to maintain a high state of readiness.

The Fleet Marine Forces will have participated in over 30 major exercises in varied geographical and climatic areas during FY 1975. These include joint exercises with other U.S. forces, such as Exercise SOLID SHIELD conducted at Camp Lejeune, North Carolina, involving all four Services, and numerous combined exercises with allied forces in the Mediterranean, Caribbean, Canada, the Philippines, and Korea.

Marine Reserve units are also participating in a wide range of exercises this fiscal year -- often in combination with our active forces. These include mountain warfare, desert, and cold weather training. These exercises provide diversified training for our Reserve units, strengthening their capability to operate effectively beside their active counterparts.

I believe that combined active and Reserve exercises provide contributions to readiness that are large in proportion to the expense involved and should be continued. They are the best possible means we have for both improving and testing Reserve responsiveness and the ability of active and Reserve units to combine into an efficient and effective force.

Maintenance of the combined arms air-ground team concept is at stake in our major training exercises. Without these exercises, higher-level command and control functioning would be neglected, along with efforts to grasp and solve the problems of interface between all of the components that make up a modern combined arms force. Although difficult to quantify, there are few activities in which the cost-to-benefit ratio is more favorable than that of our unit training exercises.

INDIVIDUAL TRAINING

In the past year, we undertook an intensive study of all our formal schools to ensure that individual Marines are provided only the instruction they need and that they get it in the shortest time possible. We have continued to explore possibilities for the use of simulators, computer-aided instructional systems, and other innovative training support equipment to assure quality and effectiveness in our instruction at significantly reduced costs. As an example, instructional TV has recently been installed for use in certain training programs at nearly all major commands. Its use is being expanded as promising new training applications are developed through experience.

We persistently emphasize the use of other Services' formal schools wherever these schools meet our requirements and their use is cost-effective. In this regard, we have taken the lead with respect to making use of "other Service" training courses. During the past year, about 31 percent of our total skill training was conducted at Army, Navy, and Air Force schools.

We are continuing our work in the Interservice Training Review Organization, the principal aim of which is to eliminate unnecessary duplication in individual courses of instruction. As a result of our participation in this Organization, the Marine Corps is now conducting some computer programming and operator training for the U.S. Air Force.

During the coming year, we will continue to insure that the training we conduct is essential and efficient. Our training and education programs will undergo further intensive

scrutiny from within the Marine Corps to assure a better led, more effective combat-ready force.

MEETING THE CHALLENGES OF THE ALL VOLUNTEER FORCE

An area where the Marine Corps and the Congress share deep concern is in meeting the challenges presented by the all volunteer force. It has been my opinion that success in achieving the goals of an all volunteer force would be largely dependent on our ability to develop programs designed to attract and retain Marines of high quality. Towards this end we are determined not to compromise our standards in order to achieve quantitative goals.

Overall, our quality has been improving. Through December of this fiscal year, 54.4% of our non-prior service accessions were either high school graduates or possessed state-issued equivalency certificates. This compares with 53.0% for the same period during FY 1974. Looking at another measure of quality, during the first half of the fiscal year, 34.5% of our accessions were in the top two mental groups versus 33.1% last fiscal year. Correspondingly, we were able to reduce our mental group IV accessions to 5.0% this year -- down from 7.7% last year.

We have recently taken several actions aimed at further improving the quality of the young men and women entering the Marine Corps. On 1 July 1974, we began using a new test to screen applicants for enlistment. Effective 1 February 1975, more stringent enlistment standards were placed into effect.

One factor which materially contributed to our recruiting effectiveness during this fiscal year was the implementation of a paid advertising program. The Marine Corps appreciates the funding that enabled us to embark upon this important facet

of our recruiting effort. As a result of this program, we are reaching 86% of the potential enlistees ten times a month -- a marked increase over the previous results of 20% two times a month.

The effectiveness of advertising is ultimately measured in terms of recruiting results. For the first half of this fiscal year, we attained 100.1% of our non-prior service recruiting goals. In addition to improved quality over last year, we are obtaining a slightly higher percentage of four-year contracts. The Expanded Enlistment Bonus Program implemented in June 1974 has been helping to overcome shortages in the highly technical telecommunications and electronic maintenance fields.

In sum, we are receiving a number of very favorable recruiting trends and indications, and I am guardedly optimistic that we will be able to meet all our fiscal year 1975 recruiting goals in terms of both quality and quantity.

Along with the demanding challenge of recruiting quality individuals in an all volunteer force environment, there is the challenge of retaining them. How each Marine privately views his prospects is a key element in his decision to continue with a military career. In fact, the all volunteer force was in part founded on a recognition of that principle.

In the course of my visits to various Marine Corps commands, my Marines have been telling me that they consider continuing their education as the most important inducement to a career. They are thus unhappy with reduced associate degree programs, reduced graduate education, and the ending of USAFI.

Most of these actions apparently reflect an intent to reduce benefits that were originally established when pre-AVF low pay scales were in effect. However, such reductions were

not anticipated by the man in the field. Accordingly, they are generally perceived as a cut in total compensation, and particularly as a disincentive for first-termers as they consider opting for a service career. To avoid adverse impact on morale and career motivation, it is my view that educational and other benefits should be reviewed not in isolation, but only as part of the Serviceman's total compensation package. Such an overall review is presently being conducted in the form of the Department of Defense's Quadrennial Review of Compensation. This approach avoids the piecemeal tinkering that spawns adverse perceptions among the troops such as those I just described.

I would now like to discuss an area of some concern to me regarding our Platoon Leaders' Class (PLC) program. The PLC program is the keystone of our officer procurement programs. Highly cost-effective, it has provided us with superb officers for almost 40 years. We are currently obtaining about 37% of our annual unrestricted officer input from this source and hope in the future to achieve up to 50% of our accessions from it.

The cost effectiveness of the PLC program derives from its low cost and the large number of career officers it provides in comparison with other officer procurement programs used by the Marine Corps. This relationship can be illustrated by the following table:

Source Program	Present Training Cost Per Accession	Proportion of Present Career Officer Population From Each Source
U.S. Naval Academy	$62,518	12%
NROTC (scholarship)	21,770	15%
NROTC (contract)	13,303	3%
PLC (w/maximum financial assistance)	11,369	41%
Officer Candidate School	8,669	29%

In 1970, when faced with an increasing shortage of officer candidates and preparing to move to the all volunteer force, we requested and obtained legislative authority to pay PLC members a monthly allowance of $100 during the academic year. This produces a commitment by the student and is competitive with the NROTC contract program. It is therefore highly productive.

The recruiting value of this monthly allowance has been evident from increased PLC accessions in the past three years. We have exceeded 100% of our annual PLC goal throughout this period. However, original authority for the financial assistance provision was granted for a five year period, with extension subject to later evaluation. The initial five year period expires 30 June 1976, and we are now facing the problem of being unable to assure students enrolling this year of their eligibility to receive the $100 monthly payment for the maximum three academic years. Our recruitment effort loses credibility under these circumstances. Furthermore, a total loss of this provision would have serious consequences for our overall officer procurement program. For this reason, we are asking by separate proposed legislation that the temporary status of the financial assistance feature be removed and that permanent authority be established.

Another important factor affecting our ability to successfully meet the challenges of an all volunteer force is stability in manpower planning. Sudden and precipitous changes -- for example, in authorized strength, grade structure, or manpower funding -- will create adverse long term effects. Adjustments to manpower programs can be made effectively only with deliberate, advance planning, normally requiring much more than one year's notice. Frequent, unforeseen changes in manpower objectives and programs create confusion and uncertainty and detract from the readiness of the Corps.

Any proposals to make immediate short range changes impacting on our manpower management should be avoided. Such actions may appear to generate small, short-term savings, but in fact may often result in large, hidden long-term costs.

We recognize that today's manpower costs are high. We are looking for better ways to remain within current fiscal constraints. At the same time, we will continue to seek savings where possible. In manpower as in other areas, I believe we have a deserved reputation as diligent, frugal managers of the taxpayers' dollars entrusted to us. We are making every effort to see that those dollars buy the maximum measure of security and deterrence -- meaning, of course, combat forces.

Our efforts have resulted in a program for FY 1976 calling for only 4% of all DOD dollars to go to the Marine Corps. Considering that we provide 9% of all DOD uniformed personnel, while our air and ground forces with associated support forces will represent 16% of the Nation's general purpose forces, I believe I am safe in saying that the Marine Corps is an excellent buy for the money.

MARINE CORPS RESERVE

In line with the present strategy emphasizing rapid response to deter conflict, and in recognition that this is a time of fiscal austerity, the Marine Corps Reserve has assumed greatly increased significance.

To insure that our Reserves are fully ready to meet today's challenges, we have focused our efforts on forging the Reserve division-wing team into an effective complement to our active forces. As a result, this Reserve force can provide the additional capabilities required by the strategy but not programmed in the active forces.

We are working in accordance with Congressional directives to further improve the effectiveness and readiness of our Reserve forces. Specifically:

- We recently concluded a study evaluating the mission, structure, and organization of the Marine Corps Reserve. Our findings indicate that our present division-wing team structure and augmentation concept are sound, though some "fine tuning" is needed;

- We are seeking ways to improve Reserve training through increased participation with US active forces and allied forces;

- We are continuing to provide Reserves with the same modern equipment provided to our active forces; and

- We are systematically reviewing our entire Reserve organization to insure that our Reserve units are located in those communities across the Nation that can most effectively sustain them.

The main factor endangering the readiness of our Reserve forces has been our difficulty in procuring non-prior service

personnel. With the end of our Vietnam involvement and elimination of the draft, the enlisted strength of our Selected Reserve had declined by approximately 10,000 by the end of FY 1974. This downward slide started from a 31 December 1972 high of 36,817. However, an aggressive attack on declining strength was begun immediately. This is now showing success, and for the first time in several years we have gained in strength rather than declined. Since 30 June our Organized Reserve has increased in strength by some 1200 Marines.

We are continuing our orderly buildup to our required strength and we expect to reach our total Reserve personnel requirement by end FY 1978.

MODERNIZATION

Of the several dimensions of balance that are essential to an effective Marine Corps, one is the balance between readiness today and readiness in the future. The way to insure our future readiness is through modernization. At relatively low cost, our modernization programs stress utility for a wide variety of possible future situations.

To insure that we will have the best possible management of our weapons systems acquisition programs, two high level acquisition review committees review these programs and recommend decisions at critical milestones. As a result of this review process, some programs have been cancelled, reoriented, or suspended pending further evaluation. As in the past, we take a close look at all unilateral programs to assure that our efforts are not duplicating those of other Services.

The ground combat weapon systems within our modernization program that I would like to highlight here today are the Dragon, TOW, and M60A1 Tank.

In order to meet today's armored threat, we are in the process of upgrading our antitank capability. The TOW and Dragon systems are capable of defeating any existing armor at ranges much greater than are possible with our present antitank weapons. We began a five year procurement program of TOW with the FY 1974 supplemental budget. We plan to equip both active and Reserve divisions with this system.

We commenced procurement of Dragon with the FY 1975 budget and expect to complete the program in 1979. Dragon will be assigned to each of our active and Reserve infantry battalions.

Since June 1974, the FY 1976 procurements for both programs have experienced a cost growth due to inflation -- 14% for the TOW, 38% for the Dragon. Nevertheless, they remain the most cost-effective antitank systems that can be obtained for our ground combat units.

To improve our armored capability, we are programmed to have all active forces outfitted with the M60A1 tank by end FY 1976 and to have all Reserve forces equipped by end FY 1977.

We are conducting our M60A1 tank training with the Army. This has made it possible to reduce our total procurement by 20 tanks, achieving an investment savings of $8.6 million -- not to mention the savings in training and other costs.

If the present 18% inflation rate of the M60A1 tank worsens, it may be necessary to accept delays in the present procurement schedule. Considering the known and projected threat, any such delays will entail significantly increased risks.

AVIATION MODERNIZATION AND PROCUREMENT

Marine Aviation is comprised of an optimal mix of the minimum required fixed wing fighter and attack aircraft, helicopters, and anti-aircraft missiles, integrally managed

by a real-time Marine air command and control system. It is designed to provide around-the-clock all-weather support for the Marine on the ground. While it has a proven capability as an expeditionary land or sea based part of Naval Aviation, it is also a force for augmentation of the total National aviation assets when required. Ongoing modernization and procurement efforts seek to ensure the continuance of this versatile capability.

Our air defense capability is moving toward a much improved position. This December will mark the introduction of the F-14 to the team as the first squadron becomes operational. For a proper perspective of air defense, however, it is necessary to consider more than just the fighter aircraft. Acquisition of the Improved Hawk missile system and employment of the Redeye platoon will enhance close-in protection as well as protection in depth. All of these air defense elements are linked to each other and to the other elements of Marine Aviation by a semi-automated tactical air command and control system. This Marine system is interoperable with systems of the Army, Navy, and Air Force.

Positive steps are also being taken to improve our close air support capabilities. The three AV-8A Harrier squadrons provide us with a V/STOL capability to operate from amphibious ships or austere landing sites. They make possible the ultimate in forward basing and siting for immediately responsive expeditionary air support. Currently, the Marine Corps has AV-8A aircraft forward deployed in both the Mediterranean and Western Pacific. These highly successful deployments, coupled with expected technological advances, add emphasis to our interest in the development of a follow-on V/STOL aircraft starting in the early 1980's. To maintain the authorized light attack active and Reserve force levels until introduction of

an advanced V/STOL, the FY 1976 budget includes an additional increment of A-4M's.

Another improvement in our close air support capability is the ongoing replacement of the A-6A with the A-6E. This is being achieved by a limited new procurement together with a cost-effective modification program. Used in conjunction with the radar beacon for forward air controllers, the A-6E provides us with a quantum improvement in our night and all-weather attack capability.

An even further improvement will occur with our planned procurement of the AN/TPQ-27 Radar Course Directing Central now under development. Its improved accuracy, range, and reliability will allow all Marine fixed wing attack elements to improve their night and all-weather bombing performance.

Turning now to helicopters, the FY 1976 budget introduces long-lead funds for a FY 1977 procurement of the CH-53E. The CH-53E will double our capability to lift heavy equipment, making over 90% of a Marine Division's combat-essential equipment helicopter transportable. The helicopter program also calls for procurement of the UH-1N utility helicopter and the AH-1J (Improved) attack helicopter with provisions for the TOW antiarmor missile system. Its ordnance load increased threefold, the improved AH-1J will provide close-in fire support for transport helicopters in the assault. In addition, survivability is measurably improved by inclusion of infrared suppression devices. The FY 1976 budget also supports continuation of the CH-46 medium assault helicopter update.

Procurement of four KC-130 refueler aircraft will fill inventory shortfalls, modernize the active force, provide the older KC-130's to the Reserves to replace the long-obsolescent

C-119's, and, of prime importance, provide the Reserves with an aerial refueling capability.

In sum, Marine Corps aviation is on a steady course towards an improved posture. The foregoing modernization and procurement programs are designed to positively influence that course. Our present aviation force level is essential if we are to have the strong and balanced Marine Corps air-ground team that I described as so essential in the first part of this report.

NAVY PROGRAMS OF CRITICAL INTEREST

As a recurrent theme, I have stressed the value of the team concept along with the importance of a balanced force posture. In keeping with this theme, and in recognition of the fact that the Navy-Marine Corps amphibious team is essentially a single entity, it is appropriate for me to express my strong support for certain Navy programs of mutual importance to the Marine Corps and the Nation as a whole.

It would be tempting for me to focus only on those Navy programs that relate exclusively to amphibious warfare. Concern about balance requires, however, that I consider the Naval system as a whole -- not just a subsystem, no matter how crucial that subsystem may be.

I share the Secretary of the Navy's and the Chief of Naval Operations' desire to see an early reversal in the general decline of Navy force levels that has occurred in recent years. It is, after all, a prerequisite for an amphibious assault that we have more than a tenuous command of the sea -- including the surface, subsurface, and air -- in the objective area as well as enroute thereto. Accordingly, I have strongly supported the Secretary of the Navy's and

Chief of Naval Operations' appeals for a larger Department of the Navy share of the Defense budget in order to deal with this critical aspect of our National security.

With these thoughts serving to place my views in the proper context, I will now discuss the specific Navy programs that are of critical Marine Corps interest.

The first of these programs concerns the timely procurement of the 8-inch Major Caliber Lightweight Gun for naval gunfire support of the landing force until its organic artillery is in operation ashore. The continued absence of this support is a major shortfall.

I look forward to the operational availability of the five LHA's -- General Purpose Amphibious Assault Ships -- under construction at Pascagoula, Mississippi. In addition to their considerable operational improvements, for the first time in years the introduction of these ships will provide the Navy-Marine Corps team with the minimum acceptable level of amphibious lift.

A significant qualitative improvement for our amphibious forces -- the Amphibious Assault Landing Craft -- is now in latter stages of development. This high speed craft will provide a capability to launch the landing force from safer positions farther to seaward, to assault across beachlines not traversable by present craft, and to attain a more rapid force build-up ashore. In short, it will provide the greatest advance in amphibious capabilities since the advent of the helicopter.

The declining numbers of Navy ships of all kinds has all but eliminated ships designed and dedicated for sweeping mines in advance of landing operations. As a result, the

Navy is expecting to use amphibious ships as platforms for airborne mine countermeasure operations. This mission cannot be accomplished concurrently with the primary role of these ships. Therefore, I firmly support the Navy in its efforts to obtain a dedicated system for mine countermeasures.

Finally, the continuing prospects for minimum numbers of amphibious ships requires that we rely on the Military Sealift Command and other strategic mobility assets to lift our follow-on forces and resupply. Their ability to achieve a modern and adequate ship force is vital to Navy and Marine Corps capabilities.

FUNDING BY MAJOR CATEGORIES

Our FY 1976 and FY 197T budget request by appropriation is as follows:

($ Millions)

	FY 1975	FY 1976	FY 197T
MPMC	1,762.3	1,828.3	467.9
RPMC	65.5	72.7	28.9
O&MMC	459.5	507.3	129.4
O&MMCR	11.7	12.1	3.5
PMC	214.6	285.8	43.8
Totals	2,513.6	2,706.2	673.3

Active duty personnel funding is requested for pay and allowances, clothing, subsistence, permanent change of station travel, and related expenses in support of 196,303 Marines in FY 1976 and 196,498 in FY 197T.

Reserve personnel funding is requested for pay and allowances, clothing, subsistence, travel and related expenses in support of 32,911 Marine Corps Reserves in FY 1976 and 33,284 in FY 197T.

O&MMC funds are requested to support Fleet Marine Force requirements for supplies, maintenance, and training, and to provide civilian personnel man-years of 16,868 and an associated end strength of 16,376.

Reserve operations and maintenance funds are again requested to support training and maintenance and to provide supplies and civilian personnel man-years of 75 with an attendant end strength of 77.

Procurement funding is requested for ammunition, weapons, and tracked vehicles, guided missiles and equipment, communications and electronics equipment, support vehicles, and engineer and other equipment.

These requests represent a minimum requirement developed with full realization of our Country's economic difficulties. We are requesting, as in the past, no luxury items, no items not in our best judgment considered essential to a well-balanced and combat ready Marine Corps. Barring unexpectedly excessive inflationary price increases, I feel confident that the funding requested will continue to provide the American people with essential combat strength at the least possible cost.

FY 1977 AUTHORIZATION REQUESTS

In accordance with the Congressional Budget and Impoundment Control Act of 1974, our FY 1977 Authorization Requests are highlighted as follows:

Active Duty End Strength	197,646
Selected Reserve Average Strength	34,699
Civilian Personnel End Strength	18,111
Average Military Training Student Load, Active	25,993
Average Military Training Student Load, Reserve	2,935
Procurement Requiring Authorization	$69.9 million

CONCLUSION

This year is a significant one for the Marine Corps. On November 10th, we will round out two centuries of service to our Country.

This is also a significant year for me, for I will round out my fourth and final year as Commandant and my fortieth year as a Marine.

I have seen many changes in the Corps over those forty years, but one aspect remains unchanged. It is the pride and self-confidence -- drawn from steadfast adherance to high standards of performance -- which must abide at the heart of any great military organization. It is instilled in each recruit who meets the challenge of becoming a Marine and, under proper leadership, is nurtured in every unit throughout the Corps.

The key to the continued pride, self-confidence and vitality of the Corps is the leadership performance of our junior officers and non-commissioned officers -- troop-leaders in direct, day-to-day contact with our young Marines. Their task is not easy. In many ways, peacetime leadership is more difficult than the combat variety, where personal differences and personal problems are often submerged in the face of shared danger -- only to resurface when that danger passes. Positive leadership of young Marines has also been made difficult by the shifting attitudes of youth and of society at large, over the past decade.

But the task of these troopleaders has never been easy. The young officers and non-commissioned officers have always carried the greatest burden in times of greatest danger or adversity. The response of today's young leaders to the challenges they face has generally been superb, and I have the greatest faith in their continued success.

I have endeavored to back them up wherever possible. From the outset of my tenure as Commandant, I have placed the highest priority on maintaining a quality Marine Corps. That

too, has been no easy task. I feel strongly, however, that our traditionally high standards of discipline and performance of duty are essential if we are to retain the institutional self-confidence required to meet the challenges of an uncertain and turbulent world.

My goals have been to maintain our multi-dimensional balance and to "make the Marines stay the Marines":

- In terms of our institutional values;
- In terms of our readiness posture; and
- In terms of our versatility, as a key component of the Navy-Marine Corps amphibious system.

We have been developing and honing this system for the full span of my career. It has served the United States well through a full range of contingencies. It remains one of this Nation's best means to cope with the unexpected.

It is a sound and indispensable National investment.

Mr. Chairman, this completes my statement. I shall attempt to answer any questions you may have.

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MAINTENANCE OF MILITARY CAPABILITY

General CUSHMAN. In this period of change and uncertainty on the world scene, I believe that it is essential that we maintain a military capability that is second to none. Further, since this is a maritime nation, I believe that the strength of our Navy and Marine Corps Forces is critical to our overall military power—and that this strength must be maintained.

READINESS

I am pleased to be able to report again this year that, despite certain problems and resource constraints, the Marine Corps is ready and capable of carrying out its role as the Nation's amphibious force-in-readiness. With the end strengths we have requested, two division-wing teams will continue to be fully ready to meet their operational requirements. The third division-wing team—which absorbed the recruiting shortfall of last year—will get back up to fighting strength in a satisfactory state during June. Our Reserve division-wing team will serve as an increasingly effective complement to our Active Forces, and I am optimistic that it will achieve its total personnel requirement by the end of fiscal year 1978.

IMPACT OF INFLATION

My foremost concerns this year stem from the potential impact of inflation and certain manpower problems that could degrade our combat readiness and capability.

Inflation is the most significant factor impacting on our posture this year. Because we are manpower intensive and exceptionally lean even in the best of times, we have been driven to manpower-related actions to save money earlier than the other services. Short of cutting combat units or degrading our ability to rapidly expand in an emergency, we have reached the point where there is no remaining potential for economies of significance.

MANPOWER

My major manpower concerns are these:

First, manpower quality. We are continuing to give great emphasis to this and have solid indications that we are succeeding.

Second, manpower stability. Short-term savings that may result from sudden changes in authorized strength, grade structure or funding are misleading in that they will almost always be outweighed by much larger long-term costs and inefficiencies.

Third, the reduction of educational opportunities for the individual marine. Aside from their morale and career incentive value, these educational benefits have a monetary value to the individual marine. Their loss is a cut in his total compensation and compounds the loss in his real income caused by inflation. To avoid adverse impact on morale and career incentive, it is my view that educational benefits should be reviewed not in isolation, but as part of the serviceman's total compensation package.

MODERNIZATION

Our modernization program request is a modest one and reflects our minimum essential requirements. I would note that it has already been slowed somewhat by inflation.

CONCLUSION

My closing thought is to convey the basic principle that underlies our overall program and budget request: "Make the Marines stay the Marines."

With the Navy, Marines have been developing and honing the Nation's amphibious capability for more than five decades. In this capacity—and in others as well—Marine forces have served the Nation in virtually every international crisis since the turn of the century. By every measure, in peace as well as in war, the Marine Corps is and will continue to be a sound and indispensable national investment.

Mr. Chairman, that concludes my statement.

Chairman McCLELLAN. Is your present level of personnel strength adequate?

General CUSHMAN. Yes, sir, it is. Our authorized strength is adequate, however, our actual strength is making a comeback from a recruiting loss of almost 7,000 men last fiscal year. We were not able to enlist the percentage of high school graduates which the Congress required, and we were therefore not able to recruit up to authorized strength of about 196,000. We dropped down to about 189,000, but we added that shortage to our quota this year. Up to now, for the first 7 months of this fiscal year, we are just over 100 percent for our recruiting goal. In other words, not only are we attaining this year's quota but we are making up for last year.

Chairman McCLELLAN. You were able to make it up?

MENTAL PROSPECTUS

General CUSHMAN. Yes, sir; and our quality has increased at the same time as measured by a slight increase in the percentage of high school graduates.

We are just below 55 percent and have had a significant drop in the mental group IV category.

We have continued to tighten the screws on the marks required of our applicants. The weights that we give to the reading and verbal comprehension parts of the test, I think will make them even tighter. We started this just 1 month ago. We are now down around 5 percent mental group IV. Three years ago we were running 20 percent and we have worked that down over the years as fast as we have been able.

Chairman McCLELLAN. Any questions?

Senator INOUYE. What do you have in your I, II, and III categories?

General CUSHMAN. The remainder, about 95 percent, fall into the mental groups I, II, and III. Mental group III is the largest. Mental group I, which is a much better than average brainpower group, has a small percentage, on the order of 2 or 3 percent.

Senator INOUYE. What is the ratio of officers and enlisted men?

General CUSHMAN. We have about the best among the service. We have one officer for approximately every 10 enlisted men. We have a wider base pyramid for one reason or another, and I won't compare with the other services, but we have the best ratio in terms of more enlisted men per individual officer.

Senator INOUYE. Admiral, what is the situation in the Navy on the mental categories and ratio of officers to enlisted personnel?

Admiral HOLLOWAY. Our number of mental group 4 enlisted so far this fiscal year has run about 5.5 percent and we face the same situation that the Marine Corps does, that the bulk of the 94.5 percent resides in the mental group 3 category. In terms of officers-to-enlisted ratio, it is about 7 to 1.

General CUSHMAN. Senator, I have the figures. We have 62 percent in category III and 31 percent in category II, and I remembered almost correctly, 2.4 percent mental group I.

Senator INOUYE. That is very good. Better than the Army.

General CUSHMAN. Well, you have to watch these percentages, sir. They are based upon a curve and they are not absolute measurements. You can get some good mental group IV fellows that have a native intelligence and they can move in there and do the job and learn, and you have others that cannot. The test does not give you the whole man in every case.

There is also an amenability-to-discipline factor. We find high school graduates do better than those who are dropouts, also such considerations as coming from broken homes and the added maturity of being 18- or 19-year-olds rather than 17 are some of the many factors which enter into whether a fellow has the stick-to-itiveness and amenability to discipline, or whether he becomes an antiestablishment type of person.

MINORITY GROUPS

Senator INOUYE. What percentage of your men are blacks?

General CUSHMAN. Roughly 18 percent are now. Between 18 and 19 percent.

Senator INOUYE. Isn't that too high a percentage?

General CUSHMAN. No, sir, I don't believe so. We are able to take care of this. This is higher than the percentage in the national population. I am more concerned about the percentage that end up in the rifle companies. We have some rifle companies where, because of the lower grade of skills required, some of the blacks from the inner city, who have not had good educational opportunities, tend to be assigned. As a result you will get a company here and there that may be almost 40 percent black.

I am making every effort to train my assignment personnel to spread them out into other skills, even though they are able to only marginally handle the more technical tasks. With leadership and extra instruction some of them are mastering the trade, so to speak. We are succeeding in both our assignments revisions and providing the basic skills.

The difficulty is illustrated, I think, by the fact that our aircraft wings there may be only 11 percent blacks. Of course, in the wings you have the very hard skills of avionics and jet engine repair and so on. Whereas on the other hand, I see a rifle company or rifle battalion which might run about 30 percent black and down in the rifle company with the concentration of riflemen it may be even higher.

Senator INOUYE. Are you satisfied that the marine of 1974 is just as good as the one in 1944?

General CUSHMAN. Yes, sir, I am. They come from a different society in terms of attitude, but we have maintained our standards. Our recruit training is still rigorous and demanding in disciplinary standards. We believe we instill patriotism and the desire to excel

in our marines. They are physically fit and once we have been able to train them for several months, I would say yes, they are as good.

PREPARED STATEMENT

Chairman McClellan. Thank you very much, General. Without objection, the statement of Rear Admiral Edward Cooke, Deputy Comptroller of the Navy, will be inserted in the record at this point.

[The statement follows:]

BIOGRAPHY OF REAR ADMIRAL EDWARD W. COOKE

Rear Admiral Cooke, a native of Fonda, Iowa, graduated from the U. S. Naval Academy in 1945. After service in the battleship IDAHO and command of the minesweeper MERGANSER, he completed submarine training and served in the CABEZON, GRENADIER, and HARDHEAD. In 1956-58 he was the Commanding Officer of the Nuclear Power Training Unit, Idaho Falls, Idaho.

Rear Admiral Cooke has commanded three submarines. The first was the USS HARDER, a conventionally powered fast attack class. The next was the USS SKATE, a nuclear powered attack class ship. His last submarine command was the USS GEORGE WASHINGTON, also nuclear powered and the nation's first Polaris submarine.

In 1966 and 1967 he was a student at the Naval War College. In June 1967 he moved to Washington, D. C. and became Executive Assistant to the Assistant Secretary of the Navy (Installations and Logistics). He served in that capacity for two years and was then ordered to Harvard University Graduate School of Business Administration.

In February 1970 he became Commander Submarine Squadron FIVE at San Diego, California. He became Commander Submarine Flotilla ONE in March of 1971 and remained in that assignment until July of 1972 when he became Director of Budget and Reports in the Office of the Comptroller of the Navy in Washington, D. C. In January 1975, he was named Deputy Comptroller of the Navy.

In addition to his Naval Academy degree, Rear Admiral Cooke has a Master of Science degree from George Washington University and is a graduate of Harvard University's Advanced Management Program.

Rear Admiral and Mrs. Cooke have three sons and three daughters. They reside in Potomac, Maryland.

STATEMENT OF REAR ADMIRAL EDWARD W. COOKE

Mr. Chairman, it is again my pleasure to appear before you today and present to you an overview of the Navy's budget request for fiscal year 1976 and for the 3-month transition period occurring between fiscal years 1976 and 1977.

The Navy's budget proposals for these two periods have been developed around a fundamental premise outlined by the President and the Secretary of Defense and the Secretary of the Navy that a strong naval program is a critical requirement for the United States. I would hasten to add that these proposals have been carefully scrubbed from a financial perspective so that we can present to the Congress the lowest amounts possible needed to carry out vital naval operations for the two budget periods.

To bring Navy's budget requests for fiscal year 1976 and the transition period into focus I would like now to use several charts which will highlight the areas considered to be the most important. In accordance with our usual practice, a more detailed justification and explanation for each program for which funding is requested will be provided by other witnesses who will appear at later hearings. My first chart shows the revised program for fiscal year 1975 and compares this with the current request for fiscal year 1976 and the transition period.

Chart 1
DEPARTMENT OF THE NAVY
SUMMARY BUDGET REQUEST
FY 1975, FY 1976, FY 197T
($ Millions)

FY 1975 REVISED	
APPROPRIATED	$27,570
PROPOSED SUPPLEMENTALS (Military and Civilian pay raise)	456
OTHER FINANCING	110
APPROPRIATION LANGUAGE TRANSFERS	(111)
SECTION 834 TRANSFERS	(12)
REIMBURSABLE ASSETS	(27)
RECISIONS	(-40)
TOTAL (TOA)	$28,136
FY 1976	
TOA	$33,688
FY 197T	
TOA	$7,442

As reflected on this chart, the Navy's FY 1976 budget request amounts to $33,688 million. This is an increase of $5,552 million over the revised FY 1975 request of $28,136 million. Of this increase, about $450 million represents an increase in real program. The remainder consists of inflation related to all appropriations and includes the funds required for the repricing of the FY 1975 and prior year shipbuilding programs to fully fund the previously authorized ships. Of the $5,552 million increase, $5,359 million is for Navy and $193 million for the Marine Corps. In the transition period, we are requesting $7,442 million, or 22.1% of our FY 1976 total. The transition funds requested will provide continuing support for on-going programs. The recommended fiscal year 1976 program level is maintained through the transition period, since no new programs will be undertaken during this period.

An important consideration in the use of our budget resources is the size, composition, and structure of our forces and their level of readiness. The following chart shows a comparison with previous years of the personnel, ships and aircraft that are supported by the FY 1976 and transition budget.

Chart 2
DEPARTMENT OF THE NAVY
COMPOSITION OF THE NAVY AND MARINE CORPS
FY 1964 - FY 1975

	FY 1964	FY 1968	FY 1975	FY 1976	FY 197T
Active Military Personnel (E/S)	857,373	1,072,484	732,493	724,954	732,358
Navy	667,596	765,232	536,117	528,651	535,860
Marine Corps	189,777	307,252	196,376	196,303	196,498
Reserve Personnel (Avg)	168,504	172,097	143,619	126,453	125,013
Navy	123,277	123,904	111,917	93,972	92,000
Marine Corps	45,227	48,193	31,702	32,481	33,013
Civilian Personnel, DH (E/S)	332,678	419,546	318,274	322,067	322,883
Active Fleet Ships (End Year)	917	976	502	490	494
Naval Reserve Ships (End Year)	85	75	65	63	63
Average Operating Aircraft	7,030	6,561	5,594	5,354	5,306
Marine Corps Divisions (Active)	3	4	3	3	3
Marine Corps Air Wings (Active)	3	3	3	3	3
Marine Corps Reserve Divisions/ Air Wings	1/1	1/1	1/1	1/1	1/1

The FY 197T increase over FY 1976 of 816 is mostly due to 757 dependents school employees who are not on the payroll on June 30. There are 279 for overseas dependents schools and 478 in schools run by the Marine Corps in

the United States. Other increases are: 50 for the new Trident facility, 50 for military construction, and 98 for some dual staffing of the Naval Home during its relocation from Philadelphia, Pa. to Gulport, Miss. Minor reductions total 139.

The budget provides for 490 active fleet ships by the end of fiscal 1976, a reduction of 12 ships from end FY 1975. The FY 1976 budget projects a net of 15 new ships joining the active forces and the return of 1 converted DLG to the Fleet, offset by the inactiviation, transfer or strike of 28 older ships. The transition budget reflects an active force of 494 ships.

The decrease of 2 ships in the reserve fleet in FY 1976 relates to the addition of 11 ships transferred from the active fleet, including 3 amphibious warfare and 8 patrol ships from the active fleet, offset by the strike of 13 older ships.

The number of average operating aircraft declines from 5,594 in FY 1975 to 5,354 in FY 1976.. This reduction of 240 aircraft reflects primarily the decrease in carrier air wings from 14 to 13 and the reduction in weather service, utility and transport squadrons. The average operating aircraft proposed in the transition budget is 5,306.

The number of active and reserve Marine Corps division/air wings remain at the same level as in FY 1975.

In FY 1976, the number of active duty Navy and Marine Corps personnel declines to an end strength of 724,954, a net decrease of 7,539 from 1975. The major portion of this overall strength reduction is in the Navy. The decrease is due to decreased requirements, primarily in the areas of recruit, training, intelligence and communications, and carrier force reductions. The Department of the Navy's end-strength at the end of the transition period will be 7,404 higher than the planned 30 June 1976 end strength. This increase is not due to overall increased manpower requirements. It is due to the change in the fiscal year and reflects the cyclical flow of accessions.

Navy and Marine reserve personnel paid drill strength also declined in 1976--from an average of 143,619 man-years in 1975 to 126,453 in 1976, a net decrease of 17,166. While the Marine Corps is projecting a small increase

an average strength in fiscal 1976, Navy requirements decrease by nearly 18,000 manyears. Our 1976 estimate represents what we feel is an appropriate level.

With respect to civilian personnel, the Navy is increasing the FY 1976 manning level by 3,793 direct hire end strength above the FY 1975 level. The increase includes a transfer of 1,840 from the Army for the Military Assistance Command Support Group, Thailand. Naval shipyards increase 3,743, and Supervisors of Shipbuilding increase 291 to support the FY 1976 fleet maintenance program. Public works centers increase 795 and civilians funded from the MILCON account increase 321. The Military Sealift Command increases by 426 due to the addition of four fleet support ships and the lay up of 2 other ships. Research activities decrease 2,184 and industrial ordnance activities drop 662. All other changes net to a decrease of 777.

CHART 3
DEPARTMENT OF THE NAVY
TOA COMPARISON
(IN MILLION DOLLARS)

APPROPRIATION	FY 1975	FY 1976	DIFFERENCE	FY 197T
MPN	$5,848.0	$5,784.9	$-63.1	$1,476.9
MPNC	1,762.3	1,828.3	+66.0	467.9
RPN	213.3	191.0	-22.3	56.3
RPNC	65.5	72.7	+7.2	28.9
Total Personnel	$7,889.0	$7,876.9	$-12.2	$2,030.0
O&MN	$7,285.5	$8,320.0	$+1,034.5	$2,234.5
O&MNC	459.5	507.3	+47.8	129.4
O&MNR	246.1	308.6	+62.5	80.7
O&MNCR	11.7	12.1	+.4	3.5
NPR	86.9	239.7	+152.8	100.5
Total Operation & Maint.	$8,089.8	$9,387.7	$+1,298.0	$2,548.6
APN	$2,780.4	$3,077.0	$+296.6	$600.1
WPN	735.3	1,224.2	+488.9	332.7
SCN	3,174.6	5,446.0	+2,271.4	474.2
OPN	1,576.7	1,981.9	+405.2	491.2
PNC	214.6	285.8	+71.2	43.8
Total Procurement	$8,481.6	$12,014.9	$3,533.3	$1,942.0
RDT&EN	$3,051.6	$3,517.7	$+466.1	$903.8
MCON	$602.2	$854.0	$+251.8	$17.2
MCNR	22.1	36.4	+14.3	.4
Total Military Construction	$624.3	$890.4	$262.1	$17.6
TOTAL	$28,136.3	$33,687.6	$+5,551.3	$7,442.0

I will discuss the changes from FY 1975 to FY 1976 in each appropriation later in my statement.

The Marine Corps share of the total Department of the Navy budget request for 1976 remains essentially level with that of FY 1975.

Our major goal or objective is to improve the readiness of our active forces. In this regard, the budget projects significant funding increases for ship maintenance and overhaul programs. Increases for aircraft and ship operations have been provided for. Component rework and spare parts support programs have also been allocated additional resources in the investment area, increased funding levels are projected for sonars, surface missile system equipment, and air launched ordnance.

It is hoped that with the increased funding, the Navy can improve its level of readiness in FY 1976.

Next, I would like to discuss the budget request by appropriation. In each of the appropriations, I will be highlighting major programs and the significant changes between Fiscal Year 1975 and Fiscal Year 1976 requests and the transition request.

Chart 4
MILITARY PERSONNEL, NAVY
($ Millions)

FY 1975	FY 1976	DIFFERENCE	FY 197T
$5,848.0	$5,784.9	$-63.1	$1,476.9

Significant Items

Manyear Reduction of 15,704	-107.5
Full Year Impact of 1 Oct 1974 Pay Raise	+58.8
PCS Increases	+32.1
Separation Payments	-19.8
Proficiency Pay	-16.5
Reenlistment Bonuses	-16.2

Military Personnel, Navy

The FY 1976 MPN budget is a request for $63 million less than authorized for FY 1975. This austere request was possible in spite of increasing pay

costs and increases in the cost of Permanent Change of Station moves. Annualization of the FY 1975 pay raise into FY 76 increased pay by $58.8 million. PCS tariff increases, and an increased number of PCS moves which were required due to a constrained FY 75 program, have added $49 million to our request. Other miscellaneous cost increases have added $13 million to our request. The foregoing cost increases have been more than offset by a significant manpower reduction of 15,704 manyears ($107.5 million), a reduction in lump sum leave payments upon separation ($19.8 million), a reduction in the proficiency pay program ($16.5 million), cessation of lump sum reenlistment bonuses ($16.3 million), a reduction in accession, separation, and organized unit moves ($16.1 million), and other miscellaneous adjustments ($6.6 million).

Funding for the FY 197T period is required to finance a 30 September 1976 end strength of 535,860. This end strength exceeds 30 June 1976 end strength by 7,209 personnel. The increase is due primarily to the change in the ending date for the fiscal year.

Chart 5
RESERVE PERSONNEL, NAVY
($ Millions)

FY 1975	FY 1976	DIFFERENCE	FY 197T
$213.3	$191.0	$-22.3	$56.3

Significant Items

Average Strength

Reduction of 17,945 Manyears in Average Paid Drill Strength

Funding

Pay Group A Strength	-24.3
Pay Group B Strength	+4.2
Pay Group P Recruits	+.5

Reserve Personnel, Navy

Average paid drill strength for the Navy reserves is targeted at 93,972 manyears for Fiscal Year 1976, 17,945 below the 111,917 programmed for Fiscal Year 1975. The FY 1975 average drill program may be lowered if the Congress supports the President's proposal for legislation which would authorize a lower FY 1975 paid drill strength. The decline in average drill strength is primarily due to a continuation of transforming the selected reserves by providing newer and better training equipment for smaller numbers

of reservists and to a change in policy which aligns reserve manning requirements more closely to fleet needs in the Surface Program area. The funding to support the reserve program in FY 1975 is $219.3 million. This includes $212.0 million appropriated by the Congress and $7.3 million included in the FY 75 Pay Supplemental. The estimate included in the Navy FY 1975 TOA is $6 million below this amount on the assumption that the President's proposal to Congress for reducing FY 1975 outlays in the Reserve area is accepted by the Congress. The FY 1976 requested funding of $191 million represents the funds needed to support the paid drill program and the Reserve Officer Candidate programs included in this account.

The FY 197T requested funding of $56.3 million is required to finance the manpower program through the three-month transition period. It represents an amount which is about 34% of the FY 1976 request. Normally, a substantial amount of cost is incurred in Reserve accounts in the July - September time-frame, because the bulk of annual active duty training occurs during the summer months of the year.

Chart 6
MILITARY PERSONNEL, MARINE CORPS
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$1,762.3	$1,828.3	$+66.0	$467.9
Significant Items				
Manyear Increase of 3,279			+23.8	
Full Year Impact of 1 Oct 1974 Pay Raise			+21.7	
PCS Increases			+26.0	
Separation Pay			-1.5	
Proficiency Pay			-4.4	

Military Personnel, Marine Corps

For the Military Personnel, Marine Corps appropriation, the funds are programmed to support a FY 1976 end strength of 196,303 personnel. The overall program cost increases by $66 million above the 1975 level. The increase of 3,279 manyears programmed in FY 1976 results from the Marine Corps' plan to overcome a strength shortfall experienced in FY 1974. As in the case of the Military Personnel, Navy account, other increases relate primarily to the full-year impact of the 1 October 1974 pay raise and PCS program and cost increases. Miscellaneous reductions including reduced payments for

separation pay and proficiency pay partially offset these increases. The requested funds for the FY 197T period are required to finance an end strength of 196,498 personnel.

Chart 7
RESERVE PERSONNEL, MARINE CORPS
($ Millions)

FY 1975	FY 1976	DIFFERENCE	FY 197T
$65.5	$72.7	$+7.2	$28.9

Significant Items

Average Strength

Increase of 779 in Average Paid Drill Strength

Dollars

Pay Group A Enlisted Strengths	+1.9
Pay Group F Recruits	+3.7
Special Training	+1.3

Reserve Personnel, Marine Corps

$73 million is requested to fund an average paid drill program of 32,481 manyears for Marine reserves. This represents an increase of $7 million and 779 average drill-pay strength over the fiscal year 1975 program. The added drills relate to the Marine Corps' objective to move closer to required manning levels in FY 1976. For FY 197T, $28.9 million is requested to finance an average paid drill strength of 33,013. This funding represents about 40% of the FY 1976 funding request. The relatively large increment of funding for the three-month period is required since most annual active duty training by reservists is performed during this timeframe.

Chart 8
OPERATION AND MAINTENANCE, NAVY
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$7,285.5	$8,320.0	$+1,034.5	$2,234.5

Significant Items

Ship Maintenance and Modernization	+444.0
Aircraft Rework and Maintenance	+68.8
Secondary Item Repair	+35.7
Aircraft and Ship Operations	+177.5
Intelligence and Communications	+40.2
Training and Medical Programs	+34.2
Commissary Store Support	-22.6
Federal Building Fund	+14.4

This appropriation finances those operations which have the most direct and immediate impact on the current readiness of the Navy. These operations also more acutely feel the pinch of inflation and, unless careful attention is paid, will suffer because of long-term readiness considerations. Accordingly, the budget proposals give priority to maintaining the readiness position previously attained and to improving those areas determined to be critically related to Navy's capability to support and respond effectively on short notice. The funding request for FY 1976 which is 14% over the current plan for FY 1975 has been developed with this premise in mind.

About $813 million of the requested increase has been allocated to readiness related programs such as ship maintenance, aircraft reworks, repair of equipments and spare parts and to ships and aircraft operations. Continued emphasis has been placed on ship maintenance and $444 million of the requested increase will be applied in this area. Most of this increase is necessary to offset rising material costs and to cover civilian pay raises. Aircraft reworks funding increases by $68.8 million with the major part of it being necessary to cover material price increases and pay raises. We plan to spend an additional $177.5 million in FY 1976 to restore ships and aircraft operations levels to minimum satisfactory levels. It should be noted that in terms of fuel consumption, both the ship and aircraft programs are based upon decreased rates of consumption per hour, a reflection of Navy's continuing energy conservation effort. Furthermore, note should be taken of the fact that the Navy's budgeted fuel program does not reflect the higher tariffs on foreign oil as outlined

by the President. To reverse a dangerous down trend in equipments that are operable and in aircraft NORS and NORM rates, additional funding amounting to $52.3 million has been planned for component rework and equipment calibration. In this area the requested funding is expected to allow for some real improvement. Investments in this effort are thought to be highly cost effective because of the higher degree of readiness to be achieved with such a nominal amount of funding increase. Increased funding is being requested in other highly essential areas such as intelligence, training, communications and base operations. Here again, the predominant portion of the increase is necessary just to offset the impact of pay raises and price increases to be realized before FY 1976 begins.

The transition budget request of $2,234.5 million represents a continuation of effort for the three-month transition to FY 1977, and provides essentially the same level of operations as requested in FY 1976.

Chart 9
OPERATION AND MAINTENANCE, MARINE CORPS
($ Millions)

FY 1975	FY 1976	DIFFERENCE	FY 197T
$459.5	$507.3	$+47.8	$129.4

Significant Items

Relocation of MCSA Philadelphia to Albany, Georgia	+6.3
Paid Advertising for Recruiting	+3.3
Support of New Facilities Completing Construction	+2.7
Depot Level Repairs	+5.1
Improvements to Real Property Maintenance	+8.8
Full Year Impact of FY 1975 Pay Raises	+5.8
GSA Rental Charges	+1.4
Rate Increases and Price Increases and Other	+14.5

FY 1976 funding increases for the Marine Corps' O&M appropriation are necessary for cost growth experience and for certain program changes designed to enhance current levels of readiness.

Over 50% of the requested increase represents the funding impact of cost escalation, pay raises and increases in average strengths, military and civilian.

Program changes incude the consolidation of supply management at Albany, Georgia, for improved supply effectiveness, the consolidation of active and reserve paid advertising requirements for recruiting purposes,

and the expansion of depot level repair effort on major items of equipment for the Fleet Marine Forces.

The transition budget request of $129.4 million provides a continuation of approximately the same level of operation as requested in FY 1976.

Chart 10
OPERATION AND MAINTENANCE, NAVY RESERVE
($ Millions)

FY 1975	FY 1976	DIFFERENCE	FY 197T
$246.2	$308.6	$+62.4	$80.7

Significant Items

Flight and Ship Operations	+26.1
Ship Maintenance and Alterations/Aircraft Reworks	+22.3
Real Property Maintenance	+1.0
Coastal/River Reserve Program	+2.9
Base Operations	+9.2

This appropriation provides for funds to train reserve component units and operate and maintain facilities such as training centers, air bases, and training sites for the use of such units.

The increase in fiscal year 1976 funding of $62.4 million includes $26.1 million for flight and ship operations and $22.3 million for ship maintenance and alterations and aircraft reworks. These increases are due primarily to price increases for stock fund items and to increases in operating tempo in both flying and steaming hours to attain an increased state of readiness, and a change in the mix of ships and aircraft. Also included are additional funds for maintenance of real property, the Coastal/River Reserve Program, and base operations support for the 376 Reserve centers, facilities, air stations and detachments throughout the United States. The transition period, during which Navy Reserve units perform the major portion of their annual two-week training duty, $80.7 million is requested. This represents an operating tempo for ships of 29 per cent and for aircraft of 28 per cent of the fiscal year 1976 level.

Chart 11
OPERATION AND MAINTENANCE, MARINE CORPS RESERVE
($ Millions)

FY 1975	FY 1976	DIFFERENCE	FY 197T
$11.7	$12.1	$+.4	$3.5

Significant Items

Stock Fund Price Increases	.1
Expansion of Training Programs	.2
Additional Travel of Recruiting Personnel	.1

Operation and Maintenance, Marine Corps Reserve

This appropriation provides for funds to train Marine Corps component units and to operate and maintain facilities such as: training centers and training sites for the use of such units.

For the Marine Corps, the increased FY 1976 requirements will support additional costs of stock fund materials, and will provide additional emphasis on recruiting and training efforts.

Chart 12
NAVAL PETROLEUM RESERVES
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$86.9	$239.7	$+152.8	$100.5
Significant Items				
Basic Budget Proposal	69.4	117.7	+48.3	47.5
Operating Costs	(7.4)	(8.4)	(+1.0)	(1.8)
Exploration	(27.0)	(51.2)	(+24.2)	(8.9)
Development	(35.0)	(58.1)	(+23.1)	(36.8)
Proposed Supplemental	17.5	-	-17.5	-
Production - Elk Hills	(15.5)		(-15.5)	
National Strategic Reserves	(2.0)		(-2.0)	
Proposed Legislation	-	122.0	+122.0	53.0
Production - Elk Hills	-	(12.0)	(+12.0)	(3.0)
National Strategic Reserves	-	(110.0)	(+110.0)	(50.0)

This appropriation was established with a two-year availability in FY 1975. In prior years, funding for the Naval Petroleum Reserves was included in the Operations and Maintenance, Navy appropriation. The basic budget finances the day-to-day costs of conserving, operating, and maintaining the petroleum and oil shale reserves. Included are funds for necessary protective drilling operations, for exploration of Reserves No. 1 in California, No. 4 in Alaska, and the oil shale reserves, and for development of the Elk Hills, the Teapot Dome, and the oil shale reserves.

The proposed FY 1975 supplemental appropriation will be used to finance costs associated with starting up full-scale production of the Elk Hills reserve and initial planning for the National Strategic Petroleum Reserves (NSPR) in FY 1975. Legislation requesting the authorization to produce in 1975 has been transmitted to the Congress.

Legislation authorizing increased production of petroleum from NPR No. 1 during FY 1976 and the transition has been transmitted. Proceeds from the exchange or sale of the petroleum, rather than general fund appropriations, are to be used to finance the operations, exploration, development, and production of the Naval Petroleum Reserves. The start-up costs of the National Strategic Petroleum Reserves (NSPR) for FY 1976 and the transition will also be financed from receipts.

Chart 13
PROCUREMENT SUMMARY - TOA
($ Millions)

Appropriation	FY 1975	FY 1976	DIFFERENCE	FY 197T
Total	$8,481.6	$12,014.9	$+3,533.3	$1,942.0
Aircraft Procurement, Navy	2,780.4	3,077.0	+296.6	600.1
Weapons Procurement, Navy	735.3	1,224.2	+488.9	332.7
Shipbuilding and Conversion, Navy	3,174.6	5,446.0	+2,271.4	474.2
Other Procurement, Navy	1,576.7	1,981.9	+405.2	491.1
Procurement, Marine Corps	214.6	285.8	+71.2	43.8

This chart compares the fiscal year 1976 procurement request with FY 1975. The procurement budget is the budget area in which our on-going modernization program is funded. It is in these appropriations where the Navy's future effectiveness, as a viable force, will be determined.

The fiscal year 1976 request is 12,014.9 million, which is slightly more than one-third of our 1976 budget.

I will now discuss the highlights for each of the procurement accounts.

Chart 14
AIRCRAFT PROCUREMENT
($ Millions)

	FY 1975		FY 1976		DIFFERENCE	FY 197T	
Total	$2,730.4		$3,077.0		$+296.6	$600.1	
Item	Qty	Cost	Qty	Cost		Qty	Cost
Combat Aircraft							
A-4M (SKYHAWK)	-	-	24	67.3		-	-
A-6E (INTRUDER)	12	122.6	12	151.3		-	-
A-7E (CORSAIR)	30	114.0	30	148.1		6	26.6
F-14A (TOMCAT)	50	616.5	36	510.3		9	73.3
P-3C (ORION)	12	138.4	12	147.5		3	47.4
S-3A (VIKING)	45	427.5	41	482.9		-	-
EA-6B (PROWLER)	6	116.8	6	111.8		1	9.3
E-2C (HAWKEYE)	6	105.3	6	146.6		1	15.0
UH-1N (IROQUOIS)	15	13.5	24	27.4		6	5.2
AH-1J (SEA COBRA)	-	-	16	39.0		6	10.1
Advance Procurement	-	164.4	-	161.9		-	95.2
Airlift Aircraft							
C-9 (SKY TRAIN II)	6	44.1	-	-		-	-
CT-39 (SABERLINER)	6	10.5	-	-		-	-
Trainer Aircraft							
VTAM(X)	-	-	15	9.2		3	4.8
T-34C (MENTOR)	18	7.0	115	29.5		36	9.7
Other Aircraft							
EC-130Z (TACAMO)	-	-	1	21.1		-	-
KC-130R (HERCULES)	6	44.0	-	-		4	40.4
Modification of Aircraft		290.9		488.9			148.6
Aircraft Spares, Equipment and Facilities		564.9		534.2			114.5
TOTAL		2,780.4		3,077.0			600.1

This appropriation finances the procurement of aircraft and associated support including flight simulator systems for navy forces and marine air wings.

Procurement of 338 aircraft is planned along with various items of support equipment in FY 1976.

Procurement of the proven A-4M Skyhawk, A-6E Intruder and A-7E Corsair continue a modest attack aircraft inventory modernization program. The F-14 buy represents the 6th consecutive production request for this fighter aircraft; 222 have been approved for production through 1975. These 36 F-14s will be used to equip the 7th and 8th Navy and 2nd Marine Corps F-14 squadrons. The ASW program includes 12 P-3C Orion land-based patrol aircraft to equip the 12th operational squadron and 41 S-3A carrier-based aircraft. The S-3A procurement, which is the 5th and final production increment, will allow the outfitting of the remaining operational S-3A squadrons. The remaining combat aircraft include the highly successful EA-6B tactical electronic jamming aircraft, the sophisticated

E-2C early warning aircraft and the twin engine UH-1N utility and AH-1J gunship helicopters--these latter two aircraft are for the U.S. Marine Corps. The $162 million included for advance procurement components in FY 1976 will permit the orderly production and delivery of 190 combat aircraft planned for procurement in FY 197T and FY 1977.

The budget also requests funds to procure 130 trainer aircraft. The first increment of 15 VTAM(X) aircraft will be utilized in the training of multi-engine pilots and continued procurement of 115 T-34C's will modernize the primary training aircraft fleet.

The EC-130Q communications relay aircraft will provide the 14th aircraft for this program enabling the authorized force level to be maintained.

The $489 million for aircraft modifications provides selected components and subsystems to increase the capability and safety of our aging aircraft inventory. Funds for modification programs reduce procurement of expensive combat aircraft by updating earlier versions of the same aircraft to meet current and future mission requirements. For example, the A-6 A-to-E modification will provide 36 older A-6A aircraft with A-6E avionics systems and 26 A-7B and C aircraft will be modified to two-place TA-7C aircraft, thereby avoiding procurement of replacement A-7E aircraft. The $198 million increase over the FY 1975 request represents greater emphasis on conversion of older aircraft in lieu of new procurement resulting in increased capability and readiness of aircraft in our inventory.

The total of $534 million for Aircraft Spares, Equipment and Facilities, includes $118 million for Initial Spares required to provide initial carrier and land site outfittings for new aircraft; $240 million for replenishment spares in support of aircraft operations; and $176 million for aircraft support equipment and facilities such as Versatile Avionics Shop Test (VAST) computerized test system, and engine component improvement effort on operational engines to correct unforeseen problems arising after engine development is completed and as a result of fleet operations.

The FY 197T Transition request of $600.1 million includes 32 combat, 39 trainer and 4 other aircraft. Additionally $148.6 million is requested for aircraft modifications and $114.5 million for aircraft spares and other support. This

request reflects funds required for 3 months following the FY 1976 funded delivery period to sustain production.

Chart 15
WEAPONS PROCUREMENT
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$735.3	$1,224.2	$+488.9	$332.7
Ballistic Missiles	78.3	287.5		199.0
POLARIS	1.0	1.6		.5
POSEIDON	39.4	33.2		6.6
TRIDENT	11.3	234.9		178.9
Modification, Spares & Other Support	26.6	17.8		13.0
Other Missiles	454.0	713.0		110.1
Air-To-Air Missiles	164.9	202.6		29.1
Air-To-Surface Missiles	25.4	85.6		10.4
Surface-To-Air Missiles	29.1	90.7		7.6
HARPOON	80.2	142.8		42.3
Fleet Satellite Communications	38.0	60.5		3.0
Modification, Spares, Aerial Targets	116.4	130.8		17.6
Torpedoes & Related Equip	178.1	197.4		19.2
Other Weapons	24.9	26.3		4.4
Total	735.3	1,224.2		332.7

This appropriation provides for procurement, production, modification and modernization of missiles, torpedoes, other weapons, and related support equipment.

Ballistic missile program requirements have increased to $288 million in FY 1976, an increase of $209 million over the FY 1975 request. The primary reason is increased TRIDENT I missile production buildup. The FY 1976 request includes $16.9 million for guidance system procurement and $103 million

for production support costs as well as $115 million for Trident advance procurement requirements in support of the first missile production request in FY 1977.

Other missiles totaling $713 million, represents the procurement of 2,282 tactical missiles as well as aerial targets, Fleet Satellite communications and related support. One thousand and five hundred (1,500) air-to-air missiles are requested including continued procurement of PHOENIX missiles and the Navy and Air Force jointly procured SPARROW 7F and SIDEWINDER 9L missiles. FY 1976 represents the first procurement increment of SIDEWINDER 9L which has improved acquisition capability. 205 CONDOR air-to-ground missiles represent the first fleet inventory missile increment. Procurement of STANDARD MR and ER surface-to-air missiles continues with a request for 307 missiles including first production increment of 22 STD ER missiles with double the previous range due to incorporation of mid-course guidance. Continued procurement of 270 subsurface/surface/air-to-surface HARPOON missile is requested. The FY 1976 request for the Navy's Satellite Communications Program requests the second and the third satellites, launch vehicles for these satellites were provided in prior years.

The FY 1976 request of $197 million for TORPEDOES and related equipment includes continued procurement of 175 MK-48 torpedoes and the intial procurement increment of 170 CAPTOR mines. The other weapons FY 1976 request of $26.3 million includes the first production increment of the new 20 MM machine gun and other support programs.

For the 3 month 197T Transition budget $333 million is requested including $179 million for TRIDENT, 187 tactical missiles and related support at $110 million. $19 million for torpedoes and related equipment and $4.4 million for other weapons. These funds support production line maintenance and quarterly support requirements for Navy weapons procurement programs.

Chart 16
SHIPBUILDING AND CONVERSION
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$3,174.6	$5,446.0	$+2,271.4	$474.2

	QTY	Total Cost (End Cost)	FY 1976 Request
New Construction	23		$2,961.2
TRIDENT	1	$641.2	559.9
SSN	2	491.0	439.0
DLGN	1	368.0	257.0
PHM	2	83.4	83.4
PF	10	955.5	955.5
AD	2	393.2	393.2
AO	2	231.8	231.8
T-ATF	3	41.4	41.4
Other			2,484.8
Advance Procurement			144.7
Escalation			1,149.8
Cost Growth			1,119.5
All Other			70.8
TOTAL SHIPBUILDING			5,446.0

Shipbuilding and Conversion

This program provides for a vigorous program of new ship construction and modernization necessary to maintain the naval balance in the future. The FY 1976 request which is $2,271 million more than the current FY 1975 program will provide for 23 new construction ships. There are no conversions budgeted in FY 1976. The current FY 1975 program of $3,175 million will provide for 22 new construction ships and 4 conversions. The significant dollar difference between the two years is attributable to a request for $1,150 million escalation and $1,120 million cost growth for FY 1975 and prior year ships. The amounts have become necessary as the Navy has experienced significant cost increases in its awarded ships due to projected longer lead times for delivery of material, increases in the labor and material indices due to spiralling inflation, and other market place factors. For these same reasons, estimates for unawarded ships have also increased significantly since the time the original estimates were prepared.

Because of the increasing building periods of our ships, we are now facing a new problem in managing our programs. The current five year limitation on the availability of funds under this appropriation has proved to be too short to cover the long-term building programs to completion and has made the administration of an already complex program much more difficult. For this reason, we are submitting for your consideration a request to change the Shipbuilding and Conversion, Navy appropriation to a "no-year" appropriation. The requested change would allow shipbuilding funds which have been appropriated in the past and those which are being requested for FY 1976 to remain available through the extended ship construction periods which we are experiencing in this area.

The FY 1976 program contains four major combatants, twelve patrol craft, four auxiliaries, and three tugs. One of the four major combatants is the fourth TRIDENT Submarine. Through improvements in the sonar, ship silencing, and the capacity for a longer range missile, the new TRIDENT submarines will enhance our sea-based strategic deterrent capability by operating in a larger ocean area and by avoiding detection more readily than existing ballistic missile firing submarines. The TRIDENT is funded at $560 million.

The remaining major combatants include two 688 class nuclear attack submarines ($439M), and the last of a 5 ship program of the DLGN 38 Class ($257M). The 688 Class SSN's are being built to operate against enemy submarines and surface ships for protracted periods and at high speed. These ships possess, in addition to their higher speed, an improved sensor system, improved acoustic countermeasures, and an advanced fire control system and central computer complex to integrate navigation, fire control and command display subsystems.

DLGN-42 is a surface escort ship equipped with anti-aircraft and anti-submarine warfare sensors. This nuclear ship has the capability to continue sustained operations in a high threat area by itself or with a nuclear task group.

The Patrol Hydrofoil Missile Ship (PHM's) which are funded at $83 million, will operate against major surface combatants, and conduct surface surveillance, and blockade straits or littoral areas. The Patrol Frigate (PF) will supplement other planned and existing escort ships in the protection of

amphibious forces, underway replenishment groups, and military and merchange convoys. The PF will be equipped with an advanced fire control system, a 76 MM gun and improved sensors and missile launching system. $956 million is included for the PFs.

Two of the auxiliaries, the fleet oilers, represent the first of a new class of oilers. They will replace ships whose ages range upward from 29 years. The remaining two are destroyer tenders which will provide logistic support and maintenance and repairs for escorts and destroyers including DLGNs and DD-963s. $232 million is requested for the oilers, and $393 million for the tenders.

The three fleet tugs are follow ships to the new T-ATF-166 class tug, the first of which is included in FY 1975. These tugs will be built to commercial standards and will operate as a unit with the Mobile Logistic Support Force. They are budgeted at $41 million for FY 1976.

The fiscal year 1976 budget also contains $145 million advance procurement funding for follow TRIDENT and SSN submarine programs. The $70 million balance remaining for shipbuilding is for small craft, outfitting material, and post delivery work.

The Transition Budget request of $474 million provides advance procurement funding of $253 million for TRIDENT, $189 million for SSN submarines, and $24 million for the PHM program. In addition $8 million has been requested for outfitting material and post delivery work.

Chart 17
OTHER PROCUREMENT
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$1,576.7	$1,981.9	$+405.2	$491.2
Major Shipboard Equipment	557.9	668.9	+111.0	214.7
Reactor Plant Equipment	166.9	193.9		79.4
Radars	23.5	29.5		25.6
Sonars	120.9	174.6		58.4
Surface Missile Systems Equipment	53.3	77.9		16.0
Other Shipboard Equipment	193.3	193.0		35.3
Ordnance	268.4	395.8	+127.4	88.9
Sonobuoys	57.7	83.1		17.4
Air Launched Ordnance	114.8	195.7		45.3
Ship Gun Ammunition	35.9	39.6		8.2
Other Ordnance	60.0	77.4		18.0
Fleet Ballistic Missile Equipment	129.1	163.3	+34.2	48.9
Spares and Repairs Parts	124.2	133.0	+8.8	18.8
Other Support Equipment	497.1	620.9	+123.8	119.9

Other Procurement

The FY 1976 Other Procurement, Navy request is $405 million over the revised FY 1975 program. This appropriation finances the procurement of major weapons and equipment other than aircraft, missiles, ships, torpedoes, and other weapons. Equipments that are funded range from the latest electronic sensors and weapons to update our naval forces, to trucks, training equipments and spare parts. This appropriation is vital to the efficient operation of our ships and shore establishment, in addition to providing the ammunition to meet training and combat requirements. Included is a variety of procurement items, from simple office equipment to sophisticated electronics systems.

This request continues to emphasize modernization and improvement of fleet readiness and can be summarized in broad categories as follows: the first is Major Shipboard Equipment at $669 million, an increase of $111 over FY 1975. Major programs in this category include reactor power units and components, radars, sonars, and surface missile systems equipment.

The next major category is Ordnance at $396 million, $127 million over the FY 1975 programs. The budget provides for training consumption and an incremental step towards achieving the inventory objectives. Air launched ordnance includes substantial amounts for the ROCKEYE and Anti-Personnel/ Anti-Material cluster bombs. These modern weapons, as well as smaller procurements of WALLEYE data link modifications and Laser Guided Bomb Kits, will provide significant qualitative and quantitative improvements in readiness. The Ship Gun Ammunition funding is primarily for five inch ammo.

The next category is Fleet Ballistic Missile Equipment. The $163 million will continue support for the POLARIS/POSEIDON program, as well as provide major support for the TRIDENT program. TRIDENT support is required for the most part to provide equipment to train personnel on the operation and maintenance of the new missiles. guidance systems, and modified fire control system which are being backfitted into the existing POSEIDON Submarines.

Under spares and repair parts, we include both initial outfitting for new equipment being introduced to the fleet and replenishment of existing spares used in daily operations. The overall goal for material availability is 85 per cent. Current availability is about 70 per cent. The requested funding is thought to be sufficient to increase availability upward of 75 per cent.

Other support equipment, funded at $621 million, up $124 million, includes such items as shore electronics and communications equipment ($127 million); production facilities ($35 million); vehicular equipment ($62 million); cryptologic and cryptographic equipment ($59 million); and other miscellaneous support equipment.

For the 3 month FY 197T transition budget, $491 million is requested. These funds are requested to maintain production lines and provide quarterly support requirements for replacement equipment through the transition period. Included in the request is $215 million for Major Shipboard Equipment, $89 million for Ordnance, $49 million for Fleet Ballistic Missile Equipment, $19 million for Spares and Repair Parts and $120 million for other miscellaneous support equipment.

Chart 18
PROCUREMENT, MARINE CORPS
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
	$214.6	$285.8	$+71.2	$43.8
Significant Items				
Tank (M60A1), M88 Recovery Vehicle	70.2	92.4	-	-
HAWK Missile System	22.6	14.3	-	-
DRAGON Missile System	18.6	32.6	-	7.6
TOW Missile System	28.9	3.3	-	2.8
Communications and Electronics Equip.	9.9	38.0	-	7.1
Support Vehicles/Engineer and Other Equip	44.0	75.9	-	16.7
Ammunition	20.4	29.3	-	9.6

Procurement, Marine Corps

Significant Marine Corps programs are the M60A1 tank and the improved HAWK, DRAGON, and TOW missile systems. The M60A1 tank was introduced to the Marine Corps in FY 1974; the funds here provide for 154 tanks at a cost of $92.4 million. FY 1976 procurement represents the final year of a three year buy and is required to modernize the U.S. Marine Corps tank fleet. Associated procurements include tank ammunition and 15 Tank Recovery Vehicles.

The improved HAWK Missile System is in its fifth year of a six year buy. The improvement involves major modification of the basic HAWK ground equipment and a new missile. The improved HAWK will provide the U. S. Marine Corps with an all weather day and night low-to-medium altitude air defense capability.

The DRAGON Missile System is a lightweight man-portable anti-tank missile which will provide anti-tank/assault fire at the infantry battalion level for employment against tanks and hard point targets. FY 1976 and FY 197T represent the second and third increments of the program. The TOW Missile System is a heavy, long range anti-tank/assault missile capable of employment against armored vehicles and fortified point targets. The remainder of the request is for continued modernization of communications and electronics systems, support equipment, and replenishment of ammunition stocks.

The transition budget provides for the continuation of those programs contained in the FY 1976 budget estimates. No new programs are being initiated in the transition budget.

Chart 19
RESEARCH & DEVELOPMENT
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
Total Appropriation	$3,051.6	$3,517.7	$466.1	$903.8
Significant Items				
Navy Air Combat Fighter	20.1	110.2	-	22.6
Tactical Airborne Signal Exploitation System (TASES) (LAMPS III)	2.9	19.6	-	6.9
Light Airborne Multi-Purpose System/	18.5	35.4	-	3.9
Sea Launched Cruise Missile (SLCM)	38.0	101.8	-	42.1
Hi Speed Anti-Radiation Missile (HARM)	14.3	27.6	-	3.9
Ship Development (Advanced)	16.1	27.8	-	10.8
Trident Missile System	640.2	735.5	-	172.5
Close In Weapon System (CIWS)	13.5	30.7	-	2.5
Combat Systems Engineering Development Site (CSEDS)	-	45.0	-	6.5
Trident Submarine System	107.7	83.8	-	12.5
FBM Systems	38.7	65.8	-	21.3
Sanguine	8.3	18.0	-	4.4

Research and Development

The $3.5 billion FY 1976 request for RDT&E is 466 million above the FY 1975 planned program. The increased funding is related to major program changes, pay increase, funding transfers from other appropriations, and price inflation.

The Navy Air Combat Fighter is a new fighter designed to replace the F-4 and augment the F-14 A. The increased cost in FY 76 over FY 75 is due to the commencing of full-scale development and increased in-house support.

System definition for the Tactical Airborne Signal Exploitation System begain in FY 1974. System design software, hardware development and system integration began in the latter part of FY 75 and is continued thru FY 76. The FY 76 increase of $16.7 million represents full year effort.

LAMPS III will extend surface ship capabilities in ASW, ASMD, and surveillance roles by using manned helos with sensor, processor and display links to the parent ship. In FY 76 it is planned to complete "at sea" TECHEVAL testing and to begin installation of extended mission SH-3 helo avionics for later testing.

Substantial increase of $63.8 million in FY 76 funding for the Sea Launched Cruise Missile represents first airframe flight, surface and underwater launch and strategic guidance demonstrations for SLCM.

The Hi Speed Anti-radiation Missile (HARM) is designed to destroy/suppress enemy radars. In FY 76 ten engineering missile models will be fired

and evaluated; three aircraft avionic models will be fabricated and tested. Rocket motors will be given qualification tests. Missile and avionic prototypes will be delivered. The FY 1976 increase is $13.3 million.

Advanced Ship Development funds preliminary design of new ships. Major studies in FY 76 include preliminary design of CVNX (nuclear carrier), DLGN (nuclear frigate), DEX (experimental destroyer escort) and SSN (nuclear submarine).

The FY 76 TRIDENT Missile program includes completion of supplemental flight tests and underground nuclear test of the Mark 4 reentry body. It also includes the start of the C4 missile development flight test and supplemental flight tests of Maneuvering Reentry Vehicles (MARV)

CIWS is a lightweight, last ditch gun defensive system designed to combat the anti-ship cruise missile threat. In FY 76 three Operational Suitability Models will be delivered and installed aboard ship for operational test prior to DSARC III and release to production.

The Secretary of Defense has directed that, in the construction of new ship types, there must be a land base test site to exercise integration of various components. Follow ships are approved only after successful completion of such tests. CSEDS is test site for whatever ship type is finally approved for AEGIS missile system. FY 76 funding is restricted to equipments and computer programming which are independent of the candidate ship class selected.

Trident Submarine effort is primarily continuation of engineering and integration of subsystems at the Land Based Evaluation Facility.

The FY 75-76 increase in FBM Systems is primarily associated with the FBM Improved Accuracy Program which is intended to improve significantly the accuracy of FBM's in the 1980's.

The FY 75-76 Sanguine Program funding is to continue design validation which began in FY 75, to conduct survivability, T&E and environmental compatibility studies, and to start final system design.

The $903.8 million FY 197T budget request represents approximately one-quarters effort in consideration of the Research and Development incremental funding policy. Funding for only continuing on-going effort is requested in all programs. No new programs are being started in the transition period.

Chart 20
MILITARY CONSTRUCTION
($ Millions)

	FY 1975	FY 1976	DIFFERENCE	FY 197T
Military Construction, Navy & Navy Reserve	$624.3	$890.4	$+266.1	$17.6
Program by Activities				
Major Construction	530.7	789.5	-	-
Minor Construction	17.0	20.0	-	5.0
Planning & Design	51.5	41.6	-	12.2
Access Roads	3.0	3.0	-	-
Navy Reserve	22.1	36.4	-	.4
Significant Programs:				
TRIDENT	103.5	194.9		
Medical Modernization	66.7	132.9		
Troop Housing	58.7	59.1		
Pollution Abatement	58.6	48.3		
Energy Conservation	-	29.9		
Shipyard Modernization	15.8	16.6		
University of Health Sciences	15.0	72.3		

Military Construction

The Navy's fiscal 1976 budget includes $890.4 million for military construction including $36.4 million for the reserve forces. The broad categories of military construction funding are shown at the top of the chart under "Program by Activities" line. The Transition budget includes only $17.6 million for continuation of planning and minor construction programs.

Looking at the significant programs, there is $195 million for TRIDENT, a substantial increase over the amount approved last year for this program. Most of these funds are required to continue orderly planning and construction of the base at Bangor, Washington, from which the TRIDENT submarines will operate. However, $7.0 million is included to cover community impact costs which may be paid under the authority of Section 608 of Public Law 93-522 enacted in December 1974.

As has been the case for several years, a significant portion of the construction budget is for facilities to support Navy and Marne Corps personnel. $133.0 million is being requested for modernization of medical facilities. This is the third increment of a SECDEF directed program to improve medical facilities and includes $100 million for the construction of a new hospital at Bethesda and $30 million for a new hospital at Bremerton, Washington; $59 million is being requested for bachelor housing and dining facilities.

This year's construction budget continues the program to abate air and water pollution. $48 million is requested for such projects.

For the first time, funds are included for projects which will result in energy savings. The projects in this program will pay for themselves in five years or less.

A modest amount is again included for modernization of the Navy's shipyards. $72.3 million is included for the DOD Uniformed Services University of Health Sciences which is to be constructed at Bethesda. This is the second increment of funding for the University. The third and final increment will be requested in the FY 1977 program.

Earlier in my statement, Mr. Chairman, I stated that the Navy's budget proposals had been carefully scrubbed to assure a minimum request for funds. To avoid the inference that our actions were limited strictly to a financial analysis, I would like to acquaint you with some of our conscientious management efforts undertaken to reduce program requirements. With the exception of increased personnel being devoted to our critical ship maintenance and modernization program, we have deliberately kept manpower needs at or below the levels projected for FY 1975. We have developed and adopted a new aircraft maintenance philosophy. This new approach referred to as SDLM calls for the standardization of maintenance policy through engineering analysis and is an outgrowth of the earlier concept of Aircraft Conditional Evaluation (ACE). Under SDLM, it is expected that Navy will be able to fund an additional 100 aircraft reworks in FY 1975. The FY 76 aircraft rework program relfects the savings resulting from SDLM. To further reduce funding requirements and with the idea in mind of generating fuel savings, our FY 1976 steaming and flying hour programs were developed on

the basis that the consumption ratio would be improved by 5%. We have paid close attention to headquarters personnel requirements. Total headquarters personnel requirements have been reduced in FY 1976 by 139 if the functional transfer of 1,840 from the Army for USMACTHAI Support Group is discounted. We have been most careful in reviewing our requirements for automatic data processing and our budget reflects a reduction of 215 in personnel devoted to this effort. No new automated data system will be introduced in FY 1976.

Navy has taken every opportunity to meet force level requirements by converting, modernizing and extending the service life of existing aircraft rather than resort to the more costly alternative which calls for new procurements. Some examples of effort in this regard are the A-6A to "E" modification; conversion of the A-7B/C to the TA-7 trainer and the service life extension programs for the F-4J and RF-4B aircraft.

Mr. Chairman, before I conclude my statement I would like to officially inform you that effective 1 February 1975, the separate budget offices under the Comptroller of the Navy and the Chief of Naval Operations were combined into a single budget office. This consolidation is in accordance with the desires of the Congress expressed in the Conference Report on the FY 1975 Appropriations Bill. That concludes my statement, Mr. Chairman. I will be glad to try to answer any questions you may have.

QUESTIONS SUBMITTED BY CHAIRMAN MCCLELLAN

Chairman McCLELLAN. Gentlemen, I have more questions, which, due to the pressure of time, I have been unable to ask today. I would appreciate your responding to them for the record.

[The questions and answers follow:]

SHIPBUILDING DEFICIT

Chairman McCLELLAN. I notice from your statement that your primary concern is the funding problem in the shipbuilding account. How much of this problem can be attributed to deliberately low estimates in earlier budgets in an attempt to fit more ships into the budget?

Secretary MIDDENDORF. None of it, Mr. Chairman. All of these prior year estimates, at the time they were established, were the best estimates responsible personnel could make using available material, labor and production factors and forecasts of outyear inflation and escalation factors.

NAVY-CAUSED CHANGES IN SHIP DESIGN

Chairman McCLELLAN. How much of the increased price for prior year ships was caused by the Navy's tendency to change the ship design during construction?

Secretary MIDDENDORF. As you know the Navy attributes approximately $214 million, or just over 9% of the total deficit to Navy caused changes in our ship programs. It is important to note that not all of this can be attributed to design or characteristic changes on ships under construction. $48.9 million of the program change amount relates to ships not yet under contract (PF, PHM). $20.3 million relates to a decision to budget this year for a contractually required silencing incentive on the DD963 program. $32.9 million relates to increased contractor supplied outfitting costs on the DD963 program and $23.9 million results from other program changes caused by contractor performance or inflation-driven higher cost.

Thus we attribute only $88.4 million to design or characteristic related changes in ships under construction.

MULTISHIP AUTHORIZATION REQUESTS

Chairman McCLELLAN. You mentioned multi-ship authorization requests as a partial cure for ship construction programs. Weren't several of the recent ship programs with large cost increases multi-ship authorizations? How do you visualize multi-ship authorizations being a cure-all for your contracting problems when that has not been the case in the past?

Secretary MIDDENDORF. We have experienced significant cost increases in two of our prior year multi-ship procurement programs, the DD-963 Class destroyers and the LHA general purpose amphibious assault ships. These are largely the result of over-optimism on the part of the Navy and the contractor in connection with the problems of starting up, essentially "from scratch," two major ship construction programs in a brand new facility. In both cases, the total program for each ship was authorized on an incremental option basis, under the Defense Department's "Total Package Procurement" concept, which provided for concept formulation and contract definition completely by the contractor, with the Navy monitoring the process to ensure a viable operational product. The concept has since been discarded, for shipbuliding programs, as unworkable.

When I now speak of multi-ship authorizations as an aid to improving the management of shipbuilding programs, I am referring to two things. First, we have found that there is limited willingness on the part of the industry to bid on "one-of-a-kind" ship programs, such as tenders and other auxiliaries, without some assurance of a follow-on commitment of some sort, at least in the form of an option for another ship. This procedure would permit the contractor to plan ahead for application of facilities and manpower for a period beyond the one-ship construction period.

Second, we endorse the House Armed Services Seapower Subcommittee's recommendation that we consider submission of an annual five-year request for authorization of a Navy shipbuilding program. There are several advantages to this concept, not the least of which are:

(*a*) Authorization of the program by the Congress would constitute approval in principle of long-term naval shipbuilding planning;

(*b*) Presentation in the form of a consolidated long-term plan would provide the Congress and the country with a broad perspective of proposed programs and thus give a better understanding of the rationale supporting the current and budget year programs;

(*c*) Clear-cut long-term programs would also improve the ability of the shipbuilding industry to plan ahead for the use of capital, facilities and manpower; and

(*d*) Such a program would allow Navy planners and program managers to determine the most favorable acquisition rates, procurement strategies, and efficient and economical application of programmed funding; and would facilitate timely planning for the distribution of RDT&E,N funds for preliminary and contact design.

In order for such an authorization to be pursued in a constructive manner, and to realize the advantages I have outlined, legislation in this regard must of course provide flexibility for annual updating of the program to reflect unpredictable factors such as changes in threat, changes to national strategy and priorities, advances in technology and changes in the national economic structure, particularly as they relate to the shipbuilding industry. Internal priorities established at each annual updating must insure the maintenance of a balanced shipbuilding program in the event the entire amounts authorized cannot be appropriated in that particular fiscal year. Accordingly, it should be recognized that each five-year authorization would have to be amended annually. A balanced construction program is absolutely essential to maintain an adequate force in terms of quality, numbers and types of ships.

In summary, Mr. Chairman, while we do not believe that multi-ship authorizations would be a cure-all for all of our current management problems, we do consider that they would assist us in a fundamental way towards overcoming or alleviating several of them.

Shipbuilding Contracts

Chairman McClellan. When you refer to escalation clauses in contracts other than the Bureau of Labor Statistics escalation, do you intend to go, in effect, to a cost plus type of contract?

Secretary Middendorf. All fixed price or fixed price incentive type shipbuilding contracts that have been awarded contain escalation clauses that use the indices produced by the Bureau of Labor Statistics. Although future shipbuilding contracts may provide a different formula for computing escalation, the Bureau of Labor Statistics indices will still be utilized, as they have been in the past. There is no intention to use cost type contracts in our major shipbuilding program, solely to accommodate the present inflation problem.

Claims

Chairman McClellan. I note that the Navy has settled $360 million worth of shipbuilding claims during the past few months. Did these hurried settlements result in a raid on the Treasury?

Secretary Middendorf. Absolutely not. These settlements you mention were not fortuitous occurrences; instead they were the products of carefully planned and extensively documented technical, legal, accounting and contractual analyses carried out over many months in each case. The settlements represented in each case an "equitable adjustment" of the contract price to which the Navy was committed under the terms of the "CHANGES" clause in our contracts.

Nuclear Frigate Option

Chairman McClellan. I understand that Newport News Shipbuilding and Dry Dock Company has refused to accept the Navy's exercise of the option for a nuclear frigate. Would you comment on the status of that contract?

Secretary Middendorf. The Navy has exercised the option existing within the DLGN-38 Class contract for the construction of the DLGN-41. The Contractor, Newport News Shipbuilding and Dry Dock Company contends the option is invalid and has provided a legal memorandum as to why it is not a valid option. The Navy Office of General Counsel has reviewed the issue and feels that the Navy has a legally binding option which has been validly exercised and that

Newport News Shipbuilding and Dry Dock Company is required to construct the DLGN–41. In view of the above positions, the parties are meeting in an attempt to resolve these differences.

INDIAN OCEAN

Chairman MCCLELLAN. The nuclear carrier *Enterprise* has been steaming around in the Indian Ocean. What purpose is served by sending United States warships into an area where the U.S. normally does not operate and there are few unfriendly forces?

Secretary MIDDENDORF. Sending the *Enterprise* task group into the Indian Ocean is a credible demonstration of naval peacetime presence in an area of considerable importance to U.S. national interests. Vital oil routes for the U.S., Europe, and Japan lie through the Indian Ocean—either from the Persian Gulf south around the Cape of Good Hope or through the Suez Canal; or from the Persian Gulf east through the Malacca Straits to Japan. In addition, we have maintained friendly relations with countries around the Indian Ocean littoral, including Australia, New Zealand, Iran, Saudi Arabia, and others. The Indian Ocean deployment of the *Enterprise* task group underscores our friendship with such countries and our capability to inject naval power into this area in protection of mutual interests if required. It should be noted that the Soviets are currently centering much of their vigorous Indian Ocean naval operations in the vicinity of Somalia, astride the oil route around the Cape of Good Hope and the southern approaches to the Suez Canal.

FOREIGN MILITARY SALES

Chairman MCCLELLAN. If the United States considers it necessary to increase naval activity in the Indian Ocean, why is the Defense Department selling destroyers to Iran, one of the few powers that could oppose us there?

Secretary MIDDENDORF. Iran is a stable factor in the Persian Gulf area, has been friendly with us, and under leadership of the Shah, is a progressive influence in the area. Iran, it will be recalled, did not join the Arab oil embargo against the U.S. In view of these factors, their drive to industrialize, and their wealth in petro-dollars, it seems in their legitimate interests to have a navy appropriate to the area to safeguard their interests and to build their influence. For one thing, free maritime access from the Persian Gulf to the Indian Ocean via the Strait of Hormuz is absolutely vital to Iran's interests as a major oil exporter. For these reasons and because Iran does not appear to be a likely opponent to us in the area, it is deemed prudent to sell them the ships that they need. If we refused to sell them these ships, Iran has the wherewithal to turn elsewhere for them, not to mention the deterioration of relations with them that such action on our part would cause.

SUPERIORITY OF IRANIAN-PURCHASED U.S. DESTROYERS

Chairman MCCLELLAN. Please comment on the fact the new destroyers being sold to Iran are superior in armament to the U.S. Navy destroyers being constructed in the same shipyards.

Secretary MIDDENDORF. It is a fact that that the Iranian ships have been configured for Anti-Air Warfare (AAW) while the U.S. ships are not now configured.

The U.S. Navy DD–963 Class was designed to provide replacements for the World War II destroyers which have reached the end of their useful lives. They have the range, speed and sea-keeping capabilities to enable them to operate in mutual support of high speed task groups including carrier groups. They can carry out missions of Antisubmarine Warfare (ASW), bombardment and other typical destroyer missions. Because the Navy had other surface combatants at sea, under construction or programmed that could meet Fleet air defense requirements, the U.S. DD–963 was provided with only a self defense AAW capability. However, in the ship design, provision was made for changes in armament over the anticipated 30 year life cycle of the ship (including an area antiwarfare capability) if changes in requirement so dictate.

A foreign military sales agreement between the Iranian Government and the U.S. Government was signed on December 15, 1973 for the purchase of two DD–963, and was amended on August 27, 1974 for the purchase of four additional DD–963, for a total of six DD–963. The Iranian Navy, without the mutual sup-

port of other Anti-Air missile-equipped ships in the Iranian Navy, has elected to configure their DD–963 with an Anti-Air missile capability.

Basing of TRIDENT Subs in Washington State

Chairman McClellan. Please comment on the problems being encountered with citizen groups in the state of Washington as a result of your plans to base TRIDENT submarines in that state.

Secretary Middendorf. It will help put the question of the local community's reaction to TRIDENT in perspective by stating that the establishment of the base at Bangor, Washington has met with general acceptance among the citizens of that area. This acceptance is undoubtedly influenced by the fact that for some time the Navy has been the largest employer in the local area due to the presence of Puget Sound Naval Shipyard at Bremerton. Furthermore the site for the TRIDENT base is the Bangor Annex of the Naval Torpedo Station, Keyport and no land acquisition is required to accommodate the planned TRIDENT force.

A citizens group in Bremerton has joined with four other environmental organizations and two local property owners to file suit against the government to block further development of TRIDENT and to stop construction of the base. The suit, which was filed in the U.S. District Court for the District of Columbia on August 5, 1974, alleges that the government failed to comply with the National Environmental Policy Act. We believe that we have complied with the law, and with the full knowledge of plaintiffs and the court we are going ahead with TRIDENT as planned.

Overseas Bases

Chairman McClellan. The Japanese were recently objecting to nuclear ships of the U.S. Navy calling at their ports. What problems do you foresee concerning our basing rights in Japan? Do we have similar problems in Okinawa?

Secretary Middendorf. Under the Treaty of Mutual Cooperation and Security the United States is granted the use, by its land, air and naval forces, of various facilities and areas in Japan for the purpose of contributing to the security of Japan and maintenance of international peace and security in the Far East. As long as the Treaty is in effect, I anticipate no major difficulties over basing the rights in Japan or Okinawa. [Deleted.] In this regard the United States is required by the Treaty to keep the needs for facilities and areas under continual observation with a view toward return to Japan. This, of course, is being done.

Nuclear Ship Costs

Chairman McClellan. Will you be able to reduce the cost of nuclear power for surface combatants?

Secretary Middendorf. The Navy has been working to find ways to reduce the cost of nuclear power. For instance, the Navy is continuing to review improvements in materials and component designs that would decrease the lifetime cost of nuclear power as well as increase the military capabilities of nuclear ships. The development of longer lived reactor cores is an example of successful results of this effort.

However, as is the case with all equipment and machinery, the rapidly increasing costs of raw materials and labor in today's inflationary economic climate make it unlikely that there will be a net decrease in the cost of nuclear power in the near future.

Admiral Rickover has advised me that there is no technology known which could be expected to yield development of a new nuclear propulsion plant, with adequate characteristics for a warship, which would produce a significant reduction in the weight, space or cost required to accommodate and produce the current optimum surface combatant nuclear propulsion plant.

Naval Petroleum Reserves

Chairman McClellan. What is your opinion regarding the use of the Naval Petroleum Reserves for domestic consumption?

Secretary Middendorf. I regret that it is not appropriate for me to offer an opinion regarding the use of the Naval Petroleum Reserves for domestic consumption. I am disqualified from acting in matters relating to the Naval Petro-

leum Reserves, and Mr. Jack L. Bowers, Assistant Secretary of the Navy (Installations and Logistics), has been designated as the Acting Secretary of the Navy for Naval Petroleum and Oil Shale Reserves and he will be providing you with a letter which will fully respond to your question.

[The letter follows:]

Hon. J. L. McClellan,
U.S. Senate, Washington, D.C.

Dear Senator McClellan: During recent hearings before your committee, you requested the opinion of Secretary Middendorf regarding the use of the Naval Petroleum Reserves for domestic consumption. Secretary Middendorf advised you that he was disqualified from acting in matters relating to the Naval Petroleum Reserves and has asked me to provide you this letter which will fully respond to that question.

As you know, the Naval Petroleum Reserves have been maintained by the Navy in a caretaker status for the past several years. Because of the recent energy situation, plans for the exploration and development of the Reserves have been developed and partially implemented. In order for more aggressive action in this area, however, the President has submitted to the Congress, for action the Energy Independence Act of 1975 (S. 594).

Title I of that bill provides for production at Naval Petroleum Reserves Nos. 1, 2, and 3 for storage in the National Strategic Petroleum Reserve, for replenishment of Department of Defense stocks, and for sale and exchange. The production from those Reserves would thus be available for domestic consumption. The funds derived from the sale of this petroleum would be placed in a special fund to be established in the Treasury and from this special fund monies would be appropriated annually for exploration and development of all the Naval Petroleum Reserves and for the establishment of the National Strategic Petroleum Reserve.

Title I of the President's bill would provide for a 300 million barrel National Strategic Petroleum Reserve for the military and Title II would provide for a one billion barrel National Strategic Petroleum Reserve for civilian consumption.

We strongly support enactment of the President's bill because it will preserve the concept, inherent in the existing statutes, of a protected source of supply for times of emergency for the military and civilian economy alike, and will at the same time, increase domestic production and reduce imports of costly foreign oil.

Sincerely,

Jack L. Bowers,
Acting Secretary of the Navy,
For Naval Petroleum and Oil Shale Reserves.

Fleet Deployments

Chairman McClellan. In his posture statement, the Secretary of Defense emphasized airlift for rapid deployment of forces to Europe. Will such emphasis enable the Navy to reduce its need for mid-ocean escorts?

Admiral Holloway. U.S. forces, including the Army and Air Force, cannot project a sustained military capability anywhere away from the North American continent unless the Navy controls the connecting sea lanes. Airlift made a great contribution in Vietnam, where it carried four percent of the total weight. Ninety-six percent moved by sea, and the percentage could be higher for a larger war such as a NATO/WARSAW Pact war in Europe. The percentage also would be higher for the minimum economic support shipping to sustain our European allies. More than ninety-nine percent by weight of U.S. overseas trade moves by sea, and some of that trade also has to be protected in wartime. Although airlift will make an important contribution of total force mobility during the initial stages of an emergency, in less than a month sealift becomes the dominant mobility force thereafter; accordingly, airlift contribution will not reduce the Navy's requirement for surface combatants.

Our need for surface combatants in a NATO/WARSAW Pact war would be greatest in the first several months, [deleted]. To prevent a quick Soviet victory in Western Europe in an European War, we would have to transport to Europe much more cargo in the first two months than could even be considered for airlift. In that scenario and time period, Allied Atlantic shipping is escort-limited. With the drop in surface combatants from approximately 305 in 1968 to the

current level of 165 plus 30 naval reserve ships after mobilization, and considering allied forces, we are still escort-limited. [Deleted.] Moreover, it is important to recognize that surface combatants would have other vitally needed functions in such a war.

USE OF HELICOPTER CARRIERS

Chairman MCCLELLAN. I note that you plan to selectively deploy helicopter carriers in place of attack carriers to "show the flag". Won't such carriers be vulnerable in several areas, without fighter aircraft support?

Admiral HOLLOWAY. [Deleted.]

OVERSEAS HOMEPORTING PLAN

Chairman MCCLELLAN. The Navy in past hearings has urged the Senate to back an overseas homeporting plan. Is overseas homeporting now a dead issue?

Admiral HOLLOWAY. The Navy's overseas homeporting plans, as currently implemented, provide for a destroyer squadron and a carrier group staff homeported in Athens, Greece, and a destroyer squadron and a carrier in Yokosuka, Japan. Additionally, there are fleet flagships, combat support ships and tenders homeported overseas. I want to emphasize, Mr. Chairman, that our overseas homeporting plans must remain responsive to changes in operational concepts and requirements, as well as to international events which impinge upon those plans. With regards to the previously planned Guam homeporting of a destroyer squadron, a change in operational plans made it necessary to cancel that initiative. Both operational and international considerations have required the suspension of plans to homeport a carrier in Greece. The current review by Greece and its allies of mutual security arrangements could further impact on our homeporting arrangements. We shall continue to ensure that our plans are responsive to the basic objective of realizing the benefits for which overseas homeporting is intended.

U.S. FLEET SAFETY IN MEDITERRANEAN

Chairman MCCLELLAN. Is it safe to sail the Fleet in the eastern Mediterranean considering the excellent surveillance of potential adversaries and the threat of cruise missiles?

Admiral HOLLOWAY. In actual combat or high tension situations, Sixth Fleet operations in the eastern Mediterranean are relatively secure due to individual unit capabilities, [deleted] and the Fleet's own tactical organization. U.S. naval forces already possess a variety of defenses against cruise missile attack including electronic countermeasures equipment (both air and surface) to confuse enemy targeting, offensive aircraft operations from carriers to destroy enemy platforms before missile launch and surface-to-surface weapons with a limited capacity to intercept incoming cruise missiles. [Deleted.] Weather, cover and deception techniques and the unpredictability of naval movements all combine to complicate this surveillance and the consequent targeting problem. Finally, the Fleet would execute its missions in joint operations with other available U.S. forces. With a balanced mix of weapons, aircraft and ships especially configured and integrated to counter air threats, the Sixth Fleet optimizes its self-defense and offensive capabilities.

Although these factors help reduce the cruise missile threat in the eastern Mediterranean, significant risks still exist. Future procurement of Anti-Ship Missile Defense weapons should further enhance the survivability of our forces in that region. However, the vulnerability of modern U.S. naval forces in a major war, whether in the Mediterranean or elsewhere, is yet to be seen. But under the conditions usually inferred for a major war, almost all weapons or weapon systems are vulnerable.

MIDEAST COMMITMENTS

Chairman MCCLELLAN. Does the U.S. Navy have a commitment to protect specific countries in the eastern Mediterranean?

Admiral HOLLOWAY. In accordance with national policy, the Navy has assigned forces committed to the defense of our NATO allies in the eastern Mediterranean. Since the accession of Greece and Turkey to the North Atlantic Treaty in 1952, these commitments have included the defense of Greece and Turkey.

Value of Navy and Marine Forces During Oil Embargo

Chairman McClellan. Of what value would the Navy and Marine Forces in the Middle East be in the event of another oil embargo?

Admiral Holloway. With the exception of the Middle East Force flagship in Bahrain, and the two destroyers normally assigned to that command on a rotational basis, we do not maintain Navy or Marine forces in the Middle East. However, Sixth Fleet and Pacific Fleet combatant ships, with aircraft and Marines on board can be moved into the Eastern Mediterranean and the Western Indian Ocean, respectively, if the national command authorities see a clear need for the projection of military power in support of diplomatic or deterrent objectives in the Middle East.

Air Combat Fighter

Chairman McClellan. Last year, the Congress directed the Navy to develop an air combat fighter which would be a close derivative of the Air Force air combat fighter. Does the Navy now plan to modify the F–16 aircraft selected by the Air Force for Navy use on the carriers?

Admiral Holloway. Three carrier-capable variants of the F–16 proposed by the General Dynamics/Ling-Temco-Vought (GD/LTV) team as well as two variants of the YF–17 proposed by Northrop/McDonnell Douglas (NORTHROP/MAC) team are being evaluated by the Navy Source Selection organization, to determine if any of those variants can satisfy requirements for the multi-mission carrier fighter attack aircraft.

Aegis

Chairman McClellan. The patience of this committee has been stretched rather thin with the expensive development program for the fleet air defense system, AEGIS, when there really isn't a suitable ship to carry it. Do you anticipate there ever will be a ship suitable to carry this system?

Admiral Holloway. Mr. Chairman, AEGIS is scheduled for fleet introduction in [deleted] and there are at least several suifable candidate AEGIS platforms. [Deleted] variants of ships now under construction, and modifications to the existing DLGN–38 and DD–963 classes. My interest, and that to the Secretary of Defense, is in getting AEGIS to sea by the fastest, most cost-effective means. My recommendations have been made to the Secretary of Defense.

[Deleted.] In the meantime, it is necessary that requested funding in the fiscal year 1976 and transition budgets for both continued AEGIS development and the related Combat System Engineering Development Site (CSEDS) be provided. Only in this way can we get this highly capable, essential fleet air defense asset to sea with the least delay and in the most economical manner.

Sea Control Ship

Chairman McClellan. Last year the Congress directed the Navy to suggest a more capable ship than the Sea Control Ship with which your predecessor was so enamored. I notice that you seem to be reviving the Sea Control Ship in a different form, plus suggesting a nuclear powered small carrier. Are you simply ignoring the Congress' intention to cancel the Sea Control Ship?

Admiral Holloway. As indicated, Congress directed the Navy to conduct additional studies of a new, more capable ship design than the former Sea Control Ship. The study effort in being is looking at various ship designs ranging in tonnage from 14,000 tons to 33,000 tons. The ship selection should be made by June 1975 and will then be provided for appropriate Congressional review and concurrence.

Antisubmarine Warfare

Chairman McClellan. We spend billions of dollars for antisubmarine warfare. Have there been any break-throughs in the Navy's ability to conduct such warfare?

Admiral Holloway. We have not had any break-throughs in the sense of new concepts or methods, but we have had significant qualitative and some quantitative improvement in our ability to detect, classify, and localize Soviet and potential enemy submarines. These improvements are primarily in the area of signal processing capabilities.

[Deleted.]

Improved sonobuoys, [deleted] have been developed along with advanced signal processing equipment for aircraft usage. Introduction of the S–3A and LAMPS helicopter, with expansion of P–3C assets is increasing our ASW capability in open ocean and direct support roles. One area which gives us a decided advantage in ASW, is the quieting of our attack submarines through sound isolation techniques [deleted]. Return on our considerable investment is now being realized in the production of superior equipment and in the expansion of our capability to counter the Soviet submarine threat.

Russian Anti-Submarine Capability

Chairman McClellan. Do you envision the Russians achieving a breakthrough in anti-submarine capability which would threaten our sea-based nuclear deterrents?

Admiral Holloway. While we do not credit the Soviets with such a capability and do not envision such in the near future, we are very sensitive to their efforts toward and potential for developing such a threat. We have good indications that the Soviets are devoting increased and significant research and development in [deleted] detection. This is evident not [deleted] in the significant increase in oceanographic operations, and we are devoting considerable effort to keeping abreast of their activities, [deleted].

Foreign Military Sales

Chairman McClellan. I am very concerned about the sales of our best weapons to foreign countries. You have sold a first line anti-submarine patrol aircraft to Iran, the U.S. Navy P–3 Orion. Will that aircraft have the same capability as the Navy aircraft?

Admiral Holloway. The Iranian P–3F does not have the same capability as the U.S. Navy P–3B or P–3C aircraft.

In purchasing the P–3F, the Shah stated that he wanted a Maritime Reconnaissance aircraft with an Anti-Submarine Warfare capability. Accordingly, the P–3F was configured with the P–3C airframe and engines and an avionics suite essentially equivalent to earlier P–3A aircraft.

With the purchase of the Iranian DD–963, the Government of Iran has requested the update of the P–3F aircraft to include equipment to enable the aircraft to be interoperable with the ships. This update package is being developed at this time.

Provision of the P–3F update package, or sale of additional P–3 aircraft, will provide an Iranian capability approaching that of U.S. Navy P–3C aircraft. However, certain items of equipment on the U.S. Navy P–3C will not be included in the Iranian aircraft.

Effect on U.S. Security With Loss of F–14 or P–3

Chairman McClellan. What effect would there be on U.S. security if weapon systems such as the F–14 and P–3 aircraft were suddenly in the hands of unfriendly forces?

Admiral Holloway. The loss of a foreign sale P–3F would compromise the communications and ordnance equipment which does represent current technology. The loss of an F–14 aircraft would impact primarily in compromise of a state of the art system. The near term impact of the loss of an F–14 would be the possible limited use of the aircraft against friendly forces. However, U.S. control of supply support for the aircraft, as well as technical and training constraints would limit the duration of the enemy's utilization. In both cases, technology would be sacrificed, allowing an unfriendly force, if he possesses the technical capability, to develop tactics or counter systems.

Amphibious Landings

Chairman McClellan. Considering the potent fire power potential adversaries can bring to bear in an engagement, as illustrated in the last Middle East War, is it reasonable to expect the Marines to conduct an opposed amphibious landing successfully?

General Cushman. Of course. After Gallipoli in World War I and the development of nuclear weapons in World II, similar questions were asked.

Marine Corps innovations and technology historically have countered the seemingly fatal vulnerabilities of the time. We have continued intensive efforts to develop new techniques and countermeasures to enemy capabilities to maintain the unique forcible entry capability of the Marine Corps. The Navy-Marine Corps amphibious team has recognized the threat and has developed the capabilities specifically needed to increase our ability to land away from the threat and to neutralize enemy weapon systems. The high speed amphibious fleet, combined with helicopter assault, provides the unique mobility of the amphibious force which enables it to select the time and location of the operation so as not to land where the threat is concentrated.

The amphibious task force is tailored to meet the threat and win. The Navy-Marine Corps team is continuing to improve the capabilities to counter the threat. Developments such as surface effect ships, electronic countermeasures, V/STOL aircraft, improved antitank weapons and standoff air-delivered ordnance will result in greater capabilities for the amphibious assault in the future.

Amphibious assault operations have always required a well-trained team to successfully accomplish a difficult task. Amphibious assaults in a high threat environment will be difficult, but they have always been so. We are ready today to do the job, and will continue to be ready in the future.

Marine Corps Recruiting

Chairman McClellan. You claim an improvement in Marine Corps recruiting as a result of improved advertising. Might not the economic situation be more responsible for the upturn in all military recruiting than increased advertising?

General Cushman. To determine the relative worth of Marine Corps Recruitment Advertising when the nation's unemployment rates are rising, one must examine a few key points.

During the early months of Fiscal Year 1975, in a period when unemployment rates were relatively stable, the Marine Corps accession goals were obtained largely as a result of improved management, dedicated recruiters, and a significant investment of advertising dollars. Congressional approval had been received at the end of Fiscal Year 1974, allowing the Marine Corps to make its debut in the paid print arena. To date, that decision, I am pleased to report, has netted the Marine Corps over 110,000 respondents of which over 70,000 have been forwarded directly to the recruiter for follow-up. Although it is too early to tell how many of those respondents have actually become accessions, preliminary indications are that it's a sizeable number. In particular, it should be noted that recruiters have reported that generally the best quality prospects are those responding to advertising efforts.

Approximately in November, the first effects of the rising unemployment began to impact upon the recruiting forces. During the months of November–February a rise of walk-in prospects has been noted. Unfortunately, according to our accounting, a majority of those individuals seeking economic relief do not possess the qualifications or the motivation to be of value to the Marine Corps. The primary producer of the quality leads continues to be the respondents to our advertising campaigns. As a result, there is, and will continue to be a need for a full, balanced media advertising program.

As pointed out in a February study by General Research Corp., entitled "Recruiter Allocation and Quota Determinations," only three basic factors have changed appreciably since the beginning of Fiscal Year 1974:

(1) Stronger emphasis on recruiting
(2) Increased advertising expenditures,
(3) Unemployment rate.

Although the study recognizes fully that unemployment has contributed to enlistments, it points out the continuing need for advertising. In fact, advertising may be more cost effective than other recruiting techniques because of the uneven spread of unemployment. In a related study, entitled "Who Joins the Marine Corps and Why," published in September 1974, it was revealed that 49% of those interviewed had decided to enter the Marine Corps prior to their senior year in high school.

Accepting the rationale that the economic situation is the principal force behind our success implies that applicants need jobs now. As of January 31, our delayed enlistment pool consisted of 10,264 young men who will not be assigned to active duty, in a pay status, for up to six months. If a job was their principal

reason for joining they would have wanted to be shipped to recruit training directly upon enlistment and begin receiving a pay check.

Marine Corps Discipline and Appearance Standards

Chairman McClellan. I understand that the Marine Corps has retained tough disciplines and appearance standards. Are they responsible for the relatively high absence rate and lower recruiting success enjoyed by the Marine Corps as opposed to the other services?

General Cushman. The statement that the Marine Corps has retained its discipline and appearance standards is correct. With respect to recruiting, knowledge of these standards will attract some young men and repel others. Our past problems in recruiting are related to making ourselves known to the high caliber individual we need for today's technically advanced Marine Corps and convincing him that the Marine Corps' challenge and standards are beneficial to him and indispensible to our mission as a force in readiness.

With respect to the relatively higher rates of absenteeism in the Marine Corps than the other services, the following are considered to be prime contributing factors:

In the synthesized profiles of the deserter prone individual the level of education has emerged as a management indicator of potential for desertion. The higher the level of education, the less likely an individual is to desert. Possession of a high school diploma is considered to be a "significant" indicator of sufficient character, emotional stability and maturity to cope with the rigors of life in the service in general and the Marine Corps in particular. The Marine Corps continues to raise the educational level of recruits in an attempt to minimize unacceptable behavior.

The Marine Corps has a higher proportion of its force operationally committed than any other service. This preponderance of operational commitments produces greater turbulence and individual hardships on Marines than on members of other services and contributes to the greater tendency of Marines for absenteeism. The Marine Corps recognizes these facts and continues to search for new methods which minimize turbulence and individual hardships commensurate with our mission as a force in readiness.

Defense Dollars Required to Maintain Marine Corps

Chairman McClellan. When you state that the Marine Corps provides 16% of the nation's general purpose forces for only 4% of the defense dollars, do you include the dollars used to purchase material or furnish support to the Marines?

General Cushman. Yes Sir. The 4% includes all support funded by Marine Corps appropriations plus that support financed by Department of Defense and Navy appropriations.

The Department of Defense support provides for retired pay, defense claims, and family housing management.

Navy support includes aircraft and related weapons procurement, research and development, certain operating costs for Marine Corps Air Stations and military construction.

Questions Submitted by Senator Young

Senator Young. Mr. Chairman. I also have questions that I would like to submit for the record at this point.

Chairman McClellan. Certainly. Without objection, they will be entered in the record with appropriate responses.

[The questions and answers follow:]

Inflation in the Budget

Senator Young. Mr. Secretary, how much inflation is contained in the budget request?

Secretary Middendorf. The FY 1976 budget increases by $5.5 billion over the FY 1975 budget. Of this increase, $2.3 billion represents funds required for repricing the FY 1975 and prior year shipbuilding programs to fully fund previously authorized ships and $2.7 billion of the remaining $3.2 billion are also inflation related price adjustments to the entire FY 1976 Navy program.

Program Growth

Senator Young. Also how much growth is requested in the budget?

Secretary Middendorf. About $.45 billion of the increase represents real program growth.

U.S. and Soviet Navy Comparison

Senator Young. How does the U.S. Navy compare with the Soviets in combatant ships?

Secretary Middendorf. Including aircraft carriers, helicopter carriers, cruisers, destroyer types, patrol ships and all types of submarines, the current numbers of combatant ships in the U.S. Navy is 326; the Soviet Navy has approximately 670. The Soviet Navy consists of a total of over 2000 ships—many of which are small coastal patrol, mine warfare, amphibious and auxiliary ships—as opposed to the U.S. Navy's total of just under 500.

Senator Young. Are the Soviets building more ships than the U.S.?

Secretary Middendorf. During the five year period from 1970 through 1974, the Soviets completed [Deleted] major surface combatants of escort size or larger and [Deleted] submarines. During the same time, the U.S. completed 44 major surface combatants and 22 submarines. However, [Deleted] of the Soviet surface combatants were missile armed, including [Deleted] with anti-ship missiles. By contrast, only 1 of the U.S. units was built as a surface-to-air missile armed ship. The remainder were destroyer escorts about half of which are being retrofitted with a point defense missile system. [Deleted] of the Soviet submarines were armed with anti-ship missiles and [Deleted] with ballistic missiles. None of the U.S. submarines were armed with ballistic or cruise missiles.

Soviet Naval and Weapons Development

Senator Young. What new naval ships and weapons have the Soviets developed that concern the Navy?

Secretary Middendorf. While the U.S. Navy is concerned about any and all of the new naval ships and weapons that the Soviet may develop, there are a few that are worthy of highlighting:

KIEV class aircraft carrier—This ship will displace approximately 40,000 tons and be about 900 feet long. It is the largest naval ship ever built in the Soviet Union. It is expected to be operational later this year. With a [Deleted] mix of V/STOL and helicopter aircraft, it will be a significant addition to the Soviet's open ocean ASW forces. A second unit of this class is currently being built.

KARA class guided missile cruiser—This ship is one of the most heavily armed warships in the world. She is armed with three separate missile systems. The weapons array includes two [Deleted], SAM launchers, [Deleted], SSM launchers and [Deleted] point defense SAM launchers. The KARA class also carries [Deleted] 76 mm guns, [Deleted] close-in-defense gatling guns, [Deleted] close-in-defense gatling guns, [Deleted] torpedo tubes, ASW rocket launchers, an extensive fit of electronics equipment and a helicopter hangar. The first unit was seen in 1973 at sea. There are three units currently active and more being built.

KRIVAK class guided missile destroyer.—A new class of Soviet missile destroyer that first appeared in 1971. It is also a very heavily armed ship with surface to surface [Deleted] anti-ship missiles, [Deleted] anti-aircraft SAM's and ASW weapons and torpedoes, as well as [Deleted] 76 mm AA guns. It has gas turbine propulsion and speeds in excess of thirty knots. There are [Deleted] currently operational and more being built. NANUCHKA class guided missile patrol ship—This is a new class of large patrol boat displacing 840 tons and carrying six SS–N–9 anti-ship missile launchers and a SAM [Deleted] point defense system. It also carries 2 x 57 mm anti-aircraft guns. It was deployed to the Mediterranean during the 1973 October war. There are currently [deleted] in the Soviet inventory and more under construction.

DELTA class nuclear propelled ballistic missile submarine—First seen in 1973, the DELTA is the largest submarine ever built by any nation. It is 450 feet in length and displaces 8,000 tons on the surface. It carries 12 SS–N–8 4200 nautical mile missiles. There are currently eight in the Soviet inventory and more on the way. The Soviets are still attempting to improve their open ocean anti-submarine warfare capability and are expending a great amount of effort and resources in this area. New weapons in this area as well as improved sensors are currently under test.

[Deleted.]

[Deleted] new missiles of various kinds and with various missions are currently under development.

[Deleted.]

Aviation with respect to aircraft of Soviet Naval Aviation (SNA), the introduction of the new swing wing BACKFIRE bomber is particularly significant. This aircraft will almost double the radius of action of current SNA strike aircraft. This air-to-surface missile carrier has an estimated radius of action of about [Deleted] nautical miles unrefueled. This range will, for the first time, give SNA the capability to strike deep into the North Atlantic and reach the sea lanes between North America and Europe.

[Deleted] estimate that the aircraft will initially have an air defense and reconnaissance role with further potential in the role of fleet strike, close support, and ASW.

Enlistment Requirements

Senator Young. What effect will the recently announced Defense policy to require 3-year or longer enlistments have on the Navy and Marine Corps?

Secretary Middendorf. The decision by the Secretary of Defense to stop two year enlistments by 1 July 1975 will have an impact on the long range manpower planning of the Marine Corps. The longer term of enlistment will produce more manyears of productive service for each enlistment obtained. This is the reason the Marine Corps has been moving towards the longer average term of enlistment for the past four years. Based upon the new 35% three year and 65% four year accession mix, approximately 7500 additional manyears will be contracted in Fiscal Year 1976 than originally planned. The increased manyears contribute to less turnover in the enlisted force and slightly smaller recruit quotas in the outyears. None of these benefits are realized, however, until Fiscal Year 1980 and beyond when normal end of active service losses decrease. This effect ensues from the following:

(1) FY 1976 accessions under 2-year contracts are end of active service losses in FY 1978.

(2) Stopping 2-year enlistments in FY 1976 defers these losses to FY 1979 and FY 1980 under 3- and 4-year contracts.

(3) Deferral of losses from FY 1978 diminishes the accession requirements for that year while increasing the requirements for FY 1979 and FY 1980.

(4) As a result, accession requirements decrease by approximately 10,000 in FY 1978 and increase by 10,000 in FY 1979, diminishing requirements for instructors and facilities in Fiscal Year 1978 but sharply increasing requirements in Fiscal Year 1979.

(5) The impact of the new policy on the Marine Corps accessions in FY 1980 and beyond is a reduction of approximately 700 in yearly accessions from our originally planned 2, 3 and 4 year mix of 10%, 20% and 70% respectively.

It is difficult to make a definitive assessment at this time. It can be anticipated that despite current civilian unemployment levels, attainment of Department of the Navy's accession goals will be made more difficult and more costly at current high quality objectives particularly in the accession level summer months. If accession goals are met, however, the Navy and Marine Corps could anticipate less turnover in the enlisted ranks and possibly experience smaller recruit quotas beginning in FY 80.

Decrease of Navy and Marine Corps Strengths in FY 1976

Senator Young. Will the Navy and Marine Corps strengths decrease in fiscal year 1976?

Secretary Middendorf. Yes sir, the Navy strength will decrease from 536,117 at the end of FY 1975 to 528,651 at the end of FY 1976. The strength of the Marine Corps will decrease from 196,376 Marines in Fiscal Year 1975 to 196,303 in Fiscal Year 1976, a reduction of 73 Marines.

Prior Year Inflation Costs

Senator Young. How much of the requested funds are required to pay for prior year inflation in the Navy shipbuilding program?

Secretary MIDDENDORF. Of the $2,269.3 million requested in the fiscal year 1976 budget to correct "full funding" deficits on prior year shipbuilding programs, the Navy attributes $213.9 million specifically to program change actions which are not related to inflation. The remaining $2,055.4 million is, in the main, the result of the impact of inflation and economically related factors on our ship cost estimates. Specifically, our analysis reveals the following detailed causes:

	(In millions)
Contract escalation (51 percent)	1,150
Program changes (9 percent)	214
Claims (7 percent)	150
Inflation on Government furnished material (8 percent)	177
Economic, estimation, inflation and other (25 percent)	578
Total (100 percent)	2,269

Senator YOUNG. Which Navy shipbuilding programs are most affected by inflation?

Secretary MIDDENDORF. It is very difficult to isolate specific shipbuilding programs as the ones most affected by inflation other than the general observation that the longer it takes to build a ship the longer that contract is subject to inflation. The other point to be made is that it is not only the length of the construction period but the rate of inflation that occurs during that construction period.

MAINTENANCE BACKLOG

Senator YOUNG. Will the Navy have substantial backlog of maintenance for real property and equipment in fiscal year 1976?

Secretary MIDDENDORF. Yes sir, a very substantial backlog. We will enter the fiscal year with a real property repair backlog of about 400 million dollars and do not epect that the funds budgeted will permit any reduction.

OVERALL NAVAL STRENGTH

Senator YOUNG. What is your judgment of our Navy's strength and presence on the oceans of the world?

Admiral HOLLOWAY. The strength and presence of our Navy are properly assessed in the context of the Fleet's adequacy to carry out its missions in support of the national strategy.

The highest priority mission of the Navy is strategic deterrence. Ballistic missile submarines form the most secure leg of the triad of national strategic deterrent forces. Through a continuing program of new construction, backfit and overhaul, we maintain a force of the highest technical quality. We judge these submarines to be invulnerable to continuous tracking and targeting by the Soviet Union, and fully capable of carrying out their mission of deterrence of nuclear attack.

The strength of the general purpose Navy is measured against its ability to carry out its wartime missions of sea control and projection of power ashore. The most demanding requirement for these forces, as well as for those of the other Services, is a worldwide conventional war with the Soviet Union. To the extent that our military forces are confident of victory in that scenario, is Soviet use of military force checked.

In conflict with the Soviet Union, the fundamental task of the U.S. Navy would be to assert control over selected sea areas, since the focus of such a war would be in theaters overseas from the United States. Assertion of sea control is more difficult than sea denial. That is, it takes a greater expenditure of maritime resources to use a particular stretch of ocean safely than it does to interrupt that use with submarines and landbased aircraft. This asymmetry of missions under respective national strategies—assertion of sea control for the United States Navy; denial of sea control for the Soviet Navy—is what causes us concern as naval planners. Offsetting steady increases in Soviet naval capability requires additional effort both by this country and our allies.

My judgment of the Navy's capability to carry out its sea control missions in worldwide conventional conflict with the Soviet Union in 1975 is as follows:

[Deleted.]

These judgments hold true for today's active fleet of about 500 ships augmented by our Naval Reserve Force and our allies. In my judgment, a Navy

of this size has only a marginal capability to support the national strategy. The balanced 600-ship Navy which I have described in previous hearings before Congress should keep pace with the competition and give us a more adequate capability to carry out the national strategy by the mid-1980s.

Naval Commitments in Middle East

Senator Young. Has the Middle East situation demanded greater Navy commitments in any way?

Admiral Holloway. Not at present. Our naval forces are operating in the Mediterranean and the Indian Ocean on routine operations at normal, peacetime force levels. We do have the capability to again increase naval strength in these areas when directed. In October 1973, in response to the rapid reinforcement by the Soviets of their Mediterranean Fleet, a Soviet force of 96 ships over a pre-October 1973 total of 54 ships, we ordered major adjustments in our own fleet. Our tactical air capability was buttressed with the return to the Mediterranean of a carrier task group which, at the time, was about to leave the eastern Atlantic waters for home. In addition we increased our evacuation capability, doubled our amphibious forces and made some adjustments in land-based air assets. A carrier task group from our Pacific command was also moved into the Indian Ocean.

Naval Role in Indian Ocean

Senator Young. What role do you think the Navy should play in the Indian Ocean? What, if any, are the alternatives to development of Diego Garcia?

Admiral Holloway. As to the role of the Navy in the Indian Ocean, an American naval presence there fulfills political and military needs in the U.S. national interests. It is a substantial symbol of active U.S. support for international trade routes, for friendly countries, and for the stability and peaceful evolution of U.S. relations with countries of the world.

The United States has an important interest in the stability of the Indian Ocean area. In particular, the oil shipped from the Persian Gulf area is essential to the economic well-being of modern industrial societies. It is essential that the U.S. maintain and periodically demonstrate a capability to operate military forces in the Indian Ocean. Such exercises of our right to navigate freely on the high seas communicates to others the importance we attach to the stability of the region and to continued free access by all nations.

Looking at Diego Garcia and alternatives to its development, the credibility of any U.S. military presence ultimately depends on the ability of our forces to function efficiently and effectively in a wide range of circumstances. Currently, the U.S. logistics facility closest to the Western Indian Ocean is in the Philippines, 5,000 miles away. At a time when access to regional fuel supplies and other support is subject to the uncertainties of political developments, the establishment of modest support facilities on Diego Garcia is essential to insure the proper flexibility and responsiveness of U.S. forces to national requirements in a variety of possible contingencies. The alternative would be the less reliable and costly use of tankers and other mobile logistics forces.

The present facility on Diego Garcia was established to provide an important link in the U.S. worldwide defense communications system. This facility was not designed to provide a capability for sustained logistic support for U.S. forces operating in the region. Existing operations in the Indian Ocean must now be supported through rights obtained from littoral states or, inefficiently, from more distant locations. Support from littoral nations becomes political and may not be available to the U.S. during times of crisis. In order to have the capability to move or maintain U.S. Navy ships in the area, development of more practical support arrangements is essential. The solution is Diego Garcia, which will allow operations from what will, in fact, be a self-sustained facility on British sovereign territory centrally located in the Indian Ocean with minimal political or military visibility.

A distinction must also be drawn between facilities and force presence. The proposed construction on Diego Garcia would enhance our capability to provide support to U.S. forces operating in the Indian Ocean. However, there is no intent to permanently station operational units there, and the installation will not imply an increase in the level of U.S. forces deployed to that region.

So, in summary, there are three alternatives to the development of Diego Garcia. First, without Diego Garcia, we must depend on support from littoral countries; the availability of this support, however, depends on the existing political situation and may not be forthcoming during a time of political crisis. Second, without

Diego Garcia the nearest fuel supply and support facility is Subic Bay, 5,000 miles from the Persian Gulf. Third, without Diego Garcia it requires four oilers to maintain a carrier task group in the Indian Ocean for 60 days; with Diego Garcia, this is reduced to two.

Small Carrier vs. Sea Control Ship

Senator Young. What is the Navy's position concerning the small carrier vice the Sea Control Ship?

Admiral Holloway. The Navy is conducting conceptual studies of a new, more capable ship for review and concurrence by Congress. Various ship designs are being analyzed ranging in tonnage from 14,000 tons to 33,000 tons. Cost and effectiveness of each ship are being compared relative to its capability of responding to a wide variety of offensive and defensive missions. The selection of one of these ship designs will be made by the Navy after the studies are completed. We expect this action to be accomplished by June 1975.

Trident Submarine

Senator Young. When will the first TRIDENT submarine become operational?

Admiral Holloway. The initial operational capability for the TRIDENT System, which includes the submarine and the TRIDENT I (C–4) missile, is April 1979.

TRIDENT Missiles

Senator Young. How will the Navy test the TRIDENT missiles?

Admiral Holloway. The plan for TRIDENT places more emphasis than in the previous POLARIS and POSEIDON programs on quality acceptance screening of parts, environmental screening during manufacture and assembly, final acceptance testing to more stringent environments and the extension of design and process evaluation tests to determine and continually assess design margins. Within the limits of production missile assets available, the maximum number of production missile flight tests are planned during the first 18–24 months after the operational availability date (OAD) to assess production hardware quality at an earlier time in system life than in previous programs.

The missile development flight test program will commence in [deleted] and is planned to include from 25 to 30 tests. Approximately 20 to 25 of these will be development missiles (C4X) flown from the flat pad at Cape Canaveral into calibrated impact areas. Subject to accomplishment of required C4X technical objectives, 5 to 10 Performance Evaluation Missiles (PEM) will be flown from either the flat pad or from an SSBN. PEM missiles are produced employing the manufacturing processes, tooling methods, test checkout, and assembly procedures intended to be used in the production program. The first submerged launch, contingent on meeting C4X minimum objectives, will be as early as [deleted]. SSBN PEM launches will demonstrate underwater launch capability and will also be a proofing of the concept of backfitting POSEIDON SSBNs to carry TRIDENT I missiles.

Demonstration and Shakedown Operations (DASO) will be conducted, as with POLARIS/POSEIDON, to demonstrate the readiness of the weapon system for deployment. At least one POSEIDON SSBN which has received TRIDENT backfit at tenderside will conduct a DASO on the Eastern Test Range (ETR) at Cape Canaveral. All POSEIDON SSBNs completing regular overhaul and outloading with the TRIDENT I will conduct DASO exercises at ETR. TRIDENT submarines will conduct DASO on the ETR prior to deployment.

Operational testing of TRIDENT will be conducted in the same manner as POLARIS/POSEIDON except that an increased number of tests will be conducted earlier in the program to provide a further assessment of production hardware. These operational tests (OT) provide initial data on reliability and accuracy to the JCS. The follow-on test program (FOT) is designed to insure that the reliability and accuracy factors are preserved during the life of the system. Both the planned initial 40 missile OT program and the annual 20 missile FOT program will be carried out under tactical conditions and will exercise all elements of the TRIDENT Strategic Weapon System.

Lightweight Fighter

Senator Young. When does the Navy plan to announce their decision on the Lightweight Fighter?

Admiral HOLLOWAY. The Navy expects to make a decision regarding the feasibility of a Navy variant of the YF–16 or YF–17 in May 1975, and also expects to complete the approved NACF Source Selection Process by August 1975, followed by announcement of the best candidate and a request for full-scale development.

F–16

Senator YOUNG. Can the Air Force A–16 be adapted for aircraft carrier operations and missions?

Admiral HOLLOWAY. Three carrier-capable variants of the F–16 proposed by the General Dynamics/Ling-Temco-Vought (GD/LTV) team are being evaluated by the Navy Source Selection organization, to determine if any of those variants can satisfy requirements for the multi-mission carrier fighter attack aircraft.

F–14 LOSSES

Senator YOUNG. Has the Navy determined the cause of the recent F–14 losses?

Admiral HOLLOWAY. Both aircraft were operating well within their design limits, and both had indications of engine difficulty. Fire subsequently developed in each aircraft causing loss of control and ejection by the crew. All crewmembers were rescued safely. An intensive investigation has been conducted. It was concluded that the most probable cause was engine failure in the area of the first stage compressor or the third stage disk. To preclude further failures a comprehensive inspection procedure has been instituted, while a long-term fix is being developed.

MARINE CORPS RECRUITING GOALS

Senator YOUNG. Has the Marine Corps been able to obtain its recruiting goals this year?

General CUSHMAN. Yes sir, we have. For the first 7 months of Fiscal Year 1975 we have achieved 100.4% of our total recruiting objective.

Senator YOUNG. What is the mix of high school graduates, non-high school graduates and mental groups over the last year?

General CUSHMAN. The mix of non-prior service accessions by high school graduates, non-high school graduates and mental groups is provided in this table for Fiscal Years 1974 and 1975.

USMC HIGH SCHOOL AND MENTAL GROUP MIX

[In percent]

	High school graduate	Non high school graduate	Mental I	Mental II	Mental III	Mental IV
Fiscal year 1975 (July to January)	53.5	46.5	2.6	31.7	61.0	4.7
Fiscal year 1974	54.4	45.6	2.7	30.8	59.0	7.5

MARINE CORPS INTEREST IN NEW ARMY TANK

Senator YOUNG. Does the Marine Corps have an interest in the new tank the Army is developing?

General CUSHMAN. The Marine Corps is monitoring the new tank program being developed by the Army; however, we expect the M60A1 tanks currently being acquired by the Marine Corps to serve us well into the early 1990's. Activities are underway to ascertain Marine Corps requirements for new mobile, protected weapons systems in the long range period, that is beyond 1990. At present, it appears that our increasing requirements for high mobility will preclude purchasing another tank in the medium 50 ton range.

MARINE CORPS USE OF OTHER SERVICE WEAPONS SYSTEMS

Senator YOUNG. How does the Marine Corps reconcile differences concerning weapons systems developed by the other services for Marine Corps use?

General CUSHMAN. Standard procedures exist under which the Marine Corps formally advises the developing service of Marine Corps interest, objectives and requirements for any new weapons system. Once interest is declared, arrange-

ments are made as necessary for liaison, monitoring, coordination, influence, or direct management participation with the developing service to achieve Marine Corps objectives. Under such arrangements, differences are reconciled through negotiation throughout the development cycle, including development and operational tests. In instances where new Marine Corps requirements can be satisfied from ongoing programs of other services, system configuration changes essential for Marine Corps needs are conveyed to the developing service for inclusion, where economically feasible, in Marine Corps production quantities. Where such arrangements are impracticable, basic systems are acquired and brought to required Marine Corps configuration through modification programs.

Harrier Aircraft

Senator Young. What has the Marine Corps experience with the Harrier aircraft and is it the intention of the Marine Corps to seek a follow-on V/STOL aircraft?

General Cushman. The AV–8A Harrier was procured by the Marine Corps because of the unique benefits for close air support inherent in the basing flexibility of V/STOL. The first AV–8A Harriers were delivered in early 1971 and the Marine Corps has received 88 aircraft to date. During this first four years of USMC operational experience with the AV–8A, this aircraft and the V/STOL concept have undergone some of the most extensive testing of any new weapon system. Project Battle Cry, the operational appraisal of the AV–8A, has tested all facets of AV–8A operations. This testing ran the gamut from sea based operations on LPH and LPD ships to austere sites ashore, including operations from an existing road at Camp Lejeune, N. C. Climatic conditions ranged from the 29 Palms desert area to Arctic Circle operations in the North Atlantic. Coordinated amphibious operations, sortie rate tests, logistics concepts, and command, control, and communications were tested in the amphibious scenario, and a complete evaluation of air-to-ground and air combat maneuvering capabilities of the AV–8A was completed.

These extensive tests, along with over 26,000 operational flight hours accrued by Marine AV–8As have convinced the Marine Corps of the capabilities of the AV–8A and the viability of the V/STOL concept of operations. The real proof of the pudding, however, rests in operational deployment, and this last year the Marine Corps deployed VMA–513 to WestPac as a front line light attack squadron. This squadron is now integrating its operations with both air and ground units in introducing V/STOL to forward deployed Marine combat units.

In addition to this WestPac deployment, the Marine Corps has just completed another first: the operational deployment of 6 AV–8As as the organic close air support arm for a Marine Amphibious Unit in the Mediterranean. On independently deployable AV–8A detachment operated from the USS Guam as a part of Marine Amphibious Ready Group 2–74 during the Mediterranean deployment from September 1974 to March 1975. This deployment, in which the AV–8A was fully integrated into the Amphibious Task Force and Landing Force Commander's schemes of maneuver, marks the first time that a unit of this size has had organic close air support assets of AV–8A capability. This deployment aboard the LPH serves to illustrate the utility of basing flexibility upon which the V/STOL concept is based.

This four years of successful operational appraisal and evaluation of the AV–8A capped off by the front line deployment of AV–8A to the primary trouble spots on both sides of the globe has convinced the Marine Corps that an all V/STOL light attack force will most effectively meet the close air support requirements of Marines in combat on the ground.

This AV–8A experience is the basis for Marine requirements for an all V/STOL light attack force, and in FY–76 the Department of the Navy is requesting $4.3M in research and development funding for contract definition on a low risk, advanced vectored thrust V/STOL follow-on to the AV–8A to meet these Marine Corps requirements.

Questions Submitted by Senator Thurmond

Chairman McClellan. Senator Thurmond was unable to attend today's hearing, but he asked that I submit certain questions to you, to be answered for the record.

[The questions and answers follow:]

Navy Base Force Manning

Senator Thurmond. Mr. Secretary, what do you see as the eventual base force manning for the Navy when it reaches the desired 600 ship level?

Secretary Middendorf. First, I would like to point out that ships form the largest but not the only combat force of the Navy. Therefore, they are not the sole determinant of force end strength.

Second, training manpower varies from year to year, even within a level combat force, because enlisted losses vary significantly year to year.

Finally, the 600 ship level is not necessarily a fixed absolute level. We may never be exactly at that level, it may change from year to year. As the mix of ships changes, the manpower level can change.

With these variables in mind, we estimate that a steady state 600 active ship Navy would require about 590,000 active military personnel, based on the force mix currently envisioned.

Ships and Manning Increase Over 5-Year Period

Senator Thurmond. Provide a schedule for the Navy to show the increase in ships and the proposed increase in manning for the next 5 years.

Secretary Middendorf. Schedule of ship and manning increases fiscal years 1976–80:

Type	Fiscal year— 1976 ships	197T	1977	1978	1979	1980	1980 ships
Active ships:							
Aircraft carriers	13.0	(−1)+1.0					
Cruisers	28.0		+2.0				
Destroyers	76.0	+2.0	(−3)+11.0				
Frigates	64.0		+1.0				
Fleet ballistic submarines	41.0						
Submarines (SS/SN)	78.0	+1.0	(−3)+6.0				
Amphibious ships	63.0	+1.0	+1.0				
Mine warfare ships	3.0						
Patrol ships	7.0		+1.0				
Underway replenishment ships	41.0						
Auxiliary ships	76.0		−1.0				
Total active ships	490.0	494.0	509.0				
Naval Reserve ships:							
Destroyers	30.0						
Frigates	0						
Amphibious warfare ships	3.0			[Deleted]			
Mine warfare ships	22.0						
Patrol ships	8.0						
Total NRF ships	63.0	63.0	63.0				
Total ships	553.0	557.0	572.0				
Total shipboard E/S	192.8	192.7	202.0				
Reason for manpower changes:							
A. Change due to ship mix			+4.9				
B. Change due to new systems			+.6				
C. Change due to 70/20 surface combat manning test							
D. Change due to precomm crew		+.2	+.3				
E. Change due to improved manning			+3.3				

600-Ship Navy

Senator Thurmond. When do you expect to reach the 600-ship Navy?

Secretary Middendorf. Fiscal year [deleted] appears to be the earliest practical date. However achieving a 600-ship active fleet will require increasing our naval shipbuilding for fiscal year 1977 through 1981. At present, there is no approved

program that would increase our force level beyond [deleted] active fleet ships, in fiscal year 1983.

Senator THURMOND. Why is this desired level for our Navy?

Secretary MIDDENDORF. A 600-ship active Navy is [deleted] force level for the mid-1980's that will enable the U.S. to meet its projected peacetime deployed posture requirements and an increased readiness to carry out its wartime missions in support of the national strategy. Deployed forces in any theatre must be strong enough offensively to deter expected opposition, strong enough defensively to defend themselves against surprise attack, and configured to provide adequately flexible responses to countermoves by other nations. Additional considerations are established by the actual numbers and disposition of friendly and unfriendly forces and by world geography. All this results in our current deployment requirements of 4–5 carrier task groups, 4 amphibious task elements, and the necessary support ships. Although the Navy can successfully carry out its missions by a thin margin today, considering the certain strategic trends including the growing Soviet maritime capabilities, a 600-ship active Navy is [deleted] needed if we are to maintain this [deleted] balance into the mid-1980's.

RECRUITING

Senator THURMOND. Mr. Secretary, do you plan to cut off any of the expensive recruiting incentives because of the generally easy period for accessions now?

Secretary MIDDENDORF. The only recruiting incentive used by the Navy and Marine Corps is the Enlistment Bonus Program. The Navy will stop their program on 15 March 1975. Before recommending further curtailment of this incentive, however, the potential impact of the lengthened enlistment obligations, which become effective on 1 July 1975, will be evaluated. The Marine Corps will not eliminate the Enlistment Bonus Program. In spite of achieving their recruiting quotas this year, the Marines have not found recruiting to be necessarily easy and are not confident that they could continue to achieve their recruiting quota if the Enlistment Bonus Program were eliminated. The present economic conditions have not eased the Department of the Navy's problem of recruiting high quality men and women into the naval service, because these same individuals continue to be equally employable in the civilian market.

SAVINGS EXPECTED FROM REDUCED TURNOVER

Senator THURMOND. Mr. Secretary, now that the entire Navy is more career oriented, cannot we expect some savings from reduced turnover?

Secretary MIDDENDORF. Generally speaking, reduced turnover will result in some savings, although these savings may be masked by other costs such as inflation and increased training required by higher technology. The reduced turnover resulting from increased first term reenlistments has been considered and accounted for in our plans and the budget submitted. It must be noted that increased retention produces a more experienced enlisted force, which in turn is a more expensive force in terms of rate of pay. This fact converts some of the dollar savings generated by reduced turnover back into increased pay for more senior enlisted personnel. In this sense savings appear as increased efficiency and increased combat readiness, not as a reduction in direct personnel costs.

RESERVE

Senator THURMOND. What is the Navy's 30-day, 60-day and 90-day Reserve Mobilization requirement?

Secretary MIDDENDORF. The Navy requirement for Reserve Personnel from various sources during a mobilization situation is:

Days:	
30	184,997
60	22,375
90	69,253
Total	276,625

The most urgent requirements which demand a high level of training will be filled by Selected Reservists. The remainder will be filled by Individual Ready

Reservists, Fleet Reservists, Standby Reservists and retirees from the Regular and Reserve components.

Senator THURMOND. How and why has it changed in the past three years?

Secretary MIDDENDORF. The requirements have decreased over the past three years due to several reasons:

1. The potential usefulness of inactive ships in naval custody and inactive ships in the custody of the Maritime Administration has decreased. Consequently, many of the inactive ships have been stricken over the past three years. This has reduced requirements for crews and the support establishment.

2. Reductions in the number of Navy ships and squadrons have reduced the augmentation requirements for active units. This reduction in the number of active units has been accompanied by a program of active ship and squadron manning which has also reduced the number of augmentees per unit.

3. The realignment of the Navy support establishment has resulted in closing of certain facilities and the realignment and reorganization of many other facilities. The reduction in the number of support activities reflects the reduction of units to be supported, but also reduces the base for wartime expansion.

4. Increased emphasis within the Navy to purify planning requirements has resulted in hundreds of thousands of manpower changes within the past three years. The majority of these changes pertained to the qualification required in individual positions. However, an evaluation of the need for all positions has resulted in a net reduction of mobilization manpower requirements.

NAVY DEPENDENCE ON INACTIVE RESERVE

Senator THURMOND. Why does the Navy depend more on its inactive Reserve than do the Army or Air Force?

Secretary MIDDENDORF. The U.S. Navy is organized in accordance with the total force policy, with the active military and civilian Naval forces and the Naval Reserve forces not on active duty constituting the U.S. Navy total force capability. The Naval Selected Reserve is designed to provide trained reserve personnel to satisfy the highest priority mobilization requirements needed by the active Navy in emergency situations. Individual Ready Reservists in the Naval Reserve Active Status Pool are considered the next priority personnel resources available to meet the mobilization requirements of the active Navy. I am not in a position to make an evaluation relative to the Navy's dependence on its inactive Reserve in comparison to the other Services', dependence on their respective inactive Reserve.

NAVAL RESERVE REDUCTION

Senator THURMOND. Explain for the Subcommittee the justification for the reduction of the Naval Reserve from 126,000 to 92,000 in the past three years?

Secretary MIDDENDORF. The Naval Reserve strength authorized in FY 73 was 129,000. As part of a plan to obtain increased funding for modernization of hardware and equipment, the Navy agreed to a reduction in Naval Reserve strength to approximately 121,000 in FY 74. This was further reduced to about 117,000 when the funding for the pre-active duty training phase for 2X6 enlistees was transferred to the MPN appropriation.

The Naval Reserve has recently undergone a restructuring directed towards providing mission oriented, task performing units capable of meeting the highest priority early mobilization requirements of the active Navy. Initial implementation was based upon the Fiscal Year 1974 Selected Naval Reserve sizing of approximately 117,000 and on requirements dictated by factors such as the Secretary of Defense's stated planning scenarios, the force levels of the Navy and active force manning levels.

For FY 1975, the Congress authorized a Naval Reserve strength of 117,000; however, the Congressionally approved Reserve Personnel, Navy appropriation supported an average strength of only 111,909. The President's FY 1976 budget submission to the Congress reflects a requested Naval Selected Reserve average strength of about 94,000. The budget for the Transition period reflects an average strength request of 92,000. In supporting this request, the Navy accepts the risk involved by an undermanning in drill pay strength of those billets which would augment the fleet support establishment early during mobilization.

SEABEES

Senator THURMOND. Justify the reduction in the Seabees from 17 to 8 battalions in FY 1976.

Secretary MIDDENDORF. The reduction in Reserve Naval Mobile Construction Battalions in FY 1976 is part of an overall Defense reduction in support forces. This reduction reflects an effort by the Office of the Secretary of Defense to achieve a balance among Defense programs within constrained resources.

Senator THURMOND. Has our nation ever deployed Seabee type battalions manned chiefly by civilians?

Secretary MIDDENDORF. All Navy Construction Battalions have been manned by naval personnel. When we have had construction requirements in areas where civilians could be employed, we have found it effective and economical to use civilian contractors.

STATUS OF SEABEE UNITS

Senator THURMOND. How many Seabee type units are in the active forces? Where are they located? Which ones will be cut?

Secretary MIDDENDORF. There are now ten Naval Mobile Construction Battalions of which one is at half strength. Additionally, there are three Naval Construction Regiments, one operational in mission, the other two with training missions. One Naval Construction Battalion Maintenance Unit is stationed in Subic Bay at reduced strength. The Amphibious Forces include two Amphibious Construction Battalions. Locations and those to be cut are shown below:

EXISTING ACTIVE NMCB's

Unit	Permanent duty station	Authorized strength	
		Officers	Enlisted
NMCB 1	Gulfport, Miss	21	563
NMCB 62	do	21	563
NMCB 71	do	10	207
NMCB 74	do	21	563
NMCB 133	do	21	563
NMCB 3	Port Hueneme, Calif	21	563
NMCB 4	do	21	563
NMCB 5	do	21	563
NMCB 10	do	21	563
NMCB 40	do	21	563

ACTIVE UNITS TO BE DISESTABLISHED

The specific units to be disestablished are:

Unit	Homeport [1]	Disestablishment date
NMCB 71	Gulfport, Miss	July 1, 1975.
NMCB 10	Port Hueneme, Calif	June 1976.

[1] Not yet announced publicly.

SEABEE USE IN VIETNAM

Senator THURMOND. How many were used in Vietnam?

Secretary MIDDENDORF. At the peak of Seabee employment in Vietnam, 12 Naval Mobile Construction Battalions were deployed, under command of 2 Naval Construction Regiments and one Naval Construction Brigade. Additionally there were 2 Naval Construction Battalion Maintenance Units and 1 Amphibious Construction Battalion in Vietnam. Of the 12 Naval Mobile Construction Battalions in Vietnam at one time, two were Reserve Battalions which had been mobilized for active duty.

CAPTOR

Senator THURMOND. The Navy wishes to begin a new procurement program known as CAPTOR. Provide for the record the justification for the requirement to add this new type mine system to the Navy's arsenal of weapons.

Admiral HOLLOWAY. CAPTOR (enCAPsulated TORpedo) is an influence-activated ([deleted] ASW mine, which launches an appropriately modified MARK-46 torpedo against submerged submarines and rejects surface targets. It is deliverable by aircraft, surface ships and submarines on extremely short notice and is designed to detect, classify and attack even the most advanced diesel and nuclear submarines. The CAPTOR weapon system is intended to interdict and restrict the movement of submerged submarine forces. In my opinion, CAPTOR represents a significantly improved operational capability in anti-submarine mine warfare, and should be introduced as a fleet asset as soon as practicable.

REEVALUATION OF CAPTOR COST PROGRAM

Senator THURMOND. Admiral, explain for the Committee the factors involved in the re-evaluation of the cost of the CAPTOR program which has resulted in an increase of $394 million over the FY 1975 estimate.

Admiral HOLLOWAY. The CAPTOR program was repriced just prior to the FY 1976 budget submission, using experience factors of known material, labor and production costs and revised outyear inflation factors. The impacts of revised learning curve projections (95% vs. 90%), delay in the start of production, program reestimation and application of increased inflation estimates across the program resulted in an increase of $362.5 million. Program changes, including increased proofing and testing programs, non-service mines and preparation for selection of a second procurement source make up the $31.5 million balance.

Senator THURMOND. Admiral Holloway, are any of these cost growths related to program changes or Navy changes unrelated to inflation?

Admiral HOLLOWAY. Yes, sir. Approximately $30 million of the increase is caused by recently imposed increased testing and proofing requirements which have been established by Congress and DOD since the development estimate was formulated in 1971. The entire balance, about $365 million, is attributable solely to repricing the program based on current material and labor information and the application of meaningful inflation factors to the total program.

CAPTOR

Senator THURMOND. Admiral Holloway, what are the reliability findings of the CAPTOR as a result of the now completed R&D tests?

Admiral HOLLOWAY. Of [deleted] Operational Evaluation full system tests just completed, [deleted] were completely successful. [Deleted] the failures were in the system's [deleted] and they are being evaluated to minimize the chance of recurring. Other than the on-going [deleted] all testing is complete. I consider that the system is ready for production and fleet introduction.

Senator THURMOND. Why is the Navy unable to project an inventory loss rate for the production units?

Admiral HOLLOWAY. Until the [deleted] operational test is completed and the underwater service life of the weapon can be projected, no factor can be predicted for in-service CAPTOR loss rates. The test has been ongoing [deleted].

COST-PLUS-INCENTIVE ADVANCED PROCUREMENT CONTRACT FOR CAPTOR

Senator THURMOND. Admiral, since this is not an overly complex program, why is the Navy proposing a cost-plus-incentive advanced procurement contract?

Admiral HOLLOWAY. We looked at CAPTOR as a "new start" program, which we normally award on a cost-plus basis. However, since the development program has been extended and additional production expertise has been gained, we now have the option to investigate contracting for CAPTOR on a fixed-price basis. While the CAPTOR design is considered stable, there are some 1400 drawings which are being reviewed and revised as the result of completion of technical and operational testing just completed. While the contractor would undoubtedly accept a fixed-price contract, we believe that—for the first production run, at least—he will insist on an overly large contingency factor or negotiate to a higher price level to protect himself against "unknowns." By utilizing a cost plus incentive fee contract, the contractor may be inclined to accept a lower target cost and at the same time realize the benefits which can accrue from the exercise of strong cost control over the taxpayer's dollar. Plant surveillance by government personnel during the production run will ensure that inefficiencies and waste are minimized.

Upon completion of the initial production increment we will be in a much stronger position to negotiate fixed price instruments for future production buys.

MARK–46 Torpedo

Senator Thurmond. Is the cost of the modification to the MARK–46 torpedo to be used in the CAPTOR program reflected in the program cost?

Admiral Holloway. The CAPTOR-related modifications to the MARK–46 torpedo are included in a separate line in Budget Activity THREE, "Modification to Torpedoes," not in the CAPTOR line. CAPTOR-related MARK–46 modifications are funded at $700 thousand in fiscal year 1975, $1.62 million in fiscal year 1976, and $20 thousand in the Transition budget period for both procurement and installation of modification kits.

Senator Thurmond. Will it be necessary to purchase any MARK–46 torpedoes for this program?

Admiral Holloway. No, sir. Modified inventory torpedoes will be used.

Senator Thurmond. How does the sale of MARK–46 torpedoes to other countries impact on the numbers available for this program?

Admiral Holloway. There is no impact. As I stated, all MARK–46 torpedoes for the CAPTOR program are fleet inventory assets. All MARK–46 torpedoes for foreign sale are new production units.

Results of CAPTOR Tests

Senator Thurmond. State for the record the test results for all air drops and underwater-launched tests conducted on the CAPTOR program.

Admiral Holloway. 74 systems-type tests have been conducted. These include 29 air-launched and 20 underwater-launched tests. [Deleted] of the air-launched and [deleted] of the subsurface-launched units are assessed as successful.

$1.5 Million R.DT. & E. CAPTOR Costs

Senator Thurmond. Explain for the Committee the requirement for $1.5 million, for CAPTOR, in RDT&E costs in FY 1976.

Admiral Holloway. Our FY 1976 requirements for $1.5 million coupled with $.5 million in FY 197T will provide an orderly transition to production and complete the final reports and evaluations as the development efforts wind down.

Of particular significance in the period is the completion of the development of the acceptance procedures, and validation of related documents. Also, we have developed a number of cost reduction engineering changes which must be tested and evaluated before incorporation in the design data package. Directly associated with that effort is the resultant up-date of the production drawings. Finally, the wrap-up of quality assurance procedures, emphasized throughout the R&D phase, is required as well as the certification of test sets and testing procedures.

Mobile Target MK 30

Senator Thurmond. Explain for the Committee the low rate of procurement for the MK 30 Mobile ASW Target for FY 74 and 75.

Admiral Holloway. There was a cost growth in the fiscal year 1972 contract, which the Navy funded from within the allocated MK 30 Target Program funds in fiscal years 1972 and 1973 at the expense of support equipment and documentation required for competitive procurement which was originally deferred into fiscal year 1974. As a result, the number of targets that could be procured within available FY 1974 funds was reduced. In fiscal year 1975 a program decision was made to minimize the number of targets procured in anticipation of a cost-saving competitive procurement commencing in fiscal year 1976. The fiscal year 1975 minimum target procurement is necessary, when coupled with prior year assets, to provide an initial MK 30 Target complement for an existing acoustic range. Concurrent with the procurement of a minimum number of targets, it is necessary to continue to procure support equipment to permit operations of the MK 30 Target for the Atlantic Fleet and for exercise components necessary to continue support of existing inventories employed in ASW training of the Pacific Fleet.

During both fiscal years, 1974 and 1975, a significant proportion of the program covered support equipment necessary for providing an additional operational site, documentation and hardware for turn-around of existing inventories.

Senator Thurmond. Explain how the results of your tests to date justify the procurement of 24 targets in FY 76.

Admiral Holloway. The contractor has, essentially, met all specifications with the exception of the goal for reliability. A Navy-contractor team is now review-

ing this aspect, and improvements are being installed in targets under test. The most recent test results (13 successes out of 14 attempts) are more encouraging. We will not procure additional targets, however until we are satisfied with their reliability.

Senator THURMOND. Are you proposing a fixed-price-incentive contract for the target torpedo procurement?

Admiral HOLLOWAY. Yes, sir. That is our present procurement plan.

Senator THURMOND. Admiral, would you agree that unfavorable test results this spring might justify delaying procurement of this target?

Admiral HOLLOWAY. Yes, sir, if test results were unfavorable, I would agree. However, thhe Navy and the contractor initiated corrective actions early this month; since then, 13 out of 14 test runs have been successful, but only one of the successful runs has been under the formal Test and Evaluation schedule. Though the recent results are encouraging, further engineering analysis is underway to determine what additional efforts are necessary to improve reliability to an acceptable level.

The Mark 30 target is an invaluable ASW training asset in view of the limited "live" submarine services available; but further procurement of the target will not be initiated until an acceptable level of reliability is indicated by test and evaluation.

MARK–48

Senator THURMOND. Admiral Holloway, has the procurement program for the Mark–48 torpedo been stretched out to 1980?

Admiral HOLLOWAY. A Department of Defense Program Budget Decision of 27 December 1974 approved procurements of MK–48 torpedoes through fiscal year 1980.

INCREASED UNIT COST

Senator THURMOND. Explain for the Committee why the unit cost is higher than that reported in the current Selected Acquisition Report?

Admiral HOLLOWAY. I assume that you are referring to the 30 September 1974 Selected Acquisition Report which reported a Procurement Unit Cost of $420 thousand. The FY 1976/FY 197T President's Budget Estimate shows a Procurement Unit Cost of $521 thousand. There are two principal reasons for this increase:

(*a*) Stretchout of the procurement program from FY 1977 to FY 1980 with a reduction in the annual procurement rate. This reduction increases the unit cost but the stretchout will ensure a viable U.S. torpedo manufacturing base during the period 1978 to the mid-1980's during which time there would otherwise be none at all.

(*b*) Inflation significantly above that in previous estimates.

It should be noted that the two unit costs are not directly comparable. The President's Budget Estimate includes Production Prototype Torpedoes and Test and Certification which are not reflected in the SAR Procurement Unit Cost. Both of these items tend to increase the Procurement Unit Cost reflected in the President's Budget Estimate.

Senator THURMOND. Why is the Navy using a fixed-price-incentive type contract for the February 1975 award date?

Admiral HOLLOWAY. There are several reasons why we are going to a fixed-price-incentive type contract for fiscal year 1975 (prime contract with Gould, Inc.):

(*a*) This will be the first year in which a new version of the Command Control Unit (a section of the torpedo's control group) will have been manufactured in production quantity.

(*b*) It is a sole source contract and will be active for four fiscal years. Cost estimating over this long a period of time is somewhat hazardous. Overhead costs are of particular concern in this respect.

(*c*) Although liable for possible overrun cost sharing the Government would benefit in any final cost savings under target cost at a rate of $.60 on the dollar.

(*d*) The fixed-price-incentive contract should provide the lowest final price to the Government. A firm-fixed-price contract would include 15.5% profit versus a 12.5% profit as negotiated for the fixed-price-incentive contract. This equates to a difference of about $2 million on the negotiated cost base of about $67 million. To make the final fixed-price-incentive contract price (to

the Government) equal to a firm-fixed-price contract, the contractor would have to overrun target cost by $3.4 million at the negotiated 60/40 share ratio.

Senator THURMOND. Admiral, I note that the total cost of the MARK–48 program has increased $276 million since the FY 1975 budget submission. How much of this increase is related to the program stretch-out?

Admiral HOLLOWAY. Approximately $194 million is related to program stretch-out.

Senator THURMOND. Admiral, explain for the Committee the requirement for $3.2 million in R&D during the FY 1976 contract?

Admiral HOLLOWAY. The $3.2 million RDT&E in FY 1976 represents the culmination of the Operational Systems Development program for the MK 48 Torpedo. The objective of this program has been to correct Weapon System deficiencies uncovered during the Technical and Operational Evaluations as well as during the initiate stages of Fleet Introduction.

FLEET WORKSHOP TEST AND HANDLING EQUIPMENT PROGRAM

Senator THURMOND. Admiral, how has the fleet workshop test and handling equipment program been operating?

Admiral HOLLOWAY. The configuration, tape/equipment incompatibilities, and correlation from one set to another have been brought under control. Reliability is still too low, but has not been a major problem because there has been an excellent support effort out of the Contractor, Gould, to keep them running. This year we have begun retrofitting the Automatic Test Equipment (ATE) with a series of reliability improvements which are expected to triple the Mean Times Between Failure (MTBF). Beyond this are more improvements under development including a programmable mini-computer which would replace many of the relays in the switching matrix. The back up ATE, intended for procurement last year, was dropped because its expected cost far exceeded what was budgeted, and the funds were sorely needed elsewhere. Although the ATE problem is still very much with us, it can be said that it has not been an impairment to fleet operations.

AUTOMATIC TEST EQUIPMENT PROGRAM

Senator THURMOND. Is the automatic test equipment program on schedule?

Admiral HOLLOWAY. All 38 sets of Automatic Test Equipment (MK 541) in the procurement plan have been delivered to the Navy. Installation of these test sets is on schedule.

MARK–48 TEST PROGRAM

Senator THURMOND. Admiral, what have been the main handling problems in the Mark–48 test program?

Admiral HOLLOWAY. The main handling problem is associated with shipping the torpedo onboard the submarines. The MK 48 Torpedo has an aluminum shell and is more prone to damage than the older steel shell torpedoes that we've been accustomed to handling. The problem is being resolved by modifying the handling systems; for example, replacing steel rollers with plastic rollers.

Senator THURMOND. Admiral, has the storage life of the torpedo been fixed to date?

Admiral HOLLOWAY. The shelf-life has been set at 400 days at which time the torpedo is to be "verified" (checked-out) at an Intermediate Maintenance Activity, submarine tender or torpedo facility ashore.

FLEET EXERCISE FIRINGS

Senator THURMOND. Admiral, what have been the results of the fleet exercise firings for the submarines using the MARK–48 torpedo to date?

Admiral HOLLOWAY. As of 31 January 1974, based on 505 Fleet Exercise firings, the in-water material reliability was [deleted]. The overall system mission success rate (based on 458 firings) was [deleted].

LIVE WAR SHOT FIRINGS

Senator THURMOND. When do you plan to conduct live war shot firings?

Admiral HOLLOWAY. Live war shot firings were conducted as part of the operational and technical evaluations and are scheduled in [deleted].

Technical Problems With M–48

Senator Thurmond. What are the chief technical problems remaining in connection with this torpedo?

Admiral Holloway. All remaining technical problems are minor in the sense that they pose no barrier to continued production or deployment of the weapon. The principal ones are:

TELCOM—(Two way wire communication) requires a new command control unit which is being introduced with the [FY 75] buy. The technical problem involves the integration of all phases of this introduction—production, test equipment, software—so that the Fleet introduction goes smoothly.

Velocity sensor switch—[The existing design has a boot material [deleted]. Switch is being redesigned and acceptable substitute boot materials are being researched, but the final solution is not in hand.]

Warhead influence exploder processor—[Deleted].

[Deleted.] (This problem, which was known when the weapon was released for production, is not the primary weapon employment mode; the anti-submarine mode is unaffected). We have just completed a test series which defined the limits of performance. Our next action is to develop and authorize one of several proferred alternatives for correction.

Automatic test equipment reliability.—Reliability is still too low; but as previously stated, there has been an excellent support effort out of the Contractor, Gould, to keep them running. An improvement program is underway which is expected to triple the mean-time between failure (MTBF) and generally improve reliability in all areas.

Advanced Lightweight Torpedo

Senator Thurmond. Admiral, explain for the Committee the so-called lightweight torpedo program?

Admiral Holloway. The MARK 46 torpedo, currently operational in the fleet as the primary air and surface launched antisubmarine torpedo, represents the technology of the late 1950's and early 1960's. Improvements have been made to this weapon as state-of-the-art technology has advanced, but the current improvement program will exhaust the growth potential of this technology. Therefore, to counter a post-1985 projected submarine threat—greater speed, endurance, depth, countermeasures and damage resistance—a new torpedo will be required.

The period of development process of a new Advanced Lightweight Torpedo is currently estimated as 12 years from program initiation to initial operational capability; this agrees with previous experience in developing torpedoes such as the Mark 46 and Mark 48, based on the type of technologies being pursued.

Manning Request for Marine Corps

Senator Thurmond. General Cushman, it appears the FY 1976 manning request for the Marine Corps is 16,000 less than your requirement. Why is this request short of your full manning requirement?

General Cushman. First, sir, I would like to point out that the 212,000 man requirement is based upon our current assessment of the forces required to support the national military strategy and perform our assigned missions during peacetime with an acceptable degree of risk. Secondly, the resources which the Marine Corps requests from the Congress are constrained, first internally within the Department of the Navy, then within the Department of Defense, and finally by the Office of Management and Budget. These constraints, imposed due to a lack of unlimited resources, both in dollars, and manpower have limited our authorization requests to the numbers submitted.

Marine Unaccompanied Overseas Tour

Senator Thurmond. General, is the Marine unaccompanied overseas tour the same length as other services and if not, why not?

General Cushman. Sir, with the exception of the Marines serving with our forward deployed Fleet Marine Forces in the Western Pacific, personnel assigned to unaccompanied duty overseas serve standard tours in consonance with the other services. The 13 month "dependents restricted" tour for our WestPac units

is an approved exception to DOD policy based on mission requirements for these forces. The 25,000 Marines assigned to WestPac are continually prepared to respond to emergency and combat requirements on very short notice, and must therefore, maintain the highest possible condition of combat readiness. Due to frequent maneuvers and deployment exercises, and a general lack of dependents' support facilities where these units are based, Marines assigned to these forces are on a 13 month tour in which no personnel are authorized to be accompanied by dependents. In general, the other services maintain a 12 month tour length in locations where dependents cannot accompany their military spouse. Tour length in these locations is specified by DOD directive and reflects, "to the extent practicable, the general desirability of each location." It is felt that any increase in the length of our tour, beyond the present 13 months in our WestPac Fleet Marine Forces, will have serious morale, retention, and recruitment implications in a Corps of Marines who can, on the average, expect to spend approximately 22% of their career in overseas, unaccompanied assignments.

Responsibilities of General Officer Corps

Senator Thurmond. General Cushman, I note you have 69 general officers to support a three-division Marine Force. Would you provide for the record the positions filled by these general officers?

General Cushman. There is a current requirement for 76 general officers in the Marine Corps not counting two billets held as additional duties.

This requirement for 76 general officers takes into consideration the planned end strengths of 196,376 for Fiscal Year 1975 and 196,303 for Fiscal Year 1976.

With a total on-board strength of 69 general officers planned for the next few years, seven general officer billets must be filled by colonels or left vacant.

This table is a current list of Marine Corps general officer billets. Although only 66 billets are presently filled by general officers, a total of 69 billets will be filled by general officers upon Senate confirmation of the Fiscal Year 1975 general officer selectees.

[The table follows:]

MARINE CORPS GENERAL OFFICER BILLETS

Billet Description	Authorized Grade	Grade of Incumbent
Commandant of the Marine Corps	0-10	0-10
Assistant Commandant of the Marine Corps	0-10	0-10
Chief of Staff	0-9	0-9
Legislative Assistant to CMC	0-7	0-7
Deputy Chief of Staff for Manpower	0-9	0-9
Director of Manpower Plans and Policy·	0-7	0-7
Director of Training and Education	0-7	0-6
Assistant Deputy Chief of Staff for Manpower/ Director of Personnel Management	0-8	0-7
Director of Marine Corps Reserve	0-8	0-8
Deputy Director of Marine Corps Reserve	0-7	0-6
Director of Intelligence	0-7	0-6
Deputy Chief of Staff for Installations and Logistics	0-8	0-8
Assistant Deputy Chief of Staff for Installations and Logistics/Director of Plans, Programs and Management	0-8	0-8
Director of Materiel	0-7	0-7
Director of Facilities and Services	0-7	0-7
Deputy Chief of Staff for Requirements and Programs	0-8	0-7
Deputy Chief of Staff for Plans and Operations	0-9	0-9
Director of Plans/Asst Deputy Chief of Staff for Plans and Operations	0-8	0-7
Director of Operations	0-7	0-6 (Sel for 0-7)
Director Judge Advocate Division	0-7	0-7
Deputy Chief of Staff for Aviation	0-8	0-8

Billet Description	Authorized Grade	Grade of Incumbent
Assistant Deputy Chief of Staff for Aviation	0-7	0-7
Deputy Chief of Staff for Research, Development and Studies	0-8	0-7
Inspector General	0-8	0-7
Director of Information	0-7	0-6 (Sel for 0-7)
Fiscal Director of the Marine Corps	0-8	0-8
Director of Information Systems Support and Management	0-7	0-7
Director of Marine Corps History and Museums	0-7	0-7
Director of Personnel Procurement	0-7	0-7
Commanding General, Fleet Marine Force, Pacific (FMFPAC)	0-9	0-9
Commanding General, III Marine Amphibious Force	0-8	0-8
Commanding General, 3d Marine Air Wing	0-8	0-8
Deputy Commander, FMFPAC	0-8	0-8
Commanding General, 1st Marine Division	0-8	0-7
Commanding General, 3d Marine Division	0-8	0-8
Commanding General, 4th Marine Division	0-8	0-7
Commanding General, 1st Marine Air Wing	0-8	0-8
Commanding General, Force Troops, Pacific	0-7	0-7
Commanding General, Marine Corps Base, 29 Palms	0-7	(Additional duty of CG, Force Troops, Pac)
Assistant Division Commander, 1st Marine Division	0-7	0-6
Assistant Division Commander, 3d Marine Division	0-7	0-7
Assistant Wing Commander, 1st Marine Air Wing	0-7	0-7

Billet Description	Authorized Grade	Grade of Incumbent
Assistant Wing Commander, 3d Marine Air Wing	0-7	Vacant
Commanding General, 1st Marine Brigade	0-7	0-7
Commanding General, Fleet Marine Force Atlantic (FMFLANT)	0-9	0-9
Deputy Commander, FMFlant	0-8	0-7
Commanding General, 2d Marine Division	0-8	0-8
Commanding General, 2d Marine Air Wing	0-8	0-8
Commanding General, Force Troops Atlantic	0-7	0-7
Assistant Division Commander, 2d Marine Division	0-7	0-7
Assistant Wing Commander 2d Marine Air Wing	0-7	0-7
Commanding General, Marine Corps Development and Education Command	0-9	0-9
Commanding General, Marine Corps Base, Camp Pendleton	0-8	0-7
Commanding General, Marine Corps Base, Camp Lejeune	0-8	0-8
Commanding General, Marine Corps Recruit Depot, San Diego	0-8	0-8
Commanding General, Marine Corps Recruit Depot, Parris Island	0-8	0-8
Commander, Marine Corps Air Bases West/Commanding General, Marine Corps Air Station, El Toro	0-8	0-7
Commander, Marine Corps Air Bases East/Commanding General, Marine Corps Air Station, Cherry Point	0-8	0-8
Commanding General, Marine Corps Supply Center, Barstow	0-8	0-7
Commanding General, Marine Corps Supply Center, Albany	0-8	0-7
Deputy for Education/Director, Education Center, Marine Corps Development and Education Command	0-8	0-7

Billet Description	Authorized Grade	Grade of Incumbent
Commanding General, 4th Marine Air Wing	0-8	0-7
Commanding General, Marine Air Reserve Trng Ctr, New Orleans	0-8	(Additional duty of CG, 4th Marine Air Wing)
Commanding General, Marine Corps Base, Camp S. D. Butler/Deputy Commander Marine Corps Bases, Pacific (Forward)	0-7	0-7
Commanding General, Landing Force Training Command Pacific	0-7	0-7
Commanding General, Landing Force Training Command Atlantic	0-7	0-7
Commanding General, Marine Corps Supply Activity, Philadelphia	0-8	0-8
Deputy Development/Director Development Center, Marine Corps Development and Education Command	0-7	0-7
Deputy for Support/Commanding General, Marine Corps Base, Quantico	0-7	0-6
Director, Command and Staff College, Marine Corps Development and Education Command	0-7	0-6
Director, Defense Supply Agency	0-9	0-9
Director, Office of Naval Disability Evaluation	0-8	0-8
Director, J-1, Joint Chiefs of Staff	0-7	0-7
Deputy Chief of Staff, Commander-in-Chief, Atlantic	0-8	0-8
Director of Operations, J-3, Pacific Command	0-8	0-8
Deputy J-3, U. S. European Command	0-7	0-7
Chief of Staff, U. S. Forces, Japan	0-8	0-8
Deputy Director, NMCC, J-3 Joint Chiefs of Staff	0-7	0-6 (Sel for 0-7)

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Marine Reserve Division and Wing Structure

Senator Thurmond. Is the Marine Reserve Division and Wing structured the same as the regular units?

General Cushman. The Marine Corps Reserve is organized similar to an active force division/wing team with appropriate combat support and combat service support units. The 4th Marine Division is structured like its reinforced regular counterparts wth 3 infantry regiments, 1 artillery regiment, and a force service regiment. The 4th Marine Aircraft Wing like its regular counterparts is task organized, and is comprised of 2 fixed wing and 2 rotary wing aircraft groups, 1 air control group, and 1 wing service group. It does not contain highly sophisticated all weather attack and electronic warfare aircraft. These would be provided by the active forces on mobilization.

Manning Level of Reserve Units

Senator Thurmond. What is the manning level of the Reserve units and how long before they would be committed to combat in the event of a callup?

General Cushman. The table of organization strength of the organized reserve is 41,126. The selected reserve is scheduled to provide 37,188 officers and men of this number; the rest will consist of regulars currently serving with the reserve division and wing and who are scheduled to serve with these units after mobilization. Our current approved average Reserve strength for FY 1975 is 31,702. We expect to achieve our required Reserve strength of 37,188 by 1978. Current planning provides for the Marine Corps Reserve division/wing team to be ready for combat by M+60. Individual units could be ready within 30 days after mobilization. The latest combat evaluation of our Reserve units indicates that 154 could be ready for combat in 30 days or less and 123 in 60 days.

Subcommittee Recess

Chairman McClellan. We will recess until Tuesday, March 4, when we will receive testimony on the Navy Procurement account.

Thank you very much, gentlemen.

[Whereupon, at 12 noon, Thursday, February 27, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 4.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

TUESDAY, MARCH 4, 1975

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m. in room 1223, Everett McKinley Dirksen Office Building, Hon. John O. Pastore presiding.

Present: Senators Pastore, Inouye, and Young.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

WEAPONS PROCUREMENT

STATEMENT OF REAR ADM. WILLIAM F. CLIFFORD, JR., U.S. NAVY, ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS (SURFACE WARFARE)

ACCOMPANIED BY:
REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY
CAPT. F. C. CASWELL, JR., U.S. NAVY, WPN APPROPRIATIONS MANAGER, OFFICE OF THE CHIEF OF NAVAL OPERATIONS (SURFACE WARFARE)
P. H. HOSMER, HEAD, WPN BRANCH, FINANCIAL MANAGEMENT DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

BUDGET REQUEST

Senator PASTORE. This morning the subcommittee will receive testimony in support of Navy procurement budget request for fiscal year 1976.

The following witnesses are scheduled to appear:

Vice Adm. Walter D. Gaddis, Deputy Chief of Naval Operations (Logistics).

Vice Adm. F. H. Price, Jr., Deputy Chief of Naval Operations (Surface Warfare).

Rear Adm. William F. Clifford, Jr., Assistant Deputy Chief of Naval Operations (Surface Warfare).

The first appropriations request to be considered will be that for "Weapons procurement, Navy." Admiral Clifford.

JUSTIFICATION

Before you begin your statement, Admiral, I think that certain information from the justifications should be inserted in the record at this point.

[The justification follows:]

WEAPONS PROCUREMENT, NAVY

For construction, procurement, production, modification and modernization of missiles, torpedoes, other weapons, and related support equipment including spare parts, and accessories therefor, expansion of public and private plants, including the land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statutes, as amended; and procurement and installation of equipment, appliances, and machine tools in public or private plants, reserve plant and Government and contractor owned equipment layaway; *$1,224,200,000* to remain available for obligation until June 30, 1978; *$332,709,000* to remain available for obligation until September 30, 1978; and *$2,435,200,000* to remain available for obligation until September 30, 1979.

(10 U.S.C. 5012, 5031, 7201, Department of Defense Appropriation Act 1974, additional authorizing legislation to be proposed.)

Justification

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-1507-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. BALLISTIC MISSILES	253,400	78,300	287,500	192,569	118,500	255,131
	2. OTHER MISSILES	126,700	454,000	713,000	210,801	474,900	661,699
	3. TORPEDOES AND RELATED EQUIPMENT	198,168	178,100	197,400	175,777	160,200	193,491
	4. OTHER WEAPONS	28,751	24,900	26,300	28,524	20,600	25,227
	TOTAL DIRECT	806,619	735,300	1,224,200	607,671	774,200	1,135,548
	REIMBURSABLE (TOTAL)	25,118	43,000	40,000	9,760	49,200	39,958
10	TOTAL	831,737	778,300	1,264,200	617,431	823,400	1,175,506
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-12,936	-37,400	-35,400	-12,936	-37,400	-35,400
13	TRUST FUNDS	-17,123	-5,500	-4,500	-17,123	-5,500	-4,500
14	NON-FEDERAL SOURCES	-59	-100	-100	-59	-100	-100
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-206,906	-161,806
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-3,519	-10,000	.....	-3,519	-10,000	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-7,400	.....	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-10,000	.....	.....	-10,000	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	10,000	.....	.....	10,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	206,906	161,806	250,500
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	10,000	.....	.....	10,000	.....	.....
	BUDGET AUTHORITY	800,700	725,300	1,224,200	800,700	725,300	1,224,200
	BUDGET AUTHORITY:						
40	APPROPRIATION	800,700	729,500	1,224,200	800,700	729,500	1,224,200
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-4,200	.....	.....	-4,200	.....
43	APPROPRIATION (ADJUSTED)	800,700	725,300	1,224,200	800,700	725,300	1,224,200

WEAPONS PROCUREMENT, NAVY

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1507-0-1-051	1974 ACT	1975 EST	1976 EST
RELATION OF OBLIGATIONS TO OUTLAYS:			
71 OBLIGATIONS INCURRED, NET	587,313	780,400	1,135,506
72 OBLIGATED BALANCE, START OF YEAR	.....	461,526	709,926
RECEIVABLES IN EXCESS OF OBLIGATIONS, START OF YEAR	-3,519	.....	.....
74 OBLIGATED BALANCE, END OF YEAR	-461,526	-709,926	-1,044,432
90 OUTLAYS	122,269	532,000	801,000
DIRECT OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	1,346	1,500	2,900
25.0 OTHER SERVICES	17,000	21,600	34,000
26.0 SUPPLIES AND MATERIALS	572,325	727,800	1,067,415
31.0 EQUIPMENT	17,000	23,300	31,233
TOTAL DIRECT OBLIGATIONS	607,671	774,200	1,135,548
REIMBURSABLE OBLIGATIONS:			
26.0 SUPPLIES AND MATERIALS	5,085	25,600	20,200
31.0 EQUIPMENT	4,675	23,600	19,758
TOTAL REIMBURSABLE OBLIGATIONS	9,760	49,200	39,958
99.0 TOTAL OBLIGATIONS	617,431	823,400	1,175,506

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1507-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1975 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. BALLISTIC MISSILES	253,400	.....	.....	192,569	53,200	7,631
2. OTHER MISSILES	326,300	.....	.....	210,801	102,700	8,399
3. TORPEDOES AND RELATED EQUIPMENT	198,168	.....	.....	175,777	14,400	4,991
4. OTHER WEAPONS	28,751	.....	.....	28,524	200	27
TOTAL DIRECT	806,619	.....	.....	607,671	170,500	21,048
REIMBURSABLE (TOTAL)	25,118	.....	.....	9,760	14,200	1,158
10 TOTAL	831,737	.....	.....	617,431	184,700	22,206
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-12,936	.....	.....	-12,936	.....	.....
13 TRUST FUNDS	-17,123	.....	.....	-17,123	.....	.....
14 NON-FEDERAL SOURCES	-59	.....	.....	-59	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-206,906	-22,206
AVAILABLE TO FINANCE NEW BUDGET PLANS	-3,519	-10,000	.....	-3,519	-10,000	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-7,400	.....	.....	.....	.....	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	10,000	.....	.....	10,000	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	206,906	22,206	.....
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	10,000	.....	.....	10,000	.....	.....
BUDGET AUTHORITY	800,700	.....	.....	800,700	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1507-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. BALLISTIC MISSILES	.....	78,300	.....	.....	65,300	11,700
	2. OTHER MISSILES	.....	454,000	.....	.....	372,200	68,100
	3. TORPEDOES AND RELATED EQUIPMENT	.....	178,100	.....	.....	145,800	26,700
	4. OTHER WEAPONS	.....	24,900	.....	.....	20,400	3,700
	TOTAL DIRECT	.....	735,300	.....	.....	603,700	110,200
	REIMBURSABLE (TOTAL)	.....	43,000	.....	.....	35,000	6,000
10	TOTAL	.....	778,300	.....	.....	638,700	116,200
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	-37,400	.....	.....	-37,400	.....
13	TRUST FUNDS	.....	-5,500	.....	.....	-5,500	.....
14	NON-FEDERAL SOURCES	.....	-100	.....	.....	-100	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-139,600
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-10,000	.....	.....	-10,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	139,600	23,400
	BUDGET AUTHORITY	.....	725,300	.....	.....	725,300	.....
	BUDGET AUTHORITY:						
40	APPROPRIATION	.....	729,500	.....	.....	729,500	.....
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-4,200	.....	.....	-4,200	.....
43	APPROPRIATION (ADJUSTED)	.....	725,300	.....	.....	725,300	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1507-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. BALLISTIC MISSILES	.....	.....	287,500	.....	.....	235,800
	2. OTHER MISSILES	.....	.....	713,000	.....	.....	585,200
	3. TORPEDOES AND RELATED EQUIPMENT	.....	.....	197,400	.....	.....	161,800
	4. OTHER WEAPONS	.....	.....	26,300	.....	.....	21,500
	TOTAL DIRECT	.....	.....	1,224,200	.....	.....	1,004,300
	REIMBURSABLE (TOTAL)	.....	.....	40,000	.....	.....	32,800
10	TOTAL	.....	.....	1,264,200	.....	.....	1,037,100
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-35,400	.....	.....	-35,400
13	TRUST FUNDS	.....	.....	-4,500	.....	.....	-4,500
14	NON-FEDERAL SOURCES	.....	.....	-100	.....	.....	-100
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	227,100
	BUDGET AUTHORITY	.....	.....	1,224,200	.....	.....	1,224,200

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1507-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
	TRANSITION	TRANSITION
PROGRAM BY ACTIVITIES:		
DIRECT:		
1. BALLISTIC MISSILES	199,000	182,100
2. OTHER MISSILES	110,100	142,200
3. TORPEDOES AND RELATED EQUIPMENT	13,200	31,100
4. OTHER WEAPONS	4,400	5,600
TOTAL DIRECT	332,700	361,000
REIMBURSABLE (TOTAL)	10,000	11,600
10 TOTAL	342,700	372,600
FINANCING:		
RECEIPTS AND REIMBURSEMENTS FROM:		
11 FEDERAL FUNDS	-9,900	-9,900
13 TRUST FUNDS	-1,100	-1,100
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR		
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-250,500
AVAILABLE TO FINANCE NEW BUDGET PLANS	-200	-200
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR		
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	220,600
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	200	200
BUDGET AUTHORITY	332,700	332,700
BUDGET AUTHORITY:		
40 APPROPRIATION	332,700	332,700
43 APPROPRIATION (ADJUSTED)	332,700	332,700
RELATION OF OBLIGATIONS TO OUTLAYS:		
71 OBLIGATIONS INCURRED, NET		362,600
72 OBLIGATED BALANCE, START OF YEAR		1,044,432
74 OBLIGATED BALANCE, END OF YEAR		-1,238,032
90 OUTLAYS		169,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1507-0-1-051				TRANSITION
	DIRECT OBLIGATIONS:			
22.0	TRANSPORTATION OF THINGS			1,100
25.0	OTHER SERVICES			10,800
26.0	SUPPLIES AND MATERIALS			339,300
31.0	EQUIPMENT			9,800
	TOTAL DIRECT OBLIGATIONS			361,000
	REIMBURSABLE OBLIGATIONS:			
26.0	SUPPLIES AND MATERIALS			6,000
31.0	EQUIPMENT			5,600
	TOTAL REIMBURSABLE OBLIGATIONS			11,600
99.0	TOTAL OBLIGATIONS			372,600

APPROPRIATION INTRODUCTION
(In Thousand Dollars)

Appropriation	FY 1976 Estimate	FY 197T Estimate	FY 1977 Estimate
	$1,224,200	$332,700	$2,435,200
Total Direct Obligations	1,135,548	361,000	
Total Direct Budget Plan	1,224,200	332,700	2,435,200

The Weapons Procurement, Navy appropriation finances the procurement of missiles, torpedoes, guns and support equipment for Naval forces and Marine forces. Support equipment includes: equipment for modification of in-service missiles, torpedoes, guns and gun mounts; aerial targets used in training exercises and evaluation; hardware for Navy navigation and communications satellite programs; spare parts; ground support and training equipment; and industrial facilities and tools required for the production and maintenance of missiles.

FISCAL YEAR 1976, 197T AND 1977 HIGHLIGHTS

The budget programs for the Weapons Procurement, Navy appropriation totals $1,224.2 million in FY 1976, $332.7 million in FY 197T, and $2,435.2 million in FY 1977. Significant features of these requests are:

(a) A POLARIS/POSEIDON Missile Program, including spare and repair parts, facilities requirements, and satellite support necessary to maintain the Navy Navigation Satellite System totaling $52.6 million in FY 1976, $20.1 million in FY 197T, and $111.2 million in FY 1977.

(b) $234.9 million in FY 1976, $178.9 million in FY 197T, and $1,285.7 million in FY 1977 for the TRIDENT Missile program.

(c) A missile and aerial target program of $640.3 million in FY 1976, $105.7 million in FY 197T, and $639.2 million in FY 1977, including $582.9 million in FY 1976, $98.9 million in FY 197T, and $569.4 million in FY 1977 for air launched and ship launched missiles and targets, $13.0 million in FY 1976 and $14.4 million in FY 1977 for missile modifications and $44.4 million in FY 1976, $6.8 million in FY 197T, and $55.4 million in FY 1977 for repair parts and support programs.

(d) $72.7 million in FY 1976, $4.4 million in FY 197T, and $60.5 million in FY 1977 for the Fleet Satellite Communications Program and Classified Projects.

(e) A program of $197.4 million in FY 1976, $19.2 million in FY 197T, and $259.7 million in FY 1977 for the procurement of torpedoes and related equipment and support.

(f) A program of $26.3 million in FY 1976, $4.4 million in FY 197T, and $78.9 million in FY 1977 for guns, gun mounts and related support equipment.

PROGRAM SUMMARY

The FY 1976, FY 197T and FY 1977 Ballistic Missile Procurement programs reflect initial procurement of the TRIDENT missile and continued support, missile modifications, spare parts and facilities support for the POSEIDON/POLARIS, and the navigation satellite program.

Tactical missile procurement in FY 1976, FY 197T and FY 1977 provides for continued procurement of SPARROW III, SIDEWINDER and PHOENIX air-to-air missiles and CONDOR Air-to-ground and HARPOON air/surface/subsurface missiles. In FY 1977 initial funding for the HARM anti-radiation missile is requested. In the surface-to-air category, production of the medium range configuration of the ship-launched STANDARD Missile is maintained. Initial procurement of the SM-2 version of the extended range configuration of the ship-launched STANDARD Missile is provided for FY 1976; and continued production of this missile is provided for in FY 1977. The FY 1976, FY 197T and FY 1977 procurement programs also include a variety of aerial targets to meet training requirements as well as fleet support requirements for out-of-production missiles.

Support programs which contribute significantly to the Navy's combat capability are also included in the FY 1976, FY 197T and FY 1977 request. Among these are: modification required to improve the capabilities of missiles previously delivered to the Fleet; spares and repair parts to support new missiles entering the Fleet as well as those already in the operating program; industrial facilities to support the production and maintenance of weapon systems procured under this appropriation; ground handling, training, test and production support equipment required to support procurement and operations, and procurement of hardware for a Fleet Satellite Communications Program which will provide protected tactical communications to all Navy ships and selected aircraft.

Torpedoes and related equipment programs will provide for the procurement of the TORPEDO MK-48, the CAPTOR weapon system, the MOBILE TARGET MK-30, and the MINI MOBILE TARGET. Modification and support of existing in-service anti-submarine weapons systems is also provided in the FY 1976, FY 197T and FY 1977 programs.

Other weapons procurement includes a 20MM Machine Gun and initial procurement of the PHALANX CLOSE-IN WEAPONS SYTEMS (CIWS). The FY 1976, FY 197T and FY 1977 programs will also provide for modification of the 5"/54 Gun Mount and other support, including spares and repair parts.

FINANCING

The FY 1976 Plan of $1,224,200,000, the FY 197T plan of $332,700,000 and the FY 1977 plan of $2,435,200,000 for this appropriation are to be financed by new obligational authority.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate
Ballistic Missiles	$253,400	$ 78,300	$287,500
Other Missiles	326,300	454,000	713,000
Torpedoes and Related Equipment	198,168	178,100	197,400
Other Weapons	28,751	24,900	26,300
TOTAL DIRECT PROGRAM	806,619	735,300	1,224,200
Reimbursable Program	27,718	43,000	40,000
TOTAL PROGRAM REQUIREMENTS	834,337	778,300	1,264,200
Less: Portion of program to be obligated in subsequent fiscal years	216,906	139,600	227,100
Plus: Obligations incurred against prior year program funds	-	184,700	138,406
TOTAL OBLIGATIONS	617,431	823,400	1,175,506

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	FY 197T Estimate	FY 1977 Estimate
Ballistic Missiles	$199,000	$1,396,900
Other Missiles	110,100	699,700
Torpedoes and Related Equipment	19,200	259,700
Other Weapons	4,400	78,900
TOTAL DIRECT PROGRAM	332,700	2,435,200
Reimbursable Program	10,000	
TOTAL PROGRAM REQUIREMENTS	342,700	
Less: Portion of program to be obligated in subsequent fiscal years		
Plus: Obligations incurred against prior year program funds		
TOTAL OBLIGATIONS	372,600	

PREPARED STATEMENT

Senator PASTORE. All right, gentlemen, you may proceed.

Admiral CLIFFORD. Mr. Chairman, I have presented a detailed statement for the record and with your permission I will read a 5-minute summary statement.

Senator PASTORE. We will so proceed.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I am Rear Admiral William F. Clifford, Assistant Deputy Chief of Naval Operations, Surface Warfare. It is my privilege to present the Navy's Weapons Procurement request for the fiscal year 1976 and Trasition budgets. I have submitted a lengthy and detailed Classified Statement for the record. At this time, with your permission, I would like to read an unclassified, summary version of that statement.

The Weapons Procurement, Navy (WPN) appropriation finances the procurement of strategic and tactical missiles, torpedoes, guns and related support equipment for the Navy. It also provides for modification of in-service missiles, torpedoes, guns and gun mounts; procurement of aerial and subsurface targets used in training exercises and weapon evaluations; hardware for Navy communication and navigational satellite programs; ground support and training equipment; initial and replenishment spares and repair parts; and industrial facilities and tools unique to the production and maintenance of missiles and other ordnance items procured within the WPN appropriation.

The significant items in the current budget request are as follows:

-- Continued support of the POLARIS/POSEIDON ballistic missile programs, including spares and repair parts, and support of the Navy Navigation Satellite System.

-- Preparation for initial production of the TRIDENT I ballistic missile, scheduled to start in fiscal year 1977.

-- A tactical missile and aerial target procurement program for surface ships and aircraft; plus modification, support and repair parts programs for missiles already in the fleet inventory.

-- Continuation of the Fleet Satellite Communications Program.

-- Continued production of the Mark 48 submarine-launched torpedo and initial production of the CAPTOR mine.

-- Limited programs for the procurement and modification of guns and gun mounts.

Each of these programs, and its associated modification, support and spare parts requirements, is essential to the maintenance and improvement of the fleet's strategic and general purpose force capability. The relative sizes and capabilities of the U.S. and Soviet fleets have been subject to many comparisons as the country has observed the growth of the Soviet fleet at a time that the U.S. Navy has significantly reduced force levels to achieve a needed fleet modernization. The CNO has testified to the congress that it is his professional judgment that in the most likely scenarios the U.S. Navy will be able to carry out its mission successfully. This judgement is based upon the presumption that existing forces will continue to be modernized as needed to meet the current threat and that inventories of existing weapons will be reached and maintained as necessary to support the combat forces.

Within the WPN appropriation are the weapons needed for forces in being or planned to carry out their mission against the threat; it is the outcome of individual engagements which in the final assessment will determine which

fleet fulfills its mission in any wartime scenario. Weapon development is a dynamic business. New weapons are introduced for three basic reasons.

- To counter the introduction of new enemy capabilities which offset advantages of our existing weapon systems.
- To overcome recoganized deficiencies in our current weapon systems.
- To provide additional combat capabilities or to rebalance and redistribute missions and capabilities among naval forces.

We have developed a balanced, economical and executable program accepting trade-offs where required, both within WPN appropriations and against other navy programs. The WPN appropriation as submitted represents our best balance within the total Navy budget to increase readiness and combat capability of existing forces, modernize existing forces, and procure replacement forces.

This year's total request of $1224 million is an increase of some 66% over the $735 authorized and appropriated in fiscal year 1975. The increase is caused, primarily, by production start-up costs for the TRIDENT I missile, initiation of production procurement of HARPOON and improved SIDEWINDER missiles, limited procurement of CONDOR missiles, procurement of the first production extended range STANDARD 11 missiles for operational evaluation, and by increases in production and procurement costs which have necessitated reestimation and repricing of weapon procurement programs. The increases are partially offset by termination of the SHRIKE antiradiation missile procurement after the fiscal year 1975 increment and a stretch-out of the Mark 48 torpedo beyond the originally planned termination date.

You will note, as we review each of these programs, that total program costs, and in most cases procurement unit costs, have increased significantly over those estimated in fiscal year 1975 budget submission. Like all other appropriations, WPN is suffering an erosion of purchasing power under the effects of the economic climate. Each of these programs has been reviewed and adjusted, in the light of operational requirements and under stringent fiscal constraints, to ensure that we get the most effective weapons, in sufficient numbers, to ensure a modern, viable navy. Each program was, of necessity, reestimated using updated information on production material and labor costs to obtain the most realistic representation of program costs that we can obtain prior to actual contract negotiations. In addition, prpgrams which extend beyond the budget year have been adjusted using inflation factors more in line with current trends, and significantly higher than factors applied in last year's submission.

Over 80 percent of the increases in estimated total program costs are caused by these two economic factors alone -- reestimation and the application of revised outyear inflation. The remainder can be attributed to additions of fiscal year 1980 program increments, increased development or additional test requirements, minor changes in weapon configurations and increased fleet support requirements.

The transition budget request of $333 million provides for limited procurement and is primarily aimed at sustaining ongoing production and support programs.

With your permission, Mr. Chairman, I would like to addresss each of these programs in some detail, in order of Budget Activity.

BUDGET ACTIVITY I

BALLISTIC MISSILES

Budget Activity I funding provides for the procurement of fleet ballistic missiles, ancillary checkout and support equipment and the modification and improvement of facilities required to outfit the submarines assigned to the sea-based strategic deterrent forces. A significant portion is also devoted to the modification of fleet inventory missiles to incorporate improvements during POLARIS and POSEIDON overhauls and refits. Of the $287.5 million requested in fiscal year 1976, $269.6 million is for ballistic missiles -- POLARIS, POSEIDON and TRIDENT I; $9.7 million is for missile modifications; and $8.2 million is for support equipment, spare parts, transportation, facilities and astronautics. $199 million are requested in the Transition budget, including $186 million for ballistic missiles, $4.5 million for modifications and $8.5 million for support requirements.

The portion of the strategic ballistic missile force now at sea is the least vulnerable element of that force. To ensure its continued survivability and effectiveness in the face of anticipated improvements in Soviet broad ocean ASW capability, we must expand its capabilities beyond those of the current POLARIS and POSEIDON assets as a matter of highest national priority. We are therefore completing the development and preparing to commence production of the TRIDENT I missile which will be deployed in the TRIDENT submarine as well as backfitted into ten of the newer POSEIDON capable existing fleet ballistic missile submarines.

Since last presented to the Congress, the production now planned for the TRIDENT submarine has been stretched out to ease

the financial strain on the Defense budget and to relax pressure on the shipbuilder. TRIDENT I missile development has been slightly slowed to compensate for abnormal inflationary cost increases experienced in R&D. The development contract for the missile has been awarded. Special measures are being undertaken to facilitate early testing of subsystems and components so that we may proceed with the production program with the least possible degree of risk. Development of the TRIDENT I missile and TRIDENT submarine is proceeding concurrently to achieve an operational capability at the earliest possible date.

POLARIS and POSEIDON missiles are no longer being procured. However, test and evaluation of these deterrent assets will continue throughout their operational lives, and procurement funds are required to support the missile inventory. The POSEIDON modification program is an outgrowth of the deficiencies encountered during operational testing in 1973, which were discussed at length during last year's budget hearings. The corrections brought up at that time have been made, and operational testing of POSEIDON resumed in October 1974. Operational tests, with these fixes installed in whole or in part, have given us reason to be cautiously optimistic that POSEIDON problems have been overcome. Continued close monitoring of operational tests will be continued to build a statistically conclusive picture. The Congress will be kept informed.

Increased procurement costs for each of these programs, over those projected in the fiscal year 1975 budget submission, are attributable to the application of higher rates of inflation to estimates, increased costs for the follow-on test programs, and refinement of estimates as a result of negotiations in connection with missile contracts.

The support funds requested in Budget Activity I are for initial and replenishment spares and repair parts, first destination transportation of missiles and major components and improvement of missile industrial facilities.

BUDGET ACTIVITY II

OTHER MISSILES

Budget Activity II funds the procurement, modification and support of air-to-air, air-to-surface, surface-to-air and surface-to-surface missiles for inventory, combat, training and test purposes. Operational and training requirements are established by the Chief of Naval Operations consistent with the Navy's role in the national defense, and these requirements are then translated into inventory objectives and annual procurement programs consistent with available and programmed fiscal resources. The "Other Missile" procurement plan is designed to establish and maintain an effective mix of weapons in the combat inventory and to provide weapons and targets in support of training. In developing the procurement plan, we consider such factors as production feasibility and delivery schedules -- not only of the weapons themselves but also of the ships and aircraft which will eventually mount each of the several missile systems.

The fiscal year 1976 and Transition budgets provide, respectively, $713 million and $110.1 million for the procurement, modification and support of these missiles.

We are continuing to upgrade our air-launched weapons through the use of new technologies, with a goal of increased performance and reliability, while at the same time reducing the number of different types of weapons in the inventory. We have increased our liaison within the Department of Defense, particularly with the Air Force, at all levels down through field activities and test squadrons. We will continue to

monitor other U. S. and foreign weapon developments for application to our own needs, and we support the concept of commonality in weapons to the point where the constraints imposed do not tend to degrade Navy weapon system effectiveness excessively. This is especially important to the Navy where the number of aircraft and the variety of weapons available to a commander are limited.

AIR-TO-AIR MISSILES

In the air-to-air role, the Navy employs the PHOENIX, SPARROW and SIDEWINDER missiles. PHOENIX is used exclusively with the F-14 aircraft in the long-range Fleet Air Defense mission. SPARROW is an all-weather, medium range, semi-active radar-guided missile used by the Navy, Air Force and many of our allies around the world. The improved version of SIDEWINDER is an infra-red seeker-guided missile which can be fired at supersonic hostile aircraft from all target aspects.

The PHOENIX program has been characterized by its high rate of success firings utilizing a multiple track fire control system capable of engaging more than one target simultaneously at long ranges. Operational Evaluation firings of the missile in its long-range air defense role have been highly successful, and they have demonstrated to our satisfaction that the weapon will meet its operational requirements and that it will be a valuable addition to our air-to-air combat arsenal.

In the fiscal year 1976 budget we are requesting $96.7 million for an additional increment of 340 missiles. In the transition budget, $27 million are requested as advance procurement funding for the fiscal year 1977 increment.

The increased total program cost of the PHOENIX missile system noted in the Congressional Data Sheets is caused by the application of the revised inflation factors over outyear programs, additional support requirements for Marine Corps participation in the program, and an RDT&E funding requirement of $26 million as the PHOENIX share in the Air-to-Air Missile Component Technology Program.

The AIM-7F version of SPARROW has demonstrated a significant improvement over previous models. It is compatible with all Navy and Air Force F-4, F-14 and F-15 aircraft. The usable engagement envelope is much greater than that of previous models of the missile, and the reliability of the AIM-7F version has also shown a significant increase. These improvement factors have been confirmed by an extensive test program conducted by Navy, Marine Corps and Air Force crews. To date, test firings from F-14 and F-15 aircraft during the Operational Test and Evaluation program, under extreme test conditions, have been successful. Testing is continuing in a follow-on mode, and we are experiencing high current accuracy and reliability success rates for the AIM-7F, which indicate that the missile will exceed our original specifications.

A contract for the fiscal year 1975 authorized increment of 600 Navy and Air Force AIM-7F SPARROW missiles was let on 31 October 1974. The fiscal year 1976 request is for 360 Navy missiles at $60.8 million; the Transition budget request is for authorization of $1.4 million to sustain the production program.

The fiscal year 1976 total program estimate is $6.2 million less than that provided with the fiscal year 1975 budget, and the reduction can be attributed to an accelerated production program, largely offset by the application of revised

outyear inflation rates and the costs of development of improved components.

SIDEWINDER, AIM-9L, is a modification of the former model, the AIM-9H. AIM-9L development problems encountered and reported last year have been solved, and the missile is now undergoing a Joint Technical Evaluation (JTE). Current tests indicate that the new SIDEWINDER will be highly effective in short-range, "dogfight" environments. We are confident that the AIM-9L will successfully complete the current NTE and OT&E phases in time for DSARC III and a production decision in June 1975 and that an initial production contract can be awarded no later than December 1975.

The fiscal year 1976 request is for 800 of the improved SIDEWINDER at $45.1 million. Eight hundred thousand dollars ($0.8 million) are requested in the Transition budget to continue production funding.

The total program estimates for SIDEWINDER (AIM-9H/L) have increased $61.7 million over those submitted with the fiscal year 1975 budget. This is attributable to a combination of factors, primarily the addition of the fiscal year 1980 increment, application of new outyear inflation rates, plus new support and test requirements; partially offset by Air Force participation in the program and a reduction in AIM-9H component purchases.

The total fiscal year 1976 and Transition budget requests for air-to-air missiles are for $201.8 million and $29.2 million, respectively, for a total of 1,500 missiles.

AIR-TO-GROUND MISSILES

The function of the air-to-ground missile is suppression of enemy capabilities and destruction of high value heavily defended

targets, at sea or ashore. Anti-radiation missiles, usually identified with the acronym "ARM," are used to destroy or nullify electronic tracking, targetting or missile guidance capabilities; their worth has been proven time and again in the recent Southeast Asia conflict and in the Mideast wars. The Navy inventory now includes the production missiles SHRIKE and STANDARD ARM, deliveries of which continue as the result of previously funded programs. Procurement fundinf of both have been discontinued in favor of the development of HARM, the joint Navy/Air Force High-speed Anti-Radiation Missile. HARM will be lower in unit cost, but higher in capability, than its predecessors. HARM is still in an early phase of development, but tests to date have been very promising. The HARM development program will continue through 1975, and we consider that we will be ready to proceed to the engineering development phase in early 1976. No procurement funding for HARM is included in the fiscal year 1976 or Transition budget requests.

Minimal amounts are included in the SHRIKE and STANDARD ARM procurement lines in fiscal year 1976 and the Transition budget to fund the support of missiles in the inventory.

CONDOR is a high-capability, medium range cruise missile utilizing television guidance to the target. The weapon has a unique capability against near-shore, inland and sea-borne targets, particularly those of high value located in heavily defended areas. The weapon can be delivered without exposing the launch aircraft to the destructive envelope of enemy surface-to-air defense systems.

CONDOR development has continued with excellent progress. Pilot production Navy Technical Evaluation (NTE) was completed,

and the weapon certified for Operational Test and Evaluation (OT&E) in November 1974. The tests are underway; and results will continue to be reported to you. OPEVAL of the missile is scheduled to complete by April 1975 in time for a DSARC III production decision and timely contract award in FY 1976.

The fiscal year 1976 budget request is for 205 production CONDOR missiles at an estimated $85.6 million. The Transition budget would continue procurement with $10.4 million for 38 missiles.

Total program cost estimates submitted with the fiscal year 1976 budget request are $24.2 million higher than the estimates submitted in fiscal year 1975. This is largely due to the additional missiles, the break in production caused by denial of fiscal year 1975 procurement funding, and the application of revised inflation rates to the program. The total increase has been partially offset by a reduction in R&D funding, principally in the fiscal year 1975 OPEVAL program and termination of the dual-mode seeker program at the direction of the Congress.

The total budget request for procurement of air-to-ground missiles in the fiscal year 1976 and Transition budgets is $98.2 million for 243 missiles.

SURFACE-LAUNCHED MISSILES

With the reduction in aircraft carrier force levels, surface combatant units of the fleet will have to carry a greater share of the sea control mission. The HARPOON missile system will provide an urgently needed increase in the offensive capability of U. S. Naval forces. When it becomes fully operational and is delivered for fleet use, the radar-guided HARPOON will

be employed as the primare surface-launched standoff offensive weapon available to commanders and commanding officers. Alternative versions of the missile will be adapted for launch from submarines and aircraft. HARPOON is a formidable offensive weapon, far superior to any now available to surface combatant forces; it will overcome a significant fleet offensive deficiency. It is essential that we continue with this program and with early fleet introduction.

The HARPOON development and pilot production program is progressing satisfactorily. Of the shots fired in the IOT&E and NTE programs since 31 March 1974, under varying conditions of weather, electronic jamming and sea state, and at varying ranges, an encouragingly high percentage have been successful. Full OT&E is scheduled to commence this summer and to complete prior to the end of the calendar year. Based on the success of the test programs to date, we are confident that we will be ready for both full production and fleet introduction during fiscal year 1976.

We have recently identified significant procurement cost growth in the HARPOON program, and we are reassessing the resultant impact on procurement plans. The fiscal year 1976 increase in total program cost estimates of some $500 million over the fiscal year 1975 total program estimates is attributable largely to economic factors (increase in labor and material costs), revision of outyear inflation rates, and an increase in the cost of the HARPOON seeker and sustainer motors. Additional increases in cost estimates include a $2 million increase in required RDT&E funding to cover additional test requirements.

The fiscal year 1976 request is for $142.8 million to fund procurement of 270 missiles. Ninety-five additional HAR-

POON's and $42.3 million are requested in the Transition budget.

The STANDARD missile family provides low risk procurement of dependable weapons whose technology and effectiveness have been proven in fleet use. We are continuing to procure the surface-to-air medium range (MR) version; the the extended range (ER) model translates to an improved version with the intended procurement of the first production SM-2's in fiscal year 1976. The SM-2 (ER) is a longer range, higher performance missile, superior to the SM-1 version.

Total program estimate differences in both of these programs are caused primarily by incorporation of revised outyear inflation factors, pluses and minuses resulting from realignment of the procurement plan to reduce SM-1 quantities and increase the numbers of SM-2's bought, and addition of the fiscal year 1980 increments and inclusion of non-recurring start-up costs for the SM-2 program.

The fiscal year 1976 request for STANDARD MR is for 285 missiles at $38.1 million; $7.6 million for 54 missiles is included in the Transition budget to sustain production continuity. For STANDARD ER, we are requesting $52.6 million in fiscal year 1976 to establish the production capability for and to fund the procurement of the fist 22 production missiles. There is no Transition budget request for STANDARD ER funding.

The surface-to-surface STANDARD SSM missile program is sustained in this year's budget at a minimum level, with no additional procurement; HARPOON will eventually replace STANDARD SSM as the primary fleet surface-to-surface missile system. In addition, all surface combatants delivering after fiscal

year 1976 will be fitted with the HARPOON missile system either during construction or shortly after delivery.

The annual "Other Missile" fleet support line funds material for missiles already in the fleet inventory -- TERRIER, TARTAR and TALOS anti-air weapons and the submarine-launched SUBROC anti-submarine rocket. Material procured with these funds includes stands, containers,consumable test and training material, and replacement test equipment.

The aerial target program provides training assets to establish and maintain the skills of Navy personnel in the use of missiles and anti-aircraft guns. These targets simulate a wide variety and range of air threats; the targets are recoverable for reuse. The fiscal year 1976 and transition budget requests a total of $58.1 million for 458 targets.

Missile modification funds for fiscal year 1976 -- $13 million -- are required to improve and update the performance and operational characteristics of SPARROW, SIDEWINDER, PHOENIX and SHRIKE air-launched missiles and the surface-launched STANDARD, TERRIER, TARTAR and TALOS missiles.

Support equipment and facilities include initial spares and replenishment spare parts, first destination transportation of missiles, and the modification and improvement of missile industrial facilities. This general line item group also funds the procurement of communication satellites and associated launch vehicles for the Navy's Fleet Satellite Communications Program. A revised schedule provides for somewhat reduced, but adequate coverage and for future expansion of this coverage when and if it becomes required. The intermodulation problem discovered during satellite testing has been eliminated by redesign and modification of the antenna system.

The total Budget Activity II request for "Other Missiles" for fiscal year 1976 and the Transition budget is for $713 million and $110.1 million, respectively.

BUDGET ACTIVITY III

TORPEDOES AND RELATED EQUIPMENT

Budget Activity III funds the procurement of the submarine-launched Mark 48 torpedo; the anti-submarine mine, CAPTOR; spares and repair parts for these weapons and others already in service torpedo modifications; subsurface mobile targets; and support related facilities improvement, equipment and services.

The Mark 48 torpedo will eventually replace all submarine launched anti-ship and anti-submarine torpedoes now in fleet use, thereby reducing to one the types of conventional torpedoes which must be logistically supported in this role. The weapon entered full-scale production with the fiscal year 1972 procurement program.

In accordance with the direction of the Secretary of Defense, the Navy has reduced the acquisition rate and extended the production of the Mark 48 torpedo, to reduce annual expenditures and to maintain a viable U. S. production base, since the Mark 48 is the only torpedo currently under production in this country. Accordingly, rather than terminate the acquisition plan in fiscal year 1977, as originally planned, we are continuing the program beyond that date.

Total program estimated cost has increased over the fiscal year 1975 submission estimates by $276.3 million. This is attributable to the stretchout of the program beyond its originally planned termination date and the application of increased inflation factors to these outyear programs.

The fiscal year 1976 budget requests $116.5 million for 175 torpedoes; the Transition budget request is for $6.5 million to sustain production contract payments.

The CAPTOR program, previously funded in the RDT&E and "Other Procurement" programs except for $7.9 million in fiscal year 1975 WPN advance procurement funds, is now ready for the first production increment. CAPTOR represents a quantum jump in antisubmarine mine field employment; it is designed to detect, classify and attack the most advanced diesel and nuclear powered submarines. The weapon is readily adaptable for delivery on short notice by air, surface and submarine platforms. The initial test program is proceeding well, and results indicate that CAPTOR will continue to meet its performance specifications. Minor deficiencies detected during initial tests have been identified and corrected; these corrections will be incorporated into production units.

We are requesting a total of $36.5 million in fiscal year 1976 and the Transition period for 260 weapons.

At this point I would like to explain the significant increase in the unit and total program costs of this weapon over the estimates presented with last year's budget submission. The CAPTOR program is an extreme example of the application of revised outyear inflation factors to an updated, reestimated production program, which was previously contained in an appropriation which did not allow for realistic outyear inflation of estimated costs. With its transition to the WPN appropriation in the fiscal year 1974 budget, total program estimates for fiscal year 1975 were constructed at a time when current inflationary rates were only just beginning to become apparent. It is only this year that a true picture of current and projected costs can

be predicted with any degree of accuracy. Coupled with increased costs of material, delivery lead times and development contract experience, we feel that the currently displayed estimates, perhaps for the first time, present an accurate picture of the costs of the CAPTOR program. The operational capability of the weapon is such that it justifies CAPTOR's cost. Had appropriate estimating factors been allowed during the previous life of the program, the increase in program costs could have been more accurately displayed, and the increase in costs would have been more in line with the several other weapon systems presented for authorization and appropriation.

Budget Activity III also funds the procurement of mobile ASW targets which provide air, surface and subsurface ASW units with the means to conduct realistic antisubmarine exercises and training, in the face of extremely limited availability of "live" submarine targets for training. There are two versions presented in this year's budget request; the versatile Mark 30 mobile target to support training and evaluation operations and the far less costly, expendable "mini-mobile" target which is used as an open ocean training device for shipboard sonar teams, both at a fraction of the cost of a live submarine. Funds requested for targets total $24.0 million in fiscal year 1976 and the Transition budget.

Funding for modifications to torpedoes in the amount of $8.1 million in fiscal year 1976 and $300 thousand ($0.3 million) in the Transition budget is required to ensure that fleet torpedo inventory assets incorporate the most modern available technology. These funds will provide for updates of air-, surface- and submarine-launched torpedoes.

The torpedo support line provides equipment and initial and replenishment spares to support new and inventory underwater ordnance. Since exercise torpedoes are recoverable and reusable, provision must be made for their overhaul and reissue; this budget line supports that effort. Torpedo and related equipment support requires $23.1 million in fiscal year 1976 and $1.6 million in the Transition period.

BUDGET ACTIVITY IV

OTHER WEAPONS

Budget Activity IV provided for funding of the procurement, modification and support of guns and gun mounts, including the VULCAN-PHALANX Close-in weapon system; a new 20-millimeter machine gun; miscellaneous other weapons, and for modifications to existing 5"/54, 5"/38, 3"/50 and various other fleet machine guns and small arms. Initial and replenishment spare parts, industrial facilities support and first destination transportation of weapons are also part of the funding request.

The VULCAN-PHALANX clos-in weapon system, or CIWS, is the current prime candidate for a last-ditch, fast reaction, automatic shipboard defense against low-flying antiship missiles which may penetrate mid- and long-range fleet defense system envelopes. As you are aware, we have encountered several difficulties during the test and evaluation of this system; we have, however, since engineered a correction for each deficiency and the "fixes" are being incorporated into the prototype and operational suitability models. We are convinced that our intensive testing program has continued to demonstrate system effectiveness against existing and future threats and we are, at the direction of the Congress, fully committed to expanding these tests to include live missile firings. The first prototype is mounted on a moored hulk and is being tested

further; we expect to be able to report the test results to you in the near future.

The fiscal year 1976 budget request of $8.6 million for CIWS would fund design and planning for the automated production line for the system; the Transition period request of $3 million is for advance procurement for components of the first fourteen production units.

Funds in the amount of $2.5 million in fiscal year 1976 are requested for initial procurement of six guns, software, production tooling and engineering support for a new 20-millimeter machine gun to replace World War II vintage weapons on small craft and auxiliary and amphibious ships.

Funds are also included in the amount of $300 thousand ($0.3 million) in fiscal year 1976 for the procurement of limited production Mark 19 Mod 2 guns to fire the 40-millimeter high velocity grenade cartridge.

A fiscal year 1976 request of $8.1 million, plus $800 thousand ($).8 million) in the transition budget, is requested to continue ongoing modifications and product improvement programs for ship-mounted 5"/54, 5"/38 and 3"/50 guns and other ordnance.

The remainder of the request -- $6.8 million in fiscal year 1976 and $600 thousand in the Transition period -- would fund support equipment and services, plus spares and repair parts, for guns and gun programs.

Mr. Chairman, that completes my summary of the fiscal year 1976 and Transition period budgets for the Weapons Procurement, Navy, appropriation. Accompanying me are representatives of the several Project Offices in the Naval Material Command and Program Sponsors and Coordinators from the Office of the Chief of Naval Operations.

WEAPONS PROCUREMENT BUDGET REQUEST

Admiral CLIFFORD. I am Rear Adm. William F. Clifford, Assistant Deputy Chief of Naval Operations for Surface Warfare. It is my privilege to present the Navy's weapons procurement budget requests for fiscal year 1976 and the 3-month transition period between fiscal years 1976 and 1977.

OVERVIEW

The "Weapons procurement, Navy" (WPN) appropriation finances the procurement of strategic and tactical missiles, torpedoes, guns, and related support equipment for the Navy. It also provides for modification of inservice missiles, torpedoes, guns and gun mounts, procurement of aerial and subsurface targets used in training exercises and weapon evaluations; hardware for Navy communication and navigation satellite programs; ground support and training equipment; initial and replenishment spares and repair parts; and industrial facilities and tools unique to the production and other ordnance items procured within the WPN appropriation.

The significant items in the current budget request are as follows:

Continued support of the Polaris/Poseidon ballistic missile programs, including spares and repair parts, and support of the Navy Navigation Satellite System.

Preparation for initial production of the Trident I ballistic missile, scheduled to start in fiscal year 1977.

A tactical missile and aerial target procurement program for surface ships and aircraft; plus modification, support and repair parts programs for missiles already in the fleet inventory.

Continuation of the fleet satellite communications program.

Continued production of the Mark 48 submarine-launched torpedo and initial production of the Captor antisubmarine mine.

Limited programs for the procurement and modification of guns and gun mounts.

PROGRAM JUSTIFICATION

Each of these programs, and its associated modification, support and spare parts requirements, is essential to the maintenance and improvement of the fleet's strategic and general purpose force capability. The relative sizes and capabilities of the United States and Soviet fleets have been subject to many comparisons as the country has observed the growth of the Soviet fleet at a time that the U.S. Navy has significantly reduced force levels to achieve a needed fleet modernization. The CNO has testified to the Congress that it is his professional judgment that in the most likely scenarios the U.S. Navy will be able to carry out its mission successfully.

This is based upon the presumption that existing forces will continue to be modernized as needed to meet the current threat and that inventories of existing weapons will be reached and maintained as necessary to support the combat forces.

Senator PASTORE. I recently received a report on the activities of the *Nimitz* in Norfolk, and I understand you are very pleased with the operations of the new carrier.

Senator YOUNG. What is the difference in the cost of nuclear power versus oil?

Senator PASTORE. In the civilian field it is now competitive. With the new surge of prices and our country's dependence of on imported oil, that is now changed. Now nuclear power is competitive, and we are going to get to the situation where nuclear power is the Navy's only source if it keeps going the way it is.

I am sorry for the interruption.

Admiral CLIFFORD. I might add parenthetically it is a powerful ship when we equip it with the weapons that it needs to fight.

REQUIREMENTS

Within the WPN appropriation are the weapons needed for forces in being or planned to carry out their mission against the threat; it is the outcome of individual engagements which in the final assessment will determine which fleet fulfills its mission in any wartime scenario. Weapon development is a dynamic business. New weapons are introduced for three basic reasons:

To counter the introduction of new enemy capabilities which offset advantages of our existing weapon systems.

To overcome recognized deficiencies in our current weapon systems.

To provide additional combat capabilities or to rebalance or redistribute missions and capabilities among naval forces.

We have developed a balanced, economical and executable program, accepting tradeoffs where required both within WPN appropriations and against other Navy programs. The WPN appropriation as submitted represents our best balance within the total Navy budget to increase the readiness and combat capabilities of existing forces, modernize existing forces, and procure replacement forces.

FISCAL YEAR 1976 FUNDING

This year's total request of $1,224 million is an increase of some 66 percent over the $735 million authorized and appropriated in fiscal year 1975. The increase is caused, primarily, by production startup costs for the Trident I missile, initiation of full procurement of Harpoon and improved Sidewinder missiles, production procurement of Condor missiles, procurement of the first production extended range Standard II missiles for operational evaluation, and by increases in production and procurement cost which have necessitated reestimation and repricing of weapon procurement programs. The increases are partially offset by termination of the Shrike antiradiation missile procurement after the fiscal year 1975 increment and a stretchout of the Mark 48 torpedo program beyond the originally planned termination date.

PROGRAM COST INCREASES

You will note, as we review each of these programs, that total program costs, and in most cases procurement unit costs, have increased significantly over those estimated in the fiscal year 1975 budget submission. Like all other appropriations, WPN is suffering an erosion

of purchasing power under the effects of the economic climate. Each of these programs has been reviewed and adjusted, in the light of operational requirements and under stringent fiscal constraints, to insure that we get the most effective weapons in sufficient numbers to insure a modern, viable Navy. Each program was, of necessity, re-estimated using updated information on production, material and labor costs to obtain the most realistic representation of program costs that we can obtain prior to actual contract negotiations. In addition, programs which extend beyond the budget year have been adjusted using inflation factors more in line with current trends, and significantly higher than the factors applied in last year's submission.

INCREASE IN INFLATION RATE

Senator YOUNG. How much have you increased the inflation rate? What ratio did you use before and now?

Admiral CLIFFORD. Well, it varies from program to program but basically I would say from the area of 6 to 7 percent to 10 to 12 percent inflation, year to year.

Senator YOUNG. And all of the services use the same formula?

Admiral CLIFFORD. Approximately. Guidance is issued by the Secretary of Defense but it is not absolutely mandatory. Each program manager within the frame of that guidance can make his best estimate.

Senator PASTORE. Hasn't your experience indicated there is always a shortfall, that you are too modest?

Admiral CLIFFORD. Yes, sir, it has, because we have not been very accurate in forecasting trends of inflation rates.

Senator PASTORE. One of the chief problems is that we do this in such a piecemeal fashion. If all of the money for a particular weapon could be appropriated at one time, it could be produced at perhaps half of the ultimate cost. Because one section is produced this year, and a new section next year, the price just continues to escalate.

It is the same way with our roads. When I was Governor, and we built a road, we would get all of the money at one time. In this way, we could get it built at half the price of what it would have cost to build in sections. It's obvious, of course, that with our present economic restraints, we cannot appropriate all the money in 1 year. I don't know what the answer is, but a lot more money is spent when we spend several years building a single weapon.

Admiral CLIFFORD. Costs keep increasing from year to year.

TRIDENT FUNDING

Senator PASTORE. In the beginning, it was estimated that the Trident would cost about $1.250 billion. God knows what it is now. By the time we get through with it, it will probably cost $5 billion. Yet there is a stretchout in the Trident, is there not?

Admiral CLIFFORD. There has been a slowdown in the building rate from two per year to three every 2 years.

Admiral GOODING. On the ship itself there is a range of dates, but we are still planning the first ship for delivery some time between December of 1977 and early 1979, but no exact date. There is that much range in the contract. We don't know exactly what that delivery date is going to be just yet.

But you are right that the prices have changed, particularly in shipping, where they are built over a period of 4 or 5 years.

Senator PASTORE. That is true about everything, it isn't only in Defense. Everything that you buy today costs more than it did last year.

Admiral CLIFFORD. We don't always have the option of putting up all of the money in 1 year, due to industrial capacity, among other things.

Senator YOUNG. I understand there is only one shipyard that can build a carrier?

Admiral CLIFFORD. That is correct. The shipyard at Bremerton could build one, but only after extensive modernization of facilities and a large manpower buildup and training program.

Senator YOUNG. How many can build a Trident?

Admiral NICHOLSON. Two private yards have the capability.

Senator PASTORE. We have 3,000 Rhode Islanders up there, but they have to travel 40 miles to go to work.

CAUSES FOR COST GROWTH

Admiral CLIFFORD. Over 80 percent of the increases in estimated program costs are caused by these two economic factors alone—reestimation and the application of revised outyear inflation. The remainder can be attributed to additions of fiscal year 1980 program increments, increased development or additional test requirements, minor changes in weapon configurations and increased fleet support requirements.

TRANSITION BUDGET

The transition budget period request of $333 million provides for limited procurement; it is primarily aimed at sustaining ongoing production and support programs.

Mr. Chairman, that completes my summary statement. I am prepared to address each of these programs in detail, as you desire, and to answer your questions.

RELATIVE NAVAL STRENGTHS

Senator PASTORE. This may not be the proper question to be asked of you, but I can ask the question anyway. On one occasion when John Chaffee was the Secretary of the Navy and Mel Laird was the Secretary of Defense, and Admiral Zumwalt came before this committee, he made a statement which really shocked me. It was a very discouraging statement, and later he came into my office, not to correct it, but to explain it further. He indicated pretty much that the Russians have become so powerful that we couldn't match them.

Now, as I understand from your statement here, you are a bit more optimistic than that. If we get these things you are asking for, we will have developed a balance of power that can meet the Russian threat, is that correct?

Admiral CLIFFORD. I think that is correct, basically, but in trying to assess this one can't talk in too many generalities. Certainly there is hardly any question that we are not in a position to take on the Russians any time at any place in any scenario. What the CNO's feeling is

that we do have the capability to control enough of the seas and the really important points to carry out the country's deployment strategy.

Senator INOUYE. I think the CNO was telling us he does not foresee at this day in the future any war where just the Navy will fight the Navy. But it will be an overall conflict involving ground and air forces because if you match gun for gun on the seas, it is true that the Russians may have more ships than we have, but we are still leading them in submarines, aren't we?

Admiral CLIFFORD. In quality but not in quantity.

Senator INOUYE. But in the Polaris?

Admiral NICHOLSON. They have more than we have, considering the 34 operational Yankee's and the [deleted] Delta's either operational or launched.

Senator PASTORE. It is true that they have more ships than we do. They had the Delta that could shoot a missile from 3,500 to [deleted] miles. I understand. We are trying to develop the Trident which will shoot about [deleted] miles. I think the whole answer to our deterrence is mobility, for the simple reason we will have more space to manuever for identification purposes.

There we only passed the Trident in the Senate by two votes and that is a pretty risky majority. Consider the impact if the vote goes the other way. No one knows what the complexion of this new Congress is.

Senator INOUYE. That is a problem.

Senator PASTORE. People say you can do more on the Poseidon, but any time you want to increase your distance, you have to lower your weight and the number of warheads. Is that true?

When you make these changes, you reduce your striking power. It is just as fundamental as that.

PROGRAM "TRADE OFFS"

Your statement refers to the acceptance of trade offs in the overall program. Would you discuss some of the major trade offs which occurred during the formulation of the fiscal year 1976 budget requests for Navy weapons procurement? Is that clear?

Admiral CLIFFORD. Yes, it is, and in my statement I was referring to the trade offs within the entire Navy budget where we tried to balance our ship procurement and operating costs against weapon procurement. That is a balance within the total Navy budget. Within WPN there have been trade offs and balances and I would be happy to provide that for the record.

Senator PASTORE. Would you do that, please.

Admiral CLIFFORD. Yes, sir.

Senator PASTORE. The budget request for the transition period is $333 million, approximately one-fourth of the fiscal year 1976 request. Does this indicate a level for the 15-month period? Will transition period funds be used for any new initiatives?

Admiral CLIFFORD. They essentially represent a level effort to continue fleet support and also sustain production during the 3-month transition period. There are no new starts planned in the transition program.

Senator PASTORE. The amount that you are asking for, I think, is $1.2 billion, which is an increase of 66 percent over the $735 million authorized and appropriated in fiscal 1975. What was your original request?

Admiral CLIFFORD. In what year?

Senator PASTORE. For this year. Is this all you asked for, or did you ask for more and this is where the cut off came?

Admiral CLIFFORD. This is the end product. I think are going back to the reference of the trade offs and balancing that we have to do necessarily.

Senator PASTORE. I would like to get that in the record if at all possible.

Admiral COOKE. You mean our request to the Secretary of Defense?

Senator PASTORE. With reference to the items that you are presenting to us today, is this the original request you made of the Secretary, or was it larger or smaller with this being a compromise figure?

Admiral COOKE. This is the Secretary of Defense approved figure, and it is smaller than our original request.

Senator PASTORE. Now, could you give me your original request?

Admiral COOKE. I either can now or I will provide it for the record.

Senator PASTORE. That is all right. But it was more?

Admiral COOKE. Yes, sir, it was more.

Senator PASTORE. And this is where the trade off is.

Admiral COOKE. Yes, sir.

Senator PASTORE. And this is part of the overall trade off, is that correct?

BUDGET ADJUSTMENTS

Admiral COOKE. It is a trade off and review of programs to determine whether we need to obligate the money this year or can we wait until next year, and it is that kind of consideration.

Senator PASTORE. That question will come up and I would like to have it spelled out in the record.

Admiral COOKE. Yes, sir.

[The information follows:]

BUDGET ADJUSTMENTS

The major adjustments between the FY 1976 WPN budget as originally submitted to OSD and as submitted to Congress are as follows:

[Dollar amounts in millions]

Program	OSD request		President's budget		Change	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Trident	22	$409.7		$120.3	−22	−$289.4
Trident A.P.				114.6		+114.6
Sparrow	700	80.6	360	60.8	−340	−19.8
Sidewinder	800	40.4	800	46.1		+5.7
Shrike	150	8.7		.8	−150	−7.9
Harpoon	270	107.0	270	142.8		+35.8
Standard Mr	285	36.2	285	38.1		+1.9
Standard Er	22	47.2	22	52.6		+5.4
Fleet Satellite Comm		82.2		60.5		−21.7
MK-48 torpedo	150	104.9	175	116.5	+25	+11.6
Captor	360	46.3	170	26.9	−190	−19.4
CIWS		17.3		8.6		−8.7
All other		446.7		435.6		−11.1
Total		1,427.2		1,224.2		−203.0

With the exception of the TRIDENT reduction, which reflects a development slippage, the above adjustments can be discussed in two elements. The first of these reflects the decision to slow the acquisition of major programs in order limit investment prior to completion of testing or the availability of a follow-on weapon. This rational is applicable to the SPARROW, SHRIKE, Fleet Satellite Communications, CAPTOR, and CIWS programs. The remaining program adjustments were made to properly reflect the impact of inflation and the requirement to maintain production lines of unique military hardware. The adjustments to the TRIDENT Advance Procurement, SIDEWINDER, HARPOON, STANDARD MR/ER, and MK–48 fall in this category.

TRIDENT SUBMARINE

Senator PASTORE. Will you discuss what effect the slowing of the Trident submarine's production has had on the cost or liability and initial operational capability of the Trident, the No. 1 missile?

These are questions that are important.

Admiral NICHOLSON. The slowing down of the Trident submarine production from 2 per year to 3 every 2 years has not affected the Trident I missile cost, reliability or initial operational capability.

Senator PASTORE. Even your missile has been constantly slowed down to meet this other new schedule, has it not?

Admiral NICHOLSON. No, the submarine production schedule has been slowed down. Missile procurement is consistent with the schedule of the submarine but it did not need to slow down for the initial submarine. We had a delay in the missile operational availability date this year which was caused by unbudgeted, abnormal inflation in fiscal year 1975.

Senator PASTORE. But the mere fact that, after the first one and the construction of the boats, it has been stretched out on schedule, this difficulty that you present will match the concluding date. Is that correct?

Admiral NICHOLSON. The date of the missile and the submarine are the same.

Senator PASTORE. You put one and two together after the first one?

Admiral NICHOLSON. Including the first one.

Admiral CLIFFORD. The stretchout of the submarine construction program provided that option.

Senator PASTORE. That is the point I wanted to get in the record.

Senator HRUSKA. You had a missile schedule and a missile timetable for the program, the Trident program, when it was on the basis of 1, 2, 2, and 2. Now do you have a different schedule, a different timetable for the present arrangement which is 1, 2, 1, 2?

Admiral NICHOLSON. It is a slower schedule and stretchout to meet those later production dates of the submarine.

Senator HRUSKA. Plus the initial slowdown because of inflation?

Admiral NICHOLSON. Yes.

Senator PASTORE. So when you have the boat, you will have the missile.

Admiral NICHOLSON. Yes, sir.

MISSILE BACKFIT IN POSEIDON SUBMARINES

Senator PASTORE. Will you discuss how this program has changed since your 1975 budget submission?

Admiral NICHOLSON. Mr. Chairman, the backfit program is the same as it was during last year's program. It starts out with funding the backfit of one submarine in fiscal 1979 and three in each of the following years, for a total of 10 of the Poseidon submarines to be backfitted with the Trident I missile.

POSEIDON IMPROVEMENT PROGRAM

Senator PASTORE. You expressed guarded optimism of the success of the Poseidon missile improvement program. How much has been obligated on the program, and what is the estimated total program cost? What is the present status of the program?

Admiral CLIFFORD. I might mention that the resumption of operational testing on the Poseidon commenced in October of 1974. There have been [deleted] test missiles flown with a net success rate of approximately [deleted] percent. This is a significant improvement over what we had before. It is the Navy's position that we are cautiously optimistic about this but we will want to see more firings and more statistical data gathered before we are sure that they are performing as expected.

The total cost of the program is $175 million.

Senator PASTORE. Are we talking about inserting a Trident missile into a Poseidon submarine?

Admiral NICHOLSON. That is what we were saying on the previous question. We are actually going to put the Trident missile, the same missile that will wind up going on the initial Trident submarine and backfit it into the same tube that carries the Poseidon missile. The design of the initial Trident missile, the Trident I, was specified to be capable of putting in the Poseidon submarine. In fact, the initial sea tests for the Trident missile will actually be fired from a Poseidon submarine.

Senator PASTORE. If the Poseidon II is built.

Admiral NICHOLSON. The Poseidon conversion program is just completing this next year for a total of 31 Poseidon submarines.

COMPARISON: POSEIDON VERSUS TRIDENT

Senator PASTORE. The Poseidon has 16 tubes. The Trident is going to have 24 tubes. Now the size of the tubes, whether they be 16 or 24, are identically the same?

Admiral NICHOLSON. The Trident submarine tubes will be much larger, so that we can in the future, if it is decided to do so, put a much larger Trident II missile on the Trident submarines.

Senator PASTORE. In other words, the Trident missile will be larger than the one you are trying to convert to the Poseidon?

Admiral NICHOLSON. The initial Trident I missile will be the one we are going to backfit on the 10 Poseidon submarines. But we have the capability of expanding to a larger missile on the Trident submarines if we decide that it is necessary. It is very similar to what has been done on the Polaris/Poseidon submarines. We started out with smaller missiles and worked our way up to the Poseidon missile.

Senator PASTORE. What will be the range of the Trident missile that goes in the Poseidon?

Admiral NICHOLSON. It will be 4,000 miles, sir.

Senator PASTORE. Almost as much as the Delta.

Admiral NICHOLSON. Yes, sir.

Senator PASTORE. That is the argument that Mr. Symington always makes, more Poseidons and fewer Tridents. Will you answer that question?

Admiral NICHOLSON. We have two problems with simply backfitting the Poseidon submarines. One is the ships will be about 15 years old by the time we finish putting the Trident missile on them, and, therefore, they will have just a few years of life left, about 10 years at the absolute maximum. We would then have a block obsolescence problem and we wouldn't have any submarines to replace them with.

So this backfit gives us a significant interim capability similar to the Delta until we get enough Tridents out to have a meaningful force.

Senator PASTORE. This reconversion, would it be fair for me to say that this reconversion is to meet the immediate threat of the Delta?

Admiral NICHOLSON. No, sir, not to meet the threat, but to give the same comparable result—increased survivability through missile ranges and increased operating area.

Senator YOUNG. I think you should provide the subcommittee at this point the difference between the capability of the Trident and Poseidon submarines.

Admiral NICHOLSON. Of the submarine, you mean?

Senator YOUNG. Yes.

Admiral NICHOLSON. That is another very important issue. Our Poseidon submarines today are relatively invulnerable compared to the threat that we are facing. However, the Soviet ASW threat is increasing at a pretty impressive rate in many areas.

In order to counter that threat the submarine must be quieter than the opposition. It must have better sonars in order to be able to hear the potential adversary at much greater ranges than he can us and we must have an ability to go faster and still remain quiet, as Trident will give us.

We feel that Trident in the 1980's will be quieter, have a better sonar, and be able to use all of that ocean and counter any threat that we can possibly see coming up in the 1980's and beyond.

We are not certain that that would be so with our current submarines. They aren't as quiet. Obviously the sonars incorporate the technology of the 1950's rather than current technology and they can't hear the other submarines at near the range Trident will. These quieting and sonar improvements, as well as the growth capability in Trident cannot be incorporated in our current submarines.

Senator INOUYE. What is the range of the Trident sonar?

Admiral NICHOLSON. The Trident sonar on an unclassified basis will give us the ability to hear essentially—that should be only in closed session.

Senator PASTORE. This is a closed session.

Admiral NICHOLSON. The Trident sonar will permit us to detect the [deleted].

Senator PASTORE. What is the sonar technology for the Soviets?

Admiral NICHOLSON. The Soviet sonars so far have not had the kind of technology that we have. They have not exhibited the ability to

build the same kind of capable arrays and the processing of the data that we have.

But it is possible that they could come up with a sonar such as we have resulting in a big improvement over what they have shown so far.

Senator PASTORE. It was always my understanding, and I am just questioning this, that our Poseidon was quieter but slower than the Delta. Is that correct or incorrect?

Admiral NICHOLSON. Yes, sir; it is quieter and it is slower, that is correct.

Senator PASTORE. And theirs is a little noisier but faster.

Admiral NICHOLSON. Yes; that is correct.

Senator PASTORE. And you say that the Trident will be much quieter?

Admiral NICHOLSON. Yes, than the Poseidon.

Senator PASTORE. It will have more space for maneuverability, insofar as detection is concerned?

Admiral NICHOLSON. The sonar will hear the other submarine much farther, allowing more time for avoidance action. That is one capability that you can't backfit into a Poseidon.

The hull is limited and we have used all of the growth capability that we have. We can't install these big sonar domes that will give us this standoff capability on Poseidon submarines. It is just impossible to backfit that.

Senator PASTORE. Because it is too compact?

Admiral NICHOLSON. Yes; there is no growth capability left.

TRIDENT VERSUS SOVIET "DELTA"

Admiral CLIFFORD. The Trident is not a response to the Delta. The Delta submarine is essentially the Soviet's reaction to our advances in antisubmarine warfare capability. With Trident we are anticipating their potential advances in undersea surveillance over the next 10 years. They are running considerably behind us but there are indications now that they are awakening to the possibilities here, hence the need to extend the maneuvering area of our sea-based deterrent through deployment of the Trident submarine in order to maintain our relative invulnerability.

Senator PASTORE. We have been disturbed over the fact that their Delta can shoot [deleted] miles.

Admiral CLIFFORD. Yes, sir.

Senator PASTORE. And we don't have that capability.

Admiral CLIFFORD. They found it necessary because of our undersea surveillance capability to get that extended range to try to get outside of the reach of our ships.

Senator PASTORE. Should Mirv warheads on the Delta cut down the range of [deleted] miles?

Admiral NICHOLSON. Not necessarily, no. It would be possible for them to Mirv and get an increased capability if they were willing to reduce the number of warheads that they were using, but it would depend on the number of warheads.

Senator PASTORE. Is it fair for us to assume that the Delta has [deleted] at the present time?

Admiral NICHOLSON. Yes, sir.

Senator PASTORE. The last briefing I got led me to understand that we can improve our distance, provided we give up a little on the number of warheads.

Admiral NICHOLSON. That is correct.

Senator PASTORE. This makes sense. Now, we have always argued this question that they can go [deleted] miles and we could only go [deleted] miles, so to speak, between [deleted] which would give them an edge of about [deleted] miles. Now, the point I am asking about is this: Is this accountable to the fact that we have multiple warheads and they have a single warhead, or is there another explanation?

Admiral NICHOLSON. It is a question of the propellant and the size of the missile, and the throw weight of the missile.

For example, it would be possible for us with the Trident I missile to get a 4,000-mile range with all of the warheads. Then it would be possible to take off some of the warheads and increase the range to approximately [deleted] miles.

Now, it is important to note that we really need a longer range because of the geography—we need a longer range than the Soviets do in order to hit the major targets in the center of the country.

For example, the Delta can be on patrol right off of their harbors and target our midlands, whereas we have to have a [deleted] mile missile in order to do that from our waters and cover all of the targets.

Senator PASTORE. Let's go to the next question.

Last year Congress deleted $30 million from the requested $68 million to procure spacecraft and equipment for the fleet satellite communications system, and added $15 million in development funds because of technical problem delays in the program. Have the technical problems been overcome? How much is requested in procurement and in R.D.T. & E. funds for the program of fiscal 1976 and the transition period?

Admiral CLIFFORD. I can answer yes, the technical problems have been overcome. You may recollect there was a modulation problem there and that has been proved satisfactorily. We feel the satellite is ready to go. We plan to complete the final engineering tests by late March and hope to let a contract for one satellite by June 1975.

In answer to the second part of the question, in fiscal year 1976 $5 million in R. & D. and $60.5 million in procurement was requested for the satellites. In the transition budget $10.8 million in R. & D. and $3 million in procurement is requested. The R. & D. amounts are for satellite development only.

PHOENIX MISSILES

Senator PASTORE. You request $96.7 million in fiscal year 1976 to procure 340 Phoenix missiles. What is the inventory objective for the program and when will it be attained? Has the objective changed since the inception of the program?

Admiral CLIFFORD. The inventory objective of the Phoenix is 1,795 missiles which should be obtained at the end of [deleted]. There is a fiscal 1979 procurement plan to provide for training expenditures until approximately 1990. There has been no significant change to the planned Phoenix procurement.

Senator PASTORE. Would you please provide for the record an explanation of the Phoenix missile.

Admiral CLIFFORD. I would like to provide that for the record, if I may.

Senator PASTORE. All right, sir.

[The information follows:]

PHOENIX CHARACTERISTICS

The PHOENIX missile is a long-range, air-to-air missile to be used with the Navy's F-14. The F-14, when armed with PHOENIX missiles, can track up to [deleted] targets, evaluate and prioritize the level of the threats, and simultaneously engage [deleted] targets out to a maximum range in excess of [deleted] miles. The PHOENIX has demonstrated its performance and lethality against a broad spectrum of threat targets in both single and multi-shot engagements and provides the fleet an improved defense capability against enemy aircraft and cruise missiles.

AMOUNT REQUESTED FOR PHOENIX

Senator INOUYE. Might I ask a question here. When we order all of these missiles for this fiscal year, you are asking for $572 million worth of Phoenix.

Admiral CLIFFORD. For the Phoenix program itself we are requesting $96.7 million in fiscal year 1976 for the Phoenix missile.

Senator INOUYE. Of that number, how many are used for practice?

Admiral CLIFFORD. We do not plan for training expenditures, but we do plan to fire a maximum of 35 missiles per year as an inventory sample.

Senator INOUYE. How do you upgrade the old missiles?

Now you have had procurement prior to 1973 and your procurement program goes up to 1979 to a total of 2,500. What about those that you procured prior to 1973? How do you upgrade?

Admiral CLIFFORD. This is what the missile modification line in the budget actually provides. If there are deficiencies discovered in the missiles as a result of extended storage time or usage in the fleet, they are brought back for a periodic rework where, if necessary, additional components are installed in the missiles to keep their performance capability up.

Senator INOUYE. So you are satisfied that all of those missiles whether they are procured today or prior to 1973 are capable of carrying out the mission?

Admiral CLIFFORD. Yes; although there is no question that the more we get into the fleet and the more experience we have with them; the more hours we accumulate as they are carried on aircraft and being returned to the magazines and being exposed to the environment again—no matter how much we test we learn more about these missiles and we do find certain modifications necessary either to increase their maintainability or their performance. They periodically go back through rework facilities at which time these modifications are incorporated into the missile to bring them up to this condition.

Senator INOUYE. Do you have that modification amount in your requests?

Admiral CLIFFORD. It is $1.7 million in fiscal 1976, the amount allocated for Pheonix modification.

F–14/PHOENIX WEAPON SYSTEM

Senator PASTORE. What is the range of the plane that will carry this missile?

Admiral CLIFFORD. It is the F–14 and I would have to provide that number.

[The information follows:]

The combat radius of the F–14 with average missile load is [deleted] miles with external drop tanks.

TRANSPORTING OF F–14

Senator PASTORE. Would the F–14 have to be transported or will it take off at a base, a foreign base?

Admiral CLIFFORD. Either way; the F–14 will be our primary carrier-fighter aircraft and will nominally operate up to 1.4 hours at the distance of 150 miles from the carrier in a fleet air defense role.

Senator PASTORE. This missile would be used for the destruction of what?

Admiral CLIFFORD. Either enemy aircraft or enemy missiles.

Senator PASTORE. Do you mean missiles in flight?

Admiral CLIFFORD. Yes, sir.

Senator YOUNG. Is the Navy procuring Phoenix missiles for foreign countries that buy the F–14 aircraft and, if so, which countries and how many aircraft and missiles are we providing?

Admiral CLIFFORD. Yes: Iran has purchased the F–14 and I would have to provide the exact number of aircraft and missiles for the record.

Senator YOUNG. We are providing the Phoenix missile?

Admiral CLIFFORD. Yes, sir.

FOREIGN SALES OF PHOENIX MISSILE

Senator YOUNG. Are there any other countries getting the F–14 and the Phoenix missile?

Admiral CLIFFORD. I don't believe so, but I will provide an accurate answer for the record.

Senator YOUNG. Would you do that.

Admiral CLIFFORD. Yes, sir.

[The information follows:]

FOREIGN SALES OF PHOENIX MISSILE

The Government of Iran has ordered 80 F–14A aircraft and 150 PHOENIX missiles. They are currently considering an additional quantity of 270 missiles. There are no other countries receiving the F–14A or PHOENIX.

CONDOR

Senator PASTORE. I note that the Navy procured 30 Condor missiles in fiscal year 1974, none in fiscal year 1975. You request funds to buy 205 in fiscal year 1976, 38 in transition period and a final buy of 162 in fiscal year 1977.

What sort of a production schedule will the funding profile result in, and will this be the most efficient production plan?

Admiral CLIFFORD. I will have to provide that for the record.
[The information follows:]

CONDOR PRODUCTION SCHEDULE

The production schedule is the most efficient program plan for these quantities of missiles. The FY 1976 buy of 205 CONDOR missiles calls for delivery of nine missiles per month during the time period from November 1976 through January 1977; ten missiles in February 1977; fifteen missiles per month from March 1977 through June 1977; and 18 missiles per month during the period from July 1977 through December 1977. The FY 197T buy of 38 missiles calls for delivery of 18 missiles per month in January 1978 and February 1978, and two in March 1978. The FY 1977 buy of 162 missiles calls for delivery of 16 missiles in March 1978; 18 missiles per month during the time period from April 1978 through October 1978; and 20 missiles in November 1978.

HARPOON

Senator PASTORE. How does the Harpoon missile system operationally compare with the Condor?

Admiral CLIFFORD. Basically the missiles are for two different purposes. The Harpoon missile is an active, homing antiship missile which will be employed by ships in a surface-to-surface mode, and by aircraft against ship targets. It is an active radar homing missile. It is basically an all-weather missile and is not effective against shore targets because it cannot discriminate the target as it can a ship at sea. It is an antiship missile.

The Condor is an extremely accurate missile designed for air-launched use only; it uses an optical targeting system. As such, it is extremely accurate but it also requires that the pilot observe and guide the missile all the way to the target. It is primarily used as a stand-off weapon; it can be fired from ranges up to 60 miles. It permits an aircraft to attack an important target which may be heavily defended by antiaircraft weapons.

Senator INOUYE. It is a cruise missile, isn't it?

Admiral CLIFFORD. Yes, sir. I might say the Harpoon is essentially a low-altitude missile. The Condor has a flexible altitude profile. The aircraft has to keep a line of sight to the Condor so that the television signal can be relayed to the crew to permit guided flight. It can go in high or low.

HARPOON COST INCREASES

Senator PASTORE. Are the significant procurement cost increases in the Harpoon program greater than those experienced in other Department of Defense similar programs?

Is that clear?

Admiral CLIFFORD. Yes, sir, it is. There has been a significant increase in the total Harpoon costs as we presented in this year's budget as compared to last year. As you know, Harpoon is just completing development. There were additional development costs that were not foreseen in the seeker development which have also increased the cost.

Additionally, inflationary factors account for 40 percent of the increase in the Harpoon costs. There have also been significant changes in reestimating the program. Among the most significant reasons are changes to the labor-base wage rates which have been used. The prime contractor originally had been anticipating producing this missile in Florida, where the wage rates were considerably less than what they

are turning out to be at the production facility in St. Louis. A combination of these three factors is the reason for the increased total program cost.

Senator PASTORE. Do you anticipate foreign sales of Harpoon and Condor missiles and, if so, what effect will the sales have on the deployment schedule of the weapons to operating forces and the unit procurement cost?

Admiral CLIFFORD. We don't anticipate foreign sales of the Condor missile at this time. We do anticipate foreign sales of the Harpoon missile and we have accepted letters of offer from I think at least three countries, Israel, Turkey, and we are negotiating with Korea at this point. The sale of these missiles will not impact the achievement of our capability in that any production of missiles to satisfy these will be within the production capability but over and above the missiles that the U.S. Navy is planning to buy in any particular year.

Senator PASTORE. Those that we use, the Condor and the Harpoon, will be affixed to our own planes and they will have [deleted].

Admiral CLIFFORD. [Deleted] and some studies are being conducted along this line. They are now [deleted].

Senator PASTORE. Those we are selling abroad will be conventional weapons?

Admiral CLIFFORD. Yes, sir.

We are not prepared to [deleted] at this time but we are working on studies with the [deleted].

The Harpoon that we are selling in foreign sales is [deleted] that we are using. We call it a [deleted] that we have.

Senator INOUYE. What sort of ship do you use to launch missiles?

Admiral CLIFFORD. The Harpoon can be launched from virtually any ship in the fleet. We can install canisters and launch it from them, or it is also compatible with the existing ASROC launchers and others.

Senator INOUYE. What is the range?

Admiral CLIFFORD. It is a 60-mile range.

Senator PASTORE. You have to get pretty close to shoot.

Admiral CLIFFORD. 60 miles, yes; but actually, it will out-shoot most of the surface missiles that the Soviets have now or are coming out with.

BULLDOG PROGRAM

Senator PASTORE. What is the status of the Bulldog missile program? What does the future program look like?

Admiral CLIFFORD. We will have to provide that for the record. There are no funds requested in this year's budget.

[The information follows:]

BULLDOG successfully completed Operational Evaluation on 25 April 1974. A total of 20 missiles were expended during the evaluation. A modification to the guidance logic was implemented after 9 firings. The final 11 missiles yielded a CEP of less than [deleted] feet and a reliability of [deleted] per cent. In light of final Congressional action last year, deleting the program, the data package has been shelved. There are currently no plans to procure the BULLDOG missile.

CAPTOR

Senator PASTORE. Will you describe what the Captor weapons system is and how it might be employed?

Admiral CLIFFORD. The Captor is essentially a [deleted] anti-submarine mine, and it uses a homing torpedo to perform the detection and weapon functions. What we are doing is developing a capsule in which we can put an existing Mark 46 torpedo that will be [deleted] depths up to [deleted]. It will actually have a case depth where the torpedo is resident down [deleted]. It is designed to conduct an acoustic search until it detects a submarine, at which time it will release the torpedo which homes in on the submarine.

Senator INOUYE. Have you tested this?

Admiral CLIFFORD. Yes, sir, it is just about at the end of operational testing now, and I would expect we will have a full report in perhaps 30 days. We have been through a whole series of development tests and technical evaluations of the Captor system.

Senator INOUYE. So the procurement is for testing purposes.

Admiral CLIFFORD. No, sir, we are through testing and we are now ready to go into production procurement.

Senator PASTORE. Where would you place these?

Admiral CLIFFORD. Well, I think essentially——

Senator PASTORE. I am talking about geographically now, not the depth.

Admiral CLIFFORD. Geographically the vicinity of the [deleted] where you would expect to find the [deleted] Soviet submarines either going out on patrol or returning.

Senator PASTORE. I hope none of yours will run into that.

Admiral CLIFFORD. We have to know ahead of time.

CLOSE-IN WEAPON SYSTEM

Senator PASTORE. The Phalanx close-in weapons system has experienced numerous technical problems and has been the subject of much congressional attention and criticism. I note that you plan the first production buy in fiscal year 1977. Do you feel that the program is technically ready for production? Please discuss the program.

Admiral CLIFFORD. We are confident that by fiscal 1977 when we hope to commence our first production that the system will be ready. It has been a controversial system, essentially centering on the basic question of whether it will or will not detonate a Soviet missile. It is designed as a close-in operating system, operating at ranges out to [deleted] on in. It is a last ditch defense, specifically to take a missile under fire up to the last [deleted] of its flight, and detonate the missile before it gets to the ship. We have tested this system in static firings on numerous occasions against all of the "friendly" warheads that we have been able to get our hands on, and it has successfully penetrated and detonated all of the warheads that we have tested it against.

Senator PASTORE. Would this be placed on a ship?

Admiral CLIFFORD. Yes, that is exactly what it would be used for.

Senator PASTORE. And it would shoot off any missile directed toward the destruction of your own ship?

Admiral CLIFFORD. Yes, it is a close-in system working for a mile around the ship. It is completely automatic; it will detect, track, and fire in an automatic mode.

TORPEDOES

Senator YOUNG. How many types of torpedoes does the Navy employ? How many different types?

Admiral CLIFFORD. There are two fundamental types, the Mark 48 torpedo, the primary submarine-launched torpedo, which will replace the existing inventory of Mark 37's and Mark 14's which we are phasing out now. The Mark 46 torpedo is the primary antisubmarine weapon used by all surface ships and aircraft. These are, basically, our two advanced systems.

Senator PASTORE. When will the M–48 replace the others?

Admiral CLIFFORD. In the late 1970's, I would guess, we plan to replace all of the 37's in the fleet. However approximately 1,200 Mark 37's will be maintained in inventory as backup weapons for the Mark 48's.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator PASTORE. Are there any questions for Admiral Clifford?

Senator YOUNG. I have a few more that I would like him to answer for the record.

Senator PASTORE. Without objection, those will be inserted in the record at this point.

Gentlemen, thank you very much for your cooperation.

[The questions and answers follow:]

PROGRAM INCREASES

Senator YOUNG. The $1.224 billion requested for fiscal year 1976 represents a large increase over the $735 million appropriated in fiscal year 1975. Specifically, why is such a large increase requested and what are the programs most affected by this increase?

Admiral CLIFFORD. This increase reflects, more than any other reason, the maturity of many development programs at the same time. The FY 1976 request includes $355.1 million for programs which are transitioning in FY 1976 from development to production. The FY 1976 program also includes $159.9 million for the first full production of a number of programs which previously transitioned to procurement. The major programs in these categories are TRIDENT, SIDEWINDER "L", CONDOR, HARPOON, STANDARD ER (SM–2), CAPTOR, MK–30, and CIWS.

In addition to these new or expanded programs additional funds have been added to recognize the abnormal inflation over the past year. These increases have been partially offset by reductions in other programs.

EFFECTS OF INFLATION

Senator YOUNG. How much of the increase is for inflation and how much is growth?

Admiral CLIFFORD. Approximately $85 million of the increase is required to cover the effects of unanticipated escalation since last year. The remaining $404 million reflects increased program.

FLEET TORPEDOES

Senator YOUNG When will the MK–48 torpedo replace older torpedoes in the Navy?

Admiral CLIFFORD. Present planning is that the MK–48 torpedo will completely replace the older torpedoes in the late 1970's or early 1980's. Replacement has already commenced. Forty-five of our attack submarines and five of our SSBN's are certified to carry the MK–48 torpedo and are loaded with them on a routine basis.

Shipbuilding and Conversion, Navy (SCN)

STATEMENT OF VICE ADM. FRANK H. PRICE, JR., U.S. NAVY, DEPUTY CHIEF OF NAVAL OPERATIONS (SURFACE WARFARE)

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

REAR ADM. E. P. TRAVERS, U.S. NAVY, DEPUTY COMMANDER FOR PLANS, PROGRAMS AND FINANCIAL MANAGEMENT/COMPTROLLER, NAVAL SEA SYSTEMS COMMAND

REAR ADM. J. H. NICHOLSON, U.S. NAVY, DIRECTOR, STRATEGIC SUBMARINE DIVISION AND TRIDENT PROGRAM COORDINATOR, OFFICE OF THE CHIEF OF NAVAL OPERATIONS (SUBMARINE WARFARE)

CAPT. R. B. HOFFMAN, U.S. NAVY, SCN APPROPRIATIONS MANAGER, OFFICE OF THE CHIEF OF NAVAL OPERATIONS (SURFACE WARFARE)

JUSTIFICATIONS

Senator Pastore. We are honored to have Vice Admiral Price as our next witness.

Before he testifies, I do think we should print in the record that information from the justifications relevant to these procurements.

[The justification follows:]

Justification

For expenses necessary for the construction, acquisition, or conversion of vessels as authorized by law, including armor and armament thereof, plant equipment, appliances, and machine tools and installation thereof in public and private plants; procurement of critical, long leadtime components and designs for vessels to be constructed or converted in the future; and expansion of public and private plants, including land necessary therefor, and such lands and interest therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statutes, as amended: [as follows; for the Trident program, $1,166,800,000; for the SSN-688 nuclear attack submarine, $502,500,000: for the DLGN nuclear powered guided missile frigate program, $244,300,000, which shall be available only for construction of DLGN 41 and for advance procurement funding for DLGN 42, both ships to be constructed as follow ships of the DLGN 38 class; for the DD-963 program, $457,100,000; for the patrol hydrofoil missile program, $92,300,000; for the patrol frigate program, $186,000,000; for a destroyer tender, $116,700,000; for a fleet ocean tug, $10,800,000; for the Poseidon conversion of fleet ballistic-missile submarines, $104,600,000; for conversion of a submarine tender, $18,300,000; for craft, $22,000,000; for pollution abatement craft, $10,400,000; for outfitting material, $24,900,000; for post delivery, $30,400,000; and for escalation on prior year programs, $71,900,000; in all:] [$3,059,000,000] $5,446,000,000, [and in addition $70,000,000 for escalation and cost growth on prior year programs which shall be derived by transfer from "Shipbuilding and Conversion, Navy 1973/1977",] to remain available for obligation until [June 3, 1979] expended: Provided, That none of the funds herein provided for the construction or conversion of any naval vessel to be constructed in shipyards in the United States shall be expended in foreign shipyards for the construction of major components of the hull or superstructure of such vessel: Provided further, That none of the funds herein provided shall be used for the construction of any naval vessel in foreign shipyards.

For "Shipbuilding and Conversion, Navy" for the period July 1, 1976, through September 30, 1976, $474,200,000, to remain available for obligation until expended. (5 U.S.C. 3103: 10 U.S.C. 5012, 5031, 7296, 7298; 31 U.S.C. 718; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed.)

Change in the language with respect to the restriction of the use of the SCN appropriation for the Navy Shipbuilding programs is required in order to allow the best management of this appropriation. During the long shipbuilding period, many factors influence ship cost estimates. Management ability to occasionally rebalance estimates is required as conditions warrant. Placing fences around major programs within an appropriation severely limits our management options. It is the position of the DOD that reprogramming procedures provide Congress with adequate means to monitor the stewardship of the SCN program and that the fencing of individual program appropriations is detrimental to good management.

Change in the language with respect to the availability of these funds is required in order to establish a separate and new account under this head to remain available until expended. Experience with the multi-year appropriations to date has shown the current 5-year appropriation to be too short to allow for some shipbuilding programs to complete. When the FY 1971 and prior appropriation expires for obligation on 30 June 1975, at least 24 ships will remain uncompleted. Based on this experience and current program status, similar situations are projected to occur as the FY 1972 and subsequent appropriations reach their separate obligation limitation dates. Appropriations previously made under this head in FY 1971 and prior years will be maintained in a separate account which will expire for obligational purposes on 30 June 1975. The appropriation made under this head in FY 1972 will be maintained in a separate account which will expire for obligational purposes on 30 June 1976. The appropriation made under this head in FY 1973 will be maintained in a separate account which will expire for obligational purposes on 30 June 1977. The appropriation made under this head in FY 1974 will be maintained in a separate account which will expire for obligational purposes on 30 June 1978. The appropriation made under this head in FY 1975 will be maintained in a separate account which will expire for obligational purposes on 30 June 1979.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1611-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. FLEET BALLISTIC MISSILE SHIPS	737,949	1,330,700	608,800	332,609	1,262,057	731,834
2. OTHER WARSHIPS	2,405,362	1,203,850	798,000	2,047,865	2,275,229	1,188,906
3. AMPHIBIOUS SHIPS	.....	.....	.....	96,607	50,714	.....
4. MINE WARFARE AND PATROL SHIPS	3,919	278,300	1,038,900	102,674	249,275	818,251
5. AUXILIARIES AND CRAFT	301,170	361,750	3,000,300	366,031	739,718	1,843,764
TOTAL DIRECT	3,508,400	3,174,600	5,446,000	2,944,991	4,576,993	4,582,755
REIMBURSABLE (TOTAL)	311,678	850,270	100,000	63,032	786,475	323,434
10 TOTAL	3,820,078	4,024,870	5,546,000	3,008,023	5,363,468	4,906,189
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-3,328	-15,000	-15,000	-2,230	-15,000	-15,000
13 TRUST FUNDS	-313,350	-835,270	-85,000	-296,478	-835,270	-85,000
14 NON-FEDERAL SOURCES	.....	.....	.....	-60	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-3,175,683	-3,843,728	-2,505,130
AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-115,600	.....	.....	-115,600	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-126,100	.....	.....	.....	.....	.....
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-16,000	-126,100	.....	-16,000	-126,100	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	16,000	126,100	.....	16,000	126,100	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	3,843,728	2,505,130	3,144,941
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	115,600	.....	.....	115,600	.....	.....
BUDGET AUTHORITY	3,492,900	3,059,000	5,446,000	3,492,900	3,059,000	5,446,000
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET				2,709,255	4,513,198	4,806,189
72 OBLIGATED BALANCE, START OF YEAR				4,365,003	4,969,839	7,125,037
74 OBLIGATED BALANCE, END OF YEAR				-4,969,839	-7,125,037	-9,300,226
90 OUTLAYS				2,104,419	2,358,000	2,631,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1811-0-1-051		1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
22.0	TRANSPORTATION OF THINGS	1,471	1,000	1,200
25.0	OTHER SERVICES	793,411	1,232,300	1,396,800
26.0	SUPPLIES AND MATERIALS	89,157	137,100	196,000
31.0	EQUIPMENT	2,061,952	3,206,593	2,988,755
	TOTAL DIRECT OBLIGATIONS	2,944,991	4,576,993	4,582,755
	REIMBURSABLE OBLIGATIONS:			
25.0	OTHER SERVICES	17,019	269,200	60,700
26.0	SUPPLIES AND MATERIALS	1,891	29,900	6,700
31.0	EQUIPMENT	44,122	487,375	256,034
	TOTAL REIMBURSABLE OBLIGATIONS	63,032	786,475	323,434
99.0	TOTAL OBLIGATIONS	3,008,023	5,363,468	4,906,189

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1971 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1611-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. FLEET BALLISTIC MISSILE SHIPS	.....	.....	.....	-2,209	74,792	.....
2. OTHER WARSHIPS	.....	.....	.....	149,111	267,264	.....
3. AMPHIBIOUS SHIPS	.....	.....	.....	96,607	50,714	.....
4. MINE WARFARE AND PATROL SHIPS	.....	.....	.....	16,077	30,079	.....
5. AUXILIARIES AND CRAFT	.....	.....	.....	41,974	30,605	.....
TOTAL DIRECT	.....	.....	.....	301,555	413,454	.....
REIMBURSABLE (TOTAL)	.....	.....	.....	3,655	77,075	.....
10 TOTAL	.....	.....	.....	305,210	490,529	.....
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	.....	.....	.....	3,713	.....	.....
13 TRUST FUNDS	.....	.....	.....	18,838	.....	.....
14 NON-FEDERAL SOURCES	.....	.....	.....	-54	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-890,336	-490,529	.....
AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-56,100	.....	.....	-56,100	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-72,100	.....	.....	.....	.....	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	16,000	56,100	.....	16,000	56,100	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	490,529	.....	.....
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	56,100	.....	.....	56,100	.....	.....
BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1972 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1611-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. FLEET BALLISTIC MISSILE SHIPS	.....	.....	.....	4,849	4,000	2,715
	2. OTHER WARSHIPS	.....	.....	.....	99,474	312,800	36,397
	4. MINE WARFARE AND PATROL SHIPS	.....	.....	.....	525	200	55
	5. AUXILIARIES AND CRAFT	.....	.....	.....	52,919	296,700	21,541
	TOTAL DIRECT	.....	.....	.....	157,608	613,700	60,718
	REIMBURSABLE (TOTAL)	.....	.....	.....	18,304	22,900	2,334
10	TOTAL	.....	.....	.....	185,912	636,600	63,052
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	.....	58	.....	.....
13	TRUST FUNDS	.....	.....	.....	117	.....	.....
14	NON-FEDERAL SOURCES	.....	.....	.....	-5	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-885,729	-699,652	-63,052
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	699,652	63,052	.....
	BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1977 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1611-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. FLEET BALLISTIC MISSILE SHIPS	.....	.....	.....	75,711	21,300	7,300
	2. OTHER WARSHIPS	.....	.....	.....	521,807	243,500	51,100
	4. MINE WARFARE AND PATROL SHIPS	.....	.....	.....	86,052	49,100	6,200
	5. AUXILIARIES AND CRAFT	.....	.....	.....	41,961	170,800	23,400
	TOTAL DIRECT	.....	.....	.....	726,037	493,700	88,000
	REIMBURSABLE (TOTAL)	.....	.....	.....	13,023	6,500	1,100
10	TOTAL	.....	.....	.....	739,060	490,200	89,100
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	.....	-2,673	.....	.....
13	TRUST FUNDS	.....	.....	.....	-2,078	.....	.....
14	NON-FEDERAL SOURCES	.....	.....	.....	-1	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-1,399,618	-611,310	-121,110
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-70,000	.....	.....	-70,000	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-54,000	.....	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-16,000	.....	.....	-16,000	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	70,000	.....	.....	70,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	611,310	121,110	32,010
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	70,000	.....	.....	70,000	.....	.....
	BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

	IDENTIFICATION CODE 07-15-1611-0-1-051	BUDGET PLAN (AMOUNTS OF PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. FLEET BALLISTIC MISSILE SHIPS	797,949	.....	.....	253,758	417,100	94,500
	2. OTHER WARSHIPS	2,405,362	.....	.....	1,276,724	717,900	288,600
	4. MINE WARFARE AND PATROL SHIPS	3,919	.....	.....	23	3,496	.....
	5. AUXILIARIES AND CRAFT	301,170	.....	.....	219,286	23,304	36,600
	TOTAL DIRECT	3,508,400	.....	.....	1,749,791	1,162,200	419,700
	REIMBURSABLE (TOTAL)	311,678	.....	.....	28,050	170,000	65,000
10	TOTAL	3,820,078	.....	.....	1,777,841	1,332,200	484,700
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-3,328	.....	.....	-3,328	.....	.....
13	TRUST FUNDS	-313,350	.....	.....	-313,350	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-2,042,237	-710,037
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	10,500	.....	.....	10,500	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-10,500	.....	.....	-10,500	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	2,042,237	710,037	225,337
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	-10,500	.....	.....	-10,500	.....	.....
	BUDGET AUTHORITY	3,492,900	.....	.....	3,492,900	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1611-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)		OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. FLEET BALLISTIC MISSILE SHIPS	.....	1,370,700	.....	.....	784,465	302,942
	2. OTHER WARSHIPS	.....	1,203,850	.....	.....	733,765	280,766
	4. MINE WARFARE AND PATROL SHIPS	.....	278,300	.....	.....	167,000	64,000
	5. AUXILIARIES AND CRAFT	.....	361,750	.....	.....	218,309	82,166
	TOTAL DIRECT	.....	3,174,600	.....	.....	1,903,939	729,874
	REIMBURSABLE (TOTAL)	.....	850,270	.....	.....	510,000	195,000
10	TOTAL	.....	4,024,870	.....	.....	2,413,939	924,874
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	-15,000	.....	.....	-15,000	.....
13	TRUST FUNDS	.....	-835,270	.....	.....	-835,270	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-1,610,931
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-115,600	.....	.....	-115,600	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	1,610,931	686,057
	BUDGET AUTHORITY	.....	3,059,000	.....	.....	3,059,000	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1611-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. FLEET BALLISTIC MISSILE SHIPS	.....	.....	604,800	.....	.....	324,377
	2. OTHER WARSHIPS	.....	.....	798,000	.....	.....	592,043
	4. MINE WARFARE AND PATROL SHIPS	.....	.....	1,038,900	.....	.....	747,946
	5. AUXILIARIES AND CRAFT	.....	.....	3,004,300	.....	.....	1,640,057
	TOTAL DIRECT	.....	.....	5,446,000	.....	.....	3,284,463
	REIMBURSABLE (TOTAL)	.....	.....	100,000	.....	.....	60,000
10	TOTAL	.....	.....	5,546,000	.....	.....	3,344,463
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-15,000	.....	.....	-15,000
13	TRUST FUNDS	.....	.....	-85,000	.....	.....	-85,000
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	2,201,537
	BUDGET AUTHORITY	.....	.....	5,446,000	.....	.....	5,446,000

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1611-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
			TRANSITION			TRANSITION
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. FLEET BALLISTIC MISSILE SHIPS			254,200			378,000
2. OTHER WARSHIPS			189,000			417,800
4. MINE WARFARE AND PATROL SHIPS			24,200			245,000
5. AUXILIARIES AND CRAFT			6,700			324,888
TOTAL DIRECT			474,200			1,365,688
REIMBURSABLE (TOTAL)			10,000			50,400
10 TOTAL			484,200			1,416,088
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS			-3,000			-3,000
13 TRUST FUNDS			-7,000			-7,000
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS			.....			-3,144,941
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS			.....			2,213,053
BUDGET AUTHORITY			474,200			474,200
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET						1,406,088
72 OBLIGATED BALANCE, START OF YEAR						9,300,226
74 OBLIGATED BALANCE, END OF YEAR						-10,085,314
90 OUTLAYS						621,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1611-0-1-051			TRANSITION
	DIRECT OBLIGATIONS:		
22.0	TRANSPORTATION OF THINGS		300
25.0	OTHER SERVICES		358,500
26.0	SUPPLIES AND MATERIALS		89,200
31.0	EQUIPMENT		917,688
	TOTAL DIRECT OBLIGATIONS		1,365,688
	REIMBURSABLE OBLIGATIONS:		
25.0	OTHER SERVICES		9,600
26.0	SUPPLIES AND MATERIALS		1,100
31.0	EQUIPMENT		39,700
	TOTAL REIMBURSABLE OBLIGATIONS		50,400
99.0	TOTAL OBLIGATIONS		1,416,088

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Introductory Statement
(In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	1977 Estimate
Appropriation	3,492,900	3,059,000	5,446,000	474,200	4,828,800
Total Direct Obligations	2,944,991	4,576,993	4,582,755	1,365,688	-
Total Direct Budget Plan	3,508,400	3,174,600	5,446,000	474,200	4,828,800

The FY1976 budget request is the sixth appropriation requested under the title "Shipbuilding and Conversion, Navy". The FY197T budget request is the seventh appropriation requested under the title "Shipbuilding and Conversion, Navy". The Shipbuilding and Conversion appropriation for FY 1971 and prior years will be available for new obligations through 30 June 1975. The FY 1972 appropriation is available for new obligations through 30 June 1976. The FY 1973 appropriation is available for new obligations through 30 June 1977. The FY 1974 appropriation is available for new obligations through 30 June 1978. The FY 1975 appropriation is available for obligation through 30 June 1979. The FY 1976 appropriation is requested to remain available for obligation until expended, and the FY 197T appropriation is requested to remain available for obligation until expended. Authorization is requested for the FY 1977 Navy Shipbuilding program. The objective of these appropriations is to finance the building of a versatile fleet, equipped with technologically advanced hull designs, propulsion, armament and electronics, capable of performing the Navy's assigned missions. Authorization of the FY 1977 request will allow for a more orderly Congressional Budget Review.

To keep abreast of price changes the Navy periodically reviews ship cost estimates in detail. In addition to estimates for basic construction of the ship, government furnished electronic, non-electronic and weapons equipment, proviaion is made in the initial estimates for projected labor and material cost increases, and design improvements and technological advances which occur while the ship is being built. Outfitting and Post Delivery requirements are also reviewed in detail.

Introductory Statement
(Continued)

	Uncompleted thru 31 Dec 1974	To be Completed by 30 June 1975	To be Completed in FY 1976	To be completed in FY 197T & Subsequent years
FY 1971 and Prior Years				
Ships	27	3	13	11
New Construction	27	3	13	11
Conversion	0	0	0	0
FY 1972				
Ships	15	0	1	14
New Construction	15	0	1	14
Conversion	0	0	0	0
FY 1973				
Ships	11	3	0	8
New Construction	8	0	0	8
Conversion	3	3	0	0
FY 1974				
Ships	19	1	4	14
New Construction	14	0	0	14
Conversion	5	1	4	0
FY 1975				
Ships	26	1	0	25
New Construction	22	0	0	22
Conversion	4	1	0	3

The request for Fiscal Year 1976 is $5,446,000,000, an increase of $2,387,000,000 above the Fiscal Year 1975 appropriation. This will provide for 23 new construction ships as compared to the FY 1975 Shipbuilding Program which had 22 new construction ships and 4 conversions.

FY 1976 - Of the 23 new construction ships requested in FY 1976, 21 represent the continuation of programs that were funded in FY 1974 and prior. They include one ballistic missile-firing submarine (TRIDENT) of the SSBN-711 Class, two high speed nuclear attack submarines (SSN-688 Class), one nuclear powered guided missile frigate (DLGN-38 Class), ten patrol frigates, two patrol hydrofoil missile ships, two destroyer tenders (AD-41 Class), and three fleet tugs. The two new ships are fleet oilers (AO-177 Class). The funding request for these 23 new ships is $2,961,200,000.

All of the $144,700,000 requested for advance procurement in FY 1976 is associated with continuing programs. $42,700,000 is for additional ballistic missile firing submarines of the TRIDENT Class and $102,000,000 is for high speed attack submarines of the SSN-688 Class.

Funds in the amount of $70,800,000 are requested for the procurement of outfitting material and the accomplishment of post delivery work during FY 1976, and for procurement of service craft.

The remaining $2,269,300,000 of the FY 1976 request is for escalation, claims and other cost growth.

FY 197T - No ships are included in the FY 197T appropriation request. Procurement of long leadtime material for continuing programs accounts for $466,200,000 of the $474,200,000 requested. The remaining $8,000,000 is requested for outfitting material.

FY 1977 - All of the 29 new construction ships requested for authorization in FY 1977 are continuations of programs that were funded in FY 197T and prior. Included are two ballistic missile-firing submarines (SSBN-711 Class), three high speed nuclear attack submarines of the SSN-688 Class, eleven patrol frigates, nine patrol hydrofoil missile ships, two fleet oilers, one submarine tender (AS-39 Class) and one fleet tug. The authorization requested for these 29 new ships is $3,896,300,000.

The conversion of the LST-1178 (USS WOOD COUNTY) to an AGHS (PHM Support Ship) is the only conversion requested for authorization for FY 1977. Authorization of $33,100,000 is requested for this conversion.

Of the $756,600,000 advance procurement requested for authorization in FY 1977, $355,900,000 is associated with continuing programs. The two continuing programs are the TRIDENT ballistic missile-firing submarines (SSBN-711 Class), $166,400,000; and the SSN-688 Class high speed nuclear attack submarine, $189,500,000. The balance of the request for authorization of $409,700,000 advance procurement is for new programs, including $349,700,000 for the nuclear aircraft carrier (CVNX) and $60,000,000 for the VSTOL support ship (VSS).

The remaining $133,800,000 requested for authorization is for outfitting material, post delivery work and craft.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate
Fleet Ballistic Missile Ships	$ 797,949	$1,330,700	$ 608,800
Other Warships	2,405,362	1,203,850	798,000
Amphibious Ships	-0-	-0-	-0-
Mine Warfaré and Patrol Ships	3,919	278,300	1,038,900
Auxiliaries and Craft	301,170	361,750	3,000,300
TOTAL DIRECT PROGRAM	$3,508,400	$3,174,600	$5,446,000
Reimbursable Program	311,678	850,270	100,000
TOTAL PROGRAM REQUIREMENTS (Current)	$3,820,078	$4,024,870	$5,546,000
Less: Portion of Program to be obligated in subsequent fiscal years	2,042,237	1,610,931	2,201,537
Plus: Obligations incurred against prior year program funds	1,230,182	2,949,529	1,561,726
TOTAL OBLIGATIONS	$3,008,023	5,363,468	4,906,189

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	197T Estimate	1977 Authorization
Fleet Ballistic Missile Ships	$254,300	$1,396,700
Other Warships	189,000	1,196,700
Amphibious Ships	-0-	-0-
Mine Warfare and Patrol Ships	24,200	1,623,500
Auxiliaries and Craft	6,700	611,900
TOTAL DIRECT PROGRAM	$474,200	4,828,800
Reimbursable Program	10,000	
TOTAL PROGRAM REQUIREMENTS (Current)	484,200	
Less: Portion of Program to be obligated in subsequent fiscal years	-0-	
Plus: Obligations incurred against prior year program funds	931,888	
TOTAL OBLIGATIONS	1,416,088	

PREPARED STATEMENT

Senator PASTORE. You may now proceed, Admiral.

Admiral PRICE. Thank you, Mr. Chairman.

I have a statement which I will submit for the record and I will read a short summary.

Senator PASTORE. Without objection, we will insert the detailed statement in the record.

[The statement follows:]

Mr. Chairman and members of the committee, I am Vice Admiral Price, Deputy Chief of Naval Operations for Surface Warfare. I am appearing before this committee in support of the fiscal year 1976 and the fiscal year 197T budget requests for the Shipbuilding and Conversion, Navy (SCN) appropriation.

SHIPBUILDING AND CONVERSION NAVY (SCN), FISCAL YEAR 1976 FISCAL YEAR 197T

You have already discussed with the Secretary of the Navy and the Chief of Naval operations the current status of the Navy and our urgent need to modernize and rebuild the fleet. However, before proceeding with a detailed discussion of this year's shipbuilding request, I believe it important to consider several factors concerning our naval posture.

Our need for a Navy has been well documented throughout the years. We have always been a nation dependent upon seaborne commerce for our economic wellbeing. In our early days, we relied on the Navy to keep enemies from our shores and the expanse of the oceans made it possible for the Navy to keep us separated from many of the World's conflicts. However, time and technology have robbed us of the comfort of security through isolation. Where in the past we could rely on a relatively small force that could be expanded in time of crises, the rapid pace of world events and the terrible cost of modern war require that we maintain armed forces in being that are fully capable of preventing war and containing crises that threaten our vital interest. These same forces must, of course, be capable of defeating an enemy if a conflict occurs. The pace of future conflicts and the length of time needed to build modern naval forces highlight the fact that we must have the ability to counter an enemy with the naval forces in being. Time no longer works in our favor.

Since the end of World War II our naval strength has been needed in crisis after crisis to effect containment, to deter aggression and to neutralize threats to this continent and to our essential world wide interests. The role of the Navy was and is vital in carrying out national policy. Its missions include strategic nuclear deterrence and deterrence of conventional war through peacetime presence. If deterrence fails, the Navy must be able to control the seas to insure the uninterrupted flow of men and materials to our own deployed forces and those of our allies and to project power ashore wherever and whenever our national strategy dictates.

The fleet strength this country must maintain to insure that the Navy has the ability to carry out assigned national taskings is a determination critical to our survival.

Clearly, no nation can maintain naval forces that are adequate to cover every foreseeable contingency or combination of contingencies. Forces to be maintained therefore are sized on the basis of the most likely contingencies and the degrees of risk which can be accepted in meeting them.

World events, revised national policies and changes in the threat posed by our potential adversaries all require continued assessment of force requirements. In 1969 for example, and based on the then existing world situation, Admiral Moorer—the Chief of Naval Operations—expressed a fiscal year 1980 requirement for 850 ships. Admiral Zumwalt subsequently supported a lesser number when our force needs changed in the light of the Nixon doctrine and other world events. Currently, the Navy is working to obtain a balanced fleet of about 600 ships. This number is far short of the over 900 ships that we had in 1969.

FORCE LEVEL OBJECTIVE

A BALANCED FLEET OF ABOUT 600 SHIPS

While we strive to maintain an adequate number of ships, numbers are not the only factor. Our newer ships are far more capable than the older ships they

replace and we need not plan a one-for-one replacement. Also, we must consider the capabilities of our prospective opponents and the form that future crisis or conflicts might assume as well as the fiscal facts of life posed by our economy. When we evaluate all factors and consider only the support needed to meet our military commitments, a balanced fleet of about 600 ships of all types is considered to be the desired force which would provide a better base from which to meet wartime commitments.

Over the past years the Navy has not been able, due to the requirements of Viet Nam and fiscal and other factors, to build the number of ships needed to replace our ageing and obsolete World War II ships. We therefore made the decision to decommission somewhat early our older, obsolete units which were becoming expensive to operate and use the funds saved to build a modern capable fleet.

Current active force level status

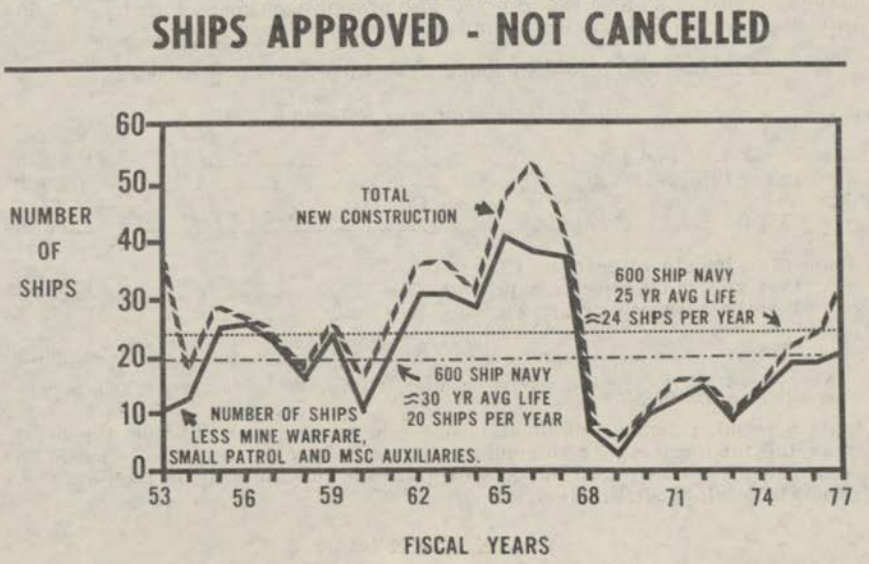
	Ships
March 1, 1975	500
End fiscal year 1975 (June 30, 1975)	497
End fiscal year 1976 (June 30, 1976)	490

As a result, we only have about 500 active ships in commission today. While this course posed considerable risk, it was the only option if we were to have an effective Navy in the 1980's.

Navy shipbuilding, 1968–75—New fleet ships, net construction program

Fiscal year:	*Ships*
1968	7
1969	5
1970	10
1971	15
1972	15
1973	8
1974	14
1975	22
Shipbuilding average, 1968–75	12

Over the 7 years between fiscal year 1969 and 1975 an average of only 12.7 new ships were constructed per year. This rate of new construction cannot, over the long haul, sustain a 500-ship Navy, let alone permit building toward our 600 ship goal.



A fleet of 600 ships, all having an average service life of 30 years, would require a construction rate of 20 new ships each year. If the average service life was 25 years a rate of 24 ships per year would be needed. Since the average service life of our ships varies between 25 and 35 years. We would have to build more than 20 to 24 ships a year to sustain a modern fleet.

The Navy program last year called for 30 new fleet ships and Congress approved 22. The approved number more nearly approaches the rate we must have to maintain the fleet. These minimal rates must, we believe, be sustained. the fiscal year 1976 request is for 23 new ships. No ship authorizations are being requested for fiscal year 197T.

Inflation, Economic Conditions and Other Factors

Caused $2269.3M in deficits on prior year programs.
Increased future ship costs.
Necessitates budgeting of sizable reserves for possible future inflation.
Jeopardizes fleet modernization effort.

Inflation

Today we see our planned fleet modernization program in jeopardy. The recent abnormal inflation has, because of the long lead and construction times involved, impacted most severely on Navy shipbuilding. This inflation has caused programs that have already been authorized and funded to be in deficit and in need of additional funding.

The costs of ongoing Navy shipbuilding programs, which were approved in prior years, were budgeted long before today's high level of inflation was evident. There was no way that the high upward excursion of the economy that we have experienced could have been predicted.

All our cost estimates for shipbuilding programs have contained allowances for the inflation which takes place between the time the estimates are made and the time the ship is awarded. The estimate of inflation used over the past few years was 7% per year. Inflation in the shipbuilding sector as measured by the Bureau of Labor statistics has been much higher and in fiscal year 1974 it had a composite rate of almost 16%

Escalation

Ship cost estimates also contain a reserve for the economic inflation which takes place during the construction period of a ship. This latter reserve is known as "shipbuilder escalation" or "contract escalation." Through fiscal year 1975, the Navy, in accordance with OSD and OMB policy, budgeted this contract provision on the basis of a composite future inflation rate of 4.25% per year throughout the building period of a ship. This rate has also proven inadequate. Fiscal year 1975 estimates, for example, project an inflation rate of at least 11.5%.

Fiscal Year 1975 and Prior Year Shipbuilding Programs

Deficits on prior year programs

	Millions
Fiscal year 1974 and prior	$1,348.3
Fiscal year 1975	921.0
Total	2,269.3
Budget line item identification (P1):	
"Cost growth on prior year programs"	1,119.5
"Escalation on prior year programs"	1,149.8
Total	2,269.3

Note: Cost growth resulting from inflation, claims, estimating errors and various economic factors.

As a result, primarily of inflation and related economic situation, the fiscal year 1974 and prior year shipbuilding programs are in deficit by some $1.35 billion. The fiscal year 1975 shipbuilding program, just approved by the Congress, is now in deficit by $921 million.

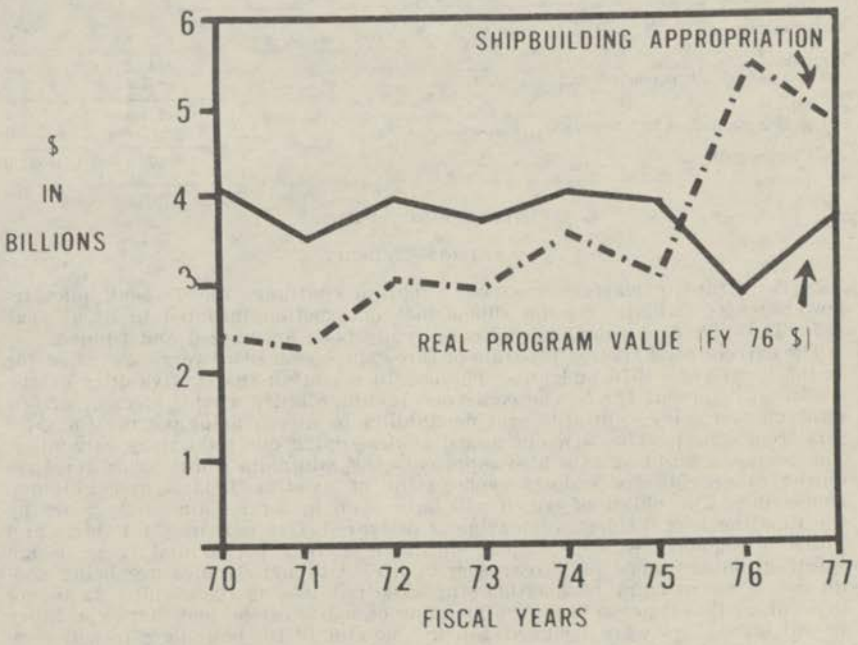
Shipbuilding and conversion, Navy (SCN) appropriation—Fiscal year 1976 request for cost growth and escalation on prior year programs

Causes:	Percent
Contract escalation	51
Program changes	9
Claims	7
Inflation impact on Government-furnished equipment (GFE)	8
Economic, estimating inflation and other	25

Although some of the total SCN deficit resulted from Navy directed characteristic or performance changes, estimating errors and less than optimum contractor performance, the greatest part of the deficit resulted from unforeseeable inflation factors. 10% resulted from program changes, 62% are attributed to inflation, and the remaining 28%, while not solely the result of inflation were significantly influenced by the existing economic conditions. Thus, we can say that almost 90% of the increase was primarily caused by the inflating economy and related economic effects.

Without the requested additional funding of $2.269 billion for the FY 75 and prior programs that is covered in this years budget, the fiscal year 1975 program, for example, which was the first in the past seven years which contained a minimum rate of ship construction needed to maintain force levels would be reduced with the attendant loss to the Navy's capability and the Nation's vital shipbuilding industry. We must also have the funding for ships already under contract in order to insure their timely completion.

NAVY SHIPBUILDING REAL PROGRAM VALUE



I would like to point out that while the $5.45 billion request for shipbuilding in the fiscal year budget request appears to be a significant increase over past years, it is lower in real value. This viewgraph shows the annual SCN appro-

priations for each year since 1970 displayed in constant fiscal year 1976 dollars.

You will note that the 1975 and prior year budget equal or exceed the real program value of the fiscal year 1976 program. This points out that, while there is an increase in total obligational authority request in fiscal year 1976, the real value of Navy shipbuilding has not increased but has declined. Inflation is a severe impediment to our modernization effort.

With the general background I will present an over view of our budget request for ship construction, discussing each ship program.

General

This year, because of the enactment of the Budgetary Control and Impoundment Act, I will be presenting budget request for two separate periods. The budget for the first period is for the upcoming budget year—fiscal year 1976. The budget for the second period is for the three month transition period between June 30, 1976 and 30 September 1976.

Shipbuilding and Conversion, Navy Appropriation (SCN) Budget Request

Fiscal year 1976 : $5,446 million—23 new construction ships.

Fiscal year 197T (Transition Budget) $474.2 million—no new ship authorization.

The fiscal year 1976 SCN request is for $5.45 billion which will fund 23 new ships and correct deficits in prior year shipbuilding programs which amount to $2.27 billion. The transition request is for $474 million needed to maintain the continuity of our ongoing programs. No new ship authorizations are included.

STRIKE FORCES—STRATEGIC

[In millions of dollars]

Trident	Fiscal year— 1976	197T
Number of ships	1	0
Ship costs	$641.2	0
Less advance funding from prior years	−81.3	0
Net	559.9	0
Plus advance procurement for future years	+42.7	+$253.0
Total request	602.6	253.0

Strike Force Ships

Strategic—Trident

In the strategic warfare area our program continues the Trident, nuclear-powered fleet ballistic missile submarine construction initiated in fiscal year 1974. Three Trident submarines have already been authorized and funded.

The current construction program of three ships every two years, as called for in the fiscal year 1976 budget, is planned to maintain the survivability of the sea-based deterrent force. The continued invulnerability of this element of our strategic forces is essential to provide stability by discouraging potential aggressors from a first strike attempt aimed at destroying our retaliatory capability. The proposed building rate also represents the minimum construction level required to provide for orderly replacement of existing Polaris and Poseidon submarines. The oldest of which will have been in service almost 20 years by the time the lead Trident submarine is delivered. Our existing 41 Polaris and Poseidon submarines were funded during a 7 year period and their design specifications assumed a 20-year service life. Although studies are being conducted in an attempt to lengthen the expected life of these ships, it is not prudent, at this time, to base firm planning on a life far beyond that expectancy to which the ships were designed. Further slowing of the building rate will demonstrate a lack of resolve to preserve the viability of our strategic deterrent, and would eventually require a more expensive program to replace our existing submarines when we were faced with their block obsolescence.

Construction funds of $560M for one Trident submarine, the fourth ship in the class, are requested in the fiscal year 1976 budget. This funding supports the continuity of the three ships every 2 years Trident submarine building rate. This program represents a stretchout of the two ships per year program presented to Congress last year. The Secretary of Defense has indicated that this change was made to reduce fiscal strain on the defense budget and to ease the pressure on the shipbuilder. This reduced Trident submarine building rate will delay delivery of the 10th submarine, previously estimated for December 1982, to the 1984–85 time frame.

The shipbuilder for the lead Trident submarine is required to meet a contract delivery date of April 1979 and to use his best efforts to achieve delivery in December 1977. Both the Navy and the contractor are confident that the contract date can be achieved. Although the deliveries of some materials and components, as estimated by the subcontractors, will not support the "best effort" December 1977 delivery date, the contract delivery date of April 1979 is achievable. The Navy and the contractor are working to improve delivery of controlling items to better assure meeting the submarine contract delivery date.

In addition to $560M for construction of the fourth Trident submarine, the fiscal year 1976 budget requests $43M to provide long lead time items for the ships planned for fiscal year 1977 and later; $253 million is also requested for the transition period to continue long lead procurements.

ATTACK SUBMARINES

STRIKE FORCES

[In millions of dollars]

Nuclear attack submarines SSN	Fiscal year—	
	1976	197T
Number of ships	2	0
Ship costs	$491.0	0
Less advance funding from prior years	−52.0	0
Net	439.0	0
Plus advance procurement for future years	102.0	189.0
Total request	541.0	189.0

Another key element in our fleet is the attack submarine force. The attack submarine program adheres to the five ships every two years procurement rate initiated in fiscal year 1975. The submarines will be of the Los Angeles, or SSN 688, class of which 23 are currently under contract.

Three more were funded in fiscal year 1975 but are not yet under contract. These ships have higher submerged speed and other improvements over previous nuclear attack submarines. These advancements include more capable sensor and countermeasure systems, a central computer complex, an upgraded weapons control system and improved noise reduction techniques.

Currently the Navy has 64 nuclear attack submarines in commission and plans to continue the alternating three-two-three program for the next few years. The already approved and ongoing construction program, together with the programs requested in fiscal years 1976 and beyond, will allow the Navy to achieve its all nuclear attack submarine force objective by the mid 1980's.

For fiscal year 1976 the Navy is requesting $541.0M and authorization for two of these ships which includes essential long lead items for future SSN's. $189M long lead funding for future nuclear powered submarines is requested in the transition budget.

TITLE VIII—PUBLIC LAW 93-365

"NUCLEAR POWERED NAVY"

New construction major combatant vessels for strike forces of U.S. Navy must be nuclear powered.

President may request conventionally powered strike force ships if he deems in national interest.

Last year Congress enacted Public Law 93-365, otherwise known as the Department of Defense Appropriation Authorization Act, 1975. Title VIII of this law entitled "Nuclear Powered Navy" specifies, in essence, a policy that new construction major combatant vessels for the strike forces of the United States Navy must be nuclear powered. These were defined as combatant submarines for strategic or tactical missions, or both. Combatant vessels intended to operate in aircraft carrier task groups (that is, aircraft carriers and the cruisers, frigates, and destroyers which accompany aircraft carriers); and those types of combatant vessels referred to above which are designed for independent combat missions, where essentially unlimited high speed endurance will be of significant military value. It also requires that all requests for authorizations or appropriations from Congress for major combatant vessels for the strike forces of the Navy be for nuclear powered ships unless and until the President has advised the Congress that construction of nuclear powered ships is not in the national interest.

This year's requests for strike force ships complies with Title VIII. I have just discussed the strategic and attack submarine programs and would now like to cover the strike force surface combatants.

STRIKE FORCES

[In millions of dollars]

Nuclear guided missile frigate (DLGN)	Fiscal year— 1976	197T
Number of ships	1	0
Ship costs	$368.0	0
Less advance funding from prior years	−111.0	0
Net	257.0	0
Plus advance procurement for future years	0	
Total request	257.0	0

GUIDED MISSILE FRIGATE (NUCLEAR POWERED)

Nuclear powered aircraft carriers and surface combatants are needed to meet the requirements for all nuclear powered fast reaction task forces. One nuclear powered aircraft carrier is in commission and another three are under construction. Currently, there are five nuclear powered surface combatants in commission with another four under construction or under contract. More are needed to provide nuclear powered surface combatants to operate with the nuclear powered carriers that are in commission or building. The funding and authorization requested in fiscal year 1976 for the DLGN-42 will provide for another of these versatile and highly capable ships.

The fiscal year 1976 budget requests authorization and funding for the last of the Virginia class nuclear guided missile frigates. Four of these ships have already been funded by the Congress and all are now under contract with the Newport News Shipbuilding and Drydock Co.

Congress has already provided some $110.0M in advance procurement for DLGN-42, and this year's request of $257.0M provides the funding needed to proceed with construction.

Future programs for strike force surface combatants are currently under review within the Navy and DOD. The need to increase the offensive capability of our surface forces and to get the AEGIS system to sea in our first line ship is critical. As Secretary Schlesinger has stated, we are carefully studying our urgent need for numbers of strike force surface combatants in light of title VIII and the very real fiscal constraints. We will inform the Congress of our findings and plans as soon as possible.

SURFACE COMBATANTS

The high endurance strike forces—nuclear powered aircraft carriers, guided missile cruisers and frigates, and attack and ballistic missile submarines and conventionally powered cruisers and destroyers—are, of necessity, sophisticated platforms mounting complex weapons systems. They are therefore expensive, and we must plan to build and acquire them only in the numbers sufficient to provide high-capability fleet assets for employment in the projection and high-threat sea

control mission areas. Their counterparts, for less demanding but no less essential sea control missions, can be less complex and less sophisticated and thus less expensive on a unit cost basis.

We are building, and we plan to continue to build, the larger, more costly ships at a rate which will sustain our capabilities in their mission areas. However, we have a pressing need at this time for numbers of these capable but less expensive ships to replace obsolete World War II ships that have been or are being retired from service.

PATROL FRIGATE

The principle program designed to accomplish this replacement is the patrol frigate. We plan to acquire at least 56 of these ships, through fiscal year 1980. When these ships are added to existing surface combatant assets, the Navy will begin to approach its minimum force level requirements for surface combatants.

The patrol frigate will be fitted with weapons allowing it to counter missile, Aircraft, submarine and surface threats, including the offensive long-range anti-surface ship missile, Harpoon.

PF average follow ship costs

	Millions
Original CNO goal (stated in fiscal year 1973 dollars)	(1)
Development estimate	$45.7
Characteristics and Navy program changes such as: 4th generator and design MOD revised ordnance	+2.8
Navy estimate for fiscal year 1976 budget	48.5
OSD directed inclusion of CIWS in fiscal year 1976 and later	+2.6
Current status (fiscal year 1973 dollars)	51.1
Escalation and inflation	60.0
Outfitting/post delivery	+8.4
Average follow ship (then year dollars)	120.1
Lead ship and R. & D. brings to	122.0

[1] Less than $50 million per follow ship.

The unit cost of the ship in terms of its original configuration and originally stated price, in fiscal year 1973 constant dollars, is still very close to the original target estimate of $50 million per follow ship, and it is this rigidly maintained constraint which will permit the Navy to build and employ it in sufficient numbers. OSD has recently directed that we budget for the installation of a close in weapons system that we originally had as a space and weight item until a proven system was available. This has increased the basic unit cost to $51.1M in FY 1973 dollars.

Last year's congressional budget actions directed a reduction from 7 to 3 patrol frigates and this number was authorized and funded in the fiscal year 1975 program. The stated basis for the reduction was a congressional concern over the projected effectiveness of the ship's MK 92 missile and gun fire control system.

The tests of this system are going extremely well and the first standard missile fired from the MK 92 resulted in a direct hit on an incoming high speed aerial drone target. The system with the 76 MM gun is also proving to be effective against surface and shore targets and a high speed aerial drone target was destroyed by this gun controlled by the MK 92. Thus, the fire control system is living up to the predicted performance. As required, we will submit a report to Congress on the completion of system testing, however, we consider that the results to date fully support going ahead with the patrol frigate program.

SURFACE COMBATANTS

[In millions of dollars]

Patrol frigate (PF)	Fiscal year— 1976	197T
Number of ships	10	0
Ship costs	$955.5	0
Total request[1]	955.5	0

[1] No advance procurement.

For the 10 ships in the fiscal year 1976 program we are requesting $955.5M. No funding or authorization is requested for the transition period.

PATROL HYDROFOIL GUIDED MISSILE SHIP

Another important element of the surface combatant force now under procurement is the anti-shipping missile equipped patrol hydrofoil (PHM). This small, high speed, heavily armed ship is designed to operate offensively in coastal and "choke point" areas against much larger surface combatants and other surface shipping. Each PHM will mount eight Harpoon anti-shipping missiles and will thus constitute a major threat to an enemy surface task force, thereby freeing up larger more complex surface combatant assets for open ocean and other tasks.

PHM average follow ship costs

	Millions
28 ship program:	
Original 1972 DCP goal (fiscal year 1974 dollars)	$18.0
Estimate changes	+7.6
Higher inflation and escalation	+21.5
Current estimate of that program	[1] 47.1
23 ship program:	
Start-up costs	1.7
Outfitting and post delivery	2.0
FCC	.1
Procurement unit cost	[2] 51.2

[1] If fiscal year 1972 SCN applied, $47.4 million.
[2] If R. & D. program added, $52.4 million.

The two lead ships in the PHM program were funded in the Navy RDT&E appropriation in fiscal year 1973, and the contract for their construction was awarded to Boeing Aircraft in February 1973. As you have been informed, initial design and production problems, including technical difficulties in aluminum and stainless welding processes, caused significant initial program delays. We have now overcome most of these problems, and PHM–1 was launched on November 9, 1974, and has started its initial underway tests at the Boeing facility in Seattle, Washington.

Severe economic escalation and cost growth in the lead ship program, caused primarily by a gross underestimate by the contractor and the Navy of the number of man-hours required for fabrication, has necessitated suspension of construction of PHM–2. Since this delay negated its usefulness as an element of the PHM test program, we are not planning to resume its construction. We will use available structural material and equipment in support of the PHM–1 test program and, wherever possible, in the follow-on construction program.

SURFACE COMBATANTS

[In millions of dollars]

	Fiscal year—	
Patrol hydrofoil guided missile ship (PHM)	1976	197T
Number of ships	2	0
Ship costs	$83.4	0
Less advance funding from prior years	0	0
Net	83.4	0
Plus advance procurement for future years	0	+$24.2
Total request	83.4	24.2

Because of the cost growth and escalation problems in the PHM R.D.T. & E. program, we have restructured the planned production and acquisition schedules. We now plan to combine, in a single production order. The four ships authorized and funded in fiscal year 1975 with the austere two-ship fiscal year 1976 request. Funding requested for these two ships is $83.4 million. Also included, in the fiscal year 1976 cost growth line item, are funds for hard production tooling to

support a fabrication schedule of 12 PHM's per year, to provide for economical production for the United States and NATO navies. Funding for hard tooling, amortized over the first few ships in the program, will not only keep our options open with regard to follow-on procurement, but will also reemphasize to NATO our commitment to on-going PHM acquisition. For the transition budget we are requesting $24.2 million for needed long-lead time items.

Support Ships

The Navy's support ships provide essential logistics and maintenance support to combatant forces. These ships enable the fleet to extend its areas of operations throughout the oceans of the world and to sustain their operations on a continuous basis.

Several classes of our support ships are overage and badly in need of modernization through replacement. Foremost amongst these are the destroyer tenders, the fleet oilers and the fleet tugs.

SUPPORT SHIPS

[In millions of dollars]

	Fiscal year—			
	1976		197T	
	Number	Ship costs	Number	Ship costs
Destroyer tender (AD)	2	$393.2	0	0
Fleet oiler (AO)	2	231.8	0	0
Fleet tug (T-AF) civilian manned	3	41.4	0	0
Total request	7	666.4	0	

Destroyer Tenders

There are currently 9 destroyer tenders in the active fleet. These ships will have an average age of 26 years at the end of this fiscal year and 5 are over 31 years of age. These older ships do not have adequate service or shop facilities to tend modern destroyers and frigates. They have no capability to support nuclear powered surface combatants nor the large number of gas turbine powered ships soon to enter the fleet. Their hulls and propulsion plants are beyond the point of economical repair or upgrading, and their replacement is long overdue.

Congress has recognized this need and authorized two new destroyer tenders, one in the fiscal year 1973 program and another last year. The fiscal year 1973 ship was cancelled by the Congress, at the request of the Navy, to provide additional funding for the then higher priority FY 72 and FY 73 submarine tenders. The cancellation was, in the words of the House Appropriations Committee Conference Report, "without prejudice to the requirement for the destroyer tender," and provided for rebudgeting of the tender in the FY 1976 shipbuilding program if the Navy so desired. Because we had already planned for a destroyer tender in fiscal year 1976, we are now requesting a total of two destroyer tenders in this year's budget. Funding for these tenders amounts to $393.2M.

The Navy expects to award the contract for the fiscal year 1975 tender by June 1975, and the contract will provide for options on the two fiscal year 1976 ships. This procedure will enhance the overall attractiveness of the construction package and will allow us to proceed expeditiously with the overdue modernization program for destroyer tenders.

Fleet Oilers

Another type of support ship that is critically overage, as a group, is the fleet oiler. At the end of fiscal year 1975 we will have 13 oilers in the active fleet. Additionally, the Navy will have 5 civilian-manned ex-fleet oilers operating under the military sealift command. The average age of these 18 ships is approaching 27 years. Except for six oilers of the Neosho class, commissioned in the 1955–1956 time frame, the rest are limited capability, slow, World War II built ships.

Last year the Navy presented a request for a lead fleet oiler. This ship was disapproved "without prejudice until the Navy has determined the extent of interest by the shipbuilding industry in building this ship and at what cost."

The Navy has ascertained that there is considerable industry interest in this program. Five shipbuilders responded affirmatively to an August 1974 preliminary letter of inquiry. We are confident that the FY 1976 budget request for two fleet oilers at a total cost of $231.8M will allow timely award of construction contract(s).

Last year there was apparent confusion between the need for these fleet oilers and nine tankers being procured for the military sealift command under build and charter action. The build and charter tankers are required for point-to-point transport of DOD fuels, e.g., from refineries to these commercially configured tankers, as distinguished from fleet oilers, are not equipped with alongside underway replenishment at sea equipment which is mandatory to the fleet oiler mission's of at-sea refueling of combatant forces. Furthermore, the build and charter tankers do not have the speed, accommodations, aviation facilities or crew accommodations necessary to accomplish the fleet oiler mission. The fleet oiler program fills an urgent and different requirement—that of providing a modern replacement for our existing but overage fleet oilers.

Fleet Tugs

Fleet tugs comprise another support ship category in urgent need of modernization. By the end of this fiscal year the Navy will be operating 18 fleet tugs and the military sealift command another 4. The average age of these ships is over 30 years. Until last year, the Navy had not procured a new fleet tug since World War II.

Last year Congress approved a lead ship of a commercial design which will operate with a civilian crew under the auspices of the military sealift command. The fiscal year 1976 request for 3 ships continues the program initiated last year. Funding requested for these three ships is $41.4M.

MISCELLANEOUS

[In millions of dollars]

	Fiscal year—	
	1976	197T
Pollution abatement craft	$11.5	0
Service craft	1.4	0
Outfitting	38.2	$8.0
Post delivery	19.7	0
Total request	70.8	8.0

Miscellaneous

In addition to the ships for which authorization and funding are requested the Navy budget contains requests for funds needed for the outfitting of new ships, for post delivery correction of deficiencies and for service craft and pollution abatement craft.

For fiscal year 1976 the Navy is requesting $11.5M for pollution abatement craft. This is the final of three procurement increments of these craft the first two increments of which were approved in fiscal year 1974 and 1975.

The service craft request for fiscal year 1976 is $1.4M and will procure several needed covered lighters (YFN's) for yard and base service.

For the outfitting of new ships the Navy is requesting $38.2M in fiscal year 1976 and $8.0M in fiscal year 197T.

For the post delivery correction of construction and acceptance trial deficiencies the Navy is requesting $19.7M in fiscal year 1976.

There is one very significant point that is critical to the success of the Navy's modernization program as contained in the budget request I've just discussed. We must have continuity in those programs upon which we have spent so much time and effort in bringing along to this budget and upon which we are depending for the revitalization of our fleet strength.

These ships, like the patrol frigate and the patrol hydrofoil have taken several years to develop and are now ready for production in the quantities we must have to reach our force level requirements. Disruptions, or cancellations would seriously impair any hope of improving future fleet numerical strength, would in-

crease the degree and the period of risk we undertook when we reduced our fleet to fund this modernization and will inevitably cause higher modernization costs in the years ahead.

Similarly, the programs I have mentioned which are designed to modernize our aging auxiliaries must be carried out so that our fleet will be ready and able to operate freely and continuously upon the oceans.

The Navy budget request has set forth a balanced and comprehensive program for the modernization of the Navy. It capitalizes upon and maintains continuity with the effort already spent in ship program development. Continuation of this effort is vital if we are to rebuild the Navy to meet the threat and tasks before us.

SUMMARY STATEMENT OF ADMIRAL PRICE

Admiral PRICE. I am Vice Admiral Price, Deputy Chief of Naval Operations for Surface Warfare. I am appearing before this committee in support of the fiscal year 1976 and the fiscal year 1977 budget requests for the shipbuilding and conversion, Navy (SCN) appropriation.

SHIPBUILDING AND CONVERSION NAVY (SCN)—FISCAL YEAR 1976 AND FISCAL YEAR 197T

FACTORS CONCERNING NAVAL POSTURE

You have already discussed with the Secretary of the Navy and the Chief of Naval Operations the current status of the Navy and our urgent need to modernize and rebuild the fleet. However, before proceeding with a detailed discussion of this year's shipbuilding request, I believe it important to consider several factors concerning our naval posture.

In our early days, we relied on the Navy to keep enemies from our shores, and the expanse of the oceans made it possible for the Navy to keep us separated from many of the world's conflicts. However, time and technology have robbed us of the comfort of security through isolation.

Where in the past we could rely on a relatively small force that could be expanded in times of crises, the rapid pace of world events and the terrible cost of modern war require that we maintain armed forces in being that are fully capable of preventing war and containing crises that threaten our vital interests. These same forces must, of course, be capable of defeating an enemy if a conflict occurs. The pace of future conflicts and the length of time needed to build modern naval forces highlight the fact that we must have the ability to counter an enemy with the naval forces in being. Time no longer works in our favor.

The fleet strength this country must maintain to insure that the Navy has the ability to carry out assigned national taskings is a determination critical to our survival.

Clearly, no nation can maintain naval forces that are adequate to cover every foreseeable contingency or combination of contingencies. Forces to be maintained therefore are sized on the basis of the most likely contingencies and the degrees of risk which can be accepted in meeting them.

World events, revised national policies and changes in the threat posed by our potential adversaries all require continued assessment of force requirements.

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FORCE LEVEL OBJECTIVE—A BALANCED FLEET OF ABOUT 600 SHIPS

NEED FOR A BALANCED FLEET

Currently, the Navy is working to obtain a balanced fleet of about 600 ships. This number is far short of the over 900 ships that we had in 1969.

While we strive to maintain an adequate number of ships, numbers are not the only factor. Our newer ships are far more capable than the older ships they replace and we need not plan a one-for-one replacement. Also, we must consider the capabilities of our prospective opponents and the form that future crisis or conflicts might assume as well as the fiscal facts of life posed by our economy.

Over the past years the Navy has not been able, due to the requirements of Vietnam and fiscal and other factors, to build the number of ships needed to replace our aging and obsolete World War II ships. We therefore made the decision to somewhat early decommission our older, obsolete units which were becoming expensive to operate and use the funds saved to build a modern capable fleet.

CURRENT ACTIVE FORCE LEVEL STATUS

1 MARCH 1975	500 SHIPS
END FY 1975 (30 JUNE 1975)	497 SHIPS
END FY 1976 (30 JUNE 1976)	490 SHIPS

ACTIVE FORCE LEVELS

As a result, we only have about 500 active ships in commission today. While this course posed considerable risk, it was the only option if we were to have an effective Navy in the 1980's. We require a higher rate of construction than we have received between fiscal year 1968 and fiscal year 1974.

RUSSIAN FLEET

Senator PASTORE. Do we have any figures to the number of ships the Russians have?

Admiral PRICE. The number, sir, if we take the total number of ships they have, is approximately 2,500, but a large portion of these are the smaller ships. They have approximately 600 regular ships of the larger types that we consider.

Senator PASTORE. This may sound a little fantastic, but at one time someone made a suggestion, that indicated a concern with reference to these gigantic fishing boats that the Russians have, placed only 100 miles away from our shores, [deleted].

Admiral PRICE. They have a great advantage over us, Mr. Chairman, in that all of the ships, including their merchant ships and their fishing ships, operate under national control so that we not only in time of war have to worry about their navy but prior to the commencement of war, you also have the tremendous number of merchant ships and fishermen which will carry out any national task which the Russians may assign them. This is a considerably different situation than that we have.

Senator PASTORE. With reference to our intelligence, I wonder if we keep a watch on this.

Admiral PRICE. I am sure we do, sir. [Deleted.]

Senator YOUNG. After these hearings and others to justify the budget you will read all about our Navy in the papers.

Admiral PRICE. They will have a pretty good idea what we are doing.

Senator YOUNG. These ships are very large fishing ships. I was wondering if they do have an intelligence capability and whether our planes are flying over them to find out.

Admiral PRICE. [Deleted.]

Senator YOUNG. This is a case where intelligence is very important to know what they are doing.

Senator INOUYE. If they are not doing it they are very foolish.

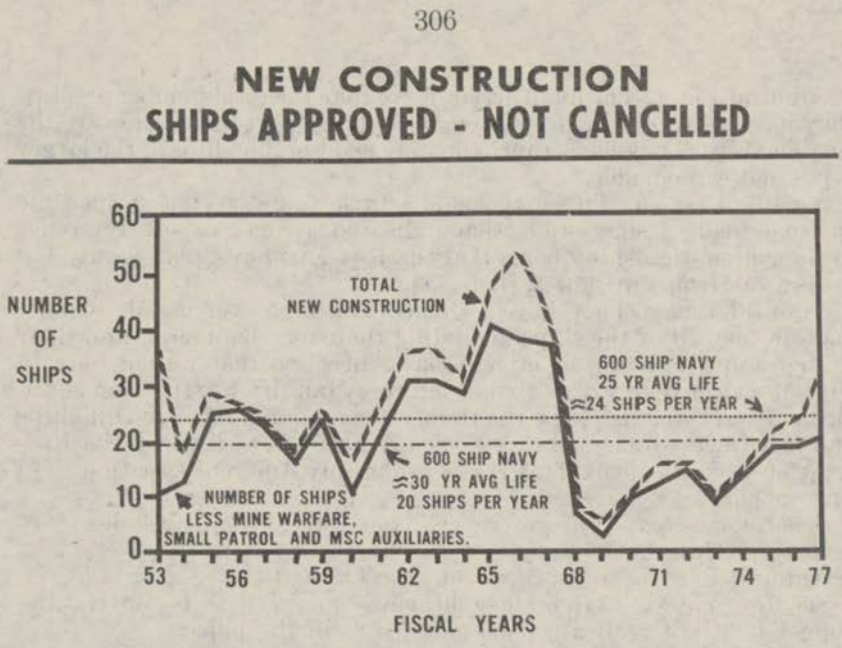
Admiral PRICE. And they are not foolish.

Navy shipbuilding 1968–75—New fleet ships, net construction program

Fiscal year:	Ships
1968	7
1969	5
1970	10
1971	15
1972	15
1973	8
1974	14
1975	22
Shipbuilding average, 1968–75	12

NEW CONSTRUCTION REQUIREMENTS

The Navy program last year called for 30 new fleet ships and Congress approved 22. That number more nearly approaches the rate we must have to maintain the fleet. The fiscal year 1976 request is for 23 new ships. No ship authorizations are being requested for fiscal year 197T.



NEW SHIP CONSTRUCTION

To maintain these we need about 24 ships a year just to maintain that number. Then, of course, we feel it is necessary to build from 500 to the 600-ship level, so we need more than that if we are going to build our fleet up to 600 ships.

Senator INOUYE. How has the Congress treated you in that regard?

Admiral PRICE. Well, generally, sir, the Congress has been very good about appropriating the ships we have asked for except as I mentioned last year, when we asked for 30 new ships and they appropriated 22. But generally we have gotten most of the ships we have asked for. It is the previous requirements to use funding for the Vietnam war and things of this nature which has prevented us from asking for the rate which we really feel is necessary.

Senator PASTORE. We need to maintain a reasonable level, and there ought to be a steady, gradual increment. But isn't there an old saying that once that ship comes down the runway, it is obsolete?

SHIPBUILDING CONSIDERATIONS

Admiral PRICE. No, sir. We have two things which we have to consider. One is that it takes 5 years, or 6, or 7 years from the time we start planning for it until the first one is delivered, we obviously can't put weapons on it that are only in the conceptual stage. We have to use weapons which we have in hand. So there is some chance that there will be some weapons which aren't the best that we would like to have when the ship is delivered.

Over the ship's life, from 25 to 30 years, we modernize that ship several times and take off obsolete weapons and put on it newer weapons as they come along. So we try not only to build the best ship we can,

but then through periodic updates to make sure that it stays effective.

Senator PASTORE. You are talking about equipment. But isn't it a fact that the ship you build today is a lot better than the one you built 5 years ago?

Admiral PRICE. Yes, sir. The weapons systems today are much better than what we were delivering then.

Senator PASTORE. So I think it ought to be gradual, and I think it ought to be steady, and I don't think you ought to do it all at one time. That is the point I am making, because otherwise you will have an obsolete fleet by the time you utilize it.

Admiral PRICE. We agree with that, completely, Mr. Chairman, but if you notice the ups and downs in authorizations and funding we have had over the past years it is virtually impossible to maintain that steady level which we think we need.

Senator PASTORE. The best example I can give you is the one I have already pointed out about the new *Nimitz* aircraft carrier.

Senator INOUYE. That chart is in terms of numbers, isn't it?

Admiral PRICE. Yes, sir.

REAL BUYING POWER

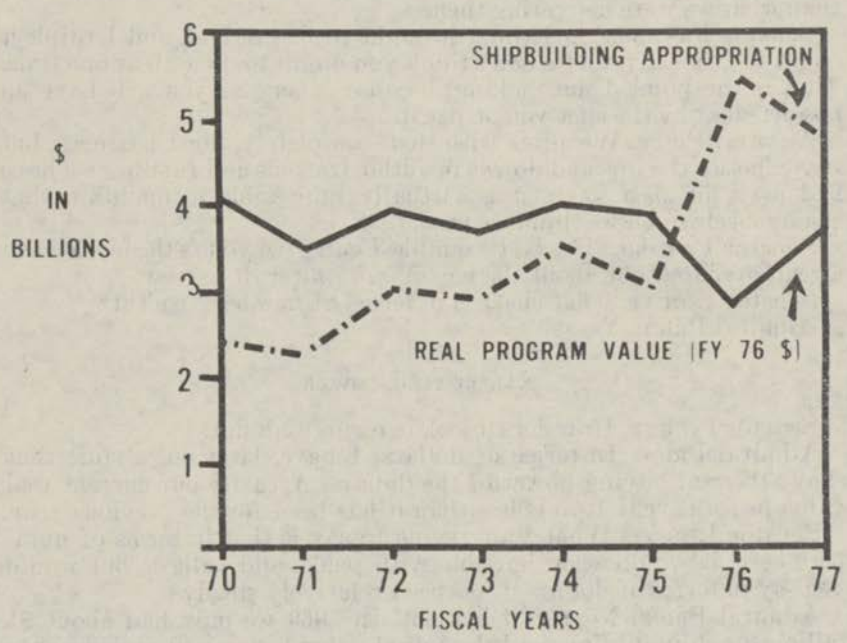
Senator INOUYE. How does it look in terms of dollars?

Admiral PRICE. In terms of dollars, I have, later on, a slide that shows the real buying power of the dollars. Actually our current real value in fiscal year 1976 is less than it has been for the previous year.

Senator INOUYE. What I am trying to say is that in terms of numbers here, it would seem horrible with peaks and valleys, but would you say in terms of dollars it has been relatively steady?

Admiral PRICE. No, sir, it has not. In 1969 we only had about $1 billion for shipbuilding, and the actual value has varied considerably from year to year.

NAVY SHIPBUILDING REAL PROGRAM VALUE



DOLLAR VALUES IN SHIPBUILDING

Admiral PRICE. I think this one will show you, sir, just since 1970, the broken line shows the shipbuilding appropriation dollars, and the solid line shows the real program value dollars in 1976 dollars. That is on the basis of what the dollar is worth today.

As I say, in 1969 it dropped away down.

Senator PASTORE. Had you been given the 30 ships as requested, how much money would we have saved?

Admiral PRICE. We would have saved, and I will get an exact answer for the record, sir, but in the PF program alone we stated it would be about $85.1 million more expensive because we lost the four ships and therefore had to expand the program. I will get that and put it in the record.

Senator PASTORE. I wish you would.

[The information follows:]

COST OF DEFERRED PROCUREMENT

Eight ships requested in the President's fiscal year 1975 budget were not funded by the Congress. These were 1 Sea Control Ship, 4 Patrol Frigates, 1 Fleet Oiler and 2 Patrol Gunboats. Of these ships all but the two Patrol Gunboats were for service with the Active Fleet of the U.S. Navy. The Patrol Gunboats were in-

tended for MAP transfer to the Republic of Vietnam. All of the six U.S. Navy ships disapproved are still required and will have to be purchased later at higher prices.

As I've mentioned, the deferral of four Patrol Frigates to a later procurement year has been estimated to add $85 million to the cost of the program. The deferred lead Fleet Oiler is approximately 15 million. The disapproval of the Sea Control Ship has, because of both the deferral and the Congressional direction to study a more capable ship, added significant cost to the Navy's requirement for sea based air platforms. The exact magnitude is uncertain at this time because of the early status of the redesign effort.

From the foregoing it can be seen that ship deferrals during a highly inflationary economy add significantly to the procurement costs of ships.

IMPACT OF INFLATION

Admiral PRICE. Today we see our planned fleet modernization program in jeopardy.

INFLATION, ECONOMIC CONDITIONS AND OTHER FACTORS

Caused $2269.3M in deficits on prior year programs.
Increased future ship costs.
Necessitates budgeting of sizable reserves for possible future inflation.
Jeopardizes fleet modernization effort.

The recent abnormal inflation has, because of the long lead and construction times involved, impacted most severely on Navy shipbuilding. This inflation has caused problems that have already been authorized and funded to be in deficit and in need of additional funding.

The costs of ongoing Navy shipbuilding programs, which were approved in prior years, were budgeted long before today's high level of inflation was evident. There was no way that the high upward excursions of the economy that we have experienced could have been predicted.

All our costs estimates for shipbuilding programs have contained allowances for the inflation which takes place between the time the estimates are made and the time the ship is awarded. The estimate of inflation used over the past few years was 7 percent per year. Inflation in the shipbuilding sector as measured by the Bureau of Labor Statistics has been much higher, and in fiscal year 1974 it had a composite rate of almost 16 percent.

Senator INOUYE. Could I ask a question there? How do they explain this extraordinary rise of 16 percent?

Admiral PRICE. It has come about primarily because of the increased prices of everything that we use in the ship, the steel prices have gone up about 70 percent.

Senator INOUYE. Is that 70 percent?

Admiral PRICE. Yes, sir. Labor costs have gone up, and the cost of manufactured articles like pumps and weapons systems have all been subject to this rapid inflation in the economy. Those are the things which have driven our costs up, especially in the past year.

Senator INOUYE. That is 70 percent for steel?

Senator YOUNG. Have steel prices gone up that much in Japan?

Admiral GOODING. Yes, sir. The thing that has driven it up is the cost of coking and the gas.

Admiral PRICE. Ship cost estimates also contain a reserve for the economic inflation which takes place during the construction period of a ship. This latter reserve is known as "shipbuilder escalation" or "contract escalation." Through fiscal year 1975, the Navy, in accordance with OSD and OMB policy, budgeted this contract provision on the basis of a composite future inflation rate of 4.25 percent per year throughout the building period of a ship. This rate has also proven inadequate. Fiscal year 1975 estimates, for example, project an inflation rate of at least 11.5 percent. Fiscal year 1975 and prior year shipbuilding programs:

Deficits on prior year programs

	Millions
Fiscal year 1974 and prior	$1,348.3
Fiscal year 1975	921.0
Total	2,269.3
Budget line item identification (P1):	
"Cost growth on prior year programs"	1,119.5
"Escalation on prior year programs"	1,149.8
Total	2,269.3

NOTE: Cost Growth resulting from inflation, claims, estimating errors and various economic factors.

PRIOR YEAR DEFICITS

As a result, the fiscal year 1974 and prior year shipbuilding programs are in deficit by some $1.35 billion. The fiscal year 1975 shipbuilding programs, just approved by the Congress, is now in deficit by $921 million. Although some of the total SCN deficit resulted from Navy-directed characteristic or performance changes, estimating errors and less-than-optimum contractor performance, the greatest part of the deficit resulted from unforeseeable-inflation factors.

Senator PASTORE. What do we do in a case like that? That would bankrupt a shipbuilding company, if they undertook a contract at this stage. Or is there a clause in the contract that compensates them for that?

Admiral PRICE. We have clauses for that. There is a clause in all shipbuilding contracts that is called the "contract escalation clause" in which we and the shipbuilder both agree on curves which specify how much and at what rate we will expend both material and labor.

We establish a base from the Bureau of Labor Statistics indexes for shipbuilding labor and material. Then, as the indexes go up, we pay them for the difference based on those curves and the amount of increase in the Bureau of Labor Statistics indexes.

However, there are shipbuilders, as an example, who see higher rates in their own yard than the composite 18-year average which is used in the indexes. There are also an awful lot of materials which aren't covered in the shipbuilding material index as an example. The shipbuilder has to accommodate them in his original bid in order for us to pay for increases above those which we actually are allowed by the contract to pay him.

Admiral GOODING. One point might be made. It is unfortunate to ask the shipbuilder to estimate the cost for 5 years. We agree in the contract that the Navy will pay outside the contract solely on the performance of the Bureau of Labor index, and in time of a stable economy that has proved quite equitable, and the shipbuilders were quite satisfied with it. In today's economy it would be unconscionable to put that risk on the shipbuilder. He wouldn't sign the contract in the first place. He couldn't afford to. So we are going to have to pay, under the contract escalation clause, far greater than we anticipated and put it in the budget.

Admiral PRICE. That is where the inflation has gone up and the predicted escalation over the building period of the ship is higher than we had originally estimated. Those are the primary things which cause our deficit.

Senator PASTORE. How far do we go in measuring the competence of the company before we begin giving him all the money he is asking for? Do we make quite an accounting and an examination, or what do we do really?

Admiral GOODING. That is a difficult question. Before we award any contract of any size we do make a pre-award survey of the contractor and we assess his responsibility and his ability to complete the contract.

You asked me how do we assess the competence of a shipyard, and I am distressed to have to tell you there is no single way to measure that. We don't know how to do it.

An experienced shipyard man can walk through a shipyard and in 2 hours tell you that this is a very productive shipyard, or people are loafing too much.

We have been unable—and we have been trying for years—to come up with a measurement of productivity, competence, or what have you, whatever you would like to call it. It is very subjective.

Senator PASTORE. I can understand that, but when we run into these dificits of billions of dollars, it is affecting every home in America. It is not peculiar to the Defense Department. As you say, no one ever perceived the increment of the increase in the energy field, which, as you pointed out, accounts in large measure for the 70 percent of the increase in steel.

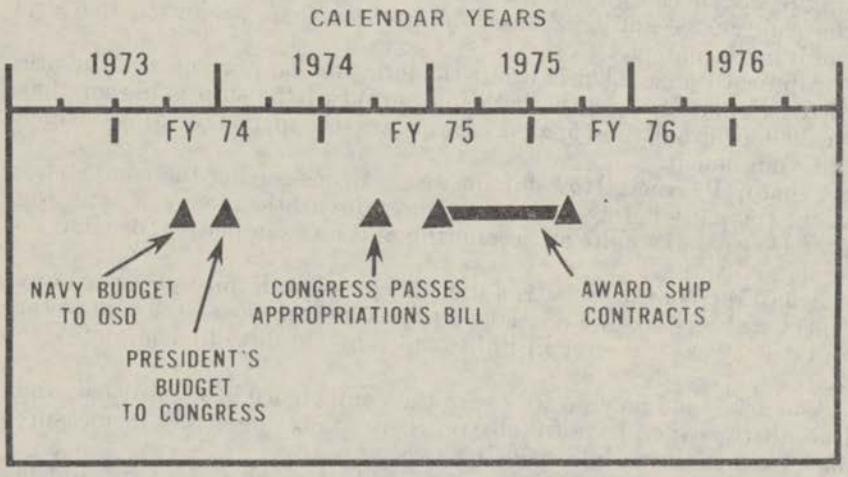
But it does raise a serious problem because, on one hand we ask for constraint in the budget. Money is scarce, and we are going to run up a deficit of at least $52 billion under this budget. God only knows what it might end up being.

I talked to Admiral Kidd one time about this very problem. He pointed out to me that certain companies were willing to give it up and say, "We will go bankrupt rather than go through with the rest of the program." What are you going to do in a case like that?

I think the people of the country ought to at least be assured that what you are requesting for these companies is legitimate, and they are entitled to it.

Senator INOUYE. The process that led up to the budget estimate before us began 6 months ago.

TIME RELATIONSHIP OF SHIP COST ESTIMATE

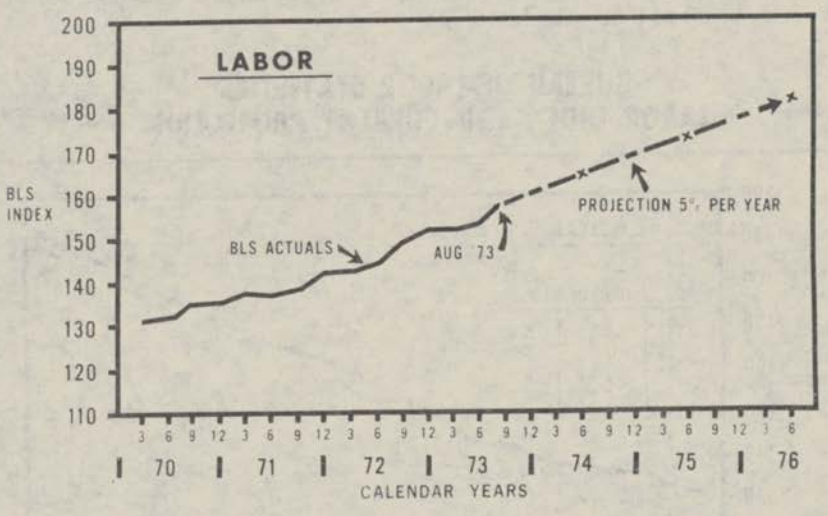


PROBLEMS IN COST ESTIMATES

Admiral PRICE. No, sir. Actually let us go back to the 1975 budget which we are in deficit now on about $900-plus million. That budget was submitted to OSD in November of 1973. This is the fiscal year 1975 budget. This will show you the President's budget went to the Congress in January of 1974. Up to that point our indexes looked like they were tracking pretty well. What we were using appeared to be pretty reasonable.

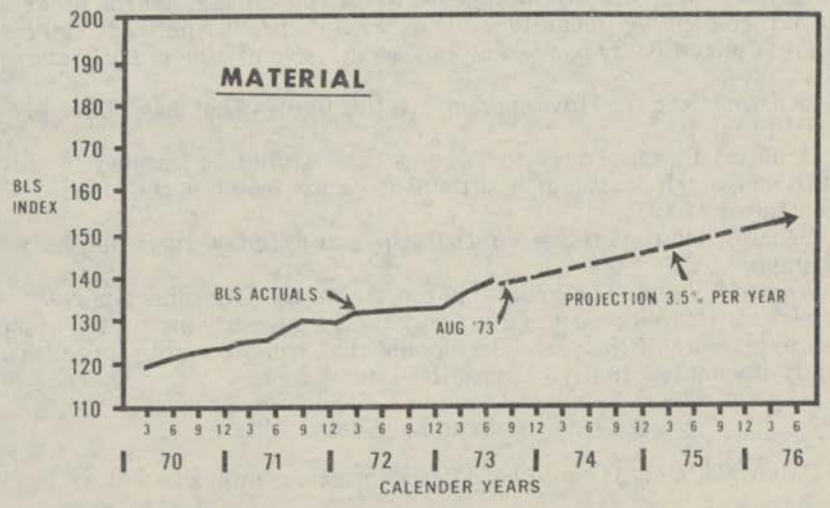
Congress passed the appropriation bill, as you can see, about October, and we would normally let our contracts for those ships some time in the latter part of fiscal year 1975, maybe very early 1976, depending on the program. It takes us that long to negotiate some of the complex contracts and get them let.

BUREAU OF LABOR STATISTICS
LABOR INDEX VS DIRECTED PROJECTION



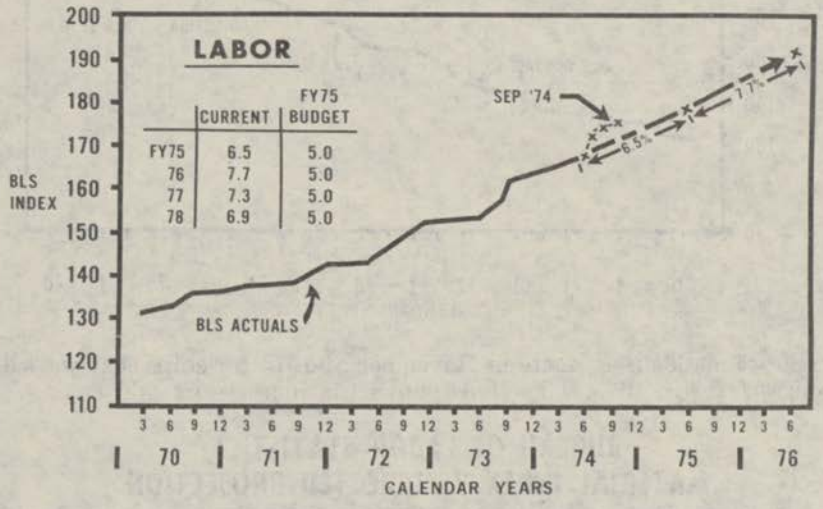
So we made an estimate in November of 1973 for ships that we will contract for in 1975. This chart shows the increase in indexes.

BUREAU OF LABOR STATISTICS
MATERIAL INDEX VS DIRECTED PROJECTION



For example, here was our prediction at the time we submitted the budget, and it looked like our 5 percent per year for labor was going to be pretty near right. Remember, our labor indexes actually lag anywhere from 3 to 6 months later in being published, so our latest data can be up to 6 months late.

BUREAU OF LABOR STATISTICS
LABOR INDEX AND CURRENT PROJECTION



If you look at what has happened to us, you can see that the indexes have increased significantly, and we are now predicting what you see there of about 6.9 percent. You can see it is even rising slightly above that.

Senator INOUYE. How current are the figures that have been presented to us?

Admiral PRICE. Today the figures that we have presented in this 1976 budget, sir, with our best predictions are based on the indexes of September of 1974.

Senator INOUYE. Between that time and today there might be changes.

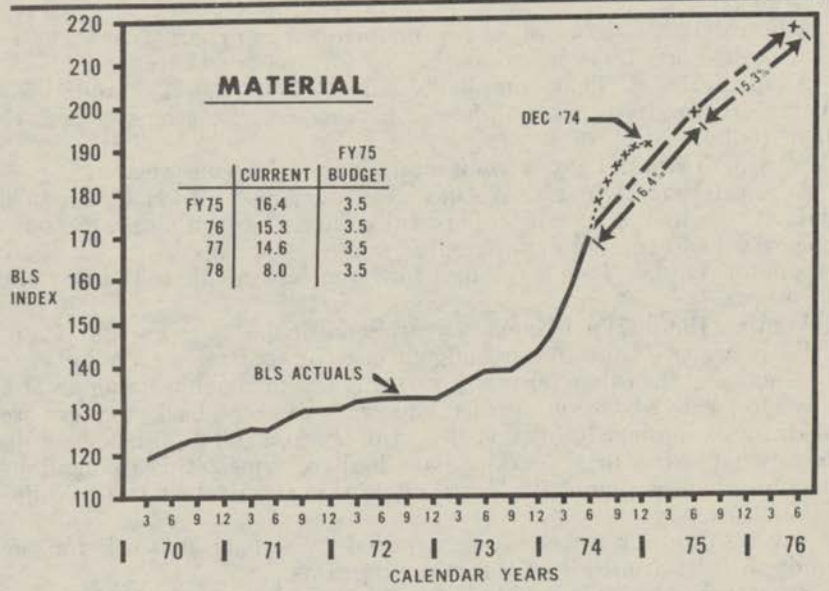
Admiral PRICE. The green line represents the December figures.

Senator PASTORE. So it is fair to say these figures are predicated upon our experience of the past. The amount that you are asking for will be short of what it actually will cost the country?

MATERIALS INDEX

Admiral PRICE. It could be. This is a good example of what we face.

BUREAU OF LABOR STATISTICS
MATERIAL INDEX AND CURRENT PROJECTION



This is the one for material, and you see in December of 1974 that it has begun to level off slightly. Whether that is a perturbation in the curve, or a real trend, we don't know. We might be asking for too much money if it leveled off. But if it goes on up you are absolutely correct, Mr. Chairman.

Senator PASTORE. In other words, in this budget you have taken into account the experience of the past in determining how much money you want.

Admiral PRICE. And our best estimate of the future.

Senator PASTORE. But you have every confidence that what you have done will be sufficient to carry out your program?

Admiral PRICE. If those inflation trends run as we predict them—but our crystal ball has been pretty poor in the last few years—and it all depends on what the economy does. We have predicted certain indexes for our shipbuilding account. If those indexes are true, if they hold true, then this is a very accurate accounting. If those indexes drop for some reason, then we will have a little bit too much money.

Senator PASTORE. Do the figures you have used represent the calculation at the point of granting the contract?

Admiral PRICE. It goes all the way through to completion, sir. We made the best estimate we can.

Senator PASTORE. If everything goes along in the future as it has in the past, and your index proves correct, you will not be asking Congress for more money to do this job unless something extraordinary happens.

Admiral PRICE. That is correct.

FUNDING FOR INFLATION

Senator YOUNG. How much money is in this budget for inflation in prior years?

Admiral PRICE. $2.3 billion for our prior year programs.

Senator YOUNG. Of the total amount for construction?

Admiral PRICE. That completely funds all of the 1975 and prior year ship programs to completion, using our predictions as we see them today.

Senator YOUNG. That is your total amount for construction?

Admiral PRICE. No, sir. We have just over $5.4 billion in the 1976 budget, of which $2.3 billion is to fully fund the past ships, the ones authorized and funded in past years.

Senator YOUNG. This is the first time you have requested money for prior years?

Admiral PRICE. We do it every year, Senator.

There are two lines in our budgets, one for escalation on prior year contracts and the other for cost growth. If the inflation is going up at a very slow rate above our projections we will come back and say we need, for example, $70 million this year because inflation has gone up some. This is the first year we have had to request this tremendous amount which is primarily the result of this tremendous rise in inflation in the last year.

But we do, each year, where required come back and ask for the funds to fully fund all of the past programs.

Senator YOUNG. This money is only retroactive for 1 year?

Admiral PRICE. No, sir. This will be for all of the ships which are still under construction and some of them, sir, for example, the *Nimitz*, go back to 1968.

Senator YOUNG. You do this for every year.

Admiral PRICE. We do, but all of the money we have asked for is not sufficient to keep the ships fully funded. As I've mentioned we have asked for moneys in past years for ships we are also asking for this year. The difference is that, under the full-funding concept, we have to ask for the total amount as we see it now for ships still under construction to fully fund that ship. As escalation and inflation rates increase, we need more money for each program to be fully funded.

Senator PASTORE. Let us consider the aircraft carrier *Nimitz*. We will assume that ship was to cost $1 billion, and the first request was for a quarter of a billion dollars. Now you come before the Congress in your fiscal 1975, which was last year's budget, and you ask for another quarter of a billion dollars. We give you $250 million, but by the time you get through with this third quarter of the building of the *Nimitz*, you find that it actually costs $300 million because of what has happened. When you come in in 1976 and ask for your budget, you not only ask for the $300 million which is predicated upon the indexes, but you ask for another $50 million to make up for the shortfall the previous year.

Admiral PRICE. That is not exactly correct. When we came in for the *Nimitz* first time we asked for the full estimated price of the ship, over the total program. We came in and we said that the price was estimated to be $427 million, under the then prices, and the then inflation that we saw. That was what we anticipated would be needed to

fully fund that ship. But it is now going to cost us $667 million. Over the years in between, since the time you first appropriated money for the ship and when inflation started going up, we came back and said we need another $30 million, for example, to fully fund that ship and Congress would then sometimes say, "Well, how much of that will you expend this year?", and if we said "half of that" to cover the inflation this year, generally, Congress has appropriated what we require for obligation.

Senator PASTORE. The Congress does ask you what you need for that 1 year to cover the shortfall?

Admiral PRICE. That has been the way it has run.

Senator PASTORE. You don't get the $30 million?

Admiral PRICE. That is the way it has generally run.

Senator PASTORE. So that anticipates the next time if it remains the same as you predicted, you would get another $15 million.

Admiral PRICE. Or if inflation has gone up at a higher rate than when we originally budgeted that ship in 1967, we may need more than the $15 million. We may need another 30 million, or whatever it may be.

Senator PASTORE. And if by some miracle the cost came down, then of course you wouldn't ask for the money?

Admiral PRICE. That is correct. But actually, Mr. Chairman, up until about 1962 or 1963, we had about $1 billion in excess in the shipbuilding account. In other words, the inflation and escalation rates we had been predicting were higher than we actually experienced, and we had built up a reserve that was subsequently used for the other things at the direction of Congress.

CONTRACT ESCALATION

Admiral GOODING. The escalation we are discussing, that is money that we owe the contractor under the terms of the contract. It does not represent mismanagement on his part, and it does not represent an overrun. It is an amount of money required by the terms of the contract, under the law.

Senator PASTORE. Yes, but whether he asked for too much or too little within the parameters of the contract depends entirely upon whether or not he has been running a good shop, does it not?

Admiral PRICE. Not completely.

Admiral GOODING. It is a simple formula in the contract.

Admiral PRICE. There are two things. There is a part of this increase we are asking for, and I can give you the exact figure, which is due to just pure calculation of indexes and has nothing to do with his productivity, in essence.

Shipbuilding and conversion, Navy (SCN) Appropriation—fiscal year 1976 request for cost growth and escalation on prior year programs

Causes:	Percent
Contract escalation	51
Program changes	9
Claims	7
Inflation impact on Government furnished equipment (GFE)	8
Economic, estimating inflation and other	25

For example, as you can see on that chart, 51 percent of what we are asking for, prior year programs, of the $2.3 million requested, 51 percent is just pure calculation based on the reported indexes.

Senator PASTORE. But the point I am making is this: They all can't be as productive, and they can't all be as efficient as your index predicts. It is a general formula, but that is all he can get because it is in his contract. What if he is much more behind than the indexes indicate, and he has to absorb it? What happens then if it is a matter of closing down the shop?

Admiral GOODING. We normally in the past have paid escalation for a fixed number of quarters in what we call the building period. Let us say we agree with the contractor that the building period is 14 months. At the end of that agreed upon period, we stop paying escalation—to give you a very concrete example, we stopped escalation to Litton on the LHA program last November, and they have not yet delivered the first ship. Now he is going to complete that ship and he is in an escalated period at his own expense. So it is a very great incentive to do that because once that escalation period is over, we stop payment.

CIVIC PROBLEMS

Senator YOUNG. I have a group of mayors waiting in my office. All of the departments have a problem of explaining this to the budget committees who will put ceilings on their budgets.

Senator PASTORE. They will put an overall ceiling, but they won't break it down in the same way we do, because they won't have hearings. They might limit the Defense Department to $88 billion instead of $92 billion, and they will have to go back to the drawing board, and they will allocate it themselves. They are not going to hear witnesses the way we are hearing witnesses.

Senator YOUNG. They will have to understand why they are asking for more money.

Senator PASTORE. This is right. But I am very happy to see that in asking for the money they take all of this into account. Then, of course, if the formula breaks down because of changes that could not be perceived in advance, they come before the Congress.

But ordinarily, if everything proceeds as planned, then the money they are asking for will do the complete job. But they have fitted it all in.

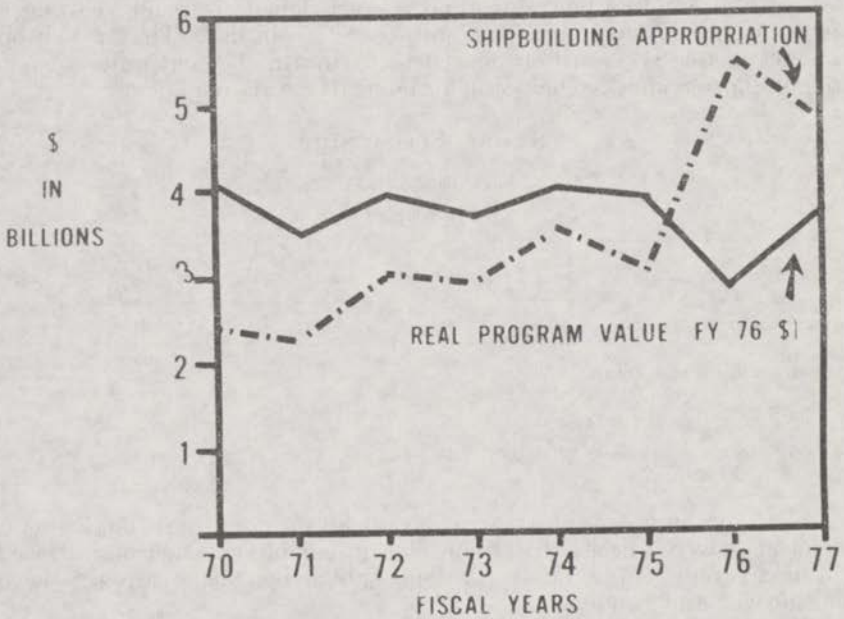
In other words, they have not computed today's cost and stated that it will build the ship. They have estimated the cost that it will be at the time construction is completed, as I understand it.

Senator YOUNG. Don't hold up on account of me, but I think I would rather try to explain this to the Budget Committee than the farmers of my State.

REAL PROGRAM VALUE

Admiral PRICE. I would like to point out that while the $5.45 billion request for shipbuilding in the fiscal year 1976 budget request appears to be a significant increase over past years, it is lower in real value.

NAVY SHIPBUILDING REAL PROGRAM VALUE



This viewgraph shows the annual SCN appropriations for each year since 1970 displayed in constant fiscal year 1976 dollars.

As you can see, 1976 is lower than the previous years due to the inflation impact.

You will note that the 1975 and prior year budgets equal or exceed the real program value of the fiscal year 1976 program. This points out that, while there is an increase in total obligation authority requested in fiscal year 1976, the real value of Navy shipbuilding has not increased but declined. Inflation is a severe impediment to our modernization effort.

Senator PASTORE. The white line on that chart represents the purchasing power of the dollar?

Admiral PRICE. That applies to the number of ships, sir, and the real value of those ships in 1976 dolars that we are asking for authorization this year.

Senator PASTORE. Why is it going up in 1977?

Admiral PRICE. We are asking for more ships, sir.

Senator PASTORE. You don't anticipate that the dollar's value is going up also?

Admiral PRICE. No, sir, we are asking for more ships.

With the general background I will present a brief overview of our budget request for ship construction.

SHIPBUILDING AND CONVERSION, NAVY APPROPRIATION (SCN) BUDGET REQUEST

Fiscal year 1976: $5.446 million—23 new construction ships.
Fiscal year 197T (Transition Budget) $474.2 million—no new ship authorization.

OVERVIEW OF BUDGET REQUEST

As I mentioned, the fiscal year 1976 SCN request is for $5.45 billion which will fund 23 new ships and correct deficits in prior year shipbuilding programs which amount to $2.27 billion. The transition budget is for $474 million needed to maintain the continuity of our ongoing programs. No new ship authorizations are included.

Strike Force Ships

STRIKE FORCES—STRATEGIC

[In millions]

Trident	Fiscal year 1976	Fiscal year 197T
Number of ships	1	0
Ship costs	$641.2	0
Less advance funding from prior years	−81.3	0
Net	559.9	0
Plus advance procurement for future years	+42.7	+$253
Total request	602.6	253

In the strategic warfare area our program continues the Trident, nuclear powered fleet ballistic missile submarine construction initiated in fiscal year 1974. Three Trident submarines have already been authorized and funded.

Trident is needed to maintain the survivability of the sea-based deterrent force. The continued invulnerability of this element of our strategic forces is essential to provide stability by discouraging potential aggressors from a first strike attempt aimed at destroying our retaliatory capability.

Construction funds of $560 million for one Trident submarine, the fourth ship in the class, are requested in the fiscal year 1976 budget.

The Secretary of Defense has slowed the Trident program to three every 2 years from the program presented last year. He indicated that this change was made to reduce fiscal strain on the defense budget and to ease the pressure on the shipbuilder.

In addition to $560 million for construction of the fourth Trident submarine, the fiscal year 1976 budget requests $43 million to provide long leadtime items for the ship planned for fiscal year 1977 and later. $253 million is also requested for the transition period to continue long lead procurements.

STRIKE FORCES

[Dollars in millions]

Nuclear attack submarines (SSN)	Fiscal year 1976	Fiscal year 197T
Number of ships	2	0
Ship costs	$491	0
Less advance funding from prior years	−52	0
Net	439	0
Plus advance procurement for future years	102	$189
Total request	541	189

ATTACK SUBMARINES

Another key element in our fleet is the attack submarine force. The attack submarine program adheres to the five ships every 2 years procurement rate initiated in fiscal year 1975. The submarines will be of the Los Angeles, or SSN 688, Class of which 23 are currently under contract.

For fiscal year 1976 the Navy is requesting $541 million which includes essential long lead items for future SSN's. And authorization for two of these ships. $189 million long lead funding for future nuclear powered submarines is requested in the transition budget.

STRIKE FORCES

[Dollars in millions]

Nuclear guided missile frigate (DLGN)	Fiscal year 1976	Fiscal year 197T
Number of ships	1	0
Ship costs	$368	0
Less advance funding from prior years	−111	0
Net	257	0
Plus advance procurement for future years	0	
Total request	257	0

GUIDED MISSILE FRIGATE (NUCLEAR POWERED)

Nuclear powered aircraft carriers and surface combatants are needed to meet the requirements for all nuclear powered fast reaction task forces. One nuclear powered aircraft carrier is in commission and another three are under construction. Currently, there are five nuclear powered surface combatants in commission with another four under contruction or under contract. More are needed to provide nuclear powered surface combatants to operate with the nuclear powered carriers that are in commission or building. The funding and authorization requested in fiscal year 1976 for the DLGN–42 will provide for another of these versatile and highly capable ships.

NECESSITY OF AIRCRAFT CARRIERS

Senator PASTORE. What do you have to say about the controversy over the essentiality of aircraft carriers. There has been a debate going on for a long, long time.

Admiral PRICE. I think, sir, that our large nuclear aircraft carriers are probably the most essential and invulnerable ships it is possible to build.

Senator PASTORE. Why do you say that?

Admiral PRICE. They are less vulnerable than any ship we have to any type of attack, be it torpedo or missile. However, that is not to say that in any given situation that the enemy couldn't bring enough power to bear that he could overwhelm our defenses. However, we think that is very unlikely given the task force type of operation that we employ and the strength and relative invulnerability of these ships.

Senator PASTORE. Would you say the same if it was caught in the Mediterranean?

Admiral PRICE. Certainly we would expect to take some hits in a surprise attack in the Mediterranean. I don't believe we can say that some of those carriers wouldn't be hit. But I think it would be very unlikely that they would be sunk or put out of commission for the total period.

Senator PASTORE. Because of the protection that goes with it?

Admiral PRICE. Yes, sir, and the ships you operate with them. Its own fighter aircraft—the F–14 with their Phoenixes—the ASW ships and the guided missile frigates that operate with them—when you put all of that together plus the terminal point defense of the carrier against antishipping missiles it is a very tough force to go against.

Senator PASTORE. But if you ever reached that state of criticality—where you are actually in an all-out nuclear war—would you still say that?

Admiral PRICE. I think there would be a high probability that we would be if that happened.

Senator PASTORE. If they began to bomb our aircraft carriers, the number is up. It would have to be very serious. But in a situation like Vietnam or something like that, there would be the situation that you have described?

Admiral PRICE. Yes, sir.

Senator PASTORE. And we don't have a substitute for an aircraft carrier at this time, do we?

Admiral PRICE. None at all. It is the most potent weapon that the Navy has at this point in time, or for the foreseeable future, for anything other than a strategic retaliatory capability which our ballistic submarines have.

NUCLEAR GUIDED MISSILE FRIGATES

The fiscal year 1976 budget requests authorization and funding for the last of the *Virginia* class nuclear guided missile frigates.

Congress has already provided some $111 million in advance procurement for DLGN–42, and this year's request of $257 million provides the funding needed to proceed with construction.

SURFACE COMBATANTS

The high endurance strike forces—nuclear powered aircraft carriers, guided missile cruisers and frigates, and attack and ballistic missile submarines, and conventionally powered cruisers and destroyers—are, of necessity, sophisticated platforms mounting complex weapons systems. They are therefore expensive, and we must plan to build and acquire them only in the numbers sufficient to provide high-capability fleet assets for employment in the projection and high-threat sea control mission areas. Their counterparts, for less demanding but no less essential sea control missions, can be less complex and less sophisticated and thus less expensive on a unit cost basis. We have a pressing need at this time for numbers of these capable but less expensive ships to replace obsolete World War II ships that have been or are being retired from service.

SURFACE COMBATANTS

[Dollars in millions]

Patrol frigate (PF)	Fiscal year 1976	Fiscal year 197T
Number of ships	10	0
Ship costs	$955.5	0
Total request	955.5	0

Note: No advance procurement.

PATROL FRIGATE

The principle program designed to accomplish this replacement is the patrol frigate. We plan to acquire at least 56 of these ships through fiscal year 1980. When these ships are added to existing surface combatant assets, the Navy will begin to approach its minimum force level requirements for surface combatants.

The patrol frigate will be fitted with weapons allowing it to counter missile, aircraft, submarine, and surface threats, including the offensive long-range antisurface ship missile, Harpoon.

Senator PASTORE. Will these be conventional?

Admiral PRICE. Yes, sir, they are gas turbine powered.

Senator PASTORE. What would be the range of these ships?

Admiral PRICE. These ships have a cruising radius, at 20 knots, of [deleted] nautical miles. These are conventional powered ships of about 3,500 tons, sir. They are small ships that we need to protect our sea lines of communications to our forces deployed overseas, and we need them in numbers for that reason.

For the 10 patrol frigates in the fiscal year 1976 program we are requesting $955.5 million. No funding or authorization is requested for the transition period.

PATROL HYDROFOIL GUIDED MISSILE SHIP

Another important element of the surface combatant force now under procurement is the antishipping missile equipped patrol hydrofoil (PHM). This small, high speed, heavily armed ship is designed

to operate offensively in coastal and "choke point" areas against much larger surface combatants and other surface shipping. Each PHM will mount eight Harpoon antishipping missiles and will thus constitute a major threat to an enemy surface task force, thereby freeing up larger, more complex surface combatant assets for open ocean and other tasks.

SURFACE COMBATANTS

[Dollars in millions]

Patrol hydrofoil guided missile ship (PHM)	Fiscal year 1976	Fiscal year 1977
Number of ships	2	0
Ship costs	$83.4	0
Less advance funding from prior years	0	0
Net	83.4	0
Plus advance procurement for future years	0	+$24.2
Total request	83.4	24.2

As you have been informed, initial design and production problems, on the two R.D.T. & E. ships funded in fiscal year 1973, combined with economic, estimating, and cost problems have necessitated suspension of construction of PHM–2. We are not planning to resume its construction as an R.D.T. & E. ship. We will use available structural material and equipment in support of the PHM–1 test program, and wherever possible, in the follow-on construction program.

We have reduced the fiscal year 1976 program to two ships and plan to award these two concurrently with the four approved last year. Funding requested for these two ships is $83.4 million.

SUPPORT SHIPS

SUPPORT SHIPS

[Dollars in millions

	Fiscal year 1976		Fiscal year 1971	
	Number	Ship costs	Number	Ship cost
Destroyer tender (AD)	2	$393.2	0	0
Fleet oiler (AO)	2	231.8	0	0
Fleet tug (T–ATF) civilian manned	3	41.4	0	0
Total request	7	666.4	0	

The Navy's support ships provide essential logistics and maintenance to combat forces. These ships enable the fleet to extend its areas of operations throughout the oceans of the world and to sustain their operations on a continuous basis.

Several classes of our support ships are overage and badly in need of modernization through replacement. Foremost amongst these are the destroyer tenders, the fleet oilers and the fleet tugs.

DESTROYER TENDERS

There are currently nine destroyer tenders in the active fleet. These ships will have an average age of 26 years at the end of this fiscal year,

and five are over 31 years of age. These older ships do not have adequate service or shop facilities to tend modern destroyers and frigates. They have no capability to support nuclear powered surface combatants nor the large number of gas turbine powered ships soon to enter the fleet. Their hulls and propulsion plants are beyond the point of economical repair or upgrading, and their replacement is long overdue.

We are requesting two destroyer tenders in this year's budget. Funding for these tenders amounts to $393.2 million.

FLEET OILERS

Another type of support ship that is critically overage, as a group, is the Fleet Oiler. At the end of fiscal year 1975 we will have 13 oilers in the active fleet. Additionally, the Navy will have five civilian-manned ex-Fleet Oilers operating under the Military Sealift Command. The average age of these 18 ships is approach 27 years. Except for six oilers of the *Neosho* class, commissioned in the 1955–56 time frame, the rest are limited capability, slow, World War II-built ships.

Last year the Navy presented a request for a lead Fleet Oiler. This ship was disapproved "without prejudice until the Navy has determined the extent of interest by the shipbuilding industry in building this ship and at what cost."

The Navy has ascertained that there is considerable industry interest in this program. Five shipbuilders responded affirmatively to an August 1974 preliminary letter of inquiry. We are confident that the fiscal year 1976 budget request for two fleet oilers at a total cost of $231.8 million will allow timely award of construction contracts.

Senator PASTORE. Where will they be built?

Admiral PRICE. There are a number of yards that will build them.

Admiral GOODING. National Steel and Todd on the West Coast, Ingalls in the central area, and General Dynamics at the East Coast Quincy Yard.

Senator PASTORE. I like the last one best of all. That is the one that you gave the lowest priority.

Admiral GOODING. I saved that for desert.

FLEET TUGS

Admiral PRICE. Fleet Tugs comprise another support-ship category in urgent need of modernization. By the end of this fiscal year the Navy will be operating 18 Fleet Tugs and the Military Sealift Command another 4. The average age of these ships is over 30 years. Until last year, the Navy had not procured a new Fleet Tug since World War II.

Last year Congress approved a lead ship of a commercial design which will operate with a civilian crew under the auspices of the Military Sealift Command. The fiscal year 1976 request for three ships continues the program initiated last year. Funded requested for these three ships is $41.4 million.

MISCELLANEOUS SHIPS AND CRAFT

MISCELLANEOUS

[Dollars in millions]

	Fiscal year 1976	Fiscal year 197T
Pollution abatement craft	$11.5	0
Service craft	1.4	0
Outfitting	38.2	$8
Post delivery	19.7	0
Total request	70.8	8

In addition to the ships for which authorization and funding are requested the Navy budget contains requests for funds needed for the outfitting of new ships, for post delivery correction of deficiencies and for service craft and pollution abatement craft.

For fiscal year 1976 the Navy is requesting $11.5 million for pollution abatement craft. This is the final of three procurement increments of these craft, the first two increments of which were approved in fiscal years 1974 and 1975.

The service craft request for fiscal year 1976 is $1.4 million and will procure several needed covered lighters (YFN's) for yard and base service.

Senator PASTORE. What kind of a ship is that?

Admiral PRICE. The pollution abatement craft is a barge that we can take alongside ships in harbor and pump sewage and other waste into them for transfer to a shore sewage disposal plant. This comes about because of the environmental requirements. The YFN is a covered, non-self-propelled barge for stowing and transporting material.

For the outfitting of new ships the Navy is requesting $38.2 million in fiscal year 1976, and $8 million in fiscal year 197T.

POST DELIVERY FUNDS

For post delivery correction of construction and acceptance trial deficiencies the Navy is requesting $19.7 million in fiscal year 1976. No funds are requested in fiscal year 197T.

REVITALIZATION OF FLEET STRENGTH

There is one very significant point that is critical to the success of the Navy's modernization program as contained in the budget request I've just discussed. We must have continuity in those programs upon which we have spent so much time and effort in bringing along to this budget and upon which we are depending for the revitalization of our fleet strength.

These ships, like the Patrol Frigate and the Patrol Hydrofoil have taken several years to develop and are now ready for production in the quantities we must have to reach our force level requirements. Disruptions or cancellations would seriously impair any hope of improving future fleet numerical strength, would increase the degree and the period of risk we undertook when we reduced our fleet to fund this modernization and will inevitably cause higher modernization costs in the years ahead.

Similarly, the programs I mentioned which are designed to modernize our aging auxiliaries must be carried out so that our fleet will be ready and able to operate freely and continuously upon the oceans.

BALANCED AND COMPREHENSIVE PROGRAM

The Navy budget request has set forth a balanced and comprehensive program for the modernization of the Navy. It capitalizes upon and maintains continuity with the effort already spent in ship program development. Continuation of this effort is vital if we are to rebuild the Navy to meet the threat and tasks before us.

Senator PASTORE. All new ship construction and 30 percent of the overhaul is done in the U.S. private shipyards. Is that correct?

Admiral PRICE. This is essentially correct.

Senator PASTORE. There has been much attention in past months to the overextended capacity of the U.S. shipyards. If the fiscal year 1976 budget requests for shipbuilding and conversion is approved, does the capacity exist to utilize the $2.3 billion for prior year deficits and the $3.2 billion for 23 new ships?

Admiral PRICE. The answer is yes, and I would like to ask Admiral Gooding to discuss it further.

Admiral GOODING. We continuously monitor this, and I can give you a categorical "yes," in answer to that question. There is capacity in the industry.

Senator PASTORE. How much of the $2.3 billion requested to correct prior year deficits is attributable to inflation?

Admiral PRICE. I would like to just mention two things, sir. One is that inflation itself, which we call the escalation during the building period, amounts to $1.149 billion of the total of $2.3 billion, or 51 percent of the total just due to inflation alone. The program changes which the Navy has introduced, saying this ship must have a new or different weapons system or some engineering change is only $213.9 million of that total. In other words, that only amounts to about 9 percent of the total for Navy cost changes.

The inflation on Government furnished equipment, which is something that we have very little control over, but that is not included in the shipbuilder line is $177 million, or about 8 percent. The rest of it, 25 percent is due to numerous things such as, for example, the fact that it takes us longer to build the ship because the material leadtimes are longer.

TIME SCHEDULE FOR NEW CONSTRUCTION

Senator PASTORE. What is the ordinary time schedule for the construction of a ship?

Admiral PRICE. It is normally from 4 to 7 years.

Senator PASTORE. And you say it is hard to anticipate in the beginning some of these changes that you are talking about. Must they be made in midstream? That is quite an expensive process.

Admiral PRICE. Let me give you an example. In the patrol frigate we had planned for a close-in weapons systems, but reserved only space and weight—no funding—for it. We had always intended to put one in, and it was in our requirements, but there was none avail-

able when we first designed the ship and first did our production planning back in 1972. There wasn't any available. So, we said we must eventually have one; leave some space in the ship and some weight margins so we can put one in when it is available.

This year OSD directed us to budget for a close-in weapons system. That has increased the cost of each ship by about $2 million, and is included in our budget request for this year because we need this system, and we have always needed it, but we didn't have it specified when we made our original ship estimate.

That sort of thing happens during the long construction period of the ship. As you know, sir, we are now allowed to put anything in a ship that hasn't gone completely through the R.D.T. & E. cycle, so we know we must have it in hand, fly before buy.

There are also such things as the poor estimates in the PHM program. We made a poor estimate there, both Boeing and the Navy did—such things as these and the economic effects on them increased the impact of the error amount to about 25 percent of the total.

Senator PASTORE. What will happen if only 1 billion is provided in fiscal year 1976 for prior year funding ships, and what if no funds are provided in 1976 for this purpose?

Admiral PRICE. If only $1 billion were provided we would have to reduce quantities of some of the ships that we have asked for in this year's program.

Senator PASTORE. This is something that you have to pay?

Admiral PRICE. Yes. Approximately $1.4 billion is what we need for obligation in 1976 for those fiscal year 1975 and prior ships and to be fully funded.

In other words, we need approximately $1.4 billion this year to do those things. Now, if no additional cost growth and escalation funds were provided instead of having $3.2 billion in this year's budget for new ships, we would only have about $900 million, which would effectively wipe out the shipbuilding program for 1976.

TRIDENT PROCUREMENT

Senator PASTORE. Current estimated total program cost of the Trident program is $18.6 billion. This includes 10 ships, missiles, and basing. This is an increase of $4.7 billion, or 34 percent over the estimated total program cost of 1 year ago. Please explain this great increase.

Admiral PRICE. The shipbuilding portion of that, Mr. Chairman, amounts to $2.239 billion. That includes $290.2 million for additional "shipbuilder" or "contract escalation" on the first three ships that we see we will pay and inflation in Government furnished equipment. The additional contract escalation and inflation on GFE for the 7 additional ships in the 10-ship program is $1.410 bilion. The stretchout in the Trident building program which means that instead of doing a 1–2–2–2–2–1 building rate we now have a 1–2–1–2–1–2–1 which extends it further out and, therefore, there is more cost to it. This increase is $603 million. A pure refinement in estimates has given us a decrease of $64 million.

That total of $2.239 billion was the cost of the shipbuilding increases. The others are in the missile and R. & D. costs.

Admiral NICHOLSON. Just to clarify that, that total amount of $18 billion-plus does include the back-fit costs for the 10 Poseidon submarines.

TRIDENT BUILDING SCHEDULE

Senator PASTORE. The present Trident submarine procurement schedule now provides funds for two ships in odd numbered fiscal years and one ship in even numbered fiscal years. What was the original production schedule? Discuss how the schedules have changed during the past years and give the reasons for the changes.

I think you ought to put this in the record.

Admiral PRICE. I can do it here. The original schedule was for a 1–3–3 building rate for a total of 10. That was in the 1974 budget. In 1975 the budget was a 1–2–2 budget due primarily to congressional direction. This year it changes to a 1–2–1–2 building rate. The Secretary of Defense has reduced the rate for two reasons. One, to reduce the fiscal pressure on the budget, and two, to reduce some of the pressure on the shipbuilder.

Senator PASTORE. You have 1–2, 1–2, and 1–2, and you end up with 10.

Admiral PRICE. That is right. So it was done primarily for fiscal reasons each time, and also as Mr. Schlesinger said this year to help with some of the pressure on the shipbuilder.

ATTACK SUBMARINE PROGRAM COSTS

Senator PASTORE. The nuclear attack submarine total program cost for 38 ships is now estimated to be $8.5 billion. This is an increase of $1.5 billion or 21 percent in 1 year. Will you discuss this increase?

Admiral PRICE. Our costs, sir, have gone up, inflation again, and remember we have two additional 1980 ships in this year's data sheets, which add $347 million. The government-furnished equipment for those is $297 million. Escalation, which is the thing we have talked about due to the shipbuilding period is $800 million, and we had a slight reduction of $7.6 million due to just some normal program changes. We have also outfitting and post-delivery costs of $58.8 million, which gives us a total of $1.493 billion.

QUESTIONS SUBMITTED BY SENATOR PASTORE

Senator PASTORE. I have several other questions here, but there is a vote on the floor, so we will recess now until 2 o'clock. Admiral, I would appreciate your answering these questions for the record.

Admiral PRICE. Very well, sir.

[The questions and answers follow:]

NUCLEAR GUIDED MISSILE FRIGATE CONSTRUCTION

Senator PASTORE. You say that more nuclear guided missile frigates are needed to operate with the nuclear powered carriers. I note that the funds requested for one ship of this class in FY 1976 are the last anticipated request throughout the 1980 time frame. Is this consistent with your statement?

Admiral PRICE. With regard to surface combatants, as Secretary Schlesinger testified in his posture statement, we are studying our force requirements in the light of TITLE VIII. We will need a number of highly capable surface ships carrying the AEGIS Weapons System to carry out our strategy in the years

ahead. Such ships would be more capable if nuclear powered than conventionally powered, but we are uncertain at this point, in view of the recent reductions in our combatant strength, as to whether we can trade-off further numbers of ships in order to get increased individual ship capabilities. We are working now to resolve this matter and will inform the Congress when our evaluations are complete.

LOW-COST MINI-CARRIER

Senator PASTORE. Last year the Congress denied procurement funds for the Sea Control Ship and recommended the design of an austere, low cost mini-carrier. Bring the Committee up to date of the matter.

Admiral PRICE. The Navy is conducting conceptual studies of a new more capable ship design having such missions as anti-submarine warfare, airborne mine countermeasures, amphibious vertical assault and close air support to amphibious operations, and limited strike and anti-air warfare operations. The designation VSTOL Support Ship (VSS) has been tentatively selected to identify this multi-mission ship.

We have completed preliminary design studies and reduced the feasible alternatives to three ships. The design characteristics reflected in the enclosure are currently being refined; however, present initial data is beneficial for comparative purposes. The left column provides some of the essential characteristics of the Sea Control Ship presented to the committee last year. The VSTOL Support Ship Design #1 supports twice the number of helicopters and VSTOL aircraft as could the Sea Control Ship. Having two shafts, increased speed and heavier armament, this ship is much superior to the Sea Control Ship and costs $60 million more in follow ship costs.

VSTOL Support Ship Design #2 is a yet larger ship at almost 33,000 tons and, in addition to VTOL/VSTOL operations, has the capability for operating fixed wing anti-submarine aircraft such as the S-3 as well as other light tactical aircraft.

VSTOL Support Ship Design #3 is the smallest ship we could design for operation of fixed wing aircraft. No great cost saving is achieved in this design when comparing the air wing size of this ship to ship design #2.

We are presently conducting cost versus effectiveness studies for the designs shown and studying nuclear powered alternatives. We expect to be able to present the design selected by the Navy to appropriate congressional committees about June 1975 for review and concurrence. The following chart details the USS design characteristics.

[The chart follows:]

ALTERNATE V/STOL SUPPORT SHIP (VSS) DESIGN CHARACTERISTICS

	SCS	VSS No. 1	VSS No. 2 (conventional angled deck)	VSS No. 3 (reverse angle deck)
Displacement full load (tons)	14,041	20,200	32,800	31,800.
Manning	699	1,011	1,912	1,912.
Propulsion	2 GT, 45,000 SHP.	4 GT, 90,000 SHP.	Steam, 100,000 SHP.	Steam, 100,000 SHP.
Number shafts	1	2	2	2.
Maximum sustained speed (kts)	24.5	28.4	26.6	26.3.
Endurance at 20 knots (nautical miles)	7,500	7,500	7,500	7,500.
Ballistic and side protection	None	None	None	None.
Elevators	2 inboard	2 inboard	2 inboard	2 inboard.
Catapults	None	None	2 C-13	2 C-13.
Arresting gear	do	do	3 wire MK-14 and barrier.	3 wire MK-14 and barrier.
Air wing size (maximum density A-7 equivalent)	18	41	72	48.
Armament	2 CIWS	2 CIWS, 2 harpoon can.	2 CIWS, 2 harpoon can.	2 CIWS, 2 harpoon can.
Lead ship cost (fiscal year 1976 dollars)	259.5	325	580	565.
Average follow ship cost (fiscal year 1976 dollars).	180.2	240	445	430.

Patrol Frigate Procurement

Senator Pastore. Fiscal year 1976 is the first large procurement request for the Patrol Frigate program. One ship was funded prior to FY 1975, three ships were funded in FY 1975, and ten ships are requested in FY 1977, with 10 or 11 ships planned for each fiscal year through 1980. Do you feel that U.S. shipyards can produce at the planned rate?

Admiral Price. Based on recent studies, it has been determined that the shipbuilding industry has more than the necessary capacity to meet the production requirements of the planned PF program through FY 1980.

NATO Participation in PHM Program

Senator Pastore. It appears that the patrol hydrofoil guided missile ship program is experiencing some difficulties. Discuss the participation of our NATO allies in this program.

Admiral Price. Joint planning and design effort for a NATO Hydrofoil Patrol Craft was conducted from 1970 to 1972. In May 1972, Germany and Italy agreed to join with the United States in the active development of the PHM. A design stage Memorandum of Understanding (MOU) was signed with Germany in November 1972. Italy and Germany have actively participated in the PHM program up to the present time. However, only the United States and Germany are planning to procure follow-on PHMs. The production supplement to the MOU is currently being negotiated. The extent of German participation in PHM production will be known when the production supplement is negotiated.

Submarine Tender Program

Senator Pastore. Last year the Congress approved the transfer of prior year funds in the amount of $103.6 million to the FY 1975 appropriation to award two submarine tender contracts. What has happened in this program?

Admiral Price. Last year Congress transferred $70 million to the FY 1975 appropriation for use on the submarine tenders. A contract was awarded to Lockheed Shipbuilding and Construction Company on 20 November 1974 for construction of AS–39 and AS–40. The residual $33.6 million derived by cancellation of the FY 1973 destroyer tender budgeted at $103.6 million was not used on these submarine tenders but was utilized to offset the total SCN deficit, and was reprogrammed to FY 1973 Cost Growth.

Fleet Oiler Costs

Senator Pastore. The Senate approved $81.4 Million in FY 1975 to procure one Fleet Oiler, however, the final act contained no funds. How much does the oiler cost in FY 1976 and is this a high priority item in the FY 1976 Navy ship building program?

Admiral Price. In the FY 1975 authorization and appropriation process, the Congress approved one Fleet Oiler (AO). However, this ship was deleted from the final act in the Appropriation Conference Report. At that time, the ship was cut without prejudice and the Navy was directed to determine the extent of shipbuilder interest in the fleet oiler program. The Navy has thoroughly investigated shipbuilder status and has determined that there is strong interest in building these ships. As presently structured, the program will provide a contract for two ships in FY 1976 with an option for two additional ships in FY 1977. The AO program has been structured in this way so as to present the most attractive package to the shipbuilder.

The two fleet oilers in the FY 1976 budget request have been estimated at $231.8 million ($136.0M lead ship, $95.8M follow ship).

These fleet oilers will be the replacements for the older World War II fleet oilers that the Navy now has in service. The average age of our fleet oilers is now in excess of 25 years. Even with the planned introduction of the new fleet oilers in this year's request, our oldest ships will have completed almost 35 years of service before they are phased out of the active fleet. The new ships are urgently needed if block obsolescence of our Fleet Oilers force is to be avoided.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator PASTORE. Chairman McClellan was not able to attend today's hearing, but he did give me some questions that he wished you to answer, Admiral. I would like you to respond to them for the record.

[The questions and answers follow:]

PF HELICOPTER MAINTENANCE

Chairman MCCLELLAN. The PF was designed for only primary helicopter maintenance support and relying on other ships, such as a Sea Control Ship, for intermediate helicopter support. How will the helicopters on board the PF be maintained since the Sea Control Ship will not be built?

Admiral PRICE. The PF design for only organizational level helicopter maintenance support is no different than the system that is being used successfully in the fleet today in LAMPS helicopter equipped destroyers. Intermediate and depot level support will be accomplished at shore activities or in larger ships with this capability that may be in company, such as LHA's.

It is true that a Sea Control Ship, if available would be helpful for helicopter maintenance; however, it is not essential for this maintenance.

COST OF MISSILE LOAD FOR PF

Chairman MCCLELLAN. The PF was designed to operate in low-threat areas, yet is being equipped with the HARPOON anti-ship missile system. What is the probability of the PF fighting another surface ship? The PF will also fire the SM-1 (Standard) missile for anti-air warfare from the same launcher as the HARPOON. What will be the mix of these missiles on a single PF? What is the estimated cost of the missile load for each PF?

Admiral PRICE. This would be heavily dependent upon the type of war and specific scenario envisioned. In a peacetime confrontation situation transitioning to active hostilities, the probability could be quite high. The same could be true, under certain circumstances during amphibious operations where the PF is employed in a supporting role.

The number of HARPOONs carried would depend on the ship's specific tactical assignment. The PF can carry a total of [deleted] missiles in any combination of numbers of HARPOON and Standard Missile. A typical mix might be [deleted] HARPOON and [deleted] Standard Missile. A missile load for the PF will probably cost somewhere between 5 and 10 million dollars.

FUTURE CAPABILITY OF PF WEAPONS

Chairman MCCLELLAN. Considering a ship life of 30 years the PF will be in the inventory after the year 2000. The PF was not designed to accommodate more or bigger weapons than originally planned. Are the weapons and sensors now being installed sufficient to meet the threat of the year 2000?

Admiral PRICE. Most Navy combatants are modernized at 10 to 15 year intervals. It is reasonable to assume that the PF will require modernization at similar intervals. This, in all probability, would involve replacement of weapons and sensors with others of greater capability or flexibility that are developed or are required to accommodate the evolution of the threat. However, it is emphasized that the weapons and sensors to be installed in the PF during construction are considered to be optimum for the PF mission during at least the next decade.

LAMPS HELICOPTERS

Chairman MCCLELLAN. A trade off was made early in the PF program to add the capability for handling two LAMPS helicopters and installing a less capable, less costly sonar than originaly planned thus reducing the PF's anti-submarine warfare (ASW) capability. The ASW capability was to come from the SCS helicopters working in company with the PF.

What effectiveness studies were performed to support this trade off?
What ASW capability does the PF now have without the SCS?
Will LAMPS III be too large for two to be put on a PF?
What ASW weapons does the PF have against a submarine? Will more be added in the near future?

Admiral PRICE. The Navy studied this extensively, using various representative scenarios and computer simulation replications. Utilizing the results of these analyses the Navy decided to provide a two helicopter LAMPS capability in the PF since the exploitation potential of LAMPS in both surface and subsurface warfare was considered high in comparison with that of ship sonars. In the process of trade-off analyses, it was determined that the AN/SQS–56 sonar adequately met the requirements of the PF mission and projected employment with other existing and planned forces.

Although the PF could be employed very effectively with a Sea Control Ship, if such a ship were available, this is not the raison d'etre of the PF. The PF is designed to operate with many types of naval forces, providing anti-air, anti-surface, and anti-submarine support.

The LAMPS III will not be too large for two to be put on a PF. The size and strength of the PF flight deck and size of the hangar are specifically designed to accommodate the LAMPS III helicopter.

The PF will have ASW torpeodoes which can be delivered by two triple-tube over the side launchers or by LAMPS helicopters. No additional weapons are specifically planned. However, the future addition of a tactical towed array sensor is a possibility being investigated to further enhance ASW capability.

MK–92 AND STANDARD SM–1

Chairman MCCLELLAN. The MK–92 and Standard SM–1 provide the air defense capability on the PF. The Aegis is an air defense system in full scale development and is to be mounted on an as yet undesignated ship platform. How do the anticipated capabilities of the two systems compare and what justification does the Navy have for developing two air defense systems? How many PFs could be procured for the estimated cost of one Aegis and its platform?

Admiral PRICE. The two systems are not competitive. The MK–92/SM–1 system is a relatively light weight system designed for installation in the smaller surface combatants employed in open ocean sea control tasks. It is optimized for quick reaction effectiveness against low altitude missile attacks, especially those mounted by submarines. The Aegis system is a much larger and more sophisticated system to be installed in major surface combatants which will operate in high threat areas, usually with carrier task groups. The Aegis system is designed to be effective in a more diverse and dense air threat environment than is the MK–92 system. Accordingly, each has been built to meet specific requirements dictated by the intended platform and assigned mission. Each meets its requirements admirably. Approximately three PF's could be procured for the estimated cost of a comparable conventionally powered Aegis ship.

PF ADAPTABILITY TO CARRIER FORCES

Chairman MCCLELLAN. How will the relatively low speed PF keep up with carrier forces?

Admiral PRICE. If the high value force does not exceed 28 knots, there would be no problem in "keeping up." For instance, a transiting amphibious group with an LHA and other amphibious ships would normally transit at speeds considerably less than 28 knots. In situations not involving transit, such as a carrier operating in a general geographic area, the problem of "keeping up" would be relatively minor for a supporting PF.

Chairman MCCLELLAN. Since the PF is now considered to be able to support carrier forces and is now multi-purpose in its capabilities is it a major combatant and subject to title VIII of Public Law 93–365 requiring it to be nuclear powered?

Admiral PRICE. Title VIII applies essentially to major combatant vessels which would normally operate in combat in carrier strike groups or are designed for independent combat missions requiring high speed endurance. The PF is a sur-

face combatant with a primary mission of supporting amphibious and underway replenishment groups, as well as convoys, which in terms of men and dollars are frequently considered "high value" forces. Although the PF could, under certain circumstances, support carrier forces, this would be in an augmentation or supplementary role and not as a replacement for major combatants. Accordingly, the PF is not subject to Title VIII.

LHA Appeal

Chairman McClellan. Have hearings for LHA appeal before ASBCA been scheduled yet?

Admiral Price. Some pre-trial hearings have been held, but a trial date has not been set by the ASBCA.

Progress in Litton/Navy Case

Chairman McClellan. Is the Navy or Litton attempting to settle out of court? If so, what progress has been made?

Admiral Price. The Navy and Litton have continued discussions concerning settlement of issues out of court. Towards this end, the contractor has submitted two sample constructive change packages for Navy review. These sample packages are still under review and discussions are being held with the contractor as to their content. The progress to date has been painstakingly slow and less than encouraging.

Chairman McClellan. What is the Navy's estimate of total dollar settlement on the appeal?

Admiral Price. Although Litton has made reference to an amount of $373 million in the complaint filed before the ASBCA on 5 July 1973, they have yet to quantify the appeal, as was requested by ASBCA. On 30 January, Litton asked and was granted an additional 60 days or until 31 March to quantify. As of 2 April he has not quantified his appeal. Until such time as the contractor quantifies his appeal and a detailed review is made by the Navy, a realistic estimate of total dollar settlement on the appeal cannot be made. In an effort, however, to plan for future settlement of the LHA appeal, the Navy has placed a claim related requirement for $100 million in the FY 76 budget.

Chairman McClellan. What is the impact (cost and schedule) of the Litton labor strike of November and December 1974 on the LHA program?

Admiral Price. The exact schedule and fiscal impact of the Ingalls strike has not yet been fully assessed. For the purposes of schedule analysis, six weeks delay on each ship has been estimated based on the 31 days of actual work stoppage plus 1½ weeks of recovery time. Under the terms of the contract, although the schedule impact of the strike is provided for as excusable delay, any associated cost impact is not acceptable as a basis for increase in contract price.

Delivery Time for LHA Vessels

Chairman McClellan. What is the Navy's most current estimate of delivery for the LHA vessels?

Admiral Price. The Navy's most current estimate of delivery for the LHA vessels is 9/75, 6/76, 6/77, 5/78, and 4/79 for LHA–1 through LHA–5 respectively.

Delivery Schedules for DD963

Chairman McClellan. The first DD963 was originally scheduled for delivery on October 31, 1974. Its delivery is slipping and has not occurred as of January 1975. Estimates are being made of significant slippages for all the DD963's.

What is Navy's current delivery schedule estimate for the DD963's?

Admiral Price. The following schedules reflect the slippage between the original contract schedule and the current contractor schedule as compared to the Navy's estimate. The estimated delivery schedule is based on the assessment that one ship delivery every 6 weeks is a more likely rate than the contractor's assessment of delivering one ship a month. The Navy's prediction of a 20 month stretch out in the program is based on this probability.

Ship	Original contract delivery schedule	Current contractor delivery schedule	Navy estimated delivery schedule
DD963	Oct. 31, 1974	Mar. 21, 1975	TBD
DD964	Apr. 30, 1975	Aug. 26, 1975	November 1975.
DD965	June 30, 1975	Oct. 28, 1975	January 1976.
DD966	July 31, 1975	Dec. 18, 1975	March 1976.
DD967	Oct. 31, 1975	Feb. 2, 1976	May 1976.
DD968	Feb. 27, 1976	Mar. 23, 1976	August 1976.
DD969	Apr. 30, 1976	May 13, 1976	October 1976.
DD970	June 30, 1976	July 7, 1976	December 1976.
DD971	July 30, 1976	Aug. 11, 1976	January 1977.
DD972	Sept. 30, 1976	Oct. 13, 1976	March 1977.
DD973	Oct. 29, 1976	Nov. 9, 1976	May 1977.
DD974	Nov. 30, 1976	Dec. 9, 1976	August 1977.
DD975	Dec. 31, 1976	Jan. 10, 1977	January 1978.
DD976	Jan. 31, 1977	Feb. 9, 1977	February 1978.
DD977	Feb. 28, 1977	Mar. 8, 1977	March 1978.
DD978	Mar. 31, 1977	Apr. 14, 1977	May 1978.
DD979	Apr. 29, 1977	May 12, 1977	June 1978.
DD980	May 31, 1977	June 14, 1977	July 1978.
DD981	July 29, 1977	July 27, 1977	September 1978.
DD982	Aug. 31, 1977	Sept. 7, 1977	November 1978.
DD983	Sept. 30, 1977	Oct. 12, 1977	January 1979.
DD984	Oct. 31, 1977	Nov. 8, 1977	February 1979.
DD985	Nov. 30, 1977	Dec. 8, 1977	March 1979.
DD986	Dec. 30, 1977	Jan. 9, 1978	April 1979.
DD987	Jan. 31, 1978	Feb. 8, 1978	June 1979.
DD988	Feb. 28, 1978	Mar. 7, 1978	July 1979.
DD989	Mar. 31, 1978	Apr. 13, 1978	September 1979.
DD990	Apr. 28, 1978	May 9, 1978	November 1979.
DD991	May 31, 1978	June 6, 1978	January 1980.
DD992	June 30, 1978	July 12, 1978	March 1980.

Ship Operational Program

Chairman McClellan. The Ship Operational Program is the computer software that controls much of the ship and is considered to be the highest risk area of the program.

(*a*) What is the status of the delivery of the Ship Operational Program (SOP)?

Admiral Price. The Navy has witnessed tests of the program and has declared, as of this date, that the program is acceptable for use during Builder's Trials. The program is still in a debugging stage and is expected to be a fully acceptable condition prior to ship delivery.

(*b*) If the SOP has been delivered, was it acceptable and have any problems been identified in the testing or in the actual use of the program?

Admiral Price. The Ship Operational Program (SOP) has not been delivered in the sense of delivery for the Navy. The program is on-board SPRUANCE and is in use by Litton for system check-out. The SOP is not deliverable separate from the ship. It is considered a part of the ship combat system and the ship as a whole is the deliverable item.

(*c*) If the SOP is inoperable due to equipment failure or battle damage, the effectiveness of the DD-963s will be drastically reduced. How difficult is it to lose the use of the SOP? Should backup manual control be installed?

Admiral Price. The Ship Operational Program is designed to provide a series of degraded modes of operations. Since equipment failures might occur, as in battle damage, a reduced capability program can be utilized. If the total computer system is lost, the ship can still fight in a fully manual mode, that is, all weapons could still be deployed. The reaction times would be increased and task force inter-ship data would have to be fed to the combat decision process by voice radio instead of direct computer to computer radio.

Chairman McClellan. Is the documentation, training logistic support, etc., of the ship and its various subsystems adequate enough to allow efficient turnover of the ship to the fleet?

Admiral Price. All logistic support material, documentation, training material and on-board equipment will meet all current standards when the ship is turned over to the Operating Forces.

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Performance of Ship Engines

Chairman McClellan. What is the demonstrated performance of the ships' engines?

Admiral Price. The engines have demonstrated all contract performance requirements with regard to engine power and fuel consumption at short test sites and at sea. In addition, a time between repairs of about 4,000 hours of operation has been demonstrated during these same tests. Using a peace time operating profile and allocating time on all four installed engines results in a 2 to 3 year interval between engine change-outs.

Subsystem Plans

Chairman McClellan. The Navy has reserved space and weight for subsystems with capabilities that were originally required, modernization subsystems, and anti-air warfare conversion subsystems. What are the installation plans for these subsystems?

Admiral Price. The DD–963 Development Concept Paper specified certain baseline subsystems which were in a developmental status and for which space and weight reservations were made. These systems included: (1) an active/passive Electronic Warfare (EW) system, (2) a shipboard CHAFF decoy system, (3) a variable depth sonar (VDS) and (4) a Light Airborne Multi-Purpose System (LAMPS). The Basic Point Defense Surface Missile System was specified during initial construction, as was a helicopter facility to support and operate helicopters. Of the above subsystems only the helicopter facility will be installed during the initial construction phase. As a result of problems in development, increases in acquisition costs or equipment non-availability due to urgent fleet requirements, the remainder of the systems will not be installed by the builder. However, those considered mission essential by the Navy (Passive EW, NATO Sea Sparrow, and CHAFF) are funded and will be installed before the ships are turned over to the fleet.

In 1972 ASMD emphasis throughout the Navy was redirected toward hard kill systems rather than active EW. It was therefore decided that DD–963 would be initially fitted with passive EW only. If effective and low cost active EW systems are forthcoming from the Navy's developmental programs, it may be desirable to backfit such equipment at a later date.

There were no funds included in the original DD–963 program for VDS, LAMPS or HARPOON. The Navy currently has no plans to install the VDS on DD–963 ships. LAMPS MK III is not planned for introduction to the fleet until 1982. The Navy has requested funds in the FY 76 budget to provide the DD–963 with the interim LAMPS MK I capability. In the case of HARPOON, this system was not fully defined at the time of evontract award. The Navy does intend to provide the DD–963 with HARPOON and has requested funds in the FY 76 budget to procure and install systems for those ships for which system procurement could meet acquisition funding cut-off dates. The remaining installations will be accomplished through the Fleet Modernization Program.

In summary, DD–963 class ships will be equipped with all mission essential subsystems when they are turned over to the fleet. Furthermore, by the addition of LAMPS and HARPOON, the mission capability will be improved.

The Navy has no plans at the present time to install modernization or conversion subsystems.

Status on Litton Agreement

Chairman McClellan. An agreement on the Litton reset proposal was to have been made in the spring of 1974. It is now scheduled to be made in the spring of 1975. What is the status? If an agreement has been made, what does the agreement consist of? If the agreement has not been made, what is the expected agreement?

Admiral Price. It is anticipated that reset negotiations will be completed in the Spring of 1975. The details of the expected agreement cannot be announced because it would jeopardize the Navy's negotiating position.

Subsystem Installation

Chairman McClellan. What subsystems are planned to be installed after the construction period which are not included in the SAR estimates of total program cost? What are the subsystems to be installed, their cost, and the schedule for installation?

Admiral PRICE. HARPOON was not originally planned for the DD–963 Class since the HARPOON system was in early development at the time of contract award for these destroyers. The Navy now intends to equip all DD–963 ships with the HARPOON system at the earliest possible time. The funding request for the final seven ships was based on the estimate that systems can be available for these ships within the SCN funding envelope. Backfitting of HARPOON in the remaining 23 ships will be accomplished through the Fleet Modernization Program. The current installation plan is to backfit 8 systems in FY–77, 7 in FY 78 and 8 in FY 79. The estimate of $5.3 million for seven HARPOON systems is based on installation of this equipment by the Navy following delivery. However contractor installation could be selected if cost and schedule impact were acceptable.

Chairman MCCLELLAN. What will the absence of the subsystems not included in the SAR estimates have on the mission capabilities of deployed ships?

Admiral PRICE. Until the HARPOON Weapons System is installed, the ships will not have an over the horizon surface-to-surface kill capability.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator PASTORE. Before he was forced to leave, Senator Young also asked that I submit further questions for him. Without objection, these will also be printed in the record at this point.

[The questions and answers follow:]

TRIDENT MISSILE TESTING

Senator YOUNG. When will the TRIDENT I missile complete testing?

Admiral NICHOLSON. The last performance evaluation missile is presently scheduled to be launched from a submarine in [deleted]. This will complete the TRIDENT I R&D funded development flight test program. TRIDENT I production missiles will be flight tested throughout their operational life, similar to the POSEIDON Operational Test Program, to demonstrate their reliability.

FIRST TRIDENT LAUNCH DATE

Senator YOUNG. When will the first TRIDENT submarine be launched?

Admiral NICHOLSON. Present planning is to launch the first TRIDENT in mid-1977.

TRIDENT POST-DELIVERY SCHEDULE

Senator YOUNG. What is the projected schedule for the TRIDENT submarine?

Admiral NICHOLSON. After delivery the ship will undergo a planned shakedown period during which each crew will operate the ship to fully test all systems and equipments, demonstrate the operation of the weapon system during a Demonstration and Shakedown Operation (DASO), and be certified to conduct defensive weapons operations. After this period, the ship will return to the builder's shipyard for a Post Shakedown Availability (PSA) of about 35 days. Upon completion of PSA, the ship will transit to the Support Site at Bangor, Washington to conduct a predeployment refit. Completion of the refit marks the Initial Operating Capability (IOC) of the submarine.

TRIDENT TESTING

Senator YOUNG. When will testing be completed on the first TRIDENT submarine? Will the test results be timely for incorporation of changes into the following submarine?

Admiral NICHOLSON. Testing of the TRIDENT submarine is conducted in a series of stages of increasing complexity. Equipment and subsystems are thoroughly tested ashore before installation in the ship. The very complex Command and Control System will be tested at its Land Based Evaluation Facility (LBEF) using sophisticated computer driven simulation and stimulation techniques.

All systems are tested after installation, first during dock trials, then sea trials before delivery of the ship. The testing of the crew and ship continues during shakedown training culminating in the demonstration and shakedown operation (DASO) in which a missile is launched.

Yes, the second TRIDENT submarine will follow the schedule of the first, one (1) year later. Thus, the results of each stage of testing will be fed back into the follow submarines.

NUCLEAR ATTACK SUBMARINES

Senator YOUNG. How many nuclear attack submarines does the Navy plan to build? How many have been delivered to date?

Admiral PRICE. The Navy's objective is a force level of about 90 nuclear attack submarines.

The Navy currently has 64 nuclear attack submarines in commission. Twenty-seven additional nuclear attack submarines have been approved by Congress and twenty-four of these twenty-seven are currently under contract. The remaining three ships, approved in the fiscal year 1975 budget, are expected to be contracted for with the two SSNs requested in the fiscal year 1976 budget request.

NUCLEAR SURFACE SHIPS CONSTRUCTION

Senator YOUNG. How many nuclear powered surface ships does the Navy propose to build and how does this compare with those previously built?

Admiral PRICE. We currently have one nuclear powered carrier and five nuclear powered surface combatants in commission. Three nuclear powered carriers and four nuclear powered surface combatants are under construction or authorized. Final funding for DLGN–42, the fifth surface combatant is requested in the FY 1976 budget.

As Secretary Schlesinger testified in his posture statement, we are studying our force requirements in the light of TITLE VIII. We will need a number of highly capable surface ships carrying the Aegis weapons system to carry out our strategy in the years ahead. Such ships would be more capable if nuclear powered than conventionally powered, but we are uncertain at this point, in view of the recent reductions in our combatant strength, as to whether we can trade-off further numbers of ships in order to get increased individual ship capabilities. We are working now to resolve this matter.

CAPABILITY OF PATROL FRIGATE

Senator YOUNG. Will the non-nuclear patrol frigates be used primarily in escort and anti-submarine roles?

Admiral PRICE. In a general sense that is true. The PF will provide anti-submarine, anti-surface, and anti-air protection for underway replenishment groups, amphibious forces, and mercantile shipping. In this regard, it should be noted that its surface-to-air missile system will provide an area defense capability to non-carrier forces heretofore supplied solely by the six DEG–1 class ships or by drawing down from missile equipped combatants required for carrier task groups. Additionally, the HARPOON surface-to-surface missile system in the PF contributes significantly to the ship's offensive capabilities.

Although designed with the open ocean surface combatant role as the major consideration, the PF possesses sufficient multi-purpose capability and flexibility to be employed, under certain circumstances, in support of various high value forces.

MISSION OF THE PHM

Senator YOUNG. How does the Navy plan to use the Patrol Hydrofoil Guided Missile Ship? How many will be procured for the U.S. Navy compared to those procured for foreign countries.

Admiral PRICE. The mission of the Patrol Hydrofoil Missile Ship is to operate offensively against major surface combatants and other surface craft and to conduct surveillance, screening, and special operations. The Navy needs PHM because the shrinking size of the U.S. surface fleet makes it imperative that we husband our higher value resources such as the DD 963 and Patrol Frigate for assignment and tasks for which they have been specifically constructed and about which war plans have been laid. The fast patrol craft will, in many critical areas of the world, provide a comparatively low value asset for use in operations against high value enemy ships or against similar enemy patrol craft. In addition, the PHMs fill the need for a small, fast, effective ship capable of surveillance, barrier and blockade operations in vital straits and choke points which are found in the Mediterranean, Baltic, Norwegian Sea, North Sea, South China Sea, and the Sea of Japan.

Presently, the United States is planning to acquire a total of 24 PHMs, while Germany is planning on a production buy of from one to ten ships. The actual extent of German participation will not be known until a production supplement to the Memorandum of Understanding between governments is signed. No other countries are involved in production planning and no military sales are now contemplated.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator PASTORE. Senator Strom Thurmond, who is an ex officio member of this subcommittee, requested that you respond to certain questions for him as well.

[The questions and answers follow:]

MINIMUM FORCE LEVEL

Senator THURMOND. Admiral Price, state for the record the justification for a 600-ship fleet Navy. Why not more or less?

Admiral PRICE. A 600-ship active Navy is the minimum force level for the mid-1980's to enable the Navy to meet its peacetime posture requirements and a readiness to carry out its wartime missions in support of the national strategy. Deployed forces in any theatre must be strong enough offensively to defend themselves against suprise attack, and configured to provide adequately flexible responses to counter-moves by other nations. Additional considerations are established by the actual numbers and disposition of friendly and unfriendly forces and by world geography. All this results in our current deployment requirements of 4–5 carrier task groups, 4 amphibious task elements, and the necessary support ships. Although the Navy can successfully carry out its missions by a thin margin today, a 600-ship active Navy is essential if we are to maintain this marginal balance into the mid-1980's in the face of growing Soviet maritime capabilities. More ships would, of course, reduce the degree of risk inherent in our estimates. With less ships, we would not foresee maintenance of a favorable balance in the mid-1980's.

Senator THURMOND. At what point in time do you expect to reach this ship level?

Admiral PRICE. Fiscal year [deleted] appears to be the earliest practicable date. However, achieving a 600-ship active fleet will require increasing our naval shipbuilding for fiscal years 1977 through 1981. At present, there is no approved program that would increase our force level beyond [deleted] active fleet ships, in fiscal year 1983.

NAVY MISSION

Senator THURMOND. How do the missions it involves handling compare with the missions handled in the past by larger ship numbers.

Admiral PRICE. The nature of the U.S. Navy missions has not changed appreciably over the past two decades; however, the nature of our potential opposition has. We had an active fleet of 976 ships in 1968. Today we have 502 and face a reduction to 490 in fiscal year 1976. Since 1962, the Soviets have greatly expanded their Navy. Although they have 2318 naval ships, many of their ships are not equivalent to ours. However, since 1962, they have increased the numbers of their air-capable ships, long-range submarines, and missile-firing surface combatants of frigate size and larger from 107 to 326. We have 197. But numbers are not the only consideration; Soviet capabilities are continuing to grow across the spectrum of Naval warfare.

Thus, while the U.S. Navy missions of the future are not expected to change, the challenge of their accomplishment will be even greater. For this reason, we seek a modern naval force rebuilt to a balanced minimum of 600 active ships.

PRIOR YEAR FUNDING

Senator THURMOND. Admiral, break out in money terms the $2.2 billion additional ship funding request and relate it to the percentages given in your statement. Especially the 28% you attribute to general economic conditions.

Admiral PRICE. The additional funding requested for prior year programs is composed of the following causes to which I alluded in my statement.

	Millions
Program changes (9.4 percent)	$213.9
Direct inflation (62.0 percent)	1406.4
Contract escalation	1149.8
Inflation on GFE	177.4
Inflation on contract award estimates	79.2
Other (28.6 percent)	649.0
Claims	150.0
Target to ceiling increases	391.6
Additional reserves due higher basic prices	5.0
Productivity estimates and other changes	102.4

Trident Program Cost Growth

Senator Thurmond. Has any cost growth resulted in the TRIDENT Program to date?

Admiral Nicholson. TRIDENT System estimate of $11.3 billion which was submitted to the Congress in January 1972 preceded OSD approval of a TRIDENT Development Concept Paper which fully defined program requirements. As such, that estimate simply reflected all the funding which was programmed for TRIDENT in the January 1972 FYDP and thus, there was no "to complete" cost in that estimate. TRIDENT Program Acquisition Cost in the 31 December 1974 SAR is $16.2 billion or an increase of $4.867 billion. Of this amount, $3.338 billion is attributable to actual experienced and predicted inflation. The remaining $1.529 billion increase is due to the addition of costs beyond the FYDP period of FY 1968 through 1977 not included in the initial estimate, increase in submarine missile tubes and missiles, stretchout of system acquisition, restructuring of the then planned MARV program to one of advance development for purposes of demonstrating compatibility with the C4 missile, refinement of estimates, and projected inflation directly associated with these changes.

Trident Commissioning

Senator Thurmond. When is the first boat to be delivered to the Navy?

Admiral Nicholson. The shipbuilder is required to meet a contract delivery date of April 1979 and to use his best effort to achieve delivery in December 1977. Both the shipbuilder and the Navy are confident that the 1979 contract date can be achieved. Although some material and component delivery dates estimated by subcontractors will not support the "best effort" December 1977 delivery date, the 1979 contract delivery date is supported. The Navy and the shipbuilder are working to improve the delivery of controlling items to achieve the earliest practicable submarine delivery date.

Trident Acquisition Cost

Senator Thurmond. What is the program cost for the TRIDENT series?

Admiral Nicholson. The program acquisition cost as reported in the 31 December 1974 SAR for the ten TRIDENT System C–4 missile program is $16,153.4 million. The total Navy estimated cost, including acquisition related OPN and O&M,N costs which are not reported in the SAR in accordance with DOD/Congressional agreement, is $17,093.8 million. Additionally, the acquisition cost estimate associated with the backfit of TRIDENT I (C–4) missiles into ten POSEIDON configured SSBNs is $2,545.2 million. The TRIDENT II estimated costs are currently undefined and therefore are excluded from the above costs.

Patrol Frigate Program

Senator Thurmond. Explain for the Subcommittee why 56 Patrol Frigates are needed for the Navy.

Admiral Price. As I previously explained, we are building towards a Navy of 600 ships. In a Navy of this size, there is a requirement for over 60 ships with the general mission capabilities of the PF.

The proposed building rate of the PF of about 10 or 11 per year is based on a recognition of this overall requirement balanced against a realistic estimate of

the availability of funds for procurement. The number of 56 PF's is the total that we could plan to procure through FY 1980. Assuming no changes in our estimates of the threat and requirements in the interim, we would plan to procure the remaining PF's in FY 1981 and subsequent year procurement funds.

PATROL FRIGATE PROGRAM REDUCTIONS

Senator THURMOND. How has the Congressional cuts of the Patrol Frigate program impacted on cost?

Admiral PRICE. After the reduction in the FY 1975 Appropriations Act, a three month contract award delay was necessitated in order to provide the program continuity necessary to preserve equipment options competitively obtained by the lead shipbuilder to maintain standardization. Further, the restoration of these four ships in the outyears of the program increases the exposure to inflation. For these reasons the total impact of FY 1975 restriction has been estimated to be $85.1 million.

HYDROFOIL MISSILE SHIP PROGRAM

Senator THURMOND. How many hydrofoil guided missile ships are needed and how do they fit into the 600-ship structure?

Admiral PRICE. Ship force levels are arrived at after careful consideration of mission, cost, and urgency of requirement. Initial planning was approved for a force level of 30 ships, however, as a result of the FY 76 budget process, the FYDP program has been reduced from 30 ships to 24 ships. The PHM Force Level is the subject of continuing analyses and succeeding FYDP updates may reflect changes. The PHM is not intended to be a replacement for other surface combatants now operational in the USN Surface Fleet. Rather the PHM is an innovative surface warfare craft intended to economically reinforce our naval capability.

OFFENSIVE POTENTIAL OF PHM

Senator THURMOND. How large a ship could the hydrofoils sink or render inoperative?

Admiral PRICE. The PHMs primary armament is eight HARPOON surface-to-surface missiles. Previous testing of this weapon has demonstrated that a single missile will sink a target destroyed. It is therefore reasonable to assume that a HARPOON hit would cause considerable damage to even the largest combatant that a series of hits would result in complete neutralization or sinking.

SOVIET/UNITED STATES PHM COMPARISON

Senator THURMOND. Do the Soviets have a comparable ship?

Admiral PRICE. The Soviets have high speed hull borne patrol craft with a surface-to-surface missile capability. They do not presently have a ship with the capabilities of the PHM.

OILER AND TENDER PROGRAMS

Senator THURMOND. Explain the future requirements in fleet oiler and destroyer tender programs.

Admiral PRICE. Our future requirements for fleet oilers are for a minimum of 9 new AO–177 class ships in the period FY 76–80. These new ships will be replacements for the older oilers now in service. Some of these veteran AO's have completed over 30 years of service.

Our underway replenishment force levels are computed on the basis of the number of Attack Carrier Task Forces, Marine Amphibious Forces and Amphibious Readiness Groups which are to receive deployed support, the tempo of activity, the distance to resupply bases as well as the accessibility and transfer capacity of in-theater or near-theater bases and their facilities. The specific requirement for fleet oilers is then developed from analysis of POL requirements of the ships to be supported and the availability of POL supply points within various theaters of operation. These operational scenarios are taken from missions defined in the Defense Program and Planning Guidance (DPPG).

The Navy requirement for 7 new destroyer tenders of the AD–37 class was derived from a series of studies addressing the Navy's requirement for cruiser destroyer force intermediate level maintenance (IMA). The requirements are based on projected force composition, defined off-ship maintenance requirements, pro-

jected IMA rates of production and projected IMA demand. The anticipated level of intermediate maintenance to support a cruiser-destroyer force under a revised and comprehensive integrated maintenance strategy (including reduced manning of low-mix ships and increased intervals between overhaul) indicates a requirement for 9 modern destroyer tenders and six shore-based maintenance support groups. Two of the required tenders entered service in the mid-1960's; one additional ship was authorized in FY–75. The remaining six ships are programmed for procurement during the period FY 76–80.

SUBCOMMITTEE RECESS

Senator PASTORE. If I may make a suggestion, we have had Admiral Gaddis here all morning, and I think from now on we ought to segment these appearances. The first group can come in at 10 o'clock, and the second group at 11 o'clock, and in that way these people can do their work at their office, until they need to appear.

Admiral PRICE. Thank you, Mr. Chairman.

Senator PASTORE. We will recess until 2 o'clock.

[Whereupon, at 12:15 p.m., the subcommittee was recessed, to reconvene at 2 p.m., the same day.]

(Afternoon Session, 2 O'Clock, Tuesday, March 4, 1975.)

DEPARTMENT OF DEFENSE

Other Procurement, Navy

STATEMENT OF VICE ADM. WALTER G. GADDIS, USN, DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)

ACCOMPANIED BY:

VICE ADM. WILLIAM D. HOUSER, DEPUTY CHIEF OF NAVAL OPERATIONS (AIR WARFARE)

MAJ. GEN. FRANCES W. VAUGHT, U.S. MARINE CORPS, ASSISTANT DEPUTY CHIEF OF STAFF FOR INSTALLATIONS AND LOGISTICS, HEADQUARTERS, MARINE CORPS

Senators present: Senators McGee, Young, Symington, Inouye, and Stevens.

JUSTIFICATION

Senator McGee (presiding). The subcommittee will now come to order.

This afternoon the subcommittee will resume hearings on Navy and Marine Corps procurement accounts for fiscal year 1976.

Our first witness will be Admiral Gaddis, who will discuss "Other procurement, Navy," appropriations account.

We will insert in the record that section of the justifications which deals with "Other procurement for the Navy."

[The justification follows:]

Justification

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance and ammunition (except ordnance for new aircraft, new ships, and ships authorized for conversion), purchase of not to exceed [seven hundred and twenty-four] one thousand and eighty-eight passenger motor vehicles, for replacement only, expansion of public and private plants, including the land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355. Revised Statutes, as amended; and procurement and installation of equipment, appliances, and machine tools in public or private plants, reserve plant and Government and contractor-owned equipment layaway. [$1,582,000] $1,981,900,000, [and in addition, $20,800,000, of which $10,200,000 shall be derived by transfer from "Other Procurement, Navy, 1973/1975" and $10,600,000 shall be derived by transfer from "Other Procurement, Navy, 1974/1976,"] to remain available for obligation until [June 30, 1977] September 30, 1978.

For "Other procurement, Navy" for the period July 1, 1976, through September 30, 1976, $491,200,000 including purchase of not to exceed one hundred and fourteen passenger motor vehicles, for replacement only to remain available for obligation until September 30, 1978.

(10 U.S.C. 5012, 5031; 31 U.S.C. 718; Department of Defense Appropriation Act, 1975.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-1810-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. SHIPS SUPPORT EQUIPMENT	334,510	360,200	386,900	289,680	384,200	383,600
	2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	412,761	524,100	631,000	395,999	562,600	617,300
	3. AVIATION SUPPORT EQUIPMENT	236,376	251,600	370,300	289,865	295,400	358,100
	4. ORDNANCE SUPPORT EQUIPMENT	264,863	286,900	403,800	253,014	352,900	388,700
	5. CIVIL ENGINEERING SUPPORT EQUIPMENT	54,081	66,500	89,000	52,753	62,300	85,900
	6. SUPPLY SUPPORT EQUIPMENT	13,497	10,600	18,200	7,979	18,800	17,500
	7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	58,813	76,800	82,700	47,556	90,100	82,380
	TOTAL DIRECT	1,375,301	1,576,700	1,981,900	1,336,846	1,766,300	1,933,480
	REIMBURSABLE (TOTAL)	159,108	67,000	67,000	129,534	119,200	76,500
10	TOTAL	1,534,409	1,643,700	2,048,900	1,466,380	1,885,500	2,009,980
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-132,672	-56,800	-56,800	-137,878	-71,800	-56,800
13	TRUST FUNDS	-15,592	-9,400	-9,400	-24,228	-9,400	-9,400
14	NON-FEDERAL SOURCES	-997	-800	-800	-762	-800	-800
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-443,570	-433,004	-196,204
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-58,848	-10,800	.....	-58,848	-10,800	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-92,102	-10,000	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-45,000	-20,800	.....	-45,000	-20,800	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	71,100	20,800	.....	71,100	20,800	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	433,004	196,204	235,124
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	10,800	.....	.....	10,800	.....	.....
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	34,002	.....	.....	34,002	.....	.....
	BUDGET AUTHORITY	1,305,000	1,555,900	1,981,900	1,305,000	1,555,900	1,981,900
	BUDGET AUTHORITY:						
40	APPROPRIATION	1,305,000	1,582,600	1,981,900	1,305,000	1,582,600	1,981,900
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-26,700	.....	.....	-26,700	.....
43	APPROPRIATION (ADJUSTED)	1,305,000	1,555,900	1,981,900	1,305,000	1,555,900	1,981,900
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET				1,303,512	1,803,500	1,942,980
72	OBLIGATED BALANCE, START OF YEAR				2,023,137	1,916,350	2,215,850
74	OBLIGATED BALANCE, END OF YEAR				-1,916,350	-2,215,850	-2,651,830
77	ADJUSTMENTS IN EXPIRED ACCOUNTS				-11,525	.....	.....
90	OUTLAYS				1,398,774	1,504,000	1,507,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1810-0-1-051	1974 ACT	1975 EST	1976 EST
DIRECT OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	13,600	14,500	13,900
25.0 OTHER SERVICES	185,546	223,100	291,500
26.0 SUPPLIES AND MATERIALS	582,100	782,100	834,500
31.0 EQUIPMENT	555,600	746,600	803,580
TOTAL DIRECT OBLIGATIONS	1,336,846	1,766,300	1,933,480
REIMBURSABLE OBLIGATIONS:			
25.0 OTHER SERVICES	18,634	16,800	9,400
26.0 SUPPLIES AND MATERIALS	56,700	52,400	34,200
31.0 EQUIPMENT	54,200	50,000	32,900
TOTAL REIMBURSABLE OBLIGATIONS	129,534	119,200	76,500
99.0 TOTAL OBLIGATIONS	1,466,380	1,885,500	2,009,980

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) 1972 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1810-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. SHIPS SUPPORT EQUIPMENT	.....	.....	.....	-352	.....	.....
2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	.....	.....	.....	-2,382	.....	.....
3. AVIATION SUPPORT EQUIPMENT	.....	.....	.....	1,326	.....	.....
4. ORDNANCE SUPPORT EQUIPMENT	.....	.....	.....	-3,041	.....	.....
5. CIVIL ENGINEERING SUPPORT EQUIPMENT	.....	.....	.....	-40	.....	.....
6. SUPPLY SUPPORT EQUIPMENT	.....	.....	.....	486	.....	.....
7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	.....	.....	.....	185	.....	.....
TOTAL DIRECT	.....	.....	.....	-3,818	.....	.....
REIMBURSABLE (TOTAL)	.....	.....	.....	1,628	.....	.....
10 TOTAL	.....	.....	.....	-2,190	.....	.....
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	.....	.....	.....	-3,178	.....	.....
13 TRUST FUNDS	.....	.....	.....	-1,785	.....	.....
14 NON-FEDERAL SOURCES	.....	.....	.....	141	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-36,990	.....	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-44,002	.....	.....	.....	.....	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	10,000	.....	.....	10,000	.....	.....
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	34,002	.....	.....	34,002	.....	.....
BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1810-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. SHIPS SUPPORT EQUIPMENT				14,218	7,344	
	2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT				64,651	18,833	
	3. AVIATION SUPPORT EQUIPMENT				92,761	32,074	
	4. ORDNANCE SUPPORT EQUIPMENT				69,097	20,441	
	5. CIVIL ENGINEERING SUPPORT EQUIPMENT				1,757	27	
	6. SUPPLY SUPPORT EQUIPMENT				2,134	1,010	
	7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT				8,559	708	
	TOTAL DIRECT				253,177	80,437	
	REIMBURSABLE (TOTAL)				25,180	13,371	
10	TOTAL				278,357	93,808	
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				-2,028	-5,000	
13	TRUST FUNDS				-6,751		
14	NON-FEDERAL SOURCES				94		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				-406,580	-88,808	
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-23,200	-10,200		-23,200	-10,200	
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-48,100					
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	61,100	10,200		61,100	10,200	
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				88,808		
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	10,200			10,200		
	BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

	IDENTIFICATION CODE 07-15-1810-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. SHIPS SUPPORT EQUIPMENT	334,510	.....	.....	275,814	53,156	5,540
	2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	412,761	.....	.....	333,730	72,567	6,464
	3. AVIATION SUPPORT EQUIPMENT	236,376	.....	.....	195,778	36,926	3,672
	4. ORDNANCE SUPPORT EQUIPMENT	264,863	.....	.....	186,958	76,359	1,546
	5. CIVIL ENGINEERING SUPPORT EQUIPMENT	54,081	.....	.....	51,036	2,473	572
	6. SUPPLY SUPPORT EQUIPMENT	13,897	.....	.....	5,359	8,290	248
	7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	58,813	.....	.....	38,812	18,892	1,109
	TOTAL DIRECT	1,375,301	.....	.....	1,087,487	268,663	19,151
	REIMBURSABLE (TOTAL)	159,108	.....	.....	102,726	45,529	10,853
10	TOTAL	1,534,409	.....	.....	1,190,213	314,192	30,004
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-132,672	.....	.....	-132,672	-10,000	.....
13	TRUST FUNDS	-15,692	.....	.....	-15,692	.....	.....
14	NON-FEDERAL SOURCES	-997	.....	.....	-997	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-344,196	-30,004
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-35,648	-600	.....	-35,648	-600	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	.....	-10,000	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-45,000	.....	.....	-45,000	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	10,600	.....	.....	10,600	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	344,196	30,004	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	600	.....	.....	600	.....	.....
	BUDGET AUTHORITY	1,305,000	.....	.....	1,305,000	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1810-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. SHIPS SUPPORT EQUIPMENT	.....	360,200	.....	.....	323,700	28,860
	2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	.....	524,100	.....	.....	471,200	41,936
	3. AVIATION SUPPORT EQUIPMENT	.....	251,600	.....	.....	226,400	20,128
	4. ORDNANCE SUPPORT EQUIPMENT	.....	286,900	.....	.....	256,100	22,754
	5. CIVIL ENGINEERING SUPPORT EQUIPMENT	.....	66,500	.....	.....	59,800	5,228
	6. SUPPLY SUPPORT EQUIPMENT	.....	10,600	.....	.....	9,500	852
	7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	.....	76,800	.....	.....	70,500	6,291
	TOTAL DIRECT	.....	1,576,700	.....	.....	1,417,200	126,049
	REIMBURSABLE (TOTAL)	.....	67,000	.....	.....	60,300	5,347
10	TOTAL	.....	1,643,700	.....	.....	1,477,500	131,396
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	-56,800	.....	.....	-56,800	.....
13	TRUST FUNDS	.....	-9,400	.....	.....	-9,400	.....
14	NON-FEDERAL SOURCES	.....	-800	.....	.....	-800	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-166,200
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-20,800	.....	.....	-20,800	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	166,200	34,804
	BUDGET AUTHORITY	.....	1,555,900	.....	.....	1,555,900	.....
	BUDGET AUTHORITY:						
40	APPROPRIATION	.....	1,582,600	.....	.....	1,582,600	.....
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-26,700	.....	.....	-26,700	.....
43	APPROPRIATION (ADJUSTED)	.....	1,555,900	.....	.....	1,555,900	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1810-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. SHIPS SUPPORT EQUIPMENT	.....	.....	386,900	.....	.....	349,200
	2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	.....	.....	631,000	.....	.....	568,900
	3. AVIATION SUPPORT EQUIPMENT	.....	.....	370,300	.....	.....	334,300
	4. ORDNANCE SUPPORT EQUIPMENT	.....	.....	403,800	.....	.....	364,400
	5. CIVIL ENGINEERING SUPPORT EQUIPMENT	.....	.....	89,000	.....	.....	80,100
	6. SUPPLY SUPPORT EQUIPMENT	.....	.....	18,200	.....	.....	16,400
	7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	.....	.....	82,700	.....	.....	74,980
	TOTAL DIRECT	.....	.....	1,981,900	.....	.....	1,788,280
	REIMBURSABLE (TOTAL)	.....	.....	67,000	.....	.....	60,300
10	TOTAL	.....	.....	2,048,900	.....	.....	1,848,580
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-56,800	.....	.....	-56,800
13	TRUST FUNDS	.....	.....	-9,400	.....	.....	-9,400
14	NON-FEDERAL SOURCES	.....	.....	-800	.....	.....	-800
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	200,320
	BUDGET AUTHORITY	.....	.....	1,981,900	.....	.....	1,981,900

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1810-0-1-051		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
		TRANSITION	TRANSITION
	PROGRAM BY ACTIVITIES:		
	DIRECT:		
	1. SHIPS SUPPORT EQUIPMENT	114,700	108,700
	2. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	165,600	157,228
	3. AVIATION SUPPORT EQUIPMENT	79,400	75,400
	4. ORDNANCE SUPPORT EQUIPMENT	97,000	91,000
	5. CIVIL ENGINEERING SUPPORT EQUIPMENT	15,400	13,600
	6. SUPPLY SUPPORT EQUIPMENT	4,500	3,900
	7. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	14,600	12,800
	TOTAL DIRECT	491,200	462,628
	REIMBURSABLE (TOTAL)	16,000	17,800
10	TOTAL	507,200	480,428
	FINANCING:		
	RECEIPTS AND REIMBURSEMENTS FROM:		
11	FEDERAL FUNDS	-14,000	-14,000
13	TRUST FUNDS	-1,800	-1,800
14	NON-FEDERAL SOURCES	-200	-200
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-235,124
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	261,896
	BUDGET AUTHORITY	491,200	491,200
	BUDGET AUTHORITY:		
40	APPROPRIATION	491,200	491,200
43	APPROPRIATION (ADJUSTED)	491,200	491,200
	RELATION OF OBLIGATIONS TO OUTLAYS:		
71	OBLIGATIONS INCURRED, NET		464,428
72	OBLIGATED BALANCE, START OF YEAR		2,651,830
74	OBLIGATED BALANCE, END OF YEAR		-2,442,258
90	OUTLAYS		674,000

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OTHER PROCUREMENT, NAVY

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1810-0-1-051			TRANSITION
	DIRECT OBLIGATIONS:		
22.0	TRANSPORTATION OF THINGS		4,200
25.0	OTHER SERVICES		66,700
26.0	SUPPLIES AND MATERIALS		199,200
31.0	EQUIPMENT		192,528
	TOTAL DIRECT OBLIGATIONS		462,628
	REIMBURSABLE OBLIGATIONS:		
25.0	OTHER SERVICES		2,500
26.0	SUPPLIES AND MATERIALS		7,800
31.0	EQUIPMENT		7,500
	TOTAL REIMBURSABLE OBLIGATIONS		17,800
99.0	TOTAL OBLIGATIONS		480,428

INTRODUCTORY STATEMENT
(In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Appropriation (Adjusted)	1,305,000	1,555,900	1,981,900	491,200
Total Direct Obligation	1,336,846	1,766,300	1,933,480	462,268
Total Direct Budget Plan	1,375,301	1,576,700	1,981,900	491,200

The Other Procurement, Navy (OPN) appropriation provides for the procurement of all major items of equipment except ships, aircraft, missiles, torpedoes, and other weapons. The procurements support programs to improve the active fleet and shore establishment by the introduction of equipments to expand or maintain existing capabilities or to provide for replacement of ineffective units. Also included is the procurement of all air and ship launched ammunition, the procurement of nuclear cores and components for refueling nuclear powered surface ships and submarines, the procurement of vehicular and materials handling units and support equipment to maintain forces ashore and afloat.

The total direct budget plan for FY 1976 is $1,981,900 thousand, an increase of $405,200 over the FY 1975 budget plan. New obligational authority of $1,981,900 is required to finance the planned FY 1976 program.

The direct budget plan for the transition budget (FY 197T) amounts to $491,200 thousand. New obligational authority in this amount is requested to finance the budget plan.

Significant features of the FY 1976 budget request are:

1. A procurement program of $193.9 million for reactor fuel and replacement components for nuclear submarines and surface ships.

2. A procurement program of $193.0 million for shipboard components, shipyard modernization and other equipment.

3. A communication and electronic equipment program of $631 million. This program includes $174.6 million for ship sonars, $92 million for other ASW electronic equipment, $70.2 million for communications equipment and $29.5 million for ship radar equipment. The remaining funds are required for aircraft, ship, shore and specialized electronics support equipment.

4. A procurement program of $370.3 million for aviation support equipment. This includes $83.1 million for sonobuoys, $195.7 million for bombs, rockets and other air launched ordnance, and $16.7 million for ASW Tactical Support Systems. In addition, $69.3 million is budgeted for a variety of supporting programs, such as aircraft launching and retrieving equipment, weapons range equipment, photographic equipment, meteorological equipment and survival equipment.

5. A procurement program of $403.8 million for ship ordnance and supporting programs. Included is $115.3 million for TRIDENT Equipment plus $39.8 million for other FBM Support Equipment, $39.6 million for Ship Gun Ammunition, $77.9 million for surface missile systems ordnance alterations and equipment, and $31.3 million for ASW Support Equipment. The remaining funds ($100 million) are required for such programs as improvements to fire control systems, miscellaneous expendable material, production equipment and spare parts.

6. Procurement programs of $89 million for vehicular and construction equipment, $18.2 million for materials handling equipment and $82.7 million for Personnel and Command Support Equipment.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	TQ Estimate
Ships support equipment	334,510	360,200	386,900	114,700
Communications and electronics equipment	412,761	524,100	631,000	165,600
Aviation support equipment	236,376	251,600	370,300	79,400
Ordnance support equipment	264,863	286,900	403,800	47,000
Civil Engineering support equipment	54,081	66,500	89,000	15,400
Supply support equipment	13,897	10,600	18,200	4,500
Personnel and command support equipment	58,813	76,800	82,700	14,600
TOTAL DIRECT PROGRAM	1,375,301	1,576,700	1,981,900	491,200
Reimbursable program	159,108	67,000	67,000	16,000
TOTAL PROGRAM REQUIREMENTS (Current)	1,534,409	1,643,700	2,048,900	507,200
Less: Portion of program to be obligated in subsequent fiscal years	344,196	166,200	200,320	127,000
Plus: Obligations incurred against prior year program funds	276,167	408,000	161,400	100,228
TOTAL OBLIGATIONS	1,466,380	1,885,500	2,009,980	480,428

JUSTIFICATION FOR NAVY STOCK FUND PROCUREMENT

Senator McGee. I think it is also relevant to include the justification for the Navy stock fund procurement at this time.

Justification

NAVY STOCK FUND

(WAR RESERVE MATERIEL PROCUREMENT)

For the procurement of Stock Funded War Reserve stocks required to achieve a support posture to meet authorized asset levels, inventory objectives for combat critical items of supplies and spare parts. $42,000,000.

(In Thousands of Dollars)
Program Requirement for FY 1976: $42,000
Program Requirement for FY 197T: -0-

PART I - PURPOSE AND SCOPE

1. The Navy Stock Fund is a revolving fund which finances the purchase and maintenance of stock of common supply items required for support and operation of the Navy. These stocks are carried in the Navy Stock Account. Upon issue of Navy Stock Account stocks for use, funds directly supporting the work or operations using the stocks are charged, and the Navy Stock Fund is reimbursed. These reimbursements provide the credit by means of which stocks issued from the Navy Stock Account are replaced. Prepositioned War Reserve Stocks are held to support specific high priority contingency programs. Because of the nature of these programs, material may be required on extremely short notice at specified locations to support specific forces. Hence, this material must be on hand today and every day. Because of the immediacy of the support requirement should a contingency arise, the material cannot be obtained from production in sufficient time to meet the requirement. The principal projects supported by Prepositioned War Reserve Stocks are:

a. Marine Amphibious Force Requirements. These forces are primarily for operations involving actual or potential enemy opposition under conditions short of general war or, secondarily for operations involving general war. The requirements provide [deleted] supply of support material, plus advanced base material essential to combat operations.

b. Fleet Support Requirements. These requirements consist of material for the support of approved Fleet Forces [deleted] at combat usage rates. To the extent practicable, this material is placed aboard ships of the Mobile Logistics Support Force or at overseas depots and includes:

(1) Material carried in Fleet Issue Ships.

(2) Material carried in Destroyer Tenders and Submarine Tenders (other than Fleet Ballistic Missile Submarine Tenders) and Repair Ships.

(3) Material positioned ashore at selected Continental U.S./overseas bases when sufficient mobile support force units are not available.

(4) Second echelon industrial support material positioned ashore as supplements to support the capability of the Mobile Logistics Support Force.

(5) Contingency requirement material positioned afloat/ashore to provide emergency augmentation to units when adequate support from the Mobile Logistics Support Force is not available.

c. Overseas Base Requirement. This material may be used to augment existing base facilities or provide new austere facilities for advanced bases upon mobilization. Only material required in the (deleted), mobilization is included in this requirement.

d. Inshore Undersea Warfare Requirement. This requirement provides material for support of Inshore Undersea Warfare contingency plans which include initial defense of CONUS harbors and outlying ports.

e. Amphibious Lift/Personnel Transport Requirement. This project provides material that will enable Military Sealift Command/Merchant Ships to augment the existing amphibious assault force in mounting-out a combat loaded landing force. Additionally, it will provide for the administrative movement of a landing force and provide flexibility in movement planning.

f. Underway Fueling Requirements. This requirement consists of portable fueling-at-sea material to fuel escort vessels from Military Sealift Command/Merchant Tankers utilizing the astern method of fueling at sea.

g. Medical Support Requirement. These requirements provide material to support the following elements:

(1) Surgical Teams, which are designed to provide direct support to the operating forces by augmenting the personnel and material of existing medical facilities when it is anticipated that the number of casualties requiring surgical care may exceed the capabilities of the medical support elements organic to the combat units in operating forces.

(2) Nuclear Casualty requirements which provide essential material to minimize personnel casualties resulting from nuclear attack.

(deleted)

(3) Blood Donor requirements which provide medical material (deleted) at designated whole blood donor centers which ensure a readiness to supply the operating forces with whole blood in contingency operations and to supply blood in the event of local, regional and national emergencies.

PART II - JUSTIFICATION OF FUNDS REQUESTED
(In Thousands of Dollars)

The total FY 1976 Prepositioned War Reserve Stock request is broken down as follows:

a. Marine Amphibious Force Requirements

NSF Budget Project 14	$ 800
NSF Budget Project 28	19,000
NSF Budget Project 34	2,800
Subtotal	$22,600

b. Fleet Support Requirements

NSF Budget Project 14	$ 1,700
NSF Budget Project 28	4,900
NSF Budget Project 34	10,800
Subtotal	$17,400

c. Amphibious Lift/Personnel Transport Requirements

NSF Budget Project 28	$ 2,000

d. Totals

NSF Budget Project 14	$ 2,500
NSF Budget Project 28	25,900
NSF Budget Project 34	13,600
Total	$42,000

PART III - CASH REQUIREMENT
(In Thousands of Dollars)

New obligational authority and a cash augmentation in the amount of $42 million is requested in FY 1976 to finance procurement of deficiencies in Prepositioned War Reserve Requirements. This is the amount of the DOD approved FY 1975 War Reserve Program for which funding in FY 1975 was deferred because of an inadequate Navy Stock Fund cash position.

Cash Requirement:		
Provision for variation		$116.5
Unfunded mobilization deficiency		42.0
Total		$158.5
Cash Availability:		
Cash balance, 1 July 1975		$ 41.3
Collections during FY 1976	$2,505.5	
Disbursements during FY 1976	$2,430.3	
Net cash from operations		$ 75.2
Cash Balance		$116.5
Cash Requirement less Cash Balance, end of year (New Obligational Authority required)		$ 42.0

PREPARED STATEMENT

Senator McGee. Now, I think it is well to note here as the admiral has already suggested, that today is Wyoming Day, and we are proud of your nativity in our wonderful State.

Senator Young will be envious of this.

Admiral, without objection, we will print your statement in the record, and you may proceed to summarize it.

Admiral Gaddis. Thank you, Mr. Chairman.

[The statement follows:]

Mr. Chairman and members of the Committee, I am Vice Admiral WALTER D. GADDIS, Deputy Chief of Naval Operations for Logistics. It is a pleasure to appear before you to present the fiscal year 1976 and transition budget request for the Other Procurement, Navy Appropriation. I will make the only formal statement on the overall appropriation.

The Other Procurement, Navy Appropriation is essentially the same in program content and structure as presented last year. One major new program effort, the support of the backfit of TRIDENT missiles in POSEIDON submarines at $61.3 million, is included in the FY 1976 request of 1 billion 981 million 900 thousand dollars. The remaining $344 million increase over the FY 1975 budget is spread over numerous programs. These include $81 million in air launched ordnance; $54 million for ship sonars, split between FBM peculiar and the AN/BQQ-5 retrofit program; $30 million in rolling stock, including trucks, earth moving equipment, forklift trucks and sedans; $31 million in shore electronic support equipment which includes $6.0 million for expansion of the Barking Sands under water range, $10 million for the 8th and last Omega shore transmitter, and $11 million for the Ocean Surveillance Information System and Fleet Command Support Centers. The Nuclear Core and component equipment replacement program has increased $27 million and Sonobuoy and Surface Missile System procurements are increased by $25 million each, with HARPOON representing $20 million of the increase. Communication and Communication Security equipment reflects a $25 million

increase, half of which relates to the procurement of communication terminals that are currently leased. Aviation support electronics, Ordnance productions facilities, and cryptologic equipment requirements have each increased approximately 15 million thus accounting for the balance of the increases.

A total of $135.8 million is included for support of the TRIDENT program including $61.3 million in support of the backfit of the TRIDENT missile into the POSEIDON submarine. The funding in this appropriation for the backfit program is for training equipment and support of this two plus billion dollar effort with the preponderance of funding included in the Weapons Procurement, Navy appropriation.

Other major programs in the fiscal year 1976 budget include $196 million for airlaunched munitions, $194 million for reactor plant equipment, $83 million for sonobuoys, $84 million for the AN/BQQ-5 sonar, and $131.9 million for Spare and Repair Parts.

The munitions program is a continuation of the initiative in the FY 1974 supplemental aimed at achievement of minimum war reserve inventories to improve readiness and provide assets for training consumption. War reserves, depleted during the SEASIA conflict, have only been partially reconstituted; principal shortages exist in the new "smart" weapons.

Spares funding for FY 1976 reflects a slight net increase over FY 1975. The primary area of increase is in initial spares which include several large programs including TRIDENT. The FY 1976 program continues the policies of reducing shipboard allowances and minimizing the depth of inventory for initial procurements. Programs for intensive management of high cost or critical repairables have been expanded to achieve a reduction in inventory investment by reducing time in the pipeline and undergoing repair. Requirements take into account anticipated improvements in equipment performance through reliability investments when applicability to specific parts is known.

Replenishment spares now include follow-on requirements in support of second and subsequent end item procurements after a demand development period. This change was made to assure use of any excess inventory and to benefit from consolidated procurements for new outfittings and replenishment of system stock. Replenishment, as a result, has increased as the former initial requirements are included in the replenishment budget. In addition, the policy of minimizing initial buys to allow actual demand experience to determine proper inventory levels will increase future replenishment budgets. In FY 1976 a transfer of organic level repairables from the procurement accounts to the Navy Stock Fund have offset the replenishment increases.

I would like now to present individually the budget request for each of the seven activities and will address the balance of the major programs in the context of the budget activity in which they appear.

Budget Activity 1 - Ships Support Equipment

This activity finances the procurement of major shipboard components such as hull, mechanical and electrical equipment, replacement cores and components; deep submergence equipment; small boats; industrial production equipment for the Naval Shipyards; and spares and repair parts.

The Fiscal Year 1976 request for this activity is $386.9 million, a $26.7 million increase over the FY 1975 level. The FY 197T request for this activity is $114.7 million.

Funding of $107.4 million in FY 1976 and $19.4 million in FY 197T is requested for Shipboard components, an increase of $15.3 million from that requested last year. This increase is attributable to the LM-2500 Gas Turbine Program, the 750 KW Ships Service Turbine Generator Program, and the Submarine Silencing Program. A significant offsetting decrease is associated with the TRIDENT Support Equipment Program.

For FY 1976 we are requesting funds for the procurement of necessary LM-2500 engine spares to support the ships under construction such as the SPRUANCE Class Destroyer. This program will provide a pool of major engine-subassemblies -- gas generators and power turbines for all LM-2500 equipped ships. These generators and turbines are programmed for procurement in the OPN appropriation to coincide with scheduled deliveries of the SPRUANCE Class Destroyers. These generators/turbines are stock spares to support the predicted failure rate.

The ship is designed to permit engine replacement in port, by ship's force, provided crane service and replacement sub-assemblies are available. Major engine maintenance will then be conducted ashore, based on the condition of the engine sub-assemblies as indicated by monitoring equipment associated with each engine. When information from monitoring equipment indicates the necessity, the gas generator or power turbine will be replaced and the unit requiring repair sent to a designated central shore repair facility. This requires that a number of Gas Generators and Power Turbines--each of which requires two year's procurement lead-time--be available when needed as replacements to minimize loss of ship availability.

We are requesting $9.3 million for the procurement of Type 18 periscope for submarines. While this periscope was originally based on the Type 15, it does contain completely redesigned electronic warfare support measures and optical sub-systems. Some of the other features in this new periscope are higher power and resolution, television and photographic capabilities, and a vastly improved image stabilization and special electronics equipment for low light level viewing.

We are requesting $10.1 million for the Submarine Silencing Program which represents an increase of $6.6 million over that requested last year. The main portion of the increase is for procurement of one Extended Operating Cycly (EOC) Forward Site

Trial Equipment and Glass Reinforced Plastic Domes. Due to extended operating cycles Fleet Ballistic Missile Submarines will remain away from the continental U.S. for extended periods; therefore, self-radiated noise must be measured periodically using Forward Site Trial Equipment requested at $1.8 million. The $2.7 million increase in Glass Reinforced Plastic Domes from 4 in FY 1975 to 8 in FY 1976 is directly attributable to planned overhauls in FY 1977.

Trident Support Equipment in FY 1976 at $4.4 million represents a reduction of $8.8 million from the FY 1975 level. Funding in FY 1974 and FY 1975 provided for the majority of Trident training equipment required. The $4.4 million in FY 1976 is for the procurement of shipboard type equipment and training aids for the Trident Training Facility.

Also included are funds for several ship safety related programs. The Fire Fighting Program is designed to provide safer and quicker reaction to shipboard fires ($4.9 million in FY 1976 and $.5 million in FY 197T); the Central Air Monitoring Program will provide more reliable analyzing of atmospheric conditions on nuclear submarines ($3.9 million in FY 1976) and the Life Raft Program will correct serious deficiencies in the present 15-25 Man Life Rafts.($4.9 million in FY 1976 and $1.0 million in FY 197T).

The budget request includes $54.9 million in FY 1976 and $17.8 million in FY 197T for spare and replacement reactor plant components and equipment required for the continued safe operation of the basic heat transfer cycle of naval reactor plants. Also included is $139.0 million in FY 1976 and $61.6 million in FY 197T for the procurement of reactor cores and associated structural and reactivity control elements required for the periodic refueling of nuclear powered ships.

Funds are requested for 8 SSN/SSBN Cores at a

cost of $57.9 million; 1 CVAN core at $43.8 million and 3 SSN/DLGN cores at $37.3 million.

Funds for Other Support Equipment amount to $85.6 million in FY 1976 and $15.9 million in FY 197T. $4.0 million is being requested in FY 1976 and $1.0 million in FY 197T for the procurement of two MK VIII and two MK IX Swimmer Delivery Vehicles and one Submarine Deck Shelter for the Naval Inshore Warfare Program.

Also included in the Other Support Equipment category is Spares and Repair Parts. Of the funds requested $16.3 million in FY 1976 and $1.8 million in FY 197T is for initial spare parts to support new end items and $34.5 million in FY 1976 and $5.7 million in FY 197T for replenishment spares for the replacement of spares consumed by the fleet.

Budget Activity 2
Communications and Electronic Equipment

This activity finances the procurement of all shipboard and shore communications and electronics equipment for the active fleet and shore activities. Included are shipboard radars, anti-submarine warfare electronics surveillance systems, and equipment in support of electronic warfare, reconnaissance, surveillance, and command and control systems. In addition, all communications and navigation equipment supporting air stations, ships, and shore facilities as well as cryptologic equipments are funded in this budget activity.

The total request of $631.0 million represents one hundred seven million increase over the FY 1975 program of $524.1 million. Additionally, $165.6 million is requested for the FY 197T transition period.

$29.5 million is requested in FY 1976 and $25.6 million in FY 197T for shipboard radars. This will provide the active fleet with detection, tracking, and identification equipments

to meet the challenge of high speed attack capabilities of low flyer, anti-ship missiles and modern aircraft.

Included in the FY 1976 request is $4.9 million to complete the AN/SPS-40 Corrective Action Program, which will correct problem areas in the currently installed radars resulting in improved reliability and maintainability.

$14.2 million is requested in FY 1976 for procurement of two AN/SPS-48C radars and eight Automatic Target Detection modifications for installed AN/SPS-48A radars, which will significantly increase the overall effectiveness of the ships combat system by providing the capability to automatically detect and track numerous air targets. The SPS-48 radar is the primary 3-D air search radar and is installed on CVs, DLGs/DLGNs and certain DDG-31 class ships. $16.3 million is requested for this program in FY 197T of which $10.8 million is to procure two AN/SPS-48C radars and $5.3 million is for eight Automatic Target detection modification kits.

$5.9 million is requested in FY 1976 for procurement of five AN/SPS-49 radars, and $2.6 million in FY 197T for two radars to maintain production continuity. This is a narrow beam, very long range, two-dimensional, air search radar, which provides the capability to conduct air search operations in a previously unused frequency, thus minimizing electronics interference between ships and effects of electronic countermeasures.

$1.8 million is requested in FY 1976 and $6.0 million in FY 197T for the AN/SPS-58 radar program. FY 1976 funds are for modifications to installed AN/SPS radars, which will result in improved performance in ability to rapidly detect the high speed, low altitude cruise missiles flying in severe land chaff and sea clutter. These radars are installed on certain CV, DE and LPH class ships. FY 197T funds are for procurement of eleven AN/SPS-58A radars which are planned for installation on AOEs, AORs, DEs, LCCs and LPH class ships.

A total of $174.6 million in FY 1976 and $58.4 million in FY 197T is requested for the procurement of ship sonars. $58.8 million in FY 1976 and $11.2 million in FY 197T of these amounts are for sonars specifically designed for the Fleet Ballistic Missile submarines. These funds include $6.5 million in FY 1976 and $1.0 million in FY 197T for procurement of the multiple channel signal processing and display equipment for use on FBM submarines and at FBM refresher training activities with the AN/BQR-15 sonar system. Another $16.6 million of this funding in FY 1976 will permit completion of the program to procure the 26 AN/BQR-15 sonars required for the Fleet Ballistic Missile submarines that are not being equipped with this sonar during their conversion period because of scheduling limitations and 5 AN/BQR-15 sonars for training sites. $35.4 million in FY 1976 and $9.9 million in FY 197T of this funding request is required to continue procurement of the AN/BQR-21 sonars initiated in FY 1975. A total of 56 AN/BQR-21 sonar systems for installation on the Fleet Ballistic Missile submarines and selected attack submarines is planned for procurement, including 19 sonars in FY 1976 and 6 systems in FY 197T.

$84.2 million in FY 1976 and $42.6 million in FY 197T is requested for the AN/BQQ-5 Sonar for 9 and 5 systems, respectively. While this request is for backfit in the SSN 594/637 class submarines, the system is also being procured for installation in all new construction SSN 688 class submarines.

$11.8 million is requested for 6 AN/BQS-13 Multi-Purpose Subsystems in FY 1976. These systems provide a much-needed interim improvement in detection capability for those submarines not scheduled to get the AN/BQQ-5 Sonar until much later in that program. The Multi-Purpose Subsystem will be installed only on submarines where it will have a usable life of at least three years prior to receiving a AN/BQQ-5 Sonar.

ASW Electronics Support equipment requests of $110.3 million in FY 1976 and $82.0 million in the Transition Budget include funding in the amount of $72.2 million and $7.7 million for FY 1976 and 197T respectively for SOSUS procurement. The SOSUS Backfit program, commencing with the Phase I or System Validation Model consists of three major areas. First, communication improvement capabilities will be continued using existing equipments and technologies. Secondly, signal processing will be upgraded at stations which are expected to have the majority of target exposure. The third area will be a program to link the system into a true network and to establish an improved coordination and control system for operating the network.

A new effort includes $1.7 million for an initial procurement of 3 Interim Escort Towed Array Systems in FY 1976 and 3 additional systems for $1.7 million in FY 197T. The towed arrays will provide the surface fleet with a short term passive towed array capability.

Four programs, ICAD, DIAMOND, AN/BRD-7, and the Tuba Phase I account for the bulk of the $37.9 million in FY 1976 and $3.7 million in FY 197T requested for Reconnaissance, Surveillance, and Electronic Warfare equipments. $8.2 million is requested in FY 1976 to procure electronics vans for the Integrated Cover and Deception System (ICADS). Developed as a counter to the increased ocean surveillance threat directed at the fleet, the ICADS will provide a new fleet capability not otherwise available. $7.5 million in FY 1976 and $.2 million in FY 197T for the Tuba Phase I Program and will provide submarines with equipment to collect acoustic intelligence. The FY 1976 funds requested will procure 8 AN/BQH-6's which provide a signal acquisition, processing, and recording capability. The FY 197T funds will continue procurement of field changes,

installation kits and sound sources for installed predecessor systems.

The request of $8.3 million for the AN/BRD-7 program will continue phased procurement of submarine equipment initiated in FY 1973 as a phased replacement for the AN/BRD-6 receiver. This equipment is also being installed in new construction submarines and funded in the ship end cost.

FY 1976 OPN funds will procure fourteen systems to complete installations on the SSN 594 and SSN 585 class submarines and will complete the backfit requirements.

Of the request of $41.9 million in FY 1976 and $8.1 million in FY 197T for Other Ship Electronics Equipment, $21.9 million is for the Naval Tactical Data Systems (NTDS) program in FY 1976 and $5.0 million in FY 197T. $6.7 million of this amount is for the hardware required to complete the Model IV Operational Computer Program, and $15.2 million is for active fleet and shore support of a total of 71 NTDS systems. Of the $15.2 million, $4.3 million is programmed to replace the Data Processing and Display Systems on the USS LONG BEACH (CGN-9). The hardware currently installed is the original R&D Model which became operational in FY 1963. In FY 197T $5.0 million of the $6.2 million is required to upgrade current active fleet NTDS installations.

The Model IV Program implementation, associated with the Tactical Air Control Systems/Tactical Air Defense Systems (TACS/TADS) program, provides the active fleet with greatly improved NTDS capability and permits complete interoperability with Air Force, Army and Marine Corps Tactical Data Systems as well as the 19 NATO ships equipped with NTDS. Model IV implementation will begin incrementally starting 1 July 1976 with an anticipated completion of the majority of U.S. ship installations by mid FY 1978.

Also included in Other Ship electronics Equipment are funds in the amount of $7.2 million in FY 1976 and $1.6 million in FY 197T for the Naval Intelligence Processing System program. This program has been budgeted in Budget Activity III in prior years. The transfer was prompted by the fact that the program has become broader than an Aviation Support program relating only to carrier installations. Shipboard installations have been authorized for amphibious command ships, general purpose amphibious assault ships, and it more generally supports the tactical command and control function.

The request of $51.6 million in FY 1976 and $19.1 million in FY 197T for Aircraft Support Communications and Electronics Equipment includes funds for Navy and Marine Corps air traffic control and flight safety improvements, air traffic control radar beacon systems, MK XII AIMS Identification Friend or Foe equipment, and landing systems and control tower improvements.

Included in these programs is $8.1 million in FY 1976 and $9.9 million in FY 197T for the Marine Air Traffic Control and Landing System (MATCALS) which will provide an all-weather operational capability at expeditionary airfields to support Marine Corps amphibious operations. It is planned to equip each of the seventeen Marine Air Traffic Control Units (MATCUs), which operate air control facilities at Marine expeditionary airfields, with a MATCALS.

The Marine Remote Air Approach and Landing System (MRAALS) program is also required to provide landing guidance at remote VSTOL and helicopter landing sites. Twenty-two systems have been funded through FY 1975. Fifteen more will be procured with the $1.8 million in Fiscal Year 1976 and the balance with $1.6 million in Fiscal Year 197T. This represents the total MRAALS requirement.

Goals have been established to improve and modernize the overall complex of Naval Air Traffic Control, Air Navigation Aids and Landing Systems in an effort to reduce mid-air and near mid-air collisions and eliminate landing accidents. There has been a considerable change in the configuration of the National Airspace Systems making it mandatory that the Navy improve facilities and place more of our air operations under positive control. The FY 1976 request of $22.7 million and FY 197T request of $7.6 million represents a significant amount of the funding toward the aforementioned goals.

$2.7 million in FY 1976 and $4.4 million in FY 197T is requested to replace existing Carrier Air Traffic Control Center (CATCC) equipment. CATCC equipment has been repeatedly cited during Safety Surveys and by the Inspection and Survey Board.

In FY 1976, $7.5 million is requested for Landing System Improvements. Most of our Ground Controlled Approach (GCA) systems have been in operational use for over 20 years, thus exceeding their life expectancy by 5 to 10 years.

Procurement of 2 ASR-8 Radars in FY 1976 at $1.0 million is requested. Airport Surveillance Radars are essential to support the positive control program. These radars compliment the landing systems improvement program and provide greater control area coverage.

$55.7 million in FY 1976 and $4.4 million in FY 197T for Other Shore Electronics Communication and Electronics Equipment will provide for continuation of various programs such as: RADTAC, Naval Reserve Equipment and Remote Sensors. Also included are funds for an Integrated Combat Systems Test Site, a program initiated in FY 1975 which will provide a permanent test facility with the equipment and resident expertise for certification of integrated combat systems prior to shipboard

installation and for conduction continuation engineering of combat systems after introduction to the Fleet.

Procurement funding in FY 1976 in the amount of $12.9 million is for the Ocean Surveillance Information System (OSIS)/Fleet Command Support Center (FCSC) program. The approved FCSC concept includes the integration of all ashore Navy command and control systems into one master program that will ensure interoperability and standardization of all hardware and software. This effort basically involves three sub-systems-Fleet Command Support Centers, the Ocean Surveillance Information System (OSIS), and the ASW Centers Command Control System (ASWCCCS).

$10.0 million is included in FY 1976 for the OMEGA program which is a world-wide VLF all-weather, continuous operating navigation system. Eight stations at strategic locations around the world will provide continuous position fixes to ships, aircraft and submarines, (military and civilian) for all nations. Bilateral agreements with Norway, Liberia, France, Argentina and Japan have provided for the construction of OMEGA stations in each of these countries. Other stations are located in Hawaii, North Dakota and the eighth station is programmed for Australia. Negotiations have been in process since 1970 when the Prime Minister announced an agreement in principle that Augstralia would host an OMEGA station. The Australian station was originally budgeted in FY 1972 but was canceled and recouped due to the stretch-out of negotiations.

The request of $9.1 million in FY 1976 and $2.0 million in FY 197T for General Purpose Electronic Test Equipment is the production of an effort to consolidate Navy management and procurement in one organization. The transfer of General Purpose Test Equipment support to one organization has produced an apparent increased funding requirement.

$5.9 million in FY 1976 is to continue a phased expansion of the existing Barking Sands Tactical Underwater Range and

provide a sufficient instrumented area for realistic fleet ASW exercises to adequately avaluate ASW systems, weapons, tactics, and personnel training.

The Shipboard Communications program request of $10.5 million in FY 1976 and $4.3 million in FY 197T will allow for the modernization of fleet communications. Specifically, the Ship Communication Automation program consists of a family of equipment suites designed to automatically process narative messages on surface ships. For this system, $4.5 million in FY 1976 and $3.5 million in FY 197T is requested.

The VERDIN (VLF/LF) communications system budgeted at $8.9 million in FY 1976 and $1.6 million in FY 197T represents the major portion of the $11.2 million in FY 1976 and $2.1 million in FY 197T requested to support the procurement of essential command and control communications equipment for the Fleet Ballistic Missile Submarine Forces. The VERDIN program will continue the procurement of equipments for installation in surface ships and submarines.

The Satellite Communications program request of $26.6 million in FY 1976 and $3.5 million in FY 197T provides for equipment to provide adequate command and control communications with ships and aircraft through the UHF and SHF frequency bands.

In the UHF band the program has evolved from the experimental joint service TACSATCOM program to GAPFILLER and will culminate in the worldwide FLTSATCOM operational capability in FY 1979. The terminal equipment now in procurement for ships and aircraft and the already deployed earth stations are interoperable with the satellites in all three programs phases. One remaining TACSATCOM satellite is in use with the deployed terminals until the GAPFILLER, leased satellite channels, become operational in FY 1976. No modifications will be required to these terminals when the traffic is transferred to the higher capacity FLTSATCOM satellites. Hence, the slip of the first

FLTSATCOM launch from May 1976 to December 1976 will not impact the deployment of terminals now in progress.

In the SHF band we are participating in the Army's procurement of shore terminals to be used with the DSCS satellites for point-to-point service.

The 1976 program includes $18.5 million to provide the Fleet Satellite Communications System terminals and associated shipboard equipment. Also requested is $6.0 million for Fleet Satellite shore terminal equipment needed to operate the links with ships, aircraft and Marine Landing Forces. The remaining $1.2 million is for Defense Satellite Communications System (DSCS) SHF requirements. FY 197T request of $3.5 million funds modems and ancillary site equipment for the uplink terminal equipment to support the Fleet Broadcast.

Of the $22.8 million in FY 1976 and $4.9 million in FY 197T requested for shore communications equipment, $3.2 million is for the Electrical Power Program which will provide both mobile diesel electric generators for emergency power and uninterruptable power systems at selected Naval Communications Stations.

To achieve Navy objectives for the modernization of the Naval Telecommunications System, the upgrading of Naval Communications Station Guam to the status of a major area station requires replacement of the present obsolescent HF transmitting capability. $2.4 million is requested to provide modern highpowered transmitters required for Guam to become the major residual HF support station in the Western Pacific/Indian Ocean communications area.

$12.5 million in FY 1976 and $4.2 million in FY 197T for the Shore Automation program will allow purchase of communications automation equipment now being leased. This equipment has been leased over the past three to four years. The contract for these sytems provides for lease with an option to buy and an economic analysis clearly illustrates that for any of these systems it is cost effective to exercise the buy option as soon as

possible. The UNIVAC 40/45 used in the Local Digital Message Exchange and Naval Communications Processing and Routing Systems are expected to satisfy system requirements through FY 1980.

A total of $29.3 million is requested for FY 1976 Encrypting Equipment procurement. No funding is requested for FY 197T. The increase over FY 1975 is attributable to the $6.0 million requested for PARKHILL (KY 65/75) narrow-band secure voice equipment. Since the NAVY has no current narrow-band secure voice capability, this is necessary to provide minimum essential capability in accordance with national policy.

Preproduction units have been delivered for joint service testing. Service approval is estimated to be January 1976 with deliveries for installation in FY 1977 or early FY 1978. In addition, $3.8 million is requested for VINSON (KY 57/58) wide-band secure voice equipment for line-of-sight tactical communication. This equipment, in augmentation and replacement of current NESTOR's and will provide a cryptographically compatible system for inter-Service and inter-Allied use. Service approval is expected in January 1976. Also, procurement of the KG-27 ($1.3 million) is required to provide cryptographic protection for Marine Corps Communication by AN/PRC-97 multichannel radios. The Marine Corps does not at present have this multichannel bulk encryption capability. Procurement in FY 1976 is necessary to accommodate an option to a FY 1975 Army Contract.

The Cryptologic Equipment program of $27.7 million in FY 1976 and $7.4 million in FY 197T will provide for the acquisition of cryptologic systems in support of National Intelligence Requirements. Three high priority requirements are funded in the programs. First is the modernization of equipment employed in direct support of operational commanders; $7.6 million in FY 1976 and $2.0 million in FY 197T requested for Project SEA SCOUT, AN/BRD-7 kits, TACINTEL, MOD VLF/SHF Kits and Signal Exploitation Spaces (SES) modernization supports this

objective. $7.8 million requested for modifications to BULLSEYE HFDF SYSTEM, to support the second objective which is to enhance the effectiveness and expand the coverage of the World-Wide Bullseye direction finding system. The Marshland and Streamliner programs requested at $8.0 million in FY 1976 and $5.4 million in FY 197T represent the third requirement which is the on-going program to modernize existing equipment in an effort to reduce manpower requirements.

Funds for Other Support Equipment amount to $34.0 million for fiscal year 1976 and $4.6 million in fiscal year 197T. These provide for first destination transportation and for Spares and Repair Parts through FY 1976 and the transition period.

Budget Activity 3
Aviation Support Equipment

This activity funds the procurement of all air-delivered weapons required for naval forces and Marine Air Wings except guided missiles. It also includes air-launched anti-submarine warfare expendables such as sonobuoys, as well as general support equipment not directly associated with aircraft and missile systems. The funds requested in fiscal year 1976 for Aviation Support Equipment total $370.3 million, $118.7 million above the fiscal year 1975 funding level. The funds requested for fiscal year 197T total $79.4 million.

Funds in the amount of $83.1 million in FY 1976 and $17.4 million in FY 197T are requested for the procurement of Sonobuoys. The fiscal year 1976 and 197T programs continue procurement of all sonobuoy types included in the fiscal year 1975 program, plus the addition of the first production lot of the AN/SSQ-62 (DICASS) Sonobuoy and the Deep Passive Directional Sonobuoy. The AN/SSQ-62 (DICASS) Sonobuoy is a directional AN/SSQ-50 (CASS) Sonobuoy. This sonobuoy will complement the AN/SSQ-50 and AN/SSQ-47 active sonobuoys. The

sonobuoy was developed under the R&D element for Airborne ASW Developments. Service approval of the system is planned for June 1975. The FY 1976 request is for the first production lot of these sonobuoys.

The Deep Passive Directional Sonobuoy procurement is required to provide sufficient buoys to enable service approval using the production configuration. This sonobuoy will provide a significant improvement over the directional passive AN/SSQ-53's sonobuoy. Additional cable is added to the sonobuoy to provide a much greater hydrophone depth setting. The additional depth is needed to provide increased detection capability in ocean areas where environmental conditions--thermal layers at medium depths--restricts the effectiveness of the normal, shallow depth hydrophones. The Navy has explored solutions to this problem extensively in R&D and will be ready in fiscal year 1976 to proceed to procurement to certify the operational suitability of buoys fabricated under production line conditions.

Based upon fleet sonobuoy usage data, the sonobuoys have better than a 90% reliability in the fleet. The proposed fiscal year 1976 procurement of all buoys is well within the delivery capabilities of the producers involved and will improve our inventory objective of these important ASW sensors.

Funds in the amount of $195.7 million in FY 1976 and $45.3 million in FY 197T are being requested for the Air Munitions Program. The FY 1976 program is structured to meet training usage during the funding delivery period and to support part of the war reserve requirements. The FY 197T will also meet training usage plus maintain production continuity. Over half of the FY 1976 and Transition Air Munitions Program is for the procurement of two cluster bombs, ROCKEYE and APAM. $72.0 million in FY 1976 and $14.5 million in FY 197T are requested for ROCKEYE; $36.4 million in FY 1976

and $12.6 million in 197T are requested for APAM. Production of APAM was initiated later in FY 1974 than was anticipated last year.

In addition, the estimated cost of the weapon has increased thus reduceing the procurement requirement based on the Navy methodology for weapon selection on a cost effectiveness basis. The cost effective trade off is between APAM and ROCKEYE and the revision has resulted in a reduction in the planned inventory objective for APAM and an increase in the inventory objective for ROCKEYE. With the reduced inventory objective for APAM the originally planned FY 1975 introduction of a second production source is not required. The FY 1975 program and FY 1976 budget request has been adjusted to reflect the revised inventory objectives for APAM and ROCKEYE. Funds are requested to: Maintain a single producer for APAM at a rate required to achieve the revised inventory objective by FY 1980, and an increase in the rate of ROCKEYE procurement in order to maintain the same overall weapon inventory, but with a change in the mix of weapons.

Other bomb procurements include $5.6 million in FY 1976 for the MK-84 2000 lb. bombs; $7.8 million in FY 1976 and $1.8 million in FY 197T for the high speed Fuel Air Explosive bomb; and $9.6 million in FY 1976 and $2.4 million in FY 197T for extended range WALLEYE weapon. The FY 1976 request also includes $1.7 million for Operational Evaluation quantities of MK-82/MK-83 Laser Guided Bomb Kits.

In addition to the bomb procurements, $62.6 million in FY 1976 and $14.1 million in FY 197T is requested for procurement of Air Launched rockets, aircraft gun ammunition and other types of air munitions. The request for rockets includes $24.3 million in FY 1976 and $7.6 million in FY 197T, for both the ZUNI and 2.75" rocket. $4.7 million in FY 1976 and $1.2 million in FY 197T are requested for 20MM and 30MM machine gun

ammunition. $12.6 million in FY 1976 and $3.0 million in FY 197T is requested for cartridge and rocket activated devices, which are used primarily to activate weapons and aircraft safety systems. Other weapons requested in FY 1976 and FY 197T include inert practice bombs, airborne expendable countermeasures, Defense Nuclear Agency Material and JATO's (Jet Assisted Take-Off), small rockets used to launch targets.

The request for Other Support Equipment is $91.5 million in FY 1976 and $16.7 million in FY 197T. $16.7 million in FY 1976 under Other Support Equipment is for the procurement of ASW Tactical Support Equipment for advanced processing and integration of ASW sensor data in support of deployed ASW aircraft. Three shipboard tactical support systems are included for support of carrier based S-3A aircraft. The FY 1976 program will complete the procurement of equipment for all carrier backfits, and a shore installed trainer at Dam Neck, Virginia. Also included in this Other Support category is $6.6 million in FY 1976 and $1.1 million in FY 197T for Weapons Range Support Equipment at the Atlantic Fleet Weapons Range, St. Croix. Requested funding will procure a new simulation system for the outer range, a submarine emergency alert system for the underwater range, a new Anti-Ship Missile Defense integrated data extraction and reduction system, and a ship position location system for the inner range.

The Airborne Mine Countermeasures Equipment request of $16.9 million will provide for the procurement of cutters, electrodes and support for minesweeping equipment towed by helicopter. Included in this request is $12.8 million to finance the procurement of 6 AN/ALQ-138 high performance Countermeasure Minesweeping Sleds which are towed by the RH-53 helicopter. This equipment will double the sweep rate attained

with present Sleds. In many cases, this increased effectiveness will cut the required sweep effort in half, thus reducing force level requirements for a given operation. In addition, the ALQ-138 will provide a capability to sweep types of mines against which available equipment is not effective. The AN/ALQ-138 is currently completing development. The R&D program is proceeding on schedule with no serious problems. The technical evaluation model is completed and has been delivered to Panama City, Florida for test. The operational evaluation and fleet training model will be delivered to Panama City in April 1975 for at sea trails and systems check out with OPEVAL completing in June 1975.

$13.9 million is requested for aircraft launching and retrieving equipment, including $3.5 million for Short Airfield Tactical Support, $1.0 million for service change kits and other support equipment, and $9.4 million shipboard catapult, arresting gear and visual landing aid equipment.

The remaining funds requested for other support equipment is for the procurement of numerous items including drone control, meteorological, photographic, survival equipment, and first destination transportation and spare parts support for all items in the budget activity. The $16.7 million requested for FY 197T are necessary to exercise contract options and to insure production continuity in support of scheduling requirements.

Budget Activity 4
Ordnance Support Equipment

Procurement of all expendable ordnance used by Naval forces except for torpedoes, guided missiles, and air-launched munitions is budgeted in this activity. Included among these expendable ordnance items are ship gun ammunition and mines. This activity also provides support equipment for Surface

Missile Systems, Fleet Ballistic Missile Submarines and Anti-submarine Warfare programs. Also included are funds for production and logistic support materials such as manufacturing facilities, production equipment, training aids, and associated spares and repair parts. The fiscal year 1976 budget request of $403.8 million, represents an increase of $116.9 million from fiscal year 1975 program. These increases are primarily in the Surface Missile Systems Equipment, Fleet Ballistic Missile Submarines Support Equipment and Other Ordnance Support programs. The fiscal year 197T budget request of $97.0 million is required to meet delivery and installation requirements and to cover modifications, improvements and support of equipment during the three month transition period.

$39.6 million in FY 1976 and $8.2 million in FY 197T is requested for Ship Gun Ammunition. Of the funds requested, $7.0 million in FY 1976 and $1.1 million in FY 197T is for three-inch ammunition, for small ships or close air defense. This will achieve a readiness position of 100% for three-inch ammunition, except for the Infra Red Cartridges which will be 53%. $27.0 million in FY 1976 and $7.1 million in FY 197T is for five-inch ammunition which provides the primary shore bombardment capability. A readiness position will be achieved of 88% for 5"/38 ammunition and 55% for 5"/54 ammunition.

$5.6 million in FY 1976 is requested for 76mm ammunition, for use primarily against air targets.

$10.7 million in FY 1976 and $.1 million in FY 197T is requested for Ship Gun Systems Equipment. Of the funds requested, $3.1 million in FY 1976 and $.1 million in FY 197T is for support of improvements to surface gun system fire control equipment. $7.6 million in FY 1976 is requested for the procurement of a MK 92 Mod 2 Gun Fire Control System Trainer, in order to provide Navy in-house capability for the training of the PF/PHM ship crews.

The FY 1976 request of $77.9 million and FY 197T request of $16.0 million for Surface Missile Systems is comprised primarily of two programs, Surface Missile Systems Ordnance Alterations, $43.3 million in FY 1976 and $5.3 million in FY 197T and HARPOON, $29.9 million in FY 1976 and $9.7 million in FY 197T.

The Surface Missile Systems Ordnance Alterations program supports currently deployed Surface Missile Systems weapons systems, TERRIER, TARTAR, TALOS and POINT DEFENSE. These alterations replace components with low reliability, improves systems performance and overcomes operational deficiencies. The FY 1976 Ordnance Alteration programs related to improving systems performance are found primarily in the TERRIER M and TARTAR portions of this line item. The TERRIER M program supports thirty (30) DLG class ships. This program consists of three semi-independent modules, digital fire control, continuous wave acquisition and tracking and track modules. These modules are designed to increase the speed and accuracy of fire control solutions by providing the system with digital vice analog computer and by increasing the ability of the fire control radar to identify enemy targets in electronic countermeasure environments. The TARTAR Ordnance Alterations support thirty-five (35) DEG and DDG class ships. This program consists of numerous modifications, many of which relate to reliability, maintainability and corrective measures. The $5.3 million requested in FY 197T is required to procure equipment and support to meet scheduled overhauls of TERRIER, TARTAR, and POINT DEFENSE equipped ships.

$29.9 million is requested in FY 1976 and $9.7 million in FY 197T for the procurement of Harpoon ship and submarine command and launch systems. The funding will procure 34 surface ship systems in FY 1976 and 11 in FY 197T; also included

in FY 1976 are 3 ship systems for maintenance training, 7 encapsulated systems for submarines, and 2 encapsulated systems for maintenance training. The Harpoon Weapons system is in the final stages of full scale development and in the early phases of a limited pilot production for the missile and the ship and aircraft command and launch systems. Technical evaluation of the launch systems is scheduled for completion in May 1975 and final service approval is planned for December 1975. The OPN procurement is structured to make maximum utilization of the missiles delivered in the WPN missile production buy.

$1.1 million in FY 1976 is requested for Anti-Surface Missile Defense Test Range Equipment. This program provides the principal sea ranges, Pacific Missile Range and Atlantic Fleet Weapons Range with equipment and software to test, evaluate and support ASMD surface ships during fleet exercises.

A total of $101.1 million is requested in FY 1976 for the Fleet Ballistic Missile support program, an increase of $82.9 million over FY 1975. Of that $82.9 million, $61.2 million is attributed to initial funding for the TRIDENT I Backfit Program, $16.0 million for procurement of SONAR Operational Trainers and $5.7 million to incorporate alterations into the FBM weapon system.

A total of $45.6 million is requested in the transition budget. $17.2 million is for the procurement of three Electrostatically Supported Gyro Monitors, $18.0 million for equipment to modify two Range Instrumentation Ships to meet new flight safety requirements for the TRIDENT I (C-4) Backfit Missile, and $10.4 million for continuing weapon system equipment support for alterations to tactical equipment, and TRIDENT I training equipment.

In addition to the above Fleet Ballistic requirements, $54 million is included for the procurement of TRIDENT system training and support equipments.

$10.7 million in FY 1976 and $.6 million in FY 197T is requested for the procurement of training equipments for the TRIDENT System, including tactical and non-tactical equipments for the Strategic Weapon System, Defensive Weapon System equipment and Standard Information Display Systems. FY 197T funding supports requirements for non-tactical Fire Control and Navigation and for the Defensive Weapons System.

$43.3 million in FY 1976 and $2.7 million in FY 197T is requested for TRIDENT Support Equipment. FY 1976 funding relates primarily to the procurement of TRIDENT Missile Tracking Site instrumentation equipment to support Operational Tests and Follow-on Operational Tests of the TRIDENT Missile in the Pacific. FY 197T provides for procurement of navigation system test equipments for the TRIDENT Refit Facility and minor additional equipments for the TRIDENT Missile Tracking Site.

Funding in the amount of $31.3 million in FY 1976 and $11.9 million in FY 197T is requested for ASW Support Equipment. This request includes the All Digital Attack Center, also designated FCS MK-117. $21.3 million is requested for 8 All Digital Attack Centers in FY 1976 and $9.6 million for 4 centers in FY 197T. These will be backfitted aboard all 594 637 and 688 class submarines having the AN/BQQ-5 Sonar. It is intended that all 594/637/688 class nuclear attack submarines will ultimately be configured with MK-117 Fire Control System and the AN/BQQ-5 Sonar. Since a regular overhaul is required for installation, the procurement phasing is keyed to the submarine overhaul schedule. Differences in procurement quantities and scheduling between ADAC and the AN/BQQ-5 results mainly from different production lead times and delivery rates.

Other Ordnance Support funding is requested at $89.2 million in FY 1976 and $11.9 million in FY 197T. The FY 1976 request is an increase of $30.2 million over the current fiscal year funding and is primarily related to two programs, Production Facilities and Equipment and Spares and Repair Parts. $23.0 million in FY 1976 and $1.5 million in FY 197T is requested for Production Facilities and Equipment. Included in the FY 1976 request is $15.6 million for the modernization of a bomb line at the Naval Ammunition Depot McAlester, Oklahoma. The design plans and specifications for construction of new and modification of existing buildings are completed and a MILCON contract was awarded in December 1974. The request of $15.6 million in FY 1976 is for the procurement and installation of production equipment. The funds requested in FY 197T are required for continuing Ordnance programs at Ordnance activities.

Spares and Repair Parts are budgeted at $43.1 million FY 1976 and $5.9 million in FY 197T. Of the funds requested, $21.7 million FY 1976 and $2.0 million FY 197T is for initial spare parts to support new end items and $21.4 million FY 1976 and $3.9 million FY 197T for Replenishment Spares for the replacement of spares consumed by the Fleet.

Budget Activity 5
Civil Engineering Support Equipment

This activity funds the procurement of trucks, passenger carrying vehicles, general and special purpose automotive equipment, construction and weight handling equipment and other specialized types of equipment for the Navy general purpose forces. The other specialized equipment includes amphibious vehicles, combat construction support equipment, fleet moorings and mobile utility support equipment. The total request for Civil Engineering Support Equipment is $89 million in FY 1976 and $15.4 million in FY 197T.

$61.8 million in FY 1976 and $10.8 million in FY 197T is requested to procure replacements for worn out Navy-owned Civil Engineering Support Equipment including passenger carrying vehicles; trucks; crushing, mixing, batching, and paving equipment, drilling and blasting equipment; earth moving equipment; lighting and power generating equipment; miscellaneous construction and maintenance equipment; fire fighting and weight handling equipment - generally referred to as automotive vehicle and construction equipment.

The objective of the DOD life expectancy criteria is to insure dependable vehicles by maintaining equipment to the maximum economic life expectancy and replacing equipment before expensive repairs and rebuilding is needed. Limited procurement funds have forced the deferment of equipment replacements at a level that requires equipment retention in excess of DOD life criteria. Replacement deferments as of 30 June 1974 had accumulated to the point that approximately 26,000 units or 41% of the total inventory exceeded its useful economic life. The deferred procurement of sufficient replacement automotive vehicles and construction equipment for the past several years has, in effect, resulted in certain recapitalization of equipment through maintenance. The result of this expedient has been to incur high expenditures for equipment maintenance and rebuilding. Replacement of all of the over age equipment during one fiscal year is not practical due to the very large amount of funds that would be required. We have, therefore, developed a level funded program for the procurement of automotive vehicles and construction equipment. FY 1976 represent the first increment of this level budget program to replace over age equipment. The level budget concept allows for the orderly replacement of over age equipment in equal annual increments while avoiding block obsolescence.

In establishing the automotive and construction equipment budget replacement level we have taken several steps to minimize the replacement requirement. First, a review of allowances was conducted resulting in an overall 10% reduction in shore establishment inventory. Second, the weighted life cycle for replacement was extended approximately 2 years beyond the DOD economic replacement criteria, allowing for a 15% overage posture at the end of the cycle. Third, all available assets resulting from force reductions in the numbers of naval construction batallions have been applied.

Funding at the requested level will result in an over age equipment posture of approximately 35% by the end of the FY 76/7T funding delivery period. The funding requested in FY 1976 and FY 197T is an essential first step toward total implementation of the level funding concept and long term solution to our over age equipment problem.

The MUSE Program of $4.7 million in FY 1976 and $.3 million in FY 197T has grown from its inception as a pool of mobile power units providing emergency support into a $63 million inventory of equipment directly serving Cold Iron Projects. The majority of our requirements in the past have been for break-downs, contingencies, peaksharing, etc. However, in recent years the greater priority on Cold Iron, (the employment of generators, transformers, and boilers located in direct support to ships) has increased requirements dramatically. With reduced steaming hours due to the energy shortage, greater demands are placed upon the MUSE Program. Fully loaded MUSE plants provide greater energy and manpower efficiency than partially loaded shipboard plants. At the same time ships readiness is improved by reducing the frequency of on-board plant overhauls. The FY 1976 request of $4.7 million will provide six 750 KW power plants, three

rotary converters, four electric substations, two steam plants, and two pier stations for replacement of overage and worn out units.

The request for pollution control equipment under this budget activity totals $6.9 million in FY 1976 and $1.7 million in FY 197T. The Program consists primarily of oil spill cleanup equipment with some one time expenditures for equipment to correct urgent air and water pollution problems caused by heating and power plants as well as solid waste collection and disposal systems. This is the fourth year of a phased effort to initially outfit Navy ports with oil spill clean up equipment. Funding through FY 1976/7T will provide 45% of the total requirement, to be located primarily at Continental U. S. fleet impact and environmentally sensitive areas.

Funds in the amount of $15.6 million and $2.6 million are requested for the remaining items in this budget activity for fiscal year 1976 and 197T respectively. These funds are to provide for amphibious and specialized equipment ($1.5 million FY 1976; $.6 million FY 197T), collateral equipment ($6.9 million FY 1976) which finance the initial provision of equipment to outfit new construction facilities, and ocean construction equipment ($3.2 million FY 1976; $.8 million FY 197T). Also included are items less than $500 thousand, initial repair parts and transportation.

Budget Activity 6
Supply Support Equipment

This activity finances the procurement of materials handling equipment used worldwide at Navy shore activities and aboard ships, automated materials handling systems, investment type support equipment, and automatic alarms and controls to provide protection to waterfront areas from polluting oil spills at bulk fuel storage and transfer facilities.

The fiscal year 1976 request for equipment in this activity totals $18.2 million, with $4.5 million requested for the period of transition to the new fiscal year. The requested program provides for an increase of $7.6 million over the fiscal year 1975 funding level, of which $7.0 million is for forklift trucks. Other increases of $1.7 million for automated materials handling systems and $.6 million for support equipment are partially offset by decreased funding of other items in this program.

Funds in the amount of $10.5 million in fiscal year 1976 and $2.5 million in fiscal year 197T are requested for forklift trucks. As of 30 June 1974, 27% of forklift trucks carried in inventory were over-age in accordance with DOD economic life criteria. The funds requested for forklift trucks in this budget will provide for the first increment of a phased ten year plan for reducing total inventory of over-age equipment. In implementing this plan, five over-age vehicles will be retired for each four new procurements delivered to shore based activities. The smaller overall inventory, with fewer over-age vehicles, will be more efficient, downtime will be reduced, and cost avoidances in annual repair and maintenance expenses will be realized. Achievement of the replacement objective by other than a phased plan would produce block obsolescense as well as a prohibiitively large lump sum investment. At the requested funding level, the percentage of over-age forklift trucks in inventory will be reduced to 17%.

Funds requested for other materials handling equipment amount to $2.1 million in fiscal year 1976, a reduction of $.5 million from the fiscal year 1975 level. $.6 million is requested for the period of transition to the new fiscal year. The funds requested under this category represent the

second increment of a 10 year plan, which began in fiscal year 1975, to replace the excessive number of over-age tractors, cranes, and other vehicles now in inventory.

Funds in the amount of $2.9 million in fiscal year 1976 and $1.0 million for the fiscal year transition period are requested for automated materials and fuel handling systems. These systems are for installation in warehouses located at major supply activities, air stations, production facilities at ammunition depots, and bulk fuel storage and processing facilities. Automated handling systems provide improved efficiency, labor and material cost savings, and lessen the potential for oil spills in waterfront areas.

The investment payback periods for these systems range from an average of 4 years for material handling systems to 5 1/2 years for fuel handling systems.

Funding of $2.7 million is requested for the remaining items in this budget activity for fiscal year 1976. These funds are to provide for supply support equipment ($1.8 million), and initial spare parts ($.3 million). For the period of transition to the new fiscal year $.4 million is requested in this area. Supply support equipment funds provide for replacement of printing production equipment and procurement of micropublishing equipment shop and other support equipment used at Naval Supply Systems Command activities, including skin wrap machines for use in packing costly repairable items for safe shipment. Funds requested for pollution control equipment are for alarms and controls at fuel storage activities.

Budget Activity 7
Personnel and Command Support Equipment

This activity finances the procurement of training aids and devices, scientific and technical equipment, industrial

shop equipment, data processing equipment and other general support equipment for headquarters operations and cognizant field activities not otherwise provided for within the appropriation structure. The operating forces and shore activities of fleet commands are included.

A total of $82.7 million is requested in fiscal year 1976 and $14.6 million is requested for the transition period. This is an increase of $5.9 million over the fiscal year 1975 program.

$18.4 million in FY 1976 and $4.1 million in FY 197T are requested for procurement of training devices and support equipment for the Navy's shorebased education and training activities engaged in providing effectively trained personnel to the active surface and subsurface fleet. The Navy is continuing its efforts to utilize simulation technology to the maximum extent possible in training situations where it is feasible, considered cost effective, and strengthens military readiness.

The major impetus in FY 1976 is the procurement of the first phase of Device 10H1, Naval Electronic Warfare Training System (NEWTS). The $8.6 million requested will provide the main data base and twenty trainee stations of an estimated total requirement of approximately seventy trainee stations.

This device will provide, through simulation, realistic visual and aural Electronic Warfare generalized basic operator training for the air, surface, and subsurface platforms.

$7.4 million in 1976 and $3.4 million in 197T will provide simulators in support of surface and subsurface related training disciplines. Of this total, simulators related to surface training accounts for $3.0 million in 1976 and $2.7 million in 197T. Three sonar operator trainers are budgeted: the third production unit of Device 14E23, AN/SQS-35

Sonar Operator Trainer for Fleet Training Group, Pearl Harbor in FY 1976, and the third and fourth units of Device 14E24, AN/SQQ-23 (PAIR) Sonar Operator Trainer to be located at Norfolk and Pearl Harbor. Also included in FY 197T is $1.3 million for a simulated AN/SQR-17 acoustic processor for Device 14E27 LAMPS/LAVA Mod. This will provide the means to train acoustic processor operators, anti-submarine air controllers and other combat information center personnel in the tactical employment of the LAMPS system.

Simulator support for subsurface training equates to $4.4 million of FY 1976 and $.7 million of the FY 197T request. $1.6 million in FY 1976 will procure the first production unit of the Device 21B63, Generalized Individual Fire Control Operator Trainer for the Fleet ASW Training Center, Atlantic, Norfolk. The prototype device for the Submarine School, New London, was developed with RDT&EN funds. $.7 million each in FY 1976 and FY 197T will provide for the third and fourth units of the multi-year procurement contract initiated in FY 1974 for four Submerged Ship Control trainers, Device 21C7. Advanced submerged ships and casualty control training for personnel of all classes of submarines, including the advanced design SSN 688, will be possible with these devices. This casualty training would be dangerous to ship and crew if conducted at sea. The request also includes $2.1 million in FY 1976 for a Periscope View Simulator for the Naval Submarine School, New London.

The remaining funds, $2.4 million in FY 1976 and $.7 million in FY 197T, will provide for minor training device support and for general support material.

$11.7 million in FY 1976 and $2.9 million in FY 197T is requested for acquisition of medical and dental equipment. These funds will support 18 medical centers, 17 hospitals, 3

regional centers and their regionalized clinic facilities that render health care services world wide. Major end items include x-ray, laboratory, intensive care coronary care, surgical, industrial medicine, and ancillary support equipment items or systems.

Despite the continued screenings of all available equipment and the programmed replacement contained in this budget request a deficit in excess of $21 million will exist at the end of FY 197T budget delivery period. Current programmed levels are designed to incrementally reduce this deficit in order to prevent large block obsolescence problems in future years. Based on current programmed levels through FY 1978 the deficit would be reduced to approximate annual requirements. If current programmed levels cannot be maintained normal wear and obsolescence will prevent reduction of the deficit.

$4.8 million in FY 1976 and $.4 million in FY 197T are requested for Oceanographic Support Equipment. These funds provide for the scientific and technical equipment required for collection, processing, and anlaysis of accoustical, bathymetric, geophysical, oceanographic, and navigational data. Nearly $4.0 million in FY 1976 and all of the $.4 million FY 197T funds will provide for equipment to be installed or used onboard the nine survey ships conducting oceanographic, coastal and offshore surveys.

$14.0 million is requested for Intelligence support equipment in FY 1976. The greatest portion of these funds, $10.2 million, is for equipment utilized in the undersea data collection effort. Information is collected by operational commanders using a wide variety of complex acoustic, electronic, and optical sensors procured with these funds. The remainder of $3.8 million is primarily for laboratory equipment utilized in processing and analyzing collected data. Counterintelligence and criminal investigative support equipment is also included.

The transition amount for Intelligence Support Equipment is $2.3 million; $2.1 million of which is for the undersea data collection effort and $.2 million is associated with counter-intelligence and criminal investigative support equipment.

$17.6 million is requested for the Computer Acquisition Program in FY 1976. Significant purchases planned in this year's budget include $6.3 million for procurement of additional peripheral hardware for World Wide Military Command and Control Systems (WWMCCS) computers currently installed and $2.3 million for procurement of an installed WWMCCS standard system for the Commander, U.S. Forces in Korea. These funds are necessary to complete the baseline installation for 8 WWMCCS sites which is the Navy's portion of the total of thirty-five computer systems worldwide.

$4.9 million is included for a Satellite Data Processing Center Computer System to receive, process and utilize data from the Defense Meteorological Satellite Program at Fleet Numerical Weather Central, Monterey. It is estimated that this procurement will result in an overall savings of $5 million when compared to the lease costs for the eight year life of the system.

$1.7 million is for the H-6060 computer components currently installed at shipyards. This purchase will provide a standard H-6060 configuration at each shipyard to support the Naval Shipyard Management Information System. It is estimated that the procurement will result in a savings of $3 million in lease costs over the life of the system.

$.8 million will provide for the procurement of ADP peripherals to support the mission of the Oceanographer of the Navy, and the remaining $1.6 million will procure already installed ADPE peripheral components to support the Chief of

Naval Education and Training, Bureau of Medicine and Surgery and the Naval Intelligence Command.

All of these procurements have been examined on the basis of most economic method of acquisition (i.e., lease versus purchase); overall benefits to the Navy. They represent a conscious decision concerning purchase priorities within the Navy.

$1.7 million in FY 1976 and $.1 million in FY 197T are requested for Naval Reserve Support Equipment. $1.3 million of this is to provide for the third increment of the Ship Operational Trainer Program for the Surface Force Reserve. These trainers will train mobilization teams for bridge, combat information center, damage control and engineering operations aboard various types of naval vessels. The remaining $.4 million in FY 1976 and $.1 million in FY 197T is for various collateral equipment in air and surface reserve activities throughout the United States.

The remaining $14.5 million in FY 1976, and $4.8 million in FY 197T provides for procurement of technical and general support equipment not otherwise provided for within the appropriation structure for such activities as the Bureau of Naval Personnel, the Naval Observatory, the Naval Security Group, the Naval Telecommunications Command, and the Operating Forces under specified Fleet commands.

Mr. Chairman, that completes my prepared statement. I am ready to respond to any questions you, or members of the Committee may have.

BUDGET REQUEST

Admiral GADDIS. Mr. Chairman and members of the committee, I am Vice Adm. Walter D. Gaddis, Deputy Chief of Naval Operations for Logistics. It is a pleasure to appear before you to present the fiscal year 1976 and transition budget request for the "Other procurement, Navy" appropriation. I will make the only formal statement on the overall appropriation.

OTHER PROCUREMENT, NAVY

The "Other procurement, Navy" appropriation is essentially the same in program content and structure as presented last year. One major new program effort, the support of the backfit of Trident missiles in Poseidon submarines at $61.3 million, is included in the fiscal year 1976 request of $1,981,900,000. The remaining $344 million increase over the fiscal year 1955 budget is spread over numerous programs. These include: $54 million for ship sonars, split between FBM peculiar and AN/BQQ-5 retrofit program; $30 million in rolling stock, including trucks, earth moving equipment, forklift trucks, and sedans; $31 million in shore electronic support equipment which includes $6 million for expansion of the Barking Sands under water range, $10 million for the 8th and last Omega shore transmitter, and $11 million for the Ocean Surveillance Information System and Fleet Command Support Centers.

The nuclear core and component equipment replacement program has increased $27 million and Sonobuoy and Surface Missile System procurements are increased by $25 million each, with Harpool representing $20 million of the increase.

Communication and communication security requirement reflects a $25 million increase, half of which relates to the procurement of communication terminals that are currently leased. Aviation support electronics, Ordnance productions facilities, and cryptologic equipment requirements have each increased approximately $15 million, thus accounting for the balance of the increases.

A total of $135.8 million is included for the support of the Trident program including $61.3 million in support of the backfit of the Trident missile into the Poseidon submarine. The funding in this appropriation for the backfit program is for training equipment and support of this $2-plus billion effort with the preponderance of funding included in the "Weapons procurement, Navy" appropriation.

Other major programs in the fiscal year 1976 budget include $196 million for airlaunched munitions, $194 million for reactor plant equipment, $83 million for sonobuoys, $84 million for the AN/BQQ-5 sonar, and $131.9 million for spare and repair parts.

The munitions program is a continuation of the initiative in the fiscal year 1974 supplemental aimed at achievement of minimum war reserve inventories to improve readiness and provide assets for training consumption. War reserves, depleted during the Seasia conflict, have only been partially reconstituted; principal shortages exist in the new "smart" weapons.

Spares funding for fiscal year 1976 reflects a slight net increase over fiscal year 1975. The primary area of increase is in initial spares which include several large programs including Trident. The fiscal year 1976 program continues the policies of reducing shipboard allowances and minimizing the depth of inventory for initial improvements.

Individually the budget activity request for each of the seven activities is commodity oriented and I will address the major fiscal year 1976 programs in the context of the budget activity in which they appear.

SHIPS SUPPORT EQUIPMENT

Budget activity 1—ships support equipment, finances the procurement of major shipboard components such as hull, mechanical and electrical equipment, replacement cores and components; deep submergence equipment; small boats; and spares and repair parts.

The fiscal year 1976 and 197T requests for this activity is $386.9 million and $114.7 million respectively.

COMMUNICATIONS AND ELECTRONIC EQUIPMENT

Budget activity 2—communications and electronic equipment, finances the procurement of all shipboard and shore communications and electronics equipment for the active fleet and shore activities. Included are shipboard radars, antisubmarine warfare electronics equipment ranging from ship sonars to underwater surveillance systems, and equipment in support of electronic warfare, reconnaissance, surveillance, and command and control systems. In addition, all communication and navigation equipment supporting air stations, ships, and shore facilities as well as cryptographic and cryptologic equipments are funded in this budget activity. The total fiscal year 1976 and fiscal year 197T request for this budget activity is 631.2 million and 165.6 million respectively.

$84.2 million fiscal year 1976 and 42.6 million in fiscal year 197T of budget activity 2 is requested for the AN/BQQ-5 Sonar for nine and five systems, respectively. This represents the third procurement year for this essential sonar program. While this request is for backfit in the 594 and 637 class submarines, the system is also being procured for installation in all new construction 688 class submarines. The number of systems planned for backfit coincide with established ship overhaul schedules.

AVIATION SUPPORT EQUIPMENT

Budget Activity 3—Aviation Support Equipment, funds the procurement of all air-delivered weapons, except guided missiles, required for naval forces and Marine Air Wings. It also includes air-launched and antisubmarine warfare expendables such as sonobuoys, as well as general support equipment not directly associated with aircraft and missile systems. The total funds requested in fiscal year 1976 and 197T for Aviation Support Equipment are $370.3 and $79.4 million respectively.

Funds in the amount of $195.7 million in fiscal year 1976 and $45.3 million in fiscal year 197T are being requested for the Air Munitions Program. The program is structured to meet training usage during the funding delivery period and to support part of the war reserve requirements. Over half of the fiscal year 1976 and Transition Air Munitions Program is for the procurement of two cluster bombs, Rockeye and APAM.

Production of APAM was initiated later in fiscal year 1974 than was anticipated last year. In addition, the estimated cost of the weapon increased thus reducing the procurement requirement based on the Navy methodology for weapon selection on a cost-effectiveness basis. With the reduced inventory objective for APAM the originally planned fiscal year 1975 introduction of a second production source is not required. The fiscal year 1975 program and fiscal year 1976 budget request has been adjusted to reflect the revised inventory objectives for both APAM and Rockeye.

ORDNANCE SUPPORT EQUIPMENT

Budget Activity 4—Ordnance Support Equipment, funds procurement of all expendable ordnance used by Naval forces except for torpedoes, guided missiles, and air-launched munitions are budgeted in this activity. Included among these expendable ordnance items are ship gun ammunition and mines. This activity also provides support equipment for Surface Missile Systems, Fleet ballistic Missile Submarines and Antisubmarine Warfare programs.

Also included in this activity are funds for production and logistic support materials such as manufacturing facilities production equipment, training aids, and associated spares and repair parts. The fiscal year 1976 and 197T budget request for this activity total $403.8 million and $97 million respectively.

CIVIL ENGINEERING SUPPORT EQUIPMENT

Budget Activity 5—Civil Engineering Support Equipment, funds the procurement of trucks, passenger-carrying vehicles, general and special purpose automotive equipment, construction and weight-handling equipment and other specialized types of equipment for the Navy general purpose forces. The other specialized equipment includes amphibious vehicles, combat construction support equipment, fleet moorings and mobile utility support equipment. The total fiscal year 1976 and 197T requests for Civil Engineering Support Equipment is $89 million and $15.4 million respectively.

In fiscal year 1976, $61.8 million and $10.8 million in fiscal year 197T is requested to procure replacements for automotive vehicles and construction equipment. Limited procurement funds have forced the deferment of equipment replacements resulting in equipment retention in excess of DOD life-expectancy criteria. The objective of the DOD life-expectancy criteria is to insure dependable vehicles by maintaining equipment to the maximum economic life and replacing equipment before expensive repairs and rebuilding is necessary. As of June 30, 1974, we had accumulated approximately 26,000 units, 41 percent of the total inventory, which had exceeded their economic life. The result of

this expedient has been high expenditures for equipment maintenance and rebuilding.

Replacement of all of the overage equipment during 1 fiscal year is not practical due to the very large amount of funds that would be required. We have therefore developed a level-funded program for the procurement of automotive vehicles and construction equipment. Fiscal year 1976 represents the first increment of this level-budget program to replace equipment in equal annual increments while avoiding block obsolescence.

In establishing the automotive and construction equipment budget-replacement level we have taken several steps to minimize the replacement requirements. First, a review of allowance was conducted resulting in a 10-percent reduction in shore establishment inventory. Second, the weighted life cycle for replacement equipment was extended approximately 2 years beyond the DOD economic-replacement criteria, resulting in a 15-percent overage posture at the end of the cycle. Third, all available assets resulting from the reductions in naval construction battalions have been applied. The funding requested in fiscal year 1976 and fiscal year 197T is an essential first step toward total implementation of the level-funding concept and long-term solution to our overage equipment.

SUPPLY SUPPORT EQUIPMENT

Budget activity 6—Supply Support Equipment finances the procurement of forklift trucks and other materials-handling equipment used at Navy installations and aboard ships, automated materials-handling systems, investment-type support equipment, and automatic alarms and controls to provide protection against polluting oilspills at shoreside transfer and storage facilities.

The total funds requested for this budget activity in fiscal years 1976 and 197T total $18.2 and $4.5 million, respectively.

Funds in the amount of $10.5 million in fiscal year 1975 and $2.5 million in fiscal year 197T are requested for forklift trucks. As with automotive and construction equipment, 27 percent of forklift trucks carried in inventory were overage. The funds requested for forklift trucks in this budget will provide for the first increment of a phased 10-year plan for reducing total inventory and the overage equipment. At the requested funding level, the percentage of overage forklift trucks in inventory will be reduced to 17 percent at the end of a 10-year cycle, and the ashore inventory will be reduced by 14 percent.

PERSONNEL AND COMMAND SUPPORT EQUIPMENT

Budget Activity 7—Personnel and Command Support Equipment, finances the procurement of training aids and devices, scientific and technical equipment, industrial shore equipment, data-processing equipment and other general-support equipment for headquarters operations and cognizant field activities not otherwise provided for within the appropriation structure. The operating forces and shore activities of fleet commands are included.

A total of $82.7 and $14.6 million is requested in fiscal years 1976 and 197T respectively.

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Mr. Chairman, that completes my prepared summary statement. I am ready to respond to any questions you or members of the committee may have.

TRIDENT MISSILE BACKFIT

Senator McGee. My first question deals with the Trident missile. Your 1976 request indicates $61.3 million for support of the backfit of Trident missiles. Could you discuss the program and give the estimated total program cost?

Admiral Gaddis. I would like to first speak to what is in this appropriation, Mr. Chairman, for the backfit of Trident I. It consists of two line items, and basically refers to training equipment to support the training of crews of the Poseidon submarines carrying the Trident I (C–4) missile. The first line item for $42 million involves $31.4 million for the installation of the full suit of training equipment at the initial training site at Dam Neck, Va. In this program it is necessary to be ready in 1978 to train the first crew which will carry this missile on the Poseidon submarine. There is $10.6 million to provide follow-on rotation refresher training equipment to be installed at the Fleet Ballistic Missile facility at Charleston, S.C.

This is a total of $42 million. This is required to be ready to train the first crews in order that that crew can go through the ship overhaul in fiscal 1978 and test out this system in the first of 10 submarines and deploy in August of 1979. An additional $19.3 million is required to provide the modifications to Poseidon tactical fire-control and missile-checkout equipment to provide Trident C–4 capability in the Poseidon submarine and at existing training facilities.

Additionally, in the transition budget, 197T, there is $22.3 million which provides range instrumentation equipment for testing of these missiles and the operational acceptance of the submarine.

Now, the overall program, sir. The overall program is not a separate program in its own right as you normally see them. The overall program is part of the summary Trident program and I think Senator Young will recall that Admiral Price spoke to the increases in the total program this morning during his SCN hearing.

This is part of that increase in the overall Trident program and it amounts to about $2.5 billion total.

The principal cost of the program is for the additional Trident I missiles which will go on these 10 additional submarines in their regular tubes.

Senator Young. Have you converted all of the Polaris submarines to this?

Admiral Gaddis. No, sir. We have 10 Polaris submarines. The first two classes, the 598 and 608, that retain their Polaris configuration and their Polaris missiles.

Senator Young. Will you convert those eventually into the new Trident?

Admiral Gaddis. No, sir. Those two early classes of submarines being the first ones built and converted to the A–3 missile will be inefficient, will be too old to be worth the backfit conversion and therefore they will retain their Polaris limited range configuration for their useful life until phased out and secured some time after the Trident submarines are in place and operational.

Senator McGee. Let me emphasize that, as we go along, as any member of the committee has questions, you may ask at that point. Please don't hesitate to do so. There is no formality in this; we are trying to get the information on the record as completely as we can.

My question regards the location of the Barking Sands underwater range. Where is that range, Admiral?

BARKING SANDS UNDERWATER RANGE

Admiral Gaddis. The Barking Sands underwater range, as Senator Inouye knows so well, is offshore Hawaii.

Senator McGee. What types of activities are conducted there?

Admiral Gaddis. It is a very special range, sir. It is the only free play range that the United States has anywhere in the world. It is designed particularly for the evaluation of the antisubmarine warfare systems and tactics, and for the training of personnel. It has been instrumented in order to provide tracking data from underwater sensors with control cabling to the beach at Barking Sands to provide a very detailed position, tracking evaluation system anywhere within the range.

TRIDENT PROGRAM COST

Senator Symington. What is the total cost program of a Trident submarine now?

Admiral Gaddis. I will have to give you my best recollection for approximation because the gentlemen who managed that were at hearings this morning.

Senator McGee. He can correct that for the record.

Admiral Gaddis. My recollection is that the total is about $16 billion.

Admiral Cooke. It is $16 billion for the Trident program plus another $2.5 billion for the Trident missiles, for a total of something over $18 billion.

Senator Symington. That would be for 10 submarines?

Admiral Cooke. Yes, sir, for 10 Trident submarines, their missiles, all R. & D. and MILCON, as well as missiles and modification costs for 10 Poseidon backfits.

Senator Symington. That would be $1.8 billion per submarine.

Admiral Cooke. No, sir. Each Trident submarine costs about $790 million also there is that extra $2 billion in there to go into other submarines.

Senator Symington. Other than the Trident?

Admiral Cooke. Yes, sir.

Included in the difference between the $16 billion and the $18 billion was something over $2 billion for missiles, Trident missiles to be backfitted into Poseidon submarines. That is a separate program.

Senator Symington. I was told by a reputable—universally so considered—scientist that if you put less launchers or less missiles in the Poseidon submarine launchers that you could get [deleted] miles, the difference between a retrofitted Poseidon and the Trident being [deleted] or that is [deleted] miles.

Is is true that you could put less launchers in and get [deleted] miles. Second, how many of these launchers, if you know, how many

less missiles would you have to put in to get the [deleted] miles you get out of the Trident?

Admiral GADDIS. The Trident I (C–4) missile, which is the one that is going into Trident submarines and which is the only missile which can be backfitted into the Poseidon submarine is listed as a 4,000-mile missile. Now, this is a 4,000-mile range with the designed maximum number of MIRV reentry bodies.

Now, by reducing the number of reentry bodies, the weight of the payload to the minimum, and I will correct it for the record but I think the minimum was [deleted] you can approach [deleted] mile range. Now, the Trident II missile which we hope to develop some time in the future, and which the Trident submarine launch tubes will take by pulling out a liner, but which the other submarines cannot take, will be a [deleted] plus missile with a full set of MIRV warhead.

Senator SYMINGTON. If you reduce the number of missiles in the Poseidon launcher to around [deleted] you would get the [deleted] miles, is that correct?

Admiral GADDIS. By doing this with the Trident I missile, you can approach the [deleted] mile range. I will provide also for the record exactly how close and exactly the minimum of MIRV bodies. I think it is [deleted] and it is very close to [deleted] miles; yes, sir.

Senator SYMINGTON. Thank you.

The following table contains achievable TRIDENT I ranges in relation to reducing the number of RVs carried by the missile:

Trident I missile/MK–4 RV

Number of RVs	*Missile range (nm)*
[Deleted]	4,000
[Deleted]	[Deleted]

Reentry vehicle design limits maximum useable range to [deleted] nautical miles.

OMEGA COMMUNICATIONS SYSTEM

Senator MCGEE. The request which you are addressing yourself to includes 10 million for the last Omega shore transmitter. What is the status of the Omega communications system?

Admiral GADDIS. The Omega navigation system is partially operational at this time. We have four transmitter sites in commission on the air. The entire system to consist of eight full-power transmitter sites, will operate worldwide. The four that are in commission are in Norway, North Dakota, Honolulu, and Trinidad. Japan is on the air but not declared operational. The Argentina, Liberia, and La Reunion station, are on schedule for completion by the end of this calendar year, by December of 1975. The one station which has not been built, and for which the $10 million is in this program, is a station scheduled for Australia. It was budgeted in 1972. Due to political problems between factions in Australia it became inappropriate to politically press this program at that time and so that money was included in the general recoupment directed by the Congress.

We now feel that we can get this in Australia this year.

If for any reason we fail to get it in Australia, which provides the best coverage of the Indian Ocean, and that is why we want it there,

we have alternate locations in the New Hebrides, New Caledonia, and in New Zealand under evaluation. Each alternative should provide complete coverage in those positions but not as good coverage as we would like in the Indian Ocean—a detailed study is underway—and that is why we would like to be in Australia but we can't delay any longer if we don't.

Senator YOUNG. The Australians are now just as opposed to it as they ever were. I don't know why?

Admiral GADDIS. It is a simple system that can be used by anyone worldwide and it is free for anyone's use, just like our Loran system.

Senator YOUNG. But they are very sensitive for some reason about it.

Admiral GADDIS. They look on it as politically, at least the last Government felt that they wanted to operate it if it were there, and they didn't feel that they were ready to. This was their problem. They are quite prideful about participating in this kind of operation. It now appears that they will be able to operate it now and that was really the only objection.

We feel it will go in Australia. But we have to install it this year regardless.

LASER ORDNANCE

Senator MCGEE. Your testimony indicates that the principal shortages exist in the new "smart" weapons. Will you discuss the matter and explain how the 1976 request would alleviate those shortages.

Admiral GADDIS. Yes, sir. We were talking about "smart" bombs, essentially laser guided bombs. Now, laser guided bombs consist of Mark 82, Mark 83, and Mark 84 bombs, and this is the standard Mark 80 series bomb that we used so many of. We have a considerable inventory of the Mark 80 series bombs. The laser guided bomb kits, however, are being procured by the Air Force. Navy developed the one for the Mark 83 bomb and we bought a test quantity of those in 1974, in that program. Air Force developed the bomb kits for the Mark 82 and the Mark 84 bombs.

The Mark 83 kit will be complete and approved for service use in April 1976, the 82 and 84 will be completed and approved for service use in June 1976. We therefore have a request for $1.7 million to buy the first 104 of the Mark 82 and Mark 84 for the Navy from our share of the initial production of the kit. We have a requirement to buy a large number of the Mark 82, 83, and 84 kits in future years.

This will be the first of the Navy buy of these two kits to be ready in 1976.

The other "smart" weapon that we are most interested in at this time is the Walleye II. This is the 2,000-pound bomb with extended fins. This is the bomb that we tested out in Vietnam with the extended range modifications. It allows about 20-mile standoff on an unguided delivery. It is a free fall bomb. It is very important in our inventory for both sea and shore targets.

It is a low cost smart weapon, as it were.

It is going to be a particularly economical program because we are getting a number of the basis Walleye bombs from the Air Force as a transfer and all we have to buy is the extended range data link assemblies for them to make the Walleye II data link conversions. We have $9.6 million in this budget for 130 of these extended range kits.

SONOBUOY FUNDING

Senator McGee. Last year the Congress denied funds requested for certain sonobuoys because of slippage in the development schedule. Has the development schedule proceeded satisfactorily? And are they included in the new budget request, for example?

Admiral Gaddis. Yes, sir; it has, Mr. Chairman. I think you are referring to three sonobuoys. The first is the Jezebel Buoy. It is the SSQ–41 where we wanted to develop a buoy with a [deleted]. We had money in last year's budget to do this but the development was not such that we could proceed at that time, and we offered up that money in the budget hearings.

That development now has been completed and tested and approved for service use, and in the Jezebel budget request for this year we propose to buy deep buoys. Of the 137,000 Jezebels in this budget request, [deleted].

Senator McGee. Let the record show that you said you can buy that number of Jezebel buoys. I thought it might be misinterpreted, and I can't imagine a buoy named Jezebel anyway.

Admiral Gaddis I should have said buoys. We have a similar situation with the [deleted] Difar, the SSQ–53. This also has been tested and approved for service use and we propose that [deleted] of these 61,000 buoys be [deleted] buoys.

The other one that was in question last year was the directional command active sonobuoys, what is called Dicass. We have a request this year for the first production lines of 2,000 of these buoys, which is really somewhat of a breakthrough in the antisubmarine warfare business, and it will be ready for service use, in June of this year. The test and evaluation is just completing.

APAM PROGRAM

Senator McGee. In regard to munitions, you refer to APAM munitions. What are these?

Admiral Gaddis. APAM is an antipersonnel, antimaterial, air munition, that is what APAM stands for. It is essentially a 500-pound low-drag bomb shape which disseminates a number of small antipersonnel bombs. They were called butterfly bombs during World War II, and they are more sophisticated than that, but in essence they are for use against troops in the field.

The question here I think relates to the fact that this bomb, which we requested a significant buy of last year, and which was slightly reduced by the committee, was further reduced because of delays in production technology at the primary producer, and our recognition that we were not in position to go to a second producer for a large buy toward a high inventory injective in the near term.

We therefore offered up in a reprograming, $26.7 million of APAM money and we adjusted our inventory objective to go heavier for the Rockeye. It is a similar kind of cluster bomb designed primarily against vehicles, and armored type of structures and so forth. It is also quite effective against personnel. It is a most effective weapon. It is an extremely cheap weapon because both the Navy and the Air Force use

this weapon and also there are a number of foreign military sales of the weapon. On the basis then of "most effective cost approach to an inventory objective," it has been agreed between the Navy and the Department of Defense to increase the size of the Rockeye objective and reduce the size of the APAM objective to that which can be achieved through a single source. We will not qualify a second bidder on APAM, and therefore in this budget you see a request for an increased number of Rockeye and an increased number of the smaller bomb programs.

Senator McGee. Your transition budget request is for $491.2 million. Will transition period funds be used for new initiatives?

Admiral Gaddis. There are no new starts in the procurement program in the transition budget. You could possibly consider the $19.2 million related to the Trident I backfit program which I spoke to earlier as a separate new initiative because this is a one-time funding of the range instrumentation station and vans for the instrumentation ships for the Trident backfit program.

This is a limitation in lead time to the test and evaluation of that backfit program.

Senator McGee. Because it is a one-time request, it would, at best, be a marginal case in terms of whether it was new initiative?

Admiral Gaddis. It really is not a new initiative because it is the follow-on piece of the $61 million program for training in that program in 1976 but it does stand alone as a line item.

Senator McGee. There are no other new initiatives that you can think of in that transition money?

Admiral Gaddis. That is correct.

Senator McGee. That is all of the questions that I have for you.

Senator Young. I have two questions, and you can answer the rest for the record.

OPN BUDGET ESTIMATE

First of all, how much of the $5 million increase of fiscal year 1975 program is for inflation and how much for growth, of the $344 million?

Admiral Gaddis. I would be pleased to answer that for the record. It is about 80 percent for inflation if one accepts published inflation indexes.

Senator Young. For past inflation?

Admiral Gaddis. No, sir, for anticipated inflation.

[The information follows:]

OPN Budget Estimates

Due to the number of different type of items funded in the OPN appropriation, no overall escalation factor is applied in determining budget estimates. The budget estimate for each of the items in the FY 1976 and 197T budget is a product of the individual program managers best estimate of what it will cost in the budget period to place the item on contract.

In the face of the recent high inflation rate experienced by many vendors, we have had to make provisions for variables related to labor and material rates. Our experience to date has been that our budget estimates have been low in most instances.

Most major FY 1975 contracts have not been awarded as yet. Our FY 1974 experience reported on page 873 (Part 7 Procurement) of the House Appropriations Committee Hearings was that cost to award exceeded budget by 5%. It is estimated that the variance will be greater in FY 1975. Hopefully, the FY 1976 and 197T estimates will be adequate.

NUCLEAR REACTOR PLANT EQUIPMENT

Senator YOUNG. And what is the purpose of the nuclear reactor plant equipment requested?

[The information follows:]

REACTOR PLANT EQUIPMENT

Nuclear reactor plant equipment requested in the FY 1976 and 197T budget includes reactor plant components and reactor power units and fuel. The budget includes $54.9 million in FY 1976 and $17.8 million in FY 197T for spare and replacement reactor plant components and equipment required for the continued safe operation of the basic heat transfer cycle of naval reactor plants. The spare components are installed as needed and therefore are not designated for a specific hull. Replacement components are usually installed during major overhauls. The budget also includes $139.0 million in 1976 and $61.6 million in 197T for reactor power units. These funds are programmed for the purchase of reactor power units which will be used for the periodic refueling of nuclear powered submarines and surface ships and as back up spares for these ships. The funds requested are required to meet the refueling needs of the Navy in the most efficient manner.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I have a number of questions which I would like to have answered for the record.

Admiral GADDIS. We would be happy to, Senator Young.

[The questions and answers follow:]

TRIDENT PROGRAM

Senator YOUNG. How much of this procurement activity is for the Trident program? Please identify and explain the relationship with funds requested in the other budget activities?

Admiral GADDIS. The fiscal year 1976 OPN funding requested for the Trident program, by budget activity, is as follows:

SHIP SUPPORT EQUIPMENT (BA-1)—$7.4M

Provides for procurement of training equipment for the Trident Training Facility (TTF) in order to meet the Ready for Training (RFT) date of January 1977. Items being procured include equipments integral to the Life Support, Defensive Weapons, Strategic Weapons Support and Refrigeration Systems.

COMMUNICATIONS AND ELECTRONICS EQUIPMENT (BA-2)—$3.8M

Provides for procurement of training equipment for the TTF in order to meet the RFT date of January 1977.

ORDNANCE SUPPORT EQUIPMENT (BA-4)—$60.5M

Provides for procurement and installation of training equipment for the TTF in order to meet the RFT date of January 1977. Equipments support both SWS and DWS portions of the TTF.

Provides for procurement of equipments and items to support the launcher and handling, fire control, navigation, instrumentation, missile checkout, MK 118 MOD 0 Fire Control and Standard Information Display systems and/or subsystems. These support equipments will be used in several locations including the Trident Support Site, various Trident test facilities and Trident flight-test range facilities and includes the initial funding of the Trident Missile Tracking Site Instrumentation.

Provides for initial spares to support both Training and Support equipments.

Air Launched Munitions

Senator Young. What are the Air Launched Munitions requested in this budget? How many of each does the Navy plan to procure.

Admiral Gaddis. $195.7 million in FY 1976 and $45.3 million in FY 197T are being requested for Air Munitions. The following is a list of the items for which these funds are being requested.

[Cost in millions of dollars]

Item	Fiscal year 1976		Fiscal year 197T	
	Quantity	Cost	Quantity	Cost
Walleye	NA	$9.6		$2.4
MK-84 2,000 lb GP bomb	4,900	5.6	NA	
Laser guided bomb kits	NA	1.7	NA	
Cluster bomb MK-20 (Rockeye)	24,000	72.0	4,700	14.5
Cluster bomb CBU-59/B (APAM)	5,200	36.4	1,800	12.6
Cluster bomb CBU-72/B (FAE)	3,460	7.8	800	1.8
Zuni rocket	26,000	12.0	22,000	4.8
2.75 in rocket	147,600	12.3	32,800	2.8
Parachute flares	NA	.8	NA	
Machinegun ammunition	NA	4.7	NA	1.2
Practice bombs	NA	7.0	NA	1.6
Miscellaneous cartridges, cads and rocats	NA	12.6	NA	3.0
Airborne expendable countermeasures	NA	9.7	NA	
ADR-8A chaff rockets	NA	.8	NA	.2
Defense Nuclear Agency (DNA) material	NA	.9	NA	
Jatos (jet assisted takeoff)	NA	.9	NA	.2
A/L ord under $500,000	NA	.9	NA	.2
Total air munitions		195.7		45.3

Overage Vehicles and Support Equipment

Senator Young. What is the backlog of overage vehicles and support equipment?

Admiral Gaddis. On 30 June 1974, 41%, by quantity, of the Navy's construction and automotive equipment was overage. The cost to become current is $257M.

Vehicle Procurement

Senator Young. Has the Navy conducted a study to optimize the procurement of vehicles to provide level procurement program to overcome large backlogs and obsolescence?

Admiral Gaddis. Yes, the Navy has conducted a study to optimize the procurement of vehicles to provide a level procurement program and overcome large backlogs and obsolescence. As a result of this study the Navy annual vehicles replacement requirement was determined to be the value of the minimum essential inventory divided by the average life expectancy. The annual vehicle replacement requirement formed the basis for the FY 76 budget request. If this annual replacement requirement is procured each year, replacement of the backlog of overage equipment will be accomplished in an orderly fashion in approximately equal annual increments and block obsolescence will be avoided.

STATEMENT OF SENATOR INOUYE

Senator Inouye. Admiral, you must be patient with me because this is my first month on this subcommittee, but I would like to know more.

Senator McGee. Don't take that seriously. He lives with this stuff all the time.

Admiral Gaddis. I can remember testifying before Senator Inouye in 1965 on Milcon.

OBSOLETE EQUIPMENT DISPOSAL

Senator INOUYE. Is there any established policy in handling obsolete equipment and material?

Now, in your inventory you must have weapons and weapons systems that cannot be readily sold to other people, and therefore you will have them for 20 or 25 years: Missiles, for example. What happens when you declare them to be obsolete? The Minuteman I becomes obsolete, and you have the Trident now, and the Poseidon becomes obsolete. Do you cannibalize it or do you chalk it off the books?

Admiral GADDIS. There are many things that happen, Senator Inouye. On the average, when equipment is considered unfit for service use it is what we call demilitarized and offered up for excess sale. Just 3 years ago the Department of Defense centralized such sales of excess property under the Defense Supply Agency for the entire Department of Defense.

It now is a single program managed within the Defense Supply Agency's O. & M. program. Prior to that time it was done within each procurement management organization of the Navy, the Systems Command, the Navy Material Establishment and so on, and in similar organizations of the Army and Air Force.

Senator INOUYE. Now are you satisfied that we are getting every dollar that can be gotten out of the demilitarized system?

Admiral GADDIS. I am absolutely certain we are. I would note, we have the responsibility to remove anything that is usable by the service first. Then the DSA organization has the responsibility for removing anything that they have a sales value for, before they can advertise it for sale.

I would offer the system that we use for excess ships that have been declared for scrap.

Senator INOUYE. What happens to the income from these sales?

Admiral GADDIS. We take all of the parts that are usable in other like ships or like equipment anywhere in the Navy. It takes us about 3 months to strip a ship of all usable military items.

Senator INOUYE. What happens to the income from sales, the scrap or whatever?

Admiral GADDIS. After that, this is turned over to the Defense Contract Audit Agency who catalog everything on board. That is as to category of the material, and the usability and so forth. It is then offered for sale as scrap. It is offered on competitive bidding and there are about 11 companies in the United States that do nothing but scrap ships.

Senator INOUYE. Where does the income go from this?

Admiral GADDIS. The income from the sale of ships and similar scrap sales goes to the Treasury. We do not use it and we do not get it.

Senator INOUYE. This is a long time ago, but 30 years ago while I was in a military hospital there was a young fellow in our ward that made over half a million dollars in less than a year in buying and selling surplus military material. He discovered while reading through one of the circulars that in a certain type of life raft there was a little platinum wire. Apparently the Navy had forgotten all about this, and he bought up every liferaft that was available and he took out the

wire and he sold it back and he made a small fortune there. I am just wondering if all of these platinum wires have now been taken out.

Admiral GADDIS. I guarantee you they are, sir.

Admiral GADDIS. I have heard of other situations like that, and these kinds of opportunities are precisely why the Secretary of Defense has established a dedicated organization, some 800 people, as I recall, in the Defense Supply Agency, who are specialists in the process of demilitarization and scrap sales.

Senator INOUYE. In terms of dollars, how much do we recoup per year?

Admiral GADDIS. The program as I recall is of the order of $80 to $85 million executed by the Defense Supply Agency.

MOTHBALLED SHIPS STATUS

Senator INOUYE. We have many ships in mothballs, and many Americans have the idea that this is a part of our reserve fleet and ready to be used, as we did at a very high cost in Vietnam, and they seem to add this figure when determining your fleet and your potential fleet.

But isn't it true that this mothball fleet is not usable, at least is not part of your mission?

Admiral GADDIS. Starting 3 years ago at the instigation of President Nixon—as you recall, there was an extremely tight situation for which quality scrap at that time—he directed that both the Maritime Administration and the Navy dispose of as many unusable ships from the inactive ship facilities of the Navy and from the National Defense Reserve Fleet of the Martime Administration as possible. And additionally, to make opportunity for lay down areas and dock areas where scrap operators could break up ships to improve the scrap availability in the United States. In response to that requirement and in execution of a program people had started some time before to reduce the size of the inactive fleet to a manageable size, we have gone from the order of magnitude of over 600 ships to less than 200 ships. That was plus some additional craft.

In the course of the last 2½ years we have disposed of over 300 unusable ships from the inactive fleet to scrap.

Senator INOUYE. What do you propose to do with the remaining 200-plus?

Admiral GADDIS. There will be a few more disposals. These ships will be reviewed annually for their condition. This is the result of a long study that was executed about 3 years ago to determine how much time it would take to put each ship of the Reserve fleet back into operating shape.

The modernization of communications and radar and these sorts of things—the average time to put those 600 ships in commission if we had the shipyard capability to start on the same day, the average time would have been 10 to 12 months.

Senator INOUYE. Now the ships that we are using——

Admiral GADDIS. So we are keeping only the best.

Senator INOUYE. The ships that are leased to other countries, Greece, Turkey, and Ecuador, and such, come from this unusable fleet, isn't that true?

Admiral GADDIS. Yes, sir.

Senator INOUYE. It may be unusable for our mission and our standards but apparently it is usable for them. I ask this because Greece and Turkey use these as part of the NATO fleet. If they are substandard, why are they used there in the NATO fleet?

Admiral GADDIS. These are ships which were loaned or sold, in lieu of putting them into the Reserve fleet, into the inactive fleet. They took over a ship that was in operating condition. They have maintained those ships in operating condition.

We could have operating ships today that are of the same class of ships that are in the inactive fleet and have not been kept up in their modernization and have not kept up in their communications and maintenance of equipment. The one that has not been kept up after 5, 7, or 10 years in the inactive fleet is too costly to reactivate and it is better to scrap. The one that has been continually modernized and maintained is still an operating and active ship.

THE BATTLESHIP NEW JERSEY

Senator YOUNG. During the Vietnam war a Senator in Armed Services wanted to reactivate a battleship and send it over to Vietnam.

Admiral GADDIS. It was the *New Jersey*. And it was reactivated at a cost of about $83 million, of which about $27 million was OPN money. It was used in Vietnam and it was most effective. It was a time when we had to fire deep into the DMZ from offshore. My son was out there and he knows how much they liked this ship.

At the time then that the scene of operations shifted and it was no longer usable, and it was a mighty expensive ship to maintain. It was put out of commission again and it is now at Puget Sound Shipyard. It is the best of three battleships in the inactive fleet.

Senator YOUNG. We only had three battleships left.

Admiral GADDIS. Correction sir, we have four battleships in the inactive fleet.

Senator MCGEE. That is all the questions we have.

Admiral GADDIS. Thank you kindly, Mr. Chairman. There are an awful lot of people in New Jersey that would like us to get the battleship out of the active fleet so they could take it over and make a memorial.

Senator MCGEE. You are not getting much pressure from Wyoming, where the shoreline is limited.

Admiral GADDIS. The old *Wyoming* would not be in good shape at this time.

SHIP MEMORIALS

Senator INOUYE. What is the policy if the State of New Jersey should request the USS *New Jersey* for a memorial monument, or what have you?

Admiral GADDIS. We are most responsive to such requests. As you probably heard about the *Laffey* in Alexandria and now the city of Baltimore would like to have that ship. The *Yorktown* is going to South Carolina, and Virginia would like to fight them for it, but the criteria is, and this is a matter of law. The request is made to an office in the ship Systems Command of the Navy. The sponsors must certify

that it will be displayed with honor and in the proper and fit condition. In other words, it is not a commercial venture and it will be maintained in an honorable condition and any private organization must demostrate the funding back-up and post bond to insure that they have this capability to maintain such a ship.

A public organization such as a State or a city, their promise is good enough but they have to recognize the magnitude of the commitment.

Senator INOUYE. I ask this because an organization in Honolulu is now planning to establish a museum in Pearl Harbor and it was a base for submarines for quite some time.

Admiral GADDIS. I had a quick touch-base with that situation. They wanted a specific submarine. I think I saw a letter just a short time ago, asking that the availability of this submarine be confirmed. The submarine in question, Ex–USS *Bowfin*, is still earmarked for this project.

Senator MCGEE. You already have enough battleships in Pearl Harbor.

QUESTIONS SUBMITTED BY CHAIRMAN MCCLELLAN

Admiral, I have questions that Chairman McClellan wanted me to submit for the record. As one of them is explicitly in your area, I am going to give it to you now and ask that you respond to it for the record.

[The question and answer follow:]

BACKFIT OF TRIDENT MISSILE

Chairman MCCLELLAN. Your fiscal year 1976 request includes $61.3 million for support of the backfit of TRIDENT missiles in POSEIDON submarines. Discuss the program and give the estimated total program costs.

Admiral GADDIS. The major elements of the TRIDENT I (C–4) backfit program are the procurement of new missiles, production and ancillary test and support equipments, SSBN weapon subsystems alterations to tactical equipments, tactical and non-tactical training equipments and support equipments for other ships and shore facilities to support ten deployed SSBNs. The Other Procurement, Navy appropriation cost estimate for this program is $258 million consisting of:

(*a*) $90 million for weapons subsystem equipment alterations for SSBNs, tenders and training equipments,

(*b*) $70 million for tactical and non-tactical training site equipment,

(*c*) $18 million for instrumentation to support operational tests and Follow-on Operational Tests, and

(*d*) $80 million for other support equipments.

The total estimated acquisition program cost funded in the Weapons Procurement, Navy appropriation was included in the 31 December 1974 Selected Acquisition Report at $2,495 million.

CONCLUDING REMARKS

Senator MCGEE. Thank you again, Admiral.

Admiral GADDIS. Thank you, Mr. Chairman.

AIRCRAFT PROCUREMENT, NAVY

STATEMENT OF VICE ADM. W. D. HOUSER, U.S. NAVY, DEPUTY CHIEF OF NAVAL OPERATIONS (AIR WARFARE)

ACCOMPANIED BY:

VICE ADM. K. L. LEE, U.S. NAVY, COMMANDER, NAVAL AIR SYSTEMS COMMAND

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

MAJ. GEN. V. A. ARMSTRONG, U.S. MARINE CORPS, DEPUTY CHIEF OF STAFF, AVIATION, HEADQUARTERS, MARINE CORPS

JUSTIFICATIONS

Senator MCGEE. If agreeable, we will continue in the same manner as we did with the preceding witnesses.

We will insert information from the justifications at this point, and then you may proceed, Admiral Houser.

[The information follows:]

Justification

For construction, procurement, production, modification, and modernization of aircraft, equipment including ordnance, spare parts, and accessories therefor; specialized equipment, expansion of public and private plants, including the land necessary therefor; and such lands and interest therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statutes, as amended; and procurement and installation of equipment, appliances, and machine tools in public or private plants; reserve plant and Government and contractor-owned equipment layaway: [$2,775,400,000], $3,077,000,000 to remain available for obligation until [June 30, 1977], September 30, 1978.

For "Aircraft Procurement, Navy" for the period July 1, 1976 through September 30, 1976, $600,100,000 to remain available for obligation until September 30, 1978. (10 U.S.C. 5012, 5031, 7201, 7341:31, U.S.C. 718 Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed for fiscal year 1976, and for the period July 1, 1976 through September 30, 1976.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1506-0-1-051		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. COMBAT AIRCRAFT	1,899,613	1,819,037	1,994,052	1,175,323	1,973,600	1,977,626
	2. AIRLIFT AIRCRAFT	.....	54,600	.....	.....	50,600	1,800
	3. TRAINER AIRCRAFT	82,771	7,000	38,700	53,181	33,000	31,705
	4. OTHER AIRCRAFT	37,465	44,000	21,150	32,221	31,500	23,944
	5. MODIFICATION OF AIRCRAFT	309,082	290,852	488,900	173,690	343,200	511,732
	6. AIRCRAFT SPARES AND REPAIR PARTS	430,532	368,611	358,498	323,853	339,900	348,429
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	177,178	196,300	175,700	122,852	194,700	166,621
	TOTAL DIRECT	2,936,641	2,780,400	3,077,000	1,881,120	2,966,500	3,011,857
	REIMBURSABLE (TOTAL)	90,490	77,000	57,000	26,239	116,900	61,251
10	TOTAL	3,027,131	2,857,400	3,134,000	1,907,359	3,083,300	3,073,108
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-29,742	-32,350	-30,000	-29,742	-32,350	-30,000
13	TRUST FUNDS	-65,376	-49,300	-26,650	-65,376	-49,300	-26,650
14	NON-FEDERAL SOURCES	-372	-350	-350	-372	-350	-350
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-1,119,772	-893,872
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-7,141	.....	.....	-7,141	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-106,800	.....	.....	-106,800	.....	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	1,119,772	893,872	954,764
	BUDGET AUTHORITY	2,817,700	2,775,400	3,077,000	2,817,700	2,775,400	3,077,000
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET				1,811,869	3,001,300	3,016,108
72	OBLIGATED BALANCE, START OF YEAR				.....	1,597,279	3,158,579
	RECEIVABLES IN EXCESS OF OBLIGATIONS, START OF YEAR				-7,141	.....	.....
74	OBLIGATED BALANCE, END OF YEAR				-1,597,279	-3,158,579	-4,058,687
90	OUTLAYS				207,449	1,440,000	2,106,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1506-0-1-051	1974 ACT	1975 EST	1976 EST
DIRECT OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	2,233	2,700	3,151
25.0 OTHER SERVICES	18,670	23,200	29,500
26.0 SUPPLIES AND MATERIALS	321,853	339,900	348,429
31.0 EQUIPMENT	1,536,364	2,600,700	2,630,777
TOTAL DIRECT OBLIGATIONS	1,881,120	2,966,500	3,011,857
REIMBURSABLE OBLIGATIONS:			
26.0 SUPPLIES AND MATERIALS	26,239	116,800	61,251
99.0 TOTAL OBLIGATIONS	1,907,359	3,083,300	3,073,108

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1506-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. COMBAT AIRCRAFT	1,899,613	.....	.....	1,175,323	633,800	90,490
3. TRAINER AIRCRAFT	82,771	.....	.....	53,181	27,300	3,005
4. OTHER AIRCRAFT	37,465	.....	.....	32,221	400	4,544
5. MODIFICATION OF AIRCRAFT	309,082	.....	.....	173,590	115,300	19,232
6. AIRCRAFT SPARES AND REPAIR PARTS	430,532	.....	.....	323,853	84,400	22,679
7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	177,178	.....	.....	122,852	47,800	6,621
TOTAL DIRECT	2,936,641	.....	.....	1,881,120	909,000	146,521
REIMBURSABLE (TOTAL)	90,490	.....	.....	26,239	59,800	4,451
10 TOTAL	3,027,131	.....	.....	1,907,359	968,800	150,972
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-29,742	.....	.....	-29,742	.....	.....
13 TRUST FUNDS	-65,376	.....	.....	-65,376	.....	.....
14 NON-FEDERAL SOURCES	-372	.....	.....	-372	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-1,119,772	-150,972
AVAILABLE TO FINANCE NEW BUDGET PLANS	-7,141	.....	.....	-7,141	.....	.....
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-106,800	.....	.....	-106,800	.....	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	1,119,772	150,972	.....
BUDGET AUTHORITY	2,817,700	.....	.....	2,817,700	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1506-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. COMBAT AIRCRAFT	.....	1,819,037	.....	.....	1,339,800	356,700
	2. AIRLIFT AIRCRAFT	.....	54,600	.....	.....	50,600	1,800
	3. TRAINER AIRCRAFT	.....	7,000	.....	.....	5,700	400
	4. OTHER AIRCRAFT	.....	44,000	.....	.....	31,100	4,400
	5. MODIFICATION OF AIRCRAFT	.....	290,852	.....	.....	227,900	44,300
	6. AIRCRAFT SPARES AND REPAIR PARTS	.....	368,611	.....	.....	255,500	86,700
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	196,300	.....	.....	146,900	34,000
	TOTAL DIRECT	.....	2,780,400	.....	.....	2,057,500	528,300
	REIMBURSABLE (TOTAL)	.....	77,000	.....	.....	57,000	14,600
10	TOTAL	.....	2,857,400	.....	.....	2,114,500	542,900
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	-32,350	.....	.....	-32,350	.....
13	TRUST FUNDS	.....	-49,300	.....	.....	-49,300	.....
14	NON-FEDERAL SOURCES	.....	-350	.....	.....	-350	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-742,900
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	742,900	200,000
	BUDGET AUTHORITY	.....	2,775,400	.....	.....	2,775,400	.....

AIRCRAFT PROCUREMENT, NAVY

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1506-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. COMBAT AIRCRAFT	.....	.....	1,994,052	.....	.....	1,480,436
	3. TRAINER AIRCRAFT	.....	.....	38,700	.....	.....	28,300
	4. OTHER AIRCRAFT	.....	.....	21,150	.....	.....	15,000
	5. MODIFICATION OF AIRCRAFT	.....	.....	488,900	.....	.....	448,200
	6. AIRCRAFT SPARES AND REPAIR PARTS	.....	.....	358,498	.....	.....	239,100
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	.....	175,700	.....	.....	126,000
	TOTAL DIRECT	.....	.....	3,077,000	.....	.....	2,337,036
	REIMBURSABLE (TOTAL)	.....	.....	57,000	.....	.....	42,200
10	TOTAL	.....	.....	3,134,000	.....	.....	2,379,236
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-30,000	.....	.....	-30,000
13	TRUST FUNDS	.....	.....	-26,650	.....	.....	-26,650
14	NON-FEDERAL SOURCES	.....	.....	-350	.....	.....	-350
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	754,764
	BUDGET AUTHORITY	.....	.....	3,077,000	.....	.....	3,077,000

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-1506-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
		TRANSITION	TRANSITION
	PROGRAM BY ACTIVITIES:		
	DIRECT:		
	1. COMBAT AIRCRAFT	282,060	561,840
	2. AIRLIFT AIRCRAFT	.....	3,800
	3. TRAINER AIRCRAFT	14,500	13,900
	4. OTHER AIRCRAFT	40,400	38,700
	5. MODIFICATION OF AIRCRAFT	148,600	216,000
	6. AIRCRAFT SPARES AND REPAIR PARTS	70,500	133,800
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	44,040	75,500
	TOTAL DIRECT	600,100	1,043,540
	REIMBURSABLE (TOTAL)	12,000	17,400
10	TOTAL	612,100	1,060,940
	FINANCING:		
	RECEIPTS AND REIMBURSEMENTS FROM:		
11	FEDERAL FUNDS	-12,000	-12,000
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-954,764
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	505,924
	BUDGET AUTHORITY	600,100	600,100
	RELATION OF OBLIGATIONS TO OUTLAYS:		
71	OBLIGATIONS INCURRED, NET		1,048,940
72	OBLIGATED BALANCE, START OF YEAR		4,068,687
74	OBLIGATED BALANCE, END OF YEAR		-4,562,627
90	OUTLAYS		555,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1506-0-1-051			TRANSITION
	DIRECT OBLIGATIONS:		
22.0	TRANSPORTATION OF THINGS		600
25.0	OTHER SERVICES		10,500
26.0	SUPPLIES AND MATERIALS		133,800
31.0	EQUIPMENT		898,640
	TOTAL DIRECT OBLIGATIONS		1,043,540
	REIMBURSABLE OBLIGATIONS:		
26.0	SUPPLIES AND MATERIALS		17,400
99.0	TOTAL OBLIGATIONS		1,060,940

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1505-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. COMBAT AIRCRAFT	.....	.....	.....	376,617	150,737	.....
2. AIRLIFT AIRCRAFT	.....	.....	.....	500	247	.....
3. TRAINER AIRCRAFT	.....	.....	.....	4,458	1,466	.....
4. OTHER AIRCRAFT	.....	.....	.....	14,047	2,700	.....
5. MODIFICATION OF AIRCRAFT	.....	.....	.....	62,500	15,562	.....
6. AIRCRAFT SPARES AND REPAIR PARTS	.....	.....	.....	107,377	36,993	.....
7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	.....	.....	51,989	11,367	.....
8. BALLISTIC MISSILES	.....	.....	.....	60,911	10,534	.....
9. OTHER MISSILES	.....	.....	.....	109,171	34,537	.....
10. MODIFICATION OF MISSILES	.....	.....	.....	5,017	300	.....
11. MISSILE SPARES AND REPAIR PARTS	.....	.....	.....	8,551	3,498	.....
12. MISSILE SUPPORT EQUIPMENT AND FACILITIES	.....	.....	.....	3,310	229	.....
TOTAL DIRECT	.....	.....	.....	804,448	267,670	.....
REIMBURSABLE (TOTAL)	.....	.....	.....	6,045	5,270	.....
10 TOTAL	.....	.....	.....	810,493	272,940	.....
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	.....	.....	.....	463	.....	.....
13 TRUST FUNDS	.....	.....	.....	13,879	.....	.....
14 NON-FEDERAL SOURCES	.....	.....	.....	117	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-1,236,615	-272,940	.....
AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-5,900	.....	.....	-5,900	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-138,723	.....	.....	.....	.....	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	106,800	5,900	.....	106,800	5,900	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	272,940	.....	.....
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	5,900	.....	.....	5,900	.....	.....
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	26,023	.....	.....	26,023	.....	.....
BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET				824,957	272,940	.....
72 OBLIGATED BALANCE, START OF YEAR				4,022,719	1,773,076	811,016
74 OBLIGATED BALANCE, END OF YEAR				-1,773,076	-811,016	-350,016
77 ADJUSTMENTS IN EXPIRED ACCOUNTS				-9,047	.....	.....
90 OUTLAYS				3,065,548	1,235,000	461,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1505-0-1-051	1974 ACT	1975 EST	1976 EST
DIRECT OBLIGATIONS:			
25.0 OTHER SERVICES	923	362	.....
26.0 SUPPLIES AND MATERIALS	293,699	91,932	.....
31.0 EQUIPMENT	509,826	175,376	.....
TOTAL DIRECT OBLIGATIONS	804,448	267,670	.....
REIMBURSABLE OBLIGATIONS:			
26.0 SUPPLIES AND MATERIALS	6,045	5,270	.....
99.0 TOTAL OBLIGATIONS	810,493	272,940	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1972 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1505-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. COMBAT AIRCRAFT				105,905		
	2. AIRLIFT AIRCRAFT				17		
	3. TRAINER AIRCRAFT				2,832		
	5. MODIFICATION OF AIRCRAFT				24,910		
	6. AIRCRAFT SPARES AND REPAIR PARTS				20,748		
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES				8,554		
	8. BALLISTIC MISSILES				18,054		
	9. OTHER MISSILES				16,531		
	10. MODIFICATION OF MISSILES				1,636		
	11. MISSILE SPARES AND REPAIR PARTS				6,661		
	12. MISSILE SUPPORT EQUIPMENT AND FACILITIES				663		
	TOTAL DIRECT				206,511		
	REIMBURSABLE (TOTAL)				48		
10	TOTAL				206,559		
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				2,461		
13	TRUST FUNDS				16,444		
14	NON-FEDERAL SOURCES				53		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				-291,539		
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-66,023					
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	40,000			40,000		
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	26,023			26,023		
	BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1505-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. COMBAT AIRCRAFT				270,712	150,737	
	2. AIRLIFT AIRCRAFT				483	247	
	3. TRAINER AIRCRAFT				1,626	1,466	
	4. OTHER AIRCRAFT				14,047	2,200	
	5. MODIFICATION OF AIRCRAFT				37,590	15,562	
	6. AIRCRAFT SPARES AND REPAIR PARTS				86,629	36,993	
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES				43,435	11,367	
	8. BALLISTIC MISSILES				42,857	10,534	
	9. OTHER MISSILES				92,640	34,537	
	10. MODIFICATION OF MISSILES				3,381	300	
	11. MISSILE SPARES AND REPAIR PARTS				1,890	3,498	
	12. MISSILE SUPPORT EQUIPMENT AND FACILITIES				2,647	229	
	TOTAL DIRECT				597,937	267,670	
	REIMBURSABLE (TOTAL)				5,997	5,270	
10	TOTAL				603,934	272,940	
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				-1,999		
13	TRUST FUNDS				-2,565		
14	NON-FEDERAL SOURCES				64		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				945,076	-272,940	
	AVAILABLE TO FINANCE NEW BUDGET PLANS		-5,900			-5,900	
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-72,700					
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	66,800	5,900		66,800	5,900	
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				272,940		
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	5,900			5,900		
	BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1505-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
	TRANSITION	TRANSITION
PROGRAM BY ACTIVITIES:		
DIRECT:		
10 TOTAL	.....	.....
FINANCING:		
BUDGET AUTHORITY	.....	.....
RELATION OF OBLIGATIONS TO OUTLAYS:		
72 OBLIGATED BALANCE, START OF YEAR		350,016
74 OBLIGATED BALANCE, END OF YEAR		-252,016
90 OUTLAYS		98,000

INTRODUCTORY STATEMENT

(In Thousands)

	1975 Estimate	1976 Estimate	197T Estimate	FY 1977 Authorization
Appropriation (Adjusted)	$2,780,400	$3,077,000	$ 600,100	$2,759,600
Total Direct Obligations	2,966,500	3,011,857	1,043,540	
Total Direct Budget Plan	2,780,400	3,077,000	600,100	2,759,600

The "Aircraft Procurement, Navy" (APN) appropriation finances the procurement of aircraft and related supporting equipment and programs for Navy and Marine aviation forces. This support includes equipment for modification of in-service aircraft, aircraft spare parts, ground support and training/simulator equipment, and industrial facilities and tools. In addition, material and effort required for the planned FY 197T (Transition period) and FY 1977 programs, which due to lead-time considerations, must be procured in FY 1976, are financed under this appropriation.

FY 197T is the three month period (1 July 1976 through 30 September 1976) transitioning from the current fiscal year basis of 1 July through 30 June to the new fiscal year basis of 1 October through 30 September. This transition will occur between FY 1976 and FY 1977 as enacted in Public Law 93-344, The Congressional Budget and Impoundment Control Act of 1974. For the Aircraft Procurement, Navy appropriation, the estimates contained herein for FY 197T reflect quantities and continuing modifications, support and initial spares for these quantities to sustain production for the three months following the FY 1976 funded delivery period. Further, advance procurement funds are required during this period for material and effort to support the planned FY 1977 program. In addition, replenishment spare and repair parts estimates represent three months worth of requirements expected to be ordered during July through September 1976. Other aircraft support equipment and facilities are based on the following criteria:

(a) The item is required for maintenance of production lines for three months or the minimum economic quantity procurable.

(b) The item must be ordered during this period to meet an installation or outfitting schedule.

(c) The item is needed to satisfy an inventory objective or allowance list.

(d) Funds are budgeted to cover three months of support effort which is normally programmed in 12 month increments.

FY 1977 authorization estimates for the APN appropriation covering the new fiscal year period 1 October 1976 through 30 September 1977 have also been included for purposes of authorization pursuant to Public Law 93-344.

FISCAL YEAR 1976 HIGHLIGHTS

The FY 1976 budget program for the Aircraft Procurement, Navy appropriation totals $3.1 billion. Significant features of the FY 1976 request are:

(a) A procurement program of 338 aircraft at a cost of $1.892 billion. Procurement of sophisticated A-6E, EA-6B, A-7E, F-14A, P-3C, S-3A, and E-2C aircraft continues in FY 1976. Marine peculiar aircraft are included with continued procurement of the A-4M, UH-1N, and AH-1J.

(b) An advance procurement program of $161.9 million to finance long lead time procurement of prime contractor and government furnished equipment, material and effort required to insure timely delivery of aircraft planned for procurement in the transition period and in FY 1977.

(c) An aircraft modification program of $488.9 million to improve the safety-of-flight, operational characteristics, maintainability, and reliability of aircraft currently in inventory. $245.6 million of this request provides for conversion/modernization of aircraft in lieu of new procurement.

(d) $358.5 million for the procurement of reparable aircraft spares and repair parts to provide initial outfitting and replenishment support for operational Navy and Marine aircraft and related aircraft support equipment.

(e) Other Supporting programs of $175.7 million including aircraft industrial facilities, engine component improvement, common ground equipment, and other production charges.

FISCAL YEAR 197T (Transition Period) HIGHLIGHTS

The FY 197T budget program for the Aircraft Procurement, Navy appropriation totals $600.1 million. Significant features of the FY 197T request are:

(a) A procurement program of 75 aircraft at a cost of $241.8 million. Procurement of 10 different models of aircraft including the EA-6B, A-7E, F-14A, P-3C and E-2C.

(b) An advance procurement program of $95.2 million to finance long lead time procurement material and effort required to be ordered between 1 July 1976 and 30 September 1976 to insure timely delivery of aircraft planned for procurement in FY 1977

(c) An aircraft modification program of $148.6 million to continue ongoing modification programs during the transition period.

(d) $70.5 million for the procurement of reparable spares and repair parts to provide initial outfitting and replenishment support for operational Navy and Marine aircraft and related aircraft support equipment.

(e) Other supporting programs of $44.0 million including aircraft industrial facilities, engine component improvement, common ground equipment, and other production charges.

FISCAL YEAR 1977 (AUTHORIZATION) HIGHLIGHTS

The FY 1977 authorization program for the Aircraft Procurement, Navy appropriation totals $2.8 billion. Significant features of the FY 1977 authorization request are:

(a) A procurement program of 294 aircraft at a cost of $1.389 billion. Procurement of EA-6B, A-7E, F-14A, P-3C, E-2C, VTAMX and T-34C aircraft continues in FY 1977. Continued procurement for the Marines of the AH-1J and UH-1N helicopters are also included in the request. Further, authorization to commence procurement of Carrier Onboard Delivery (COD) aircraft and CH-53E helicopters is also requested.

(b) An advance procurement program of $155.1 million to finance long lead time material and effort required to insure timely delivery of aircraft planned for procurement in FY 1978.

(c) An aircraft modification program of $595.8 million to improve the safety-of-flight, operational characteristics, maintainability and reliability of aircraft in inventory. Included in this amount is $311.1 million for conversion/ modernization in lieu of new procurement.

(d) $365.5 million for the procurement of reparable aircraft spares and repair parts to provide initial outfitting and replenishment support for operational Navy and Marine aircraft and related support equipment.

(e) Other Supporting programs of $253.8 million including aircraft industrial facilities, engine component improvement, common ground equipment, and other production charges.

PROGRAM SUMMARY

Of the 338 aircraft included in the FY 1976 programs, 207 are combat aircraft. This combat aircraft program continues procurement of three attack weapons systems, the A-4M SKYHAWK, the A-7E CORSAIR II and A-6E INTRUDER. Fighter aircraft procurement consists solely of the high performance, air superiority F-14A TOMCAT. Procurement of the AH-1J SEACOBRA armed gunship and the light transport utility version of the UH-1N IROQUOIS helicopter is continued in FY 1976. Support of the Navy's anti-submarine warfare mission is provided by continued procurement of the S-3A VIKING and P-3C ORION aircraft. Also funds are programmed for the EA-6B PROWLER for electronic warfare and the E-2C HAWKEYE for airborne warning. Advance procurement funds related to the planned FY 197T and FY 1977 program are included for eight combat models.

Trainer aircraft planned for procurement in FY 1976 are the new advanced multi-engine trainer, VTAMX, and continued purchase of the T-34C MENTOR.

In FY 1976, procurement in the other aircraft activity is limited to the EC-130 (Special Mission) TACAMO aircraft.

Support programs which contribute significantly to the Navy's and the Marine's combat capability include: modifications required to improve the capabilities of aircraft previously delivered to the Fleet; spares and repair parts to support new aircraft entering the Fleet as well as those already in the operating program; industrial facilities to support the production and maintenance of Fleet aircraft; ground handling, training equipment including continuing emphasis on simulator procurement, test and production support equipment required to support aircraft procurement and operations.

The FY 197T program contains 75 aircraft, of which 32 are combat aircraft. This combat aircraft program continues three months of production of one attack weapons sytem, the A-7E CORSAIR II and one fighter aircraft, the F-14A TOMCAT. Procurement of the AH-1J SEACOBRA and UH-1N IROQUOIS Helicopters is also continued. P-3C ORION aircraft procurement is continued in support of the anti-submarine mission. Funds for procurement of the EA-6B PROWLER for the electronic warfare mission and the E-2C HAWKEYE for airborne warning, are also requested. Advance procurement funds for seven models of aircraft programmed for FY 1977 are included.

Trainer aircraft planned for procurement in FY 197T are the VTAMX, the advanced multi-engine trainer and the T-34C MENTOR.

Other aircraft planned for procurement is the KC-130R HERCULES tanker aircraft.

Support programs include modifications of aircraft previously delivered to the Fleet; spares and repair parts for support of new aircraft and those aircraft already operating; and aircraft support equipment and facilities.

The FY 1977 authorization program contains 294 aircraft; 158 of these are combat aircraft. Procurement of the A-7E CORSAIR II attack aircraft and the F-14A TOMCAT fighter aircraft are being continued. Helicopters programmed include continued procurement of the AH-1J SEACOBRA and UH-1N IROQUOIS as well as the initial procurement of the CH-53E SUPER STALLION. P-3C ORION aircraft are programmed for procurement in support of the anti-submarine mission. Procurement of the electronic warfare EA-6B PROWLER and the early warning E-2C HAWKEYE are also in the authorization request.

Airlift aircraft procurement included in the FY 1977 authorization request is limited to the Carrier Onboard Delivery (COD) aircraft.

Trainer aircraft planned for continued procurement are the advanced multi-engined VTAMX and the T-34C MENTOR.

Support programs which contribute significantly to the Navy's and the Marine's combat capability include: modifications required to improve the capabilities of aircraft delivered to the fleet; spares and repair parts to support both new aircraft and those already in the operating program; and aircraft support equipment and facilities required to support aircraft procurement and operations.

FINANCING

The FY 1976 budget plan of $3,077,000,000 and the FY 197T budget plan of $600,100,000 for the Aircraft Procurement, Navy appropriations are to be financed by new obligational authority. The FY 1977 Authorization plan of $2,759,600,000 will also be financed by new obligational authority.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate
Combat aircraft	$1,899,613	$1,819,037	$1,994,052
Airlift aircraft	-	54,600	-
Trainer aircraft	82,771	7,000	38,700
Other aircraft	37,465	44,000	21,150
Modification of aircraft	309,082	290,852	488,900
Aircraft spares and repair parts	430,532	368,611	358,498
Aircraft support equipment and facilities	177,178	196,300	175,700
TOTAL DIRECT PROGRAM	2,936,641	2,780,400	3,077,000
Reimbursable program	90,490	77,000	57,000
TOTAL PROGRAM REQUIREMENTS	3,027,131	2,857,400	3,134,000
Less: Portion of program to be obligated in subsequent fiscal years	1,119,772	742,900	754,764
Plus: Obligations incurred against prior year program funds	-	968,000	634,637
TOTAL OBLIGATIONS	1,907,359	3,082,500	3,013,873

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SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	FY 197T Estimate	FY 1977 Estimate
Combat aircraft	$ 282,060	$1,354,100
Airlift aircraft	-	151,200
Trainer aircraft	14,500	39,200
Other aircraft	40,400	-
Modification of aircraft	148,600	595,800
Aircraft spares and repair parts	70,500	365,500
Aircraft support equipment and facilities	44,040	253,800
TOTAL DIRECT PROGRAM	600,100	2,759,600
Reimbursable program	12,000	-
	612,100	-

AIRCRAFT PROCUREMENT

Admiral HOUSER. Mr. Chairman and members of the committee:

I welcome the opportunity to present to you the Navy's aircraft procurement request. To assist me are Vice Admiral Lee, Commander Naval Air Systems Command and Major General Armstrong, Marine Corps Deputy Chief of Staff for Aviation.

During the past year, since last appearing before you, Naval Aviation has experienced a number of notable events. The F–14A deployed with the Seventh Fleet in USS *Enterprise* (CVAN–65) and has shown extreme success, in spite of two accidents. This summer USS *John F. Kennedy* (CV–67) will deploy to the Mediterranean with the second group of F–14A's along with the new E–2C early warning aircraft and the first S–3A antisubmarine squadron. These aircraft, along with the A–7B, A–6E and EA–6B aircraft on board make this air wing truly unique and a forerunner of those to deploy in the future.

This summer we will see the first flight of an improved EA–6B featuring significantly reduced response time for electronic signal jamming providing the fleet with a significantly enhanced capability for both offensive and defensive operations.

The new E–2C airborne early warning aircraft, with its passive detection system, increased radar detection range and an overland detection and tracking capability, provides the fleet with capabilities never before achieved in airborne early warning.

The Navy's ASW force continues its modernization. In the case of the land-based force six East Coast squadrons and four Pacific squadrons have been outfitted with the P–3C. The experience of these 10 squadrons has confirmed our expectations that this aircraft is the most capable land-based AWW aircraft in the world. The S–3A carrier based antisubmarine aircraft moves from the test and evaluation phase to operational deployment this year and we expect his ASW system to provide great flexibility for the carrier group commander and add a new dimension to antisubmarine warfare.

MARINE AVIATION

In continuation of our efforts to modernize Marine Aviation, the first F–14 aircraft will become operational later this year; another light attack squadron will be equipped with the A–4M; and the third of five medium attack squadrons will transition to the A–6E. The transition of three light attack squadrons to the V/STOL Harrier is complete, and with a squadron deployed in the Far East and a detachment aboard the USS *Guam* (LPH–9) with the Marine Amphibious Ready Groups in the Mediterranean. The first two seat training Harriers will be delivered this summer providing a vast improvement of the Corps V/STOL Training Capability.

Modernization of the aircraft in the Naval Air Training Command continues this year with follow-up procurement of the T–34C turboprop basic trainer and the initiation of a program to replace old multiengine trainers with a new turboprop twin engine training aircraft.

The fiscal year 1976 and transition period aircraft procurement requests contain only those aircraft necessary to endeavor to maintain this effective force. Most of the aircraft requested are a continuation of prior year programs.

Because of a Defense Department decision to consolidate airlift functions under a single manager system headed by the commander, Military Airlift Command, additional procurement of modern C–9 and CT–39 jet transports is not requested in the fiscal year 1976 budget.

AIRCRAFT PROCUREMENT

	FY-76	FY-7T
ATTACK		
A-7E	30	6
A-6E	12	0
ELECTRONIC WARFARE		
EA-6B	6	1
FIGHTERS		
F-14A	36	9
AIRBORNE EARLY WARNING		
E-2C	6	1
PATROL & ANTI-SUBMARINE		
P-3C	12	3
S-3A	41	0
MARINE ATTACK		
A-4M	24	0
MARINE HELICOPTERS		
UH-1N	24	6
AH-1J	16	6
MARINE TANKERS		
K C-130R	0	4
TRAINERS		
T-34C	115	36
VTAMX	15	3
SPECIAL MISSION		
EC-130Q	1	0

Continued procurement is requested of the Navy A–7E and A–6E attack aircraft; the A–6B electronic warfare aircraft; F–14 fighters; E–2C airborne early warning aircraft and P–3C and S–3A patrol and antisubmarine aircraft. For specific Marine Corps requirements we request procurement of the UH–1N and AH–1J helicopters and the A–4M light attack aircraft and KC–130 aerial tankers.

CONVERSIONS IN LIEU OF NEW PROCUREMENT

F–4B to F–4N.
F–4J to F–4S.
RF–4B to SLEP.
A–6A to A–6E.
SH–3A to SH–3H.
CH–46 UPDATE.
A–7B to TA–7C.
C–2A SLEP.

In order to fill authorized force levels, it is necessary to continue aircraft in our active inventory for extended periods beyond their originally anticipated service life. Modification programs to safely extended structural service life of aircraft and to modernize their weapons systems for mission effectiveness in current threat environments are increasing in numbers and in requirements for fundings. This year's request includes funding for the service life extension programs on our F–4B and F–4J fighters and the Marine RF–4B reconnaissance aircraft; for upgrading A–6A aircraft to the improved A–6E version; for modifying our older SH–3 antisubmarine helicopters to the improved SH–3H; for updating Marine CH–46 assault helicopters for greater lift capability and improved safety and combat survivability; conversion of older A–7B and A–7C aircraft to a two place training version with the A–7–E systems; for extending the service life of early C–2A COD aircraft; and for installation of electronic warfare equipment designed to update radar homing and warning and DECM capabilities in combat aircraft.

Also included in the fiscal year 1976 and transition budget requests are funds for spares and repair parts to support both new aircraft and those currently in inventory as well as funds for support equipment and industrial facilities.

In summary the Navy's total aircraft procurement request for fiscal year 1976 and the transition period is $3,677.1 million—fiscal year 1976 $3,077 million; fiscal year 197T $600.1 million.

Mr. Chairman, with your permission I will review each program requested this year, concentrating on how it fits into our force level requirements. I will discuss where we stand with respect to equipping the force and why these quantities are requested.

I will show a picture of the aircraft and corresponding data. The data sheets will be provided the recorder for the record.

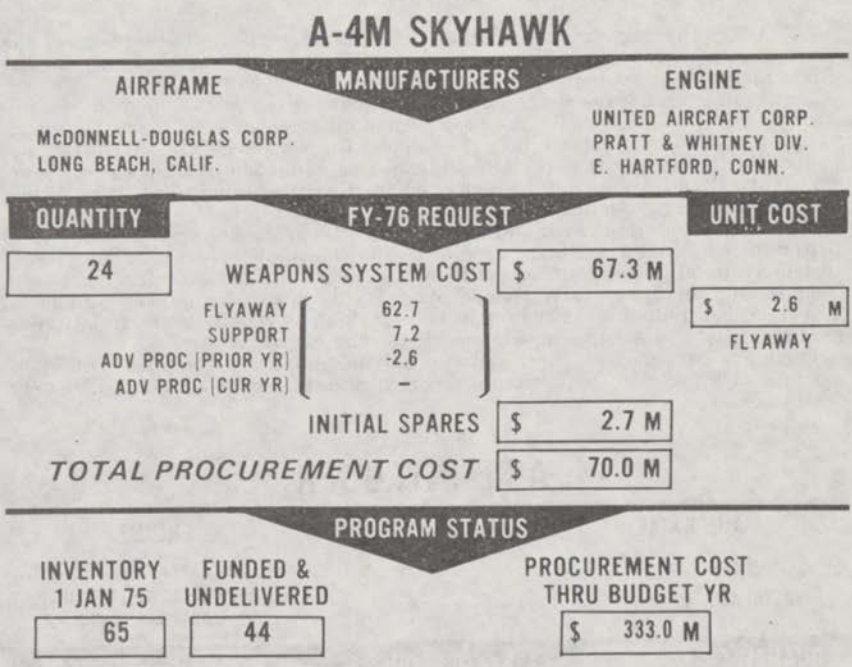
[The remainder of the statement follows:]

A–4M SKYHAWK

Prior procurement of A–4M aircraft will enable the Marine Corps to attain its goal of equipping all active A–4 squadrons with the A–4M. However further procurement is required to maintain these forces. The 24 A–4M aircraft requested in FY 1976 will maintain these force levels through FY 1981 and are required for the Marine Light Attack Capability assuming earliest possible introduction of the follow-on Light Attack VSTOL aircraft. The Marine active A–4E and A–4F aircraft replaced by the 4–4M, plus the Navy A–4F aircraft that will be available upon decommissioning of the *Hancock*, will complete the modernization of the Marine reserve light attack squadrons. To do this, we are requesting $67.3 million in FY 1976. An additional $2.7 million is required for initial spares.

DATA SLIDE

I invite your attention to the data slide. The format coincides with the Congressional Data Sheets provided to you by the Secretary of Defense. Total APN dollars include the Weapons System Cost and Initial Spares.



WEAPONS SYSTEM COST

"Weapons System Cost" is the total amount we are requesting under the line item and is derived from flyaway cost, support requirements and advance procurement. I would like to emphasize that only the flyaway and prior year advance procurement are directly related to this year's requested quantity. "Advance Procurement Current Year" provides long-lead funding for next years planned request.

Total "Initial Spares" requirements are contained in the request for "Aircraft Spares and Repair Parts" but have been included here to provide you with the dollar amounts associated with each weapon system. A portion of support equipment and initial spares will outfit support ships and air stations, independent of the quantity of aircraft in this year's buy. I point this out to show you that even if zero quantity of any given aircraft is procured this year, a portion of initial spares and support equipment for that aircraft would still be required.

FLYAWAY UNIT COST

The "Flyaway Unit Cost" is the cost of one completely equipped aircraft at the head of the runway ready for take-off. This should be differentiated from total program unit cost which is the cost of single aircraft after prorating the cost of RDT&E, support and initial spares throughout the total program.

Under "Program Status" the total inventory for this aircraft series as of 1 January 1975 is shown. The total "Funded and Undelivered" pertains to the aircraft in this series approved by the Congress for procurement but not delivered to the Navy as of 1 January 1975. "Costs Through Budget Year" indicates total accumulated APN costs for the program through this year's request.

A detailed listing of "Total Program" is available for each item on a second data slide, if you desire to see those. These slides list:

Details on procurement quantities programmed for the future,
Inventory objectives,
APN, RDT&E and MILCON costs, and
Total program costs.

A–6E INTRUDER

The A–6 is the only true all-weather attack aircraft in the Department of the Navy and represents a major part of the DOD capability against many targets (fixed and moving) at night and during periods of inclement weather.

The A–6E is an improved version of the combat-proven A–6A which has demonstrated its capabilities under the most demanding combat conditions. This long-range, versatile, twin-jet aircraft is equipped for very accurate navigation and weapons delivery, and the specialized electronics equipment installed permits accurate attack on targets day or night under all-weather conditions. This system includes a new micro-miniaturized computer, a solid state weapon release system and a single integrated track and search radar. Weapons delivery accuracies are better than the A–6A system. The real key to the A–6E program is the greater system availability and reduced maintenance effort required. Initial reports from a manpower survey, recently conducted for A–6E squadrons, is most promising. The trend is a reduction in the number of technicians required. The full systems availability of the A–6E is about four times that of the A–6A.

There are currently six fleet and two Marine squadrons equipped with A–6E aircraft with excellent performance reported to date. The A–6E has completed 6 deployments.

A-6E INTRUDER

AIRFRAME MANUFACTURERS	ENGINE
GRUMMAN BETHPAGE, L.I.,N.Y.	UNITED AIRCRAFT CORP. PRATT & WHITNEY DIV. E. HARTFORD, CONN.

QUANTITY	FY-76 REQUEST		UNIT COST
12	WEAPONS SYSTEM COST	$ 151.3 M	
	FLYAWAY	100.6	$ 8.4 M
	SUPPORT	57.4	FLYAWAY
	ADV PROC (PRIOR YR)	-6.7	
	ADV PROC (CUR YR)	–	
	INITIAL SPARES	$ 4.9 M	
	TOTAL PROCUREMENT COST	$ 156.2 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
54	28	$ 907.8 M

Additional A-6E Deployments

The 7th A-6E deployment will be in FORRESTAL in March 1975. A third Marine A-6E squadron will also be formed this year.

The fiscal year 1976 configuration includes incorporation of the Target Recognition and Attack Multisensor (TRAM) system. TRAM is an electro-optical sensor package with a Forward Looking Infrared (FLIR) sensor and laser designator that will allow high resolution viewing of the target and provides the capability to execute self-contained first pass attack delivery of laser guided weapons.

CONDOR Missile System

In addition, the CONDOR missile system has completed development and will be launched from the A-6E/TRAM aircraft. This sophisticated missile provides a standoff launch capability with unexcelled terminal accuracy and increased sortie effectivity due to the destructive potential of the CONDOR warhead. The Operational Evaluation of the A-6E/TRAM with CONDOR is expected to be completed in March 1975. Contractor flight test of TRAM commenced late March 1974, utilizing a prototype TRAM system, and results have been outstanding to date. Navy evaluations including IOT&E will commence in the 4th quarter of FY 1975. A total procurement program of 94 A-6E's is planned, with 82 funded in FY 1975 and prior, 12 requested in FY 1976. A recent DOD decision eliminated the previously approved FY-77 and subsequent procurement of 95 aircraft. We will retrofit 228 A-6A's to the "E" version in our modification program.

The FY 1976 request for 12 aircraft and $151.3 million, continues a modest inventory modernization, and provides for a minimum production capability. Required funds for initial spares associated with these aircraft are an additional $4.9 million.

EA-6B PROWLER

MANUFACTURERS

AIRFRAME	ENGINE
GRUMMAN, BETHPAGE, L.I., N.Y.	PRATT & WHITNEY, E. HARTFORD, CONN.

FY-7T REQUEST

QUANTITY		UNIT COST
1	WEAPONS SYSTEM COST $ 12.7 M	
	FLYAWAY 12.5	$ 12.5 M FLYAWAY
	SUPPORT 1.9	
	ADV PROC (PRIOR YR) -5.1	
	ADV PROC (CUR YR) 3.4	
	INITIAL SPARES $ 1.1 M	
	TOTAL PROCUREMENT COST $ 13.8 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
47	12	$ 1259.8 M

EA–6B PROWLER

The EA–6B is a four-place, twin-turbojet aircraft which contains a fully integrated, computer controlled electronic warfare system. It is the first naval aircraft engineered from conception and built specifically for tactical electronic warfare. The aircraft, a derivative of the A–6A, is a carrier-based aircraft capable of employing electro-magnetic radiations to degrade enemy radar and communications nets in support of both sea control and power projection missions.

The EA–6B has met all program schedules and technical milestones. The Expanded Capability (EXCAP) version of the EA–6B is fully operational and currently deployed to both Sixth and Seventh Fleets. An Improved Capability (I–CAP) version is currently in development and meeting all milestones with rollout scheduled for March 1975 and first flight in July 1975. The EA–6B I–CAP will feature digital tuning for reduced response time, and improved displays and cockpit arrangement for increased operator efficiency. The FY 1975 and subsequent procurements incorporate the improved capability (I–CAP) modification. Prior year aircraft will be modified to I–CAP.

The EA–6B has proven to be an extremely flexible and useful addition to the Carrier Air Wing. Its role in Fleet Defense as well as in strike projection continues to expand as the inventory and our ability to deploy more squadrons increases. The Mid East War of October 1973 vividly demonstrated the requirement for electronic warfare capabilities on almost any battlefields of the future.

A total program of 77 EA–6B's (including one R&D a/c) is currently planned. This program is sufficient to provide four aircraft EA–6B squadrons for 12 CVA's.

EA-6B PROWLER

MANUFACTURERS

AIRFRAME
GRUMMAN,
BETHPAGE, L.I., N.Y.

ENGINE
PRATT & WHITNEY,
E. HARTFORD, CONN.

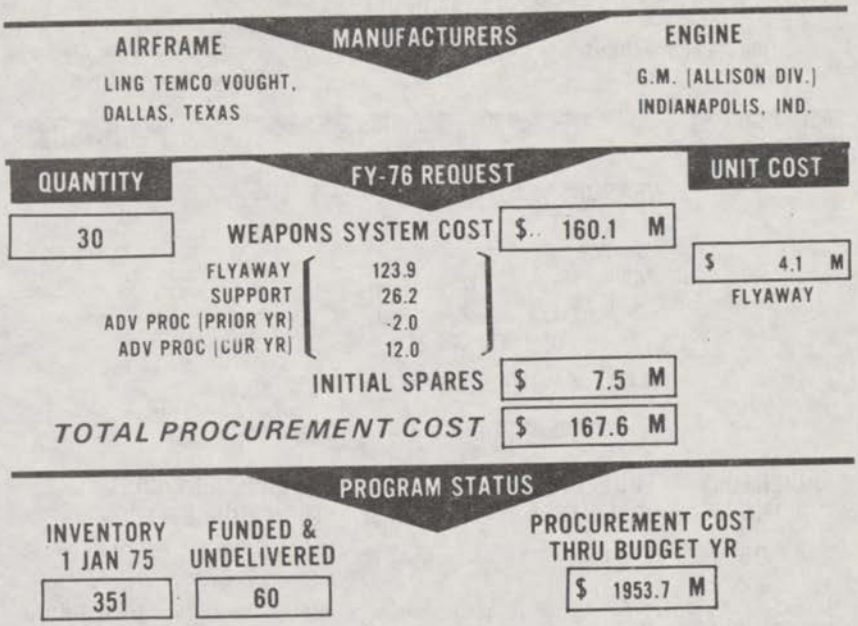
QUANTITY	FY-7T REQUEST		UNIT COST
1	WEAPONS SYSTEM COST	$ 12.7M	
	FLYAWAY 12.5		$ 12.5M FLYAWAY
	SUPPORT 1.9		
	ADV PROC PRIOR YR -5.1		
	ADV PROC CUR YR 3.4		
	INITIAL SPARES	$ 1.1M	
	TOTAL PROCUREMENT COST	$ 13.8M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
47	12	$ 1259.8M

We are requesting $116.9 million for procurement of 6 EA–6B's in FY 1976 and $12.7 million for one aircraft in the Transition budget. Initial spares require an additional $3.5 million in FY 1976 and $1.1 million in FY 197T. For the FY 1977 authorization we are requesting $104.0 million for 6 aircraft.

A-7E CORSAIR II



A–7E Corsair II

The A–7E is a single-place, attack aircraft which continues as the mainstay of the Navy's carrier based attack force. Its performance in combat in Southeast Asia was outstanding. It provides a substantial increase in bombing accuracy, combat radius and load carrying capability over previous light attack aircraft. The integrated navigation/weapons delivery system enhances flexibility in the target area and enables all aviators to achieve far better combat bombing accuracy than results achieved with previous visual attack-systems.

The A–7E has proved to be both reliable and easily maintainable, not only during operational testing but in deployments to the Mediterranean and the Western Pacific. The following achievements reported by 3M and safety center data emphasize the performance and maturity of this weapon system:

(*a*) Lowest combat attrition rate of any tactical jet aircraft in Southeast Asia.

(*b*) Lowest carrier accident rate in calendar 1973 and 1974.

(*c*) Highest overall operational readiness (64.5%) and aircraft utilization (37 hours/month/aircraft) of all carrier jet aircraft during first half of calendar 1974.

(*d*) The eight 1974 A–7E carrier deployments averaged an operational readiness rate of 70 percent.

TF–41 engine problems caused as many as 132 aircraft to be without engines this past year and severely impacted maintenance-man-hours by the requirement for increased inspections and engine changes. Nose landing gear problem also impacted maintenance-man-hours by requiring more frequent inspections and changes.

I am pleased to report that both problems are now under control. As of 31 December 1974, all aircraft had good engines, and spare engines were being modified. Concurrently, the 24 A–7's aboard *Roosevelt* were the first equipped with the new titanium nose landing gear which proved to be the solution to the nose landing gear problem during development and test. Our goal is an all A–7E regular, light attack force. By the end of FY 1976, twenty squadrons will be equipped with the A–7E. A total procurement program of 666 A–7E's is planned—and 506 have been approved for procurement through the FY 1975 budget. A continuation of this procurement rate will achieve the desired all A–7E active force level in FY 1979.

A-7E CORSAIR II

MANUFACTURERS

AIRFRAME
LING TEMCO VOUGHT
DALLAS, TEXAS

ENGINE
G.M. (ALLISON DIV.)
INDIANAPOLIS, IND.

QUANTITY	FY-7T REQUEST		UNIT COST
6	WEAPONS SYSTEM COST	$ 36.4 M	
	FLYAWAY 31.1		$ 5.2 M FLYAWAY
	SUPPORT 7.5		
	ADV PROC (PRIOR YR) -12.0		
	ADV PROC (CUR YR) 9.8		
	INITIAL SPARES	$ 3.2M	
	TOTAL PROCUREMENT COST	$ 39.6M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
351	60	$1993.3M

We are requesting $160.1 million for procurement of 30 A–7E's in FY 1976 and $36.7 million for 6 aircraft in the Transition budget.

Initial spares required an additional $7.5 million in FY 1976 and $3.2 million in FY 197T. For the FY 1977 authorization we are requesting $169.2 million for 30 aircraft.

F-14A TOMCAT

MANUFACTURERS

AIRFRAME
GRUMMAN
BETHPAGE, L.I., N.Y.

ENGINE
UNITED AIRCRAFT CORP.,
PRATT & WHITNEY DIV.
E. HARTFORD, CONN.

QUANTITY	FY-76 REQUEST		UNIT COST
36	WEAPONS SYSTEM COST	$ 599.3 M	
	FLYAWAY 460.5		$ 12.8 M FLYAWAY
	SUPPORT 119.8		
	ADV PROC (PRIOR YR) -70.0		
	ADV PROC (CUR YR) 89.0		
	INITIAL SPARES	$ 20.4 M	
	TOTAL PROCUREMENT COST	$ 619.7 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
110	121	$ 4077.5 M

F–14A TOMCAT

During 1974 the principal direction of the F–14 program shifted from test and evaluation to operational employment. Through December 1974 fleet F–14 pilots have logged 10,100 operational/training sorties and 17,000 flight hours. The first two squadrons deployed in USS *Enterprise* last fall. Meanwhile, the next two squadrons have been established at Oceana, Virginia, and are expected to deploy in USS *Kennedy* this summer.

Thus far, we are very impressed with our F–14 operational experience. Stringent fleet exercises of maritime defense against simulated coordinated missile attacks have graphically established the F–14's large increase in capability against silent, jamming and long-range targets. Commander Carrier Group 7 aboard *Enterprise*, in his mid-deployment report, has indicated that "lethal hits were scored in every exercise" and "the *Phoenix* missile in carrier operations is demonstrating reliability equal to that experienced during the R&D flight program." In the classic dogfighting role (i.e., "close-in tight-turning engagements), the F–14 has repeatedly established its superiority over the best dissimilar aircraft available. Because of its other capabilities, it would not appear reasonable to expect that the F–14 should successfully engage in tight-turning fights. In fact, however, as a result of the combination of the sweep wing, superb slow speed capabilities, high visibility, and a weapon system designed to fight with guns or missiles close in, the F–14 is unexcelled. Navy Fighter Weapons School pilots, who regularly fight against the F–14 attest to the F–14's superb capability to defeat the current and predicted threats.

Fleet utilization rates and maintenance manhours per flight hour are those expected of a mature program, not an airplane just completing its first deployment.

Fleet operations have not, however, been trouble-free. During January 1975 two F–14's embarked in *Enterprise* were lost in separate incidents due to fire from apparent engine failure. Preliminary analysis indicates that the most likely cause is in the fan stage of the engine. A comprehensive investigation into the causes of these incidents is underway. Corrections to these problems should yield an increase in F–14 combat survivability. Note, however, that F–14 operational losses to date are considerably below planning factors.

You will recall that last year I reported to you the achievement of the highly significant F–14/*Phoenix* missile milestones . . . first . . . in December 1972 a single F–14 simultaneously engaged four or five separate target drones with four *Phoenix* missile resulting in four kills . . . second . . . in November 1973 an F–14 launched six *Phoenix* missiles in less than a minute at six targets in two raid fronts. Four of the missiles made direct hits, one missile failed and one missile's target discontinued presentation of realistic-size simulation during missile flight resulting in a "no test." Both of these firings are unprecedented and add a new dimension of air-to-air combat.

In recent AIM–54 launch missions, the F–14/*Phoenix* weapon system has continued to demonstrate its capability against difficult targets. Some examples of recent hits which have been scored in tactically realistic situations are:

(*a*) A short range launch against a fighter maneuvering at maximum capability.

(*b*) A fighter target (F–4) at low altitude.

(*c*) A small target simulating a cruise missile at extremely low altitude over the water.

(*d*) A supersonic target simulating an air-to-surface missile at high altitude.

(*e*) A simulated bomber in a fleet exercise employing electronic countermeasures against both the F–14 radar and the *Phoenix* missile.

An impressive 86 percent of the 58 *Phoenix* missiles launched from the F–14 scored hits on their targets. Thirty-five of the 58 were launched by Navy crews, including 17 by operational squadrons.

You will recall from my testimony of last year that the Navy and Grumman successfully resolved the F–14 aircraft contractual difficulty in March 1973. FY 1974 and subsequent F–14 procurements have been and will continue to be negotiated annually on an individual contract basis. The FY–75 airframe contract was definitized in December 1974.

As you know, in August 1974 the Congress rejected the Navy's request for $100 million advance payments for Grumman. However, in October 1974 Grumman obtained $200 million commercial financing from a group of U.S. Banks and Bank Melli, Iran. On 16 October 1974, Grumman remitted $52 million plus accrued interest to the Navy, thus liquidating the outstanding advance payments under the advance payments pool agreement dated 8 August 1972.

The Imperial Iranian Air Force is purchasing 80 F–14s along with support and spares to modernize their fighter force. This procurement has been initiated and deliveries will commence in January 1976 at the rate of two aircraft per month, increasing to a three-per-month rate in January 1977 and continuing at that rate through July 1978. These deliveries will be made concurrently with those planned for the FY 1975 through 77 Navy procurements.

The first Marine F–14A Squadron will become operational in December 1975. The second Marine squadron starts its training in July of this year.

F-14A TOMCAT

MANUFACTURERS

AIRFRAME
GRUMMAN
BETHPAGE, LI., N.Y.

ENGINE
UNITED AIRCRAFT CORP
PRATT & WHITNEY DIV.
E. HARTFORD, CONN

QUANTITY	FY-7T REQUEST		UNIT COST
9	WEAPONS SYSTEM COST	$ 132.3 M	
	FLYAWAY 119.4		$ 13.3 M FLYAWAY
	SUPPORT 4.9		
	ADV PROC (PRIOR YR) -51.0		
	ADV PROC (CUR YR) 59.0		
	INITIAL SPARES	$ 6.1 M	
	TOTAL PROCUREMENT COST	$ 138.4 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
110	121	$4215.9M

Twelve research and development and 222 production aircraft for a total of 234 F–14s have been funded to date. We are requesting $599.3 million for procurement of 36 F–14A's in FY 1976 and $132.3 million for 9 aircraft in the Transition Budget. Initial spares require an additional $20.4 million in FY 1976 and $6.1 million in FY 197T. For the FY 1977 authorization we are requesting $576.4 million for 36 aircraft.

Since last year the planned procurement rate of F–14A's has been modified substantially. A decision by the Secretary of Defense last year provides for the procurement of 36 in FY 1977, 33 in FY 1978, 24 in FY 1979 and 18 in FY 1980. This results in the F–14A production line remaining open through CY 1981 with a minimum sustaining rate in the later years.

CH-53E SUPER STALLION

AIRFRAME MANUFACTURERS	ENGINE
SIKORSKY AIRCRAFT DIV. UNITED AIRCRAFT STRATFORD, CONN.	GENERAL ELECTRIC CO. WEST LYNN, MASS

QUANTITY	FY-76 REQUEST		UNIT COST
–	WEAPONS SYSTEM COST	$ 20.0 M	
	FLYAWAY –		$ – M
	SUPPORT –		FLYAWAY
	ADV PROC (PRIOR YR) –		
	ADV PROC (CUR YR) 20.0		
	INITIAL SPARES	$ M	
	TOTAL PROCUREMENT COST	$ 20.0 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
0	0	$ 20.0 M

CH–53E SUPER STALLION

The CH–53E is a shipboard compatible, heavy transport helicopter which is a growth version of the H–53 series currently in use by the Marine Corps, Navy and Air Force. Primary utilization by naval forces will be the movement of tactical and support equipment at weights up to 16 tons.

Significant structural changes from the earlier H–53 series are: three engines in lieu of two; seven main rotor blades of improved design and materials in lieu of six; an increased main rotor diameter; and a larger tail rotor system which is canted 20°.

The increased performance provided by these changes equates to double the lift capability of the current CH–53D, by either external or internal mode, while the shipboard deck spot factor is increased by only 10%. The CH–53E will be capable of lifting over 90% of Marine Division Combat essential equipment and 88% of all Construction Battalion equipment. It will also be able to lift 98% of all Marine and 92% of all Naval Tactical aircraft without disassembly, including the capability of retrieving another CH–53E.

Of a total program procurement of 70 aircraft, 30 will be utilized by the Marine Corps in existing heavy helicopter squadrons and training units while the Navy will operate a total of 30 CH–53E's assigned to Combat Support squadrons on both coasts plus detachments overseas. The remaining aircraft are for pipeline and advanced attrition.

$20 million is requested in FY 1976 for advance procurement of long-lead components prior to first production planned for FY 1977. For the FY 1977 authorization we are requesting $123.5 million for 17 aircraft.

UH-1N IROQUOIS

MANUFACTURERS

AIRFRAME
BELL
FORT WORTH, TEXAS

ENGINE
UNITED AIRCRAFT OF W.VA.
BRIDGEPORT, WEST VIRGINIA

FY-76 REQUEST

QUANTITY			UNIT COST
24	WEAPONS SYSTEM COST	$ 29.7 M	
	FLYAWAY	25.7	$ 1.1 M FLYAWAY
	SUPPORT	3.6	
	ADV PROC (PRIOR YR)	-1.9	
	ADV PROC (CUR YR)	2.3	
	INITIAL SPARES	$ .6 M	
	TOTAL PROCUREMENT COST	$ 30.3 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
121	39	$ 164.4 M

UH–1N IROQUOIS

The UH–1N, commonly referred to as the "HUEY," is the latest UH–1 model helicopter to join the fleet. The "Twin-Pac" T400–CP–400 engine has delivered significant improvement in safety, reliability, and maintainability over a period of several years. It is currently being utilized by the Navy, Marine Corps and Air Force. Canadian armed services have also procured the UH–1N.

The Marine Corps utilizes this utility combat helo for support to the landing force, mobility in command and control for the ground commander, medical evacuation, troop movement and various other light utility missions. The Navy uses the UH–1N to provide shore-based "Search and Rescue" at various naval air stations and in helicopter support of Antarctic Operation DEEPFREEZE.

The Marine Corps force requirement is six squadrons of 21 aircraft each plus two training elements of six aircraft each. The Navy force level requirement is 30 operating aircraft.

UH-IN IROQUOIS

MANUFACTURERS

AIRFRAME
BELL
FORT WORTH, TEXAS

ENGINE
UNITED AIRCRAFT OF W.VA.
BRIDGEPORT, WEST VIRGINIA

QUANTITY	FY-7T REQUEST		UNIT COST
6	WEAPONS SYSTEM COST	$ 6.5 M	
	FLYAWAY 6.4		$ 1.1 M FLYAWAY
	SUPPORT .2		
	ADV PROC PRIOR YR -1.4		
	ADV PROC CUR YR 1.3		
	INITIAL SPARES	$ .1 M	
	TOTAL PROCUREMENT COST	$ 6.6 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
121	39	$171.0M

A total procurement program of 294 UH–1N's is planned. We are requesting $29.7 million for procurement of 24 UH–1N's in FY 1976 and $6.5 million for 6 aircraft in the Transition budget. Initial spares require an additional $0.6 million in FY 1976. For the FY 1977 authorization, we are requesting $27.4 million for 28 aircraft.

AH-1J SEA COBRA

MANUFACTURERS

AIRFRAME
BELL
FORT WORTH, TEXAS

ENGINE
UNITED AIRCRAFT OF W.V.
BRIDGEPORT, WEST VIRGINIA

QUANTITY	FY-76 REQUEST		UNIT COST
16	WEAPONS SYSTEM COST	$ 40.4 M	
	FLYAWAY 28.7		$ 1.8 M FLYAWAY
	SUPPORT 10.3		
	ADV PROC (PRIOR YR) —		
	ADV PROC (CUR YR) 1.4		
	INITIAL SPARES	$ 1.8 M	
	TOTAL PROCUREMENT COST	$ 42.2 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
61	18	$ 179.0 M

AH–1J (Improved) Sea Cobra

The AH–1J assault helicopter gunship provides the Marine Corps with necessary close-in fire support for both aerial and ground escort operations during the ship-to-shore movement and within the objective area. The AH–1J (Improved) like its predecessors, the single engine AH–1G and the standard AH–1J, is designed specifically for the armed combat role—however, with the addition of TOW missile provisions in FY 1976/197T aircraft and incorporation of the TOW missile system in FY 1977 production aircraft, we will acquire a helicopter borne antiarmor capability.

The primary differences between the standard and improved versions of the AH–1J are: an uprated version of the "Twin-Pac" engine, new main transmission, uprated rotor dynamics and an extended fuselage. These features permit a 40% increase in maximum gross weight (10,000 to 14,000 #), a 20% increase in fuel capacity, and, depending on ambient conditions, a 200 to 300% increase in payload. Significant economies will be realized by using the rotor dynamics system and uprated engine developed for the Government of Iran.

AH-1J SEA COBRA

MANUFACTURERS

AIRFRAME	ENGINE
BELL FORT WORTH, TEXAS	UNITED AIRCRAFT OF W.VA. BRIDGEPORT, WEST VIRGINIA

FY-7T REQUEST

QUANTITY			UNIT COST
6	WEAPONS SYSTEM COST	$ 11.1 M	
	FLYAWAY 11.0		$ 1.8 M FLYAWAY
	SUPPORT .5		
	ADV PROC PRIOR YR -1.4		
	ADV PROC CUR YR 1.0		
	INITIAL SPARES	$ 1.6 M	
	TOTAL PROCUREMENT COST	$ 12.7 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
61	18	$ 191.7M

A total procurement of 124 AH–1J's is planned. We are requesting $40.4 million for procurement of 16 Improved AH–1J's in FY 1976 and $11.1 million for 6 aircraft in the Transition budget. Initial spares require an additional $1.8 million in FY 1976 and $1.6 million in FY 197T. For the FY 1977 authorization we are requesting $56.0 million for 23 aircraft equipped with the TOW anti-armor missile system.

P-3C ORION

AIRFRAME MANUFACTURERS	ENGINE MANUFACTURERS
LOCKHEED BURBANK, CALIF.	GM (ALLISON DIV.) INDIANAPOLIS., IND.

QUANTITY	FY-76 REQUEST		UNIT COST
12	WEAPONS SYSTEM COST	$ 171.9 M	$ 11.5 M FLYAWAY
	FLYAWAY 137.6		
	SUPPORT 21.5		
	ADV PROC (PRIOR YR) -11.6		
	ADV PROC (CUR YR) 24.4		
	INITIAL SPARES	$ 3.8 M	
	TOTAL PROCUREMENT COST	$ 175.7 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
117	25	$ 1941.6 M

P–3C ORION

The fleet transition from the older P–3A/B to the new computer-equipped P–3C land-based Antisubmarine Warfare (ASW) aircraft is progressing on schedule. With the last of the six patrol squadrons at NAS Jacksonville, Florida, completely outfitted with the P–3C, the transition emphasis has temporarily shifted to the west coast where the fourth Pacific squadron recently completed transition. The experience of the ten squadrons has confirmed our expectations that this aircraft is the most capable land-based ASW aircraft in the world.

As I reported last year, Navy was implementing a number of related programs designed to improve the Operational Readiness of the P–3C and that P–3C operational readiness was remaining at or near the goal of 70%.

The P–3 Improved Maintenance Program, which I very briefly mentioned last year has since proven to be particularly effective. During the first four months (July to October 1974) of the program's implementation in seven squadrons, including active, training and reserve squadrons, significant benefits were realized. Experience with this small sample leads us to expect reductions within the next six months of approximately 20% in MMH/FH and 45% in scheduled MMH's. The program results in benefits both to the individual squadrons and the intermediate maintenance activities, resulting in a decrease in the time that an aircraft is not operationally ready due to the maintenance effort.

The first of the P–3C update aircraft has been received with fleet introduction scheduled for April 1975. This program continues the systematic improvement of the P–3C. The keystone of this update is the seven-fold increase in computer memory capacity and associated software allowing a tremendous increase in the application of the P–3C's onboard computer to the ASW problem. This update culminates four years of planning and intense activity.

The aircraft proposed in our FY 1976 request will contain additional improvements such as Forward Looking Infrared (FLIR), a Sonobuoy Reference System (SRS), and a new acoustic tape recorder to mention a few.

Procurement through FY 1980 will deliver a total of 241 aircraft providing P–3Cs for a 20-squadron active force.

P-3C ORION

MANUFACTURERS

AIRFRAME	ENGINE
LOCKHEED BURBANK, CALIF.	GM [ALLISON DIV.] INDIANAPOLIS, IND.

FY-7T REQUEST

QUANTITY			UNIT COST
3	WEAPONS SYSTEM COST	$ 61.2 M	
	FLYAWAY 33.2		$ 11.1 M FLYAWAY
	SUPPORT 32.5		
	ADV PROC PRIOR YR -18.3		
	ADV PROC CUR YR 13.8		
	INITIAL SPARES	$ .9 M	
	TOTAL PROCUREMENT COST	$ 62.1 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
117	25	$2003.7 M

We are requesting $171.9 million for procurement of 12 P-3C's in FY 1976 and $61.2 million for 3 aircraft in the Transition budget. Initial spares require an additional $3.8 million in FY 1976 and $0.9 million in FY 197T. For the FY 1977 authorization we are requesting $179.9 million for 12 aircraft.

S-3A VIKING

MANUFACTURERS

AIRFRAME	ENGINE
LOCKHEED BURBANK, CALIF.	GENERAL ELECTRIC WEST LYNN, MASS.

FY-76 REQUEST

QUANTITY			UNIT COST
41	WEAPONS SYSTEM COST	$ 482.9 M	
	FLYAWAY 427.6		$ 10.4 M FLYAWAY
	SUPPORT 111.3		
	ADV PROC [PRIOR YR] -56.0		
	ADV PROC [CUR YR] –		
	INITIAL SPARES	$ 33.1 M	
	TOTAL PROCUREMENT COST	$ 516.0 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
51	86	$ 2580.7 M

S–3A VIKING

The S–3A "Viking" is a carrier-based antisubmarine search and attack aircraft. It is designed to exploit the Navy's offensive antisubmarine warfare capability by utilizing the carrier's mobility, independence from foreign air bases and ability to concentrate air ASW forces in an enemy submarine datum area, which is beyond the economic range of land-based aircraft. It replaces the aging propeller-driven S–2 "Tracker" aircraft which are presently in use aboard our CVs.

The S–3A is a twin engine turbofan aircraft which carries a crew of four, at altitudes up to 40,000 feet and at speeds in the 400+ knot range with an endurance in excess of six hours. It contains and employs the most modern passive and active ASW search sensors designed to counter the Soviets' nuclear submarines and integrates this data into a general purpose digital computer. This real-time information is visually displayed for the flight crew on multi-purpose units. It will employ the standard antisubmarine weapons such as homing torpedoes, conventional and nuclear depth charges, rockets, and mines. Additionally, it is designed to employ the HARPOON missile.

The S–3A testing is on or ahead of schedule and the results received to date indicate that this weapon system is able to accomplish its mission of detection, classification and localization of enemy submarines in an order of magnitude better than the S–2. The weapons system portion of the Board of Inspection and Survey trials was completed on schedule in March 1974, and operational evaluation by VX–1 is in progress at NAS Patuxent River, Maryland. All milestones of this program have been met on or ahead of schedule during the development of this weapon system. Initial Operational Capability was achieved in February 1975.

Two S–3A accidents have occurred during development testing and initial transition training of fleet pilots. Preliminary results of both investigations indicate pilot overcontrol into an extreme attitude from which recovery was not possible. Methods to prevent a recurrence are under investigation.

As of 1 January 1975, 52 aircraft have been delivered and an additional 86 aircraft are under contract. The 41 aircraft requested in FY–76 represent the final lot of the 187 aircraft. This provides the Navy an operating force of twelve carrier-based squadrons and one Replacement Training Squadron.

We are requesting $482.9 million for procurement of 41 S–3A's in FY 1976. Initial spares require an additional $33.1 million in FY 1976 and $0.8 million in FY 197T. The FY 1976 procurement completes the S–3A procurement program.

E-2C HAWKEYE

AIRFRAME MANUFACTURERS	ENGINE
GRUMMAN BETHPAGE, L.I.,N.Y.	GM (ALLISON DIV.) INDIANAPOLIS, IND

QUANTITY	FY-76 REQUEST		UNIT COST
6	WEAPONS SYSTEM COST	$ 154.3 M	
	FLYAWAY 105.3 SUPPORT 49.0 ADV PROC (PRIOR YR) -7.7 ADV PROC (CUR YR) 7.7		$ 17.5 M FLYAWAY
	INITIAL SPARES	$ 7.1 M	
	TOTAL PROCUREMENT COST	$ 161.4 M	

PROGRAM STATUS		
INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
21	15	$ 926.3 M

E–2C Hawkeye

The E–2C Airborne Early Warning aircraft is a multimission vehicle that provides early threat warning and command and control services to fleet units. Although similar in appearance to its predecessor, the E–2B, airframe refinements, uprated engines and a totally new avionics package provides capabilities never before achieved in airborne early warning. A passive detection system, increased radar detection ranges and an overland detection and tracking capability are among the improvements incorporated.

The aircraft was approved for service use in June 1974, and commenced its initial deployment in September 1974. Greatly improved reliability has been realized and current operational readiness figures confirms an increase from 46% to 66% over the E–2B.

Testing of the Advanced Radar Processing Systems (ARPS) modification to the APS 120 RADAR reached a milestone in October 1974 with the successful completion of ARPS NPE I. The ARPS modification provides a significant increase in anti-jam capability, automatic overland detection and tracking and small target detection at increased ranges. This modification is planned for incorporation in the FY 1976 aircraft.

E-2C HAWKEYE

MANUFACTURERS

AIRFRAME	ENGINE
GRUMMAN BETHPAGE, L.I., N.Y.	GM (ALLISON DIV.) INDIANAPOLIS, IND.

FY-7T REQUEST

QUANTITY			UNIT COST
1	WEAPONS SYSTEM COST	$ 21.9 M	
	FLYAWAY 18.1		$ 18.1 M FLYAWAY
	SUPPORT .6		
	ADV PROC PRIOR YR -3.7		
	ADV PROC CUR YR 6.9		
	INITIAL SPARES	$ 1.4 M	
	TOTAL PROCUREMENT COST	$ 23.3 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
21	15	$949.6M

We are requesting $154.3 million for procurement of 6 E–2C's in FY 1976 and $21.9 million for one aircraft in the Transition budget. Initial spares require an additional $7.1 million in FY 1976 and $1.4 million in FY 197T. For the FY 1977 authorization we are requesting $125.8 million for 6 aircraft.

VTAMX

AIRFRAME	MANUFACTURERS	ENGINE

THIS AIRCRAFT WILL BE PROCURED ON AN INDUSTRY-WIDE COMPETITIVE BASIS

QUANTITY	FY-76 REQUEST		UNIT COST
15	WEAPONS SYSTEM COST	$ 9.2 M	
	FLYAWAY	8.2	$ 0.6 M FLYAWAY
	SUPPORT	1.0	
	ADV PROC (PRIOR YR)	–	
	ADV PROC (CUR YR)	–	
	INITIAL SPARES	$ – M	
	TOTAL PROCUREMENT COST	$ 9.2 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
0	0	$ 9.2 M

VTAMX

The VTAMX aircraft is a twin engine turbine powered aircraft required to replace the 20 plus year old TS–2A aircraft employed in the advanced multi-engine training aircraft role. The VTAMX will be an FAA certificated, in production aircraft.

The TS–2A does not meet multi-engine training requirements due to its lack of high altitude capability and the wide gap in performance, operation and instrumentation as compared to the P–3 ASW patrol aircraft, which most multi-engine graduates will fly, and the E–2 AEW aircraft. The TS–2A has become a very costly aircraft to operate.

The 15 aircraft requested in FY 1976 and the 3 aircraft in FY 197T constitute the initial and second increment in a program designed to satisfy Navy multi-engine training aircraft requirements. 75 VTAMX aircraft are required and 75 are programmed through the FYDP years.

VTAMX

MANUFACTURERS

AIRFRAME — ENGINE

THIS AIRCRAFT WILL BE PROCURED ON AN INDUSTRY-WIDE COMPETITIVE BASIS

QUANTITY	FY-7T REQUEST		UNIT COST
3	WEAPONS SYSTEM COST	$ 4.8 M	
	FLYAWAY 1.8		$ .6 M FLYAWAY
	SUPPORT 3.0		
	ADV PROC PRIOR YR –		
	ADV PROC CUR YR –		
	INITIAL SPARES	$ – M	
	TOTAL PROCUREMENT COST	$ 4.8 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
0	0	$ 14.0 M

We are requesting $9.2 million for procurement of 15 VTAMXs in FY 1976 and $4.8 million for 3 aircraft in the Transition budget. For the FY 1977 authorization we are requesting $12.3 million for 15 aircraft.

T-34C MENTOR

AIRFRAME MANUFACTURERS	ENGINE MANUFACTURERS
BEECH AIRCRAFT WICHITA, KANSAS	UNITED AIRCRAFT E. HARTFORD, CONN.

QUANTITY	FY-76 REQUEST		UNIT COST
115	WEAPONS SYSTEM COST	$ 29.5 M	
	FLYAWAY	28.3	$ 0.3 M FLYAWAY
	SUPPORT	1.2	
	ADV PROC (PRIOR YR)	–	
	ADV PROC (CUR YR)	–	
	INITIAL SPARES	$ – M	
	TOTAL PROCUREMENT COST	$ 29.5 M	

PROGRAM STATUS		
INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
0	0	$ 36.5 M

T–34C MENTOR

The T–34C Mentor aircraft that we are requesting in FY 1976 will be a follow-on buy of the same model authorized in FY 1975. The T–34C is an improved version of the T–34B aircraft. The principal improvements to the T–34B were a turboprop power plant and a full avionics package.

The T–34C is the essential element to implementing the Long Range Pilot Training System (LRPTS) by providing the necessary cost effective training aircraft performance to support the expanded primary phase. The expanded primary increases the percentage of training accomplished in economical aircraft which results in reduction in overall pilot training costs. The T–34C replaces the T–34B and the T–28 aircraft employed in undergraduate pilot training, both of which have been in service over 19 years.

The 115 aircraft requested in FY 1976 constitute the second increment in a program designed to satisfy Navy undergraduate pilot training primary phase training aircraft requirements. T–34C aircraft required to satisfy this requirement are programmed through the FYDP years.

T-34C MENTOR

MANUFACTURERS

AIRFRAME	ENGINE
BEECH AIRCRAFT	UNITED AIRCRAFT
WICHITA, KANSAS	E. HARTFORD, CONN.

FY-7T REQUEST

QUANTITY			UNIT COST
36	WEAPONS SYSTEM COST	$ 9.7 M	
	FLYAWAY 8.7		$ .2 M FLYAWAY
	SUPPORT 1.0		
	ADV PROC (PRIOR YR) –		
	ADV PROC (CUR YR) –		
	INITIAL SPARES	$ – M	
	TOTAL PROCUREMENT COST	$ 9.7 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
0	0	$46.2 M

We are requesting $29.5 million for procurement of 115 T-34C's in FY 1976 and $9.7 million for 36 aircraft in the Transition budget. For the FY 1977 authorization we are requesting $26.9 million for 109 aircraft.

EC-130Q

MANUFACTURERS

AIRFRAME	ENGINE
LOCKHEED GEORGIA CO.	GM (ALLISON DIVISION)
DIVISION OF LOCKHEED AIRCRAFT CORP.	INDIANAPOLIS, INDIANA

FY-76 REQUEST

QUANTITY			UNIT COST
1	WEAPONS SYSTEM COST	$ 21.1 M	
	FLYAWAY 18.3		$ 18.3 M FLYAWAY
	SUPPORT 2.8		
	ADV PROC (PRIOR YR) –		
	ADV PROC (CUR YR) –		
	INITIAL SPARES	$ – M	
	TOTAL PROCUREMENT COST	$ 21.1 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
11	2	$ 119.0 M

EC–130Q Hercules

The EC–130Q is the current production C–130 aircraft dedicated to the airborne FBM command and control communication systems. This aircraft provides the only survivable command and control communications link with the deployed strategic submarine forces.

The FY 1976 request for one aircraft will provide an inventory of 14 aircraft to support the World Wide Military Command and Control System council approved force level of 12 UE aircraft. This procurement is supported by a request from the OSD Office of the Director, Telecommunications and Command and Control Systems. Fourteeen aircraft in inventory—2 in pipeline (rework/modification/test/training)—minimally supports the approved Atlantic and Pacific operations.

We are requesting $21.1 million for procurement of one EC–130Q in FY 1976.

KC-130R HERCULES

AIRFRAME	MANUFACTURERS	ENGINE
LOCKHEED GEORGIA CO. DIVISION OF LOCKHEED AIRCRAFT CORP.		GM (ALLISON DIVISION) INDIANAPOLIS, IND.

QUANTITY	FY-7T REQUEST			UNIT COST
4	WEAPONS SYSTEM COST		$ 40.4 M	
	FLYAWAY	35.5		$ 8.9 M FLYAWAY
	SUPPORT	4.9		
	ADV PROC (PRIOR YR)	0		
	ADV PROC (CUR YR)	0		
	INITIAL SPARES		$ .2 M	
	TOTAL PROCUREMENT COST		$ 40.6 M	

PROGRAM STATUS

INVENTORY 1 JAN 75	FUNDED & UNDELIVERED	PROCUREMENT COST THRU BUDGET YR
0	10	$ 111.8 M

KC–130R Hercules

The KC–130R is the current production C–130 aircraft modified for in-flight refueling. These aircraft refuel Marine Corps fighter and attack aircraft during tactical operations and Navy and Marine Corps aircraft during transoceanic ferry operations.

The four aircraft provide pipeline and advanced attrition aircraft to maintain the aerial refueler capability until procurement of the KCX is commenced in the mid-80s.

Delivery of four aircraft procured in FY 1974 will be completed on schedule and within budget by December 1975. Six of the older KC–130F aircraft will be transferred to the Marine Corps Reserve starting in July 1975 to replace the twenty-one-year-old C119s.

We are requesting $40.4 million for procurement of 4 KC–130's in the Transition budget. Initial spares require an additional $0.2 million in FY 197T.

FY-76 AND FY-7T AIRCRAFT MODIFICATIONS

A. CONVERSION IN LIEU OF PROCUREMENT (CILOP)	FY-76	FY-7T
● A-6A TO A-6E CONV, TA-7C CONV, SH-3H CONV, F-4J SLEP, RF-4B SLEP, CH-46 UPDATE, TC-4C CONV, F-4B SLEP, C-2A SLEP	254.1	108.8
B. OTHER MODIFICATIONS		
● ELECTRONIC WARFARE	38.0	4.3
● TACTICAL AIRCRAFT MODIFICATIONS	115.5	12.2
● ANTISUBMARINE WARFARE	29.7	10.1
● OTHER AIRCRAFT MODIFICATIONS	40.9	10.7
● POWER PLANT CHANGES	8.6	1.9
● SAFETY OF FLIGHT	1.1	.3
● RELIABILITY AND MAINTAINABILITY CHANGES	1.0	.3
TOTAL	488.9	148.6

Aircraft Modification

The Aircraft Modification Program funds incorporation of technical improvements which substantially modernize aircraft presently in service. Modifications are divided into the following two major categories:

(*a*) Conversion in Lieu of Procurement (CILOP) which is defined as any conversion, Service Life Extension (SLEP) or update program to be performed on existing aircraft for the primary purpose of meeting force lends with modernized aircraft, thereby defering the need to procure new aircraft.

(*b*) Other Modifications which include safety improvements, configuration change for additional or different mission, reliability and maintainability improvement and aircraft modernization to improve combat effectiveness.

Our request for this program in FY 1976 is $488.9 million dollars and FY 197T is $148.6 million dollars. Some of the more significant items in the modification program include:

New Starts

F–4J Conversion in Lieu of Procurement (CILOP) will modify and update a total of 302 aircraft to extend their service life an additional 96 months. The program consists of rewiring, configuration update, and structural modifications.

Continuation of Prior Year Programs

RF–4B update which will modify and update 30 aircraft in the same manner as the F–4J program. In addition, the night/all-weather detection capabilities and carrier compatibility of the RF–4 will be greatly improved.

A–6A to A–6E modification (CILOP) which retrofits a total of 228 A–6As with A–6E avionics and weapons release system for improved combat capability, maintainability and reliability. Incorporates the target recognition and attack multisensor (TRAM) capability.

CILOP of 81 A–7B and A–7C to a two-place training version with A–7E systems designated the TA–7C. Utilization of the TA–7C in the Carrier Replacement Air Wings will result in a reduction of training flight hours, aircraft inventory re-

quirements, fuel requirements and will provide improved Training and Efficiency for aircraft transition and weapons delivery.

Installation of the electronic warfare package designed to update the radar homing and warning and DECM capability in combat aircraft to counter the more advanced Soviet surface-to-air and air-to-air missiles.

CH–46 update (CILOP) program which provides the U.S. Marine Corps with a modernized medium assault helicopter which incorporates greater lift capability, and improves safety and combat survivability.

Conversion of the SH–3A and SH–3G to the SH–3H (CILOP) configuration which provides a multi-mission capability. The addition of radar, sonobuoys, and magnetic anomaly detection equipment provides for more capable and flexible operations against modern submarines.

FY-76 AND FY-7T AIRCRAFT SPARES

	FY-76	FY-7T
• INITIAL SPARES	$118.0M	$ 25.8M
• *SUPPORT OF NEW AIRCRAFT*	(90.2)	(16.8)
• *SUPPORT OF AIRCRAFT MODIFICATION*	(27.8)	(9.0)
• REPLENISHMENT SPARES	$240.5M	$ 44.7M
TOTAL	$358.5M	$ 70.5M

AIRCRAFT SPARES AND SPARE PARTS

The funding requested in this budget activity is required to provide repairable assembles and components necessary for support of Navy and Marine Corps aircraft.

Initial spares supply the basic outfitting and pipeline quantities to support new or modified weapon systems and are directly related to the number and types of operating aircraft entering the fleet. Replenishment spares provide for follow-on outfitting and for replacement of those spares that either wear out or are in a condition which is beyond economical repair. This budget activity has undergone certain changes in structure during the past two years.

Prior to FY 1975 all outfitting requirements were budgeted in the initial segment of the spares funding line. Commencing in FY 1975, follow-on outfitting requirements shifted to the replenishment account. This shift in funding policy was initiated to maximize application of inventory stratification techniques and minimize inventory investment. Application of this technique has resulted in an average eight percent reduction in follow-on outfitting requirements.

In FY 1976 a pipeline reduction was applied to initial outfitting requirements to minimize the risk of obsolescence due to design instability. This reduction equates to approximately twenty percent of pipeline requirements.

The availability of future issue requirements for repairable components is dependent upon APN–6 procurement funding and O&MN rework funding. The former provides outfitting and attrition replacement assets while the latter provides the means to refurbish and repair those assets which fall subsequent

to procurement. Both funding elements are of primary importance to the material support function. However, component rework funding is more sensitive to the immediate readiness posture since it basically provides for the immediate requirements within the budget year.

FY-76 AND FY-7T AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES

	FY-76	FY-7T
● COMMON GROUND EQUIPMENT	$ 77.7 M	$ 20.4M
● COMPONENT IMPROVEMENT	$ 38.6 M	$ 4.0M
● AIRCRAFT INDUSTRIAL FACILITIES	$ 27.5 M	$ 8.0M
● WAR CONSUMABLES	$ 3.4 M	$ .7M
● OTHER PRODUCTION CHARGES	$ 28.5 M	$ 10.9M
TOTAL	*$175.7 M*	*$44.0M*

AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES

The $175.7 million requested in the FY 1976 Budget provides support for our aviation programs in five different categories:

1. *Common Ground Equipment* ($77.7 million) to fund the Versatile Avionics Shop Test (VAST) System which supports the F–14, S–3 and E–2C aircraft; general ground support equipment including our mobile maintenance facilities; aircraft system trainers and training aids; the Maintenance Information Automated Retrieval System (MIARS); and a major portion of our effort to improve the reliability and maintainability of existing aeronautical equipment other than engines.

2. *Component Improvement Program* ($38.6 million) to support our continuing effort to improve the durability, maintainability, and reliability of aircraft engines. This program represents the minimum level of engineering support required for improvements essential for satisfactory performance of engines in Fleet use.

3. *Aircraft Industrial Facilities* ($27.5 million) which provides funds to modernize and improve the production equipment used in our Naval Air Rework Facilities, to procure Calibration equipment for maintaining the accuracy of our aviation test eqiupment, and for the replacement or restoration of government owned machine tools used in contractor plants as well as for the maintenance of our Naval Weapons Industrial Reserve Plants.

4. *War Consumables* ($3.4 million) to procure auxilliary fuel tanks and ejector racks. These items are of a consumable nature related primarily to the number of sorties flown by combat or training aircraft.

5. *Other Production Charges* ($28.5 million) which provides funds for certain production support and testing services, procurement of aerial cameras and various common equipment provided to the Coast Guard, ground support equip-

ment required for Naval Reserve site outfittings, and special support for certain selected aircraft.

$44.0 million is requested in the transition budget for Aircraft Support Equipment and Facilities.

FY-76 AND FY-7T AIRCRAFT PROCUREMENT PROGRAM

BUDGET ACTIVITIES	TYPE	QUANTITY		COST (IN MILLIONS)	
		FY-76	FY-7T	FY-76	FY-7T
1. COMBAT AIRCRAFT	A-4M SKYHAWK	24		67.3	
	A-6E INTRUDER	12		151.3	
	EA6B-PROWLER	6	1	116.9	12.7
	A-7E CORSAIR II	30	6	160.1	36.4
	F14A TOMCAT	36	9	599.3	132.3
	CH-53E SUPER STALLION	0		20.0 [ADV PROC]	
	UH-IN IROQUOIS	24	6	29.7	6.5
	AH-IJ SEA COBRA	16	6	40.4	11.1
	P-3C ORION	12	3	171.9	61.2
	S-3A VIKING	41		482.9	
	E-2C HAWKEYE	6	*1	154.3	21.9
3. TRAINER AIRCRAFT	VTAMX	15	3	9.2	4.8
	T-34C MENTOR	115	36	29.5	9.7
4. OTHER AIRCRAFT	EC-130Q [TACAMO IV]	1		21.1	
	KC-130R HERCULES		4		40.4
5. MODIFICATION OF AIRCRAFT				488.9	148.6
6. AIRCRAFT SPARES AND REPAIR PARTS				358.5	70.5
7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES [ADVANCED PROCUREMENT FOR FY 1977 PROGRAM]				175.7 (161.9)	44.0 (95.2)
TOTAL AIRCRAFT PROGRAM		338	75	$3077.0M	$600.1M

APN SUMMARY

Our total aircraft procurement request is for 338 aircraft and $3 billion 77.0 million in FY 1976; 75 aircraft and $600.1 million in the Transition budget; and an authorization in FY 1977 of $2 billion 759.6 million for 294 aircraft.

F–14 AIRCRAFT LOSSES

Senator McGEE. How many F–14 aircraft have been lost during development and operations to date?

Admiral HOUSER. There are five.

Senator McGEE. Have you determined the cause in each accident?

Admiral HOUSER. We have determined the cause specifically in two and we have very good reasons to know what caused the other three to crash.

Senator McGEE. Do they follow a pattern?

Admiral HOUSER. Only two of them follow a pattern. I will discuss each one.

Senator McGEE. You could supply that for the record in terms of whatever pattern seems to be suggested in those instances.

Admiral HOUSER. Yes, sir.

Senator YOUNG. I would like to hear how those last two were lost.

Admiral HOUSER. Yes, sir. Those are the two that follow a pattern. One was lost in the south China Sea off the Philippines and the other

was lost in the Indian Ocean off Sumatra. They were both operating well within their designed limits, and both had indications of engine difficulty. The instruments in the airplane indicated there was difficulty in the engine. One was a port engine and the other was a starboard engine. Both of them subsequently developed fires and very shortly thereafter control of the aircraft was lost with the result that the crew had to eject.

Both of these airplanes were lost in very deep water where they were not recoverable and, as a result, a great deal of activity was undertaken by the Naval Air Systems Command, by the Grumman Aerospace Corp., the manufacturer of the airplane, and by Pratt & Whitney aircraft, the manufacturer of the engine.

Computer studies were made, simulations were done, and all previous incidents involving the F–14 were reviewed, including those cases where engines had failed or had given trouble and a corrective program was established.

The airplanes were actually put out of commission, except for operational reasons, for about 4 days.

I will explain the operational reason if I may. We had no reason to believe the airplane could not perform its mission if called upon, and as a result the task group commander on board the *Enterprise* was told his F–14's were satisfactory for conducting operational missions if he had to conduct them.

Training missions, however, were curtailed in order that we could identify what took place before we launched additional airplanes.

Several causes were determined as possibilities, and corrective actions were taken. These had to do, two of them, with the engine and one with the airframe. We have given the order to restore the airplanes to flying after certain inspections have been made and about two-thirds of these have gone back into the air.

Senator YOUNG. Did you find something wrong?

Admiral HOUSER. We had some areas of suspicion and because we did not have the actual carcasses to look at, we cannot say definitely that this was the case, but we believe that there are two particular areas, probably one of which would be the reason for these crashes.

Senator YOUNG. There has been no more trouble since then?

Admiral HOUSER. We have had no more trouble since then.

CAUSES OF F–14A AIRCRAFT LOSSES

Senator MCGEE. The causes of the other three, as near as you can determine them, can be made a part of the record.

Admiral HOUSER. Yes, sir.

[The information follows:]

F–14A LOSSES

F–14A aircraft #1 was lost on 30 December 1970 at Grumman's Calverton facility on its second test flight. The cause was hydraulic line failure resulting from vibration induced fatigue in the flight test instrumentation system which bled pressure from the flight control system. Flight control deteriorated to the point that the aircraft departed from controlled flight approximately one quarter mile from touchdown at which point the Grumman crew ejected safely.

F–14A aircraft #10 was lost on 30 June 1972 at the Naval Air Station, Patuxent River, Maryland. The cause has been attributed to the Grumman test pilot allow-

ing the aircraft to enter a steep descent shortly after take off and failing to initiate recovery in time to prevent impact with the water. Contributing factors were cockpit distraction due to recycling the landing gear followed by a wing sweep/flap interlock mechanical problem at the last minute, pilot fatigue, hazy weather conditions and the pilot's lack of familiarity with operating procedures at Patuxent River. The pilot was killed.

F–14A aircraft #6 was lost on 20 June 1973 at Pacific Missile Range, Point Mugu, California, while undergoing separation tests of the AIM–7E–2 Sparrow Missile. Following improper separation of the Sparrow from an aft fuselage station it impacted the aircraft under the fuselage causing a fuel leak which was subsequently ignited by the aircraft's engine exhaust. The Grumman crew ejected safely. The aircraft accident board concluded that the most probable causes were unknown transonic flow field effects, launcher malfunction, or a combination of the two.

No pattern is considered to exist for these three losses.

ATTRITION RATE OF AIRCRAFT

Senator McGee. How does this attrition rate compare with other aircraft programs? Is it normal or could it be termed excessive?

Admiral Houser. It is not excessive. I do not like to say that any losses are normal but we do expect them in the course of flying combat airplanes. The best comparison we have is with the F–4. In the initial 18,000 hours of operations for each aircraft, there have been eight operational accidents with the F–4, and the F–14 has suffered two. The F–14 rate is about one-fourth the rate of the F–4 when it had 18,000 flight hours. That does not count the R. & D. accidents but these were operational accidents so we are very pleased with the low accident rate of the F–14.

CONTRACT PERFORMANCE NEGOTIATIONS

Senator McGee. The committee has maintained a continuing interest in the contract performance negotiations with the Grumman Aerospace Corp. Last year there were misunderstandings between the committee and the Navy relative to the contractural agreements and status. Can you bring us up to date on the contract?

Admiral Houser. I would like to ask the officer who does the contracting to bring you up to date.

Admiral Lee. I will quickly review what went on and then bring you up to date on the fiscal year 1975 contract. If you remember in the fall of 1973 we negotiated with Grumman a contract to provide the aircraft in the budget for fiscal 1974.

This contract was negotiated with several clauses in it. One of the clauses stated that in the event that this contract would come under the advance funding agreement we had with Grumman at that time. Another clause stated that the contract would come into effect and be binding only upon enactment of the fiscal year 1974 authorization and appropriation acts, provided that neither of these acts contain any restrictions or limitation on the procurement of F–14's inconsistent with the signed contract.

The Congress, later on that year, I believe, passed the so-called Byrd-Proxmire amendment which stated that any advance payment agreement negotiated after the passage of this bill for more than $25 million would have to be submitted to the Armed Serv-

ices Committees of the two Houses, and if this submittal was not disapproved by one House or the other within 60 days, the Department of Defense could go ahead and make payment.

That contract was also not executed because at the time it was negotiated the appropriations bill had not been passed, nor had the authorization bill, so the contract was merely negotiated and signed by both Grumman and the Government but not executed.

Now, after the passage of the Byrd-Proxmire amendment, Grumman did not want to execute that contract until their financing was cleared up. On June 4 of last year the Department of Defense submitted a request to the committee chairman to continue this advance payment agreement with Grumman. It was about $100 million.

As you might remember, the Senate rejected this advance payment agreement and in the meantime the fiscal 1974 contract was still not executed. After the Senate turned down the advance payment agreement with Grumman, Grumman arranged some financing with the New York Branch of the Bank of Iran, Bank Meli, for $75 million and then additional financing with, I believe, eight other banks. This solved their financing problems for the time being, and the fiscal year 1974 contract was executed.

That took place in October of last year. This wrote the final chapter in this long, drawn out, painful process of negotiating the fiscal 1974 contract.

Then in July or August of last year, 1974, we began negotiations for the fiscal year 1975 contract for 50 aircraft for the Navy and 30 aircraft for Iran. These negotiations were completed in December of this year and the contracts were both signed by Grumman. That is the 50 aircraft for the U.S. Navy for fiscal 1975 and 30 aircraft for Iran.

Iran has a later order for 50, which will be contracted for later.

Now, the contract in the fiscal year 1974 was a fixed-price-incentive contract and this year's contract is a fixed-price contract with an abnormal escalation-clause contract. I would say the only difference in this particular contract and most fixed-price contracts is this abnormal escalation clause, but we think that this is a fair contract with Grumman because of unsettled economic conditions.

We negotiated these contracts on a man-hours and materials cost basis and allow them certain profit, but if they can improve their man-hours and materials costs they can make a little more profit. The contract for fiscal 1975 was signed in December of 1974.

MARINE CORPS F–14 SQUADRONS

Senator McGee. Thank you for that explanation.

What about the Marine Corps? How many F–14s are you planning there?

General Armstrong. We are forming a squadron of 12 aircraft and will build a training base of 12 aircraft. These 12 training aircraft will be co-located with the Navy. We are going to train in the same squadrons. Our F–14 force will eventually be four 12-plane tactical squadrons supported by 12 training aircraft.

Senator McGee. What will they replace?

General ARMSTRONG. The F–14 squadrons will replace the F–4s on a one-for-one basis.

Senator MCGEE. How much will that add in cost?

General ARMSTRONG. The total cost, I will have to give you that later.

Admiral HOUSER. When this subject came up a couple of years ago it was of the order of two F–4s for one F–14. These were program costs at that time. I would suspect it might be the same.

Senator MCGEE. It would double it, you mean?

Admiral HOUSER. It might be a little less because there are certain things that the Navy might require. These would have to be started again and the F–14 is a hot production line item.

Senator INOUYE. In the testing of the F–14 have you had any occasion to test under combat conditions?

Admiral HOUSER. No, sir. We have had simulated combat but no combat.

Senator YOUNG. I might observe that the Marines are doing much better.

Senator MCGEE. I assume there is no comment.

JOINT OPERATIONS IN THAILAND

Senator STEVENS. I had one particular question I wanted to ask. Probably I shouldn't even ask it. Do you have any Navy or Marines in Thailand?

Admiral HOUSER. The U.S. Navy maintains an austere detachment of aviation support personnel at Utapao Air Base, Thailand. This detachment consists of 4 officers and 30 enlisted personnel attached to the Fleet Aviation Support Unit under the administrative control of Comfairwestpac. The detachment provides minimum aviation support, fueling, and so forth, for transient aircraft staging through this area. There are no naval aircraft permanently stationed in Thailand. In addition to the above, the U.S. Navy has a limited number of representatives stationed with several joint activities and a few uniservice organizations.

Senator STEVENS. You don't have any fixed personnel marines or Navy there now?

Admiral HOUSER. As previously stated U.S. Navy personnel permanently stationed in Thailand consist of the aviation support unit and limited numbers of joint staff and uniservice personnel.

Senator STEVENS. You don't have operations out of there?

Admiral HOUSER. During the Vietnam conflict the U.S. Navy operated maritime patrol aircraft out of Utapao in support of market time operations. Occasional reconnaissance flights were also staged into the eastern Indian Ocean. In July 1974 in response to a request from the Royal Thai Government, the JCS directed that the U.S. Navy discontinue all Indian Ocean reconnaissance flights originating from Utapao. Since that time only logistic support and South China Sea reconnaissance flights have utilized the facilities at Utapao.

Senator YOUNG. What happened to that big naval base there?

Admiral HOUSER. Senator Young, to the best of my knowledge, it is used by Thailand, but not by the United States at this time.

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Senator YOUNG. We turned it over to them.

Admiral HOUSER. It was their base and it was a jointly used base.

Senator YOUNG. Did we give them equipment?

Admiral HOUSER. The Navy has no aircraft permanently stationed in Thailand nor does it plan to have any in the future. The only operations which are staged from Thailand are occasional maritime patrol reconnaissance flights into the south China Sea or logistics mission as previously stated. The Air Force has a substantial base complex in Thailand.

Senator YOUNG. Is the base still operational in case you wanted to use it for emergency purposes.

Admiral HOUSER. I would say yes.

Senator STEVENS. I was prompted by the news that we have an 18-month exodus order, supposed to be promulgated tomorrow by their Government and I wondered what it would mean to you people.

EARLY WARNING AIRCRAFT

Admiral HOUSER. We have a few Navy people stationed at joint headquarters.

Senator MCGEE. If the A–3 airborne warning and control system is introduced into the Air Force operational inventory, what effect will this have on the need for E–2C's and other airborne early warning aircraft?

Admiral HOUSER. I will take the second part of that question first. We had only one other early warning aircraft and that was the older E–1. It will be phased out independent of the E–3.

Senator MCGEE. The point of the question was, what would the effect be on the E–2.

Admiral HOUSER. There would be little effect. The E–2 is designed for fleet operational requirements. It has a system for data links between aircraft and ships. It operates as an integral part of the task group.

At this time we are working with the Air Force to develop the data links for the E–3 to enable it to work with naval units also. The E–2, of course, as a part of the carrier deck load, proceeds with the carrier wherever it is. We will look forward to getting any assistance on any joint operations we can with the E–3 when it is procured, but the E–2 will be required, in any event.

IRANIAN P–3 PROCUREMENT

Senator MCGEE. What is the status of Iran's procurement of P–3 patrol aircraft?

Admiral HOUSER. As of the present all have been accepted by Iran and they will be delivered later this year by Lockheed and Iranian crews.

Senator MCGEE. Are they the same craft for which you request procurement funds in the 1976 budget?

Admiral HOUSER. Of course their procurement funds are different from ours, but as to whether they are the same type, they are not identical. Although the United States and Iranian aircraft have the same airframe and engines, their internal systems are not identical, being designed for somewhat different missions.

Senator McGee. In terms of this particular aircraft, are these the aircraft for which your procurement funds are involved?

Admiral Houser. No, funds requested in fiscal year 1976 are for U.S. aircraft only.

U.S. NAVY'S S–3 PROGRAM

Senator McGee. What is the expected service life of the S–3A carrier-based ASW aircraft?

Admiral Houser. Sixteen years.

Senator McGee. What are the Navy's attrition requirements for the aircraft?

Admiral Houser. About four per year or 2½ percent.

Senator McGee. Does the procurement schedule plan for procurement of sufficient attrition aircraft?

Admiral Houser. Through about 1980; yes, Mr. Chairman.

Senator McGee. Does the Navy have any non-ASW applications in the S–3 platform for future requirements?

Admiral Houser. We have plans for them. We believe there are a number of applications that this airframe engine combination has that will permit us to do a lot of the things that we want to do.

One is an electronic systems airplane which we have called TASES, the Tactical Airborne Signal Exploitation System. We have a current airplane called the EA–3 which does most of this mission, and we are looking at this time to the S–3 to do some of that mission. This, however, is a program which we will present to you in due course with the funding and the numbers. It is not an approved program.

We also are looking for a version of the S–3 for a carrier on-board delivery airplane.

Senator McGee. Does the 5-year defense plan reflect any of the requirements you have described here?

Admiral Houser. The 5-year defense plan does reflect procurement of a COD airplane, the small transport airplane, but no procurement this year.

Senator Young. When will the Navy make its report on this new fighter plane?

Admiral Houser. In about 2 months, Senator Young. The evaluation is being conducted now and the final work is being put together on the evaluation, the additional work by the contractors, and by early May there should be an answer on the evaluation of the new fighter airplane.

Senator Young. You are evaluating both of them?

Admiral Houser. We are evaluating proposals from both teams of contractors.

Senator McGee. What has been your experience in the Navy with regard to stopping an aircraft production line and deferring later requirements which necessitate the reopening of the line.

Admiral Lee. We have had little experience with this. As a matter of fact, we researched the records and can't find any major airframe or engine that we have stopped and started. We do have examples of modifications for certain models of these where we have stopped production and then restarted.

Senator McGee. Are any foreign nations interested in buying the S–3 aircraft?

Admiral Lee. Yes, several have conducted discussions on it. One in particular seems to be very interested in buying it.

Senator McGee. Can you tell us any more about the status of the negotiations?

Admiral Lee. The Federal Republic of Germany has had extensive discussions over the last couple of years about procuring the S–3A for its naval forces. Last December we thought they were going to buy the airplane; they were up to the point of decision. I might add it is not unusual in foreign sales to arrive at this point and then not consummate the sale. However, the Germans have reopened discussions and we believe that they may be back to a position of decision about May of this year.

Senator McGee. Are there negotiations underway with any other government?

Admiral Lee. Discussions, but nothing firm; so I would not call them negotiations.

Senator McGee. What is the status of the Navy's program to replace the current carrier on-board delivery aircraft?

Admiral Houser. We have made proposals to the Secretary of Defense for our choice in carrier on-board delivery airplanes. This matter is now being discussed or will be discussed in the Research and Development Subcommittees of the different major committees.

C–2/S–3 COMPARISON

Senator McGee. How did the C–2 and S–3 derivatives compare for such purposes?

Admiral Houser. The comparisons in general are this: The S–3 is a new airplane, newer technology than the C–2. For the same payload the C–2 airplane is cheaper. The S–3 costs more because it has to be developed.

The C–2 is one of these airplanes where the tooling has been put away and could be brought back out. However, it is slower and has shorter range than the S–3. There are advantages to both of these airplanes.

These are the types of things that we have been in discussions with the Office of the Secretary of Defense on. They will be covered in the later discussions.

A–4M PROGRAM

Senator McGee. Last year the Congress denied funds for the procurement of A–4M aircraft in fiscal 1975. How many aircraft were requested for 1975?

Admiral Houser. Twenty-four.

Senator McGee. How many were requested for 1976?

Admiral Houser. There are 24 requested in fiscal year 1976 also.

Senator McGee. Why are no buys anticipated through 1980?

Admiral Houser. That is the end of the line for the light attack aircraft needed by the Marines. The ones requested are to maintain force levels and these will carry the Marine Corps through 1980.

Senator McGee. What effect did the recent October war in the Mideast have on the A–4M inventory?

Admiral Houser. None, sir. There were 46 A–4s of earlier models transferred to the Israelis but the "M" was not. With the funds resulting from the foregn sales of these older aircraft, 17 new A–4M's were procured.

Senator McGee. Are foreign sales of A–4M aircraft anticipated?

Admiral Houser. Yes, sir. Kuwait has ordered 30 A–4KV's and six of the training version of the A–4. Discussions are underway with several other countries. This is quite a good seller. It is an effective reliable airplane which many countries like.

Senator McGee. We note here the requested fiscal 1976 buy of 12 A–6E aircraft is the last scheduled through fiscal 1980. Why is this the last buy?

Admiral Houser. This was a decision by the Secretary of Defense. The Navy appealed this decision but it was not changed and at the present time the fiscal year 1976 buy is the last buy.

Senator McGee. You request $600 million for the transition budget period. Are funds included in the transition budget for new initiatives?

Admiral Houser. No, sir.

Senator McGee. None whatsoever?

Admiral Houser. That is correct.

Senator McGee. Now, are there any other questions?

IRANIAN F–14 PROCUREMENT

Senator Young. I have a couple of questions I would like to ask. Were the F–14's that were given to Iran exactly the same as ours?

Admiral Houser. There are minor differences, Senator Young, to account for better compatibility with existing equipment in the Iranian Air Force, but they are essentially the same airplanes.

AIRCRAFT RESEARCH AND DEVELOPMENT

Senator Young. What is the status of the follow-on V/STOL attack aircraft?

Admiral Houser. This is a matter under research and development. We are looking at several V/STOL candidates. The two more promising are the AV–8 Plus and the AV–16 Plus, vectored-thrust Harrier aircraft and future developments in that line, and also the planes we have discussed in the past.

We have been disappointed in the past with the Thrust Augmented Wing and Congress slowed the program down considerably last year by cutting a good deal of money out. Improvements have come along in the development and we anticipate that we will have a successful design but not as rapidly as we thought before.

Senator Young. This is the type of aircraft that we are buying from the British.

Admiral Houser. The first one is the AV–8 Harrier now operated by the Marines. It is deployed both in the Mediterranean and also in Japan. General Armstrong just returned from Japan and he had command of the first employed squadron and he would like to add something.

General Armstrong. We have had these since last August and it has done better than we had anticipated We have had very good luck with it out there. It was deployed out into the extended site where we had thought we could operate. We operated six around the clock off a small field, out in the jungle area. This worked out very well, and we have been very pleased with it.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. Thank you. I would like to submit my remaining questions to be answered for the record.

F–14 PROCUREMENT

Senator YOUNG. How many F–14's does the Navy plan to procure?

Admiral HOUSER. Current Navy plans call for the procurement of 390 F–14s through FY–80.

GRUMMAN FINANCIAL PROBLEMS

Senator YOUNG. Has Grumman solved their financial problems and is the Navy continuing to provide Grumman with advance payments?

Admiral HOUSER. Last year Grumman completed arrangements for a $200 million loan from a consortium of U.S. banks and Bank Melli of Iran. Shortly thereafter Grumman repaid all advance payments to the U.S. Navy.

CH–53E HELICOPTER

Senator YOUNG. Will the CH–53E heavy lift helicopter satisfy the Navy and Marine Corps requirements into the 1980's?

Admiral HOUSER. Yes, the CH–53E heavy lift helicopter will satisfy the Marine Corps requirements in the 1980's as encompassed in the approved Department of Defense Development Concept Paper #94, of 23 April 1973. These requirements include (a) lift for amphibious assault, (b) retrieval of downed aircraft and heavy equipment, and (c) the tactical movement of weapons systems and equipment. Initial test results have indicated that the CH–53E will meet or exceed the performance guarantees established for the aircraft. These guarantees meet present and predicted Marine Corps heavy lift requirements.

E–2 AIRBORNE EARLY WARNING AIRCRAFT

Senator YOUNG. How many E–2 Airborne Early Warning Aircraft does the Navy plan to procure? How many would be deployed on an aircraft carrier?

Admiral HOUSER. The present Navy plan procures 56 E–2C's. This will not support a force level sufficient to deploy our current four aircraft per carrier. An all E–2C force at four per deck requires a procurement of 65 opeating and pipeline aircraft plus attrition. The Navy is increasing the total number to be procured in its planning for FY 1977.

KC–130

Senator YOUNG. Will the program to buy KC–130 aircraft for the Marine Corps provide sufficient aircraft until a new aircraft such as the Advanced Medium STOL Transport is developed?

Admiral HOUSER. Based on a projected annual attrition rate of one percent and an estimated IOC of the mid-1980's for a tanker version of the AMST, the KC–130 program provides sufficient aircraft to maintain the approved force levels.

CONVERSION-IN-LIEU OF PROCUREMENT PROGRAM

Senator YOUNG. Why does the Navy need a conversion-in-lieu of procurement program? How does this program relate to Service Life Extension? How does the cost of these two programs compare with the procurement of new aircraft?

Admiral HOUSER. The Navy has resorted to this type of program as the only method of maintaining our force level inventories. Adverse funding availability, fiscal constraints and high unit costs have severely reduced our planned procurement of new aircraft. In an attempt to maintain force level requirements, the Conversion-in-Lieu-of-Procurement (CILOP) program has been established. CILOP is considered to be any aircraft conversion, Service Life Extension, update or combination thereof, to be performed on existing aircraft for the primary purpose of providing a reasonably acceptable, modernized aircraft as a substitute for new aircraft procurement required to meet or maintain force levels.

As indicated above, the Service Life Extension Program has been assimilated by the CILOP program. When comparing new procurement with CILOP programs during the period of FY–75 through FY–81, it is evident that the saving

utilizing CILOP are significant. For example, had the Navy continued to buy the F–4J it would have cost $7,778K per aircraft versus the F–4J CILOP cost of $669K each, the cost of a new A–6E is $10,216K each compared to the A–6A to A–6E CILOP of $2,400K each; a new TA–7C would cost $5,679K each compared to the TA–7C CILOP cost of $2,148K each.

Maintenance Support and Supply

Senator Young. Is the Navy's maintenance support and supply adequate to maintain the desired state of readiness?

Admiral Houser. The Navy material readiness standard is established at [Deleted] of the operating force level. Safely flyable aircraft, capable of performing at least one primary mission, are considered to meet the minimum material readiness standard. However, a full systems capable weapon system is the desired objective to meet a realistic material readiness standard. Currently the Navy wide material readiness index stands at [Deleted.] The trend is upward and a readiness level of [Deleted] is forecasted by end FY–76. The POM–77 balanced program is designed to raise the material readiness index to the [Deleted] plateau by FY–81. Attainment of the projected readiness improvement levels are predicated on planned applied resources and new maintenance management initiatives including the analytical maintenance program.

Aircraft Maintenance Backlog

Senator Young. What is the aircraft maintenance backlog and how does that compare with fiscal years 1973 and 1974?

Admiral Houser. Aircraft rework maintnance backlog (aircraft on extension) for Reserve and Active forces is as follows:

	Reserve	Active	Total
Fiscal year:			
1973 actual	173	873	1,046
1974 actual	113	834	947
1975 projected	102	952	1,054
1976 projected	80	818	898

Marine Squadrons

Senator Inouye. On your last schedule you have 18 squadrons. You have four squadrons in the Marines.

General Armstrong. Yes; that is what we are programed for, and we believe those will fill the need. There will be a total of 80 counting attrition, training and pipeline.

Senator Inouye. And there are 14 other squadrons which will be for the Navy?

Admiral Houser. Yes, it is phrased a little differently than that. The decision is to have 18 squadrons. The Secretary of Defense awarded 18 squadrons to the Department of the Navy, which includes the Navy and Marine Corps. As you know, the Marines and Navy work very closely together in mutual deployments. We expect, if the occasion arises where Navy airplanes are required to support the marines, or vice versa, these F–14's will be put in the area for the purpose for which they are needed.

Soviet Developments

Senator Inouye. In the development of new systems and new weapons, we seem to be either reacted or taking the initiative vis-a-vis the Soviets. They come up with the Foxbat and our—I suppose the answer to that was the F–14.

Admiral HOUSER. Not exactly, Senator. There is a good indication that the Soviets came up with the Foxbat after the United States came up with the SR–71, a very high altitude, high speed airplane. The F–14 has the capability for countering or neutralizing the Foxbat because it has the long range, high altitude missile in the Phoenix.

We have demonstrated an intercept of the target at 77,000 feet at mach 2.2, roughly that which the Foxbat is capable of obtaining.

Senator INOUYE. That is 77,000 feet?

Admiral HOUSER. Yes, to operate in the high altitudes requires a different type of airplane from the low-altitude planes.

One of the reasons the F–14 has been made so versatile is that it can operate at the lower altitudes and fight with the best of the small fighters, but it also does not neglect the high altitudes. We have put the performance in the missile, rather than trying to get the airplane up to that altitude.

Senator INOUYE. Are the Soviets working on something different now?

Admiral HOUSER. Yes, they are working on what we consider to be an advanced tactical fighter.

They have new versions of their Mig-21, their lastest models. They have the Mig-23, but the Mig-25 is the latest in the series. Any further than that I do not have any information on.

Senator INOUYE. So the 14 would be in the inventory for quite some time.

Admiral HOUSER. We expect for a long time, and it is the type of airplane that has so much capability and so much weaponry that it can be used in a wide variety of theaters and scenarios and not limited to one particular application.

Senator INOUYE. Thank you.

NAVAL LIGHTWEIGHT FIGHTER

Senator YOUNG. I have just one more question.

How does the light-weight fighter being proposed fit in with the F–14?

Admiral HOUSER. This is the light-weight fighter that is proposed for the Navy, you mean?

Senator YOUNG. Yes.

Admiral HOUSER. This is the thing that we are evaluating right now, Senator Young.

Senator YOUNG. How would that fit in with the F–14?

Admiral HOUSER. They would be complementary. There are many things that the F–14 can do that the light-weight fighter cannot do. For example, it would not have the equivalent radar detection range. We do think, however, there are applications where the lighter weight fighter could have substantial impact in the fighter force of the Navy and Marine Corps.

Senator YOUNG. And it would be much cheaper.

Admiral HOUSER. This is what we are determining now. We don't find any really cheap systems these days, but it would be cheaper than the F–14.

Senator YOUNG. I thought one major purpose of the light-weight fighter was the cost.

Admiral HOUSER. That is what Admiral Lee and his people are look-

ing at, to see what estimates there are. Clearly, on a one-for-one basis it would cost less. One of the things you have in new developments is a substantial front load in terms of getting the airplane ready for production. You have to go through all of the developments and design and testing, all of which take money, and then each of the airplanes after that bears a burden of that expense.

In the case of airplanes in production, that money has already been spent.

Senator INOUYE. You are making a decision within a month?

Admiral HOUSER. We expect by the first of May to have a decision.

Senator INOUYE. I presume you have enough pilots for the F–14?

Admiral HOUSER. Yes; and the waiting line is quite long. All of the pilots want to qualify with it.

Senator MCGEE. Thank you, gentlemen.

Admiral HOUSER. Thank you, Mr. Chairman.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator MCGEE. Chairman McClellan has given me some questions that he would like to have answered for the record.

[The questions and answers follow:]

AIRBORNE INFRARED COUNTERMEASURES

Chairman MCCLELLAN. As a result of the last Middle East war, the services made an attempt to upgrade their airborne countermeasures equipment. One of the items funded and procured in the readiness supplemental was the AN/ALQ–123 Infrared Countermeasures Pod. Does this pod perform the function for which it was procured?

Admiral HOUSER. Yes, sir, it does.

Chairman MCCLELLAN. Is the threat for which this pod was procured still pervasive?

Admiral HOUSER. Yes, sir.

NAVAL INVENTORY OBJECTIVES OF PODS

Chairman MCCLELLAN. What would be a satisfactory Navy inventory objective of these pods?

Admiral HOUSER. The Navy has determined that the present inventory of 60 pods, plus those 59 that are now on contract for procurement, will provide an adequate inventory of ALQ–123 pods for Navy and Marine TACAIR forces.

FUNDS REQUEST TO BUY OUT INVENTORY

Chairman MCCLELLAN. Why have funds not been required to buy out this inventory objective?

Admiral HOUSER. Funds were requested and provided in the Fiscal Year 1974 Supplemental to buy out Navy planned procurement.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator MCGEE. Senator Thurmond has also sent over some questions regarding the Navy's aircraft procurement. Will you please respond to them for the record.

[The questions and answers follow:]

F–14 PROCUREMENT

Senator THURMOND. What is the current procurement cost of the F–14?

Admiral HOUSER. The fiscal year 1976 procurement unit cost of the F–14 is $17.2 million.

Delivery Rate for F–14

Senator Thurmond. What is the delivery rate for the F–14?

Admiral Houser. The F–14 is currently being produced at a 6 per month rate.

Senator Thurmond. How many flights are necessary before acceptance by the Navy.

Admiral Houser. An average of 6 flights have been required for the latest 25 aircraft.

F–14 Maintenance

Senator Thurmond. What is the current maintenance man hour per flying hour for the F–14?

Admiral Houser. Direct maintenance man hour per flight hour is 22.3. Total maintenance man hour per flight hour including cleaning, corrosion control, and other general maintenance support is 39.2. (This data applies to all Navy F–14's for the period Jul–Dec 74).

F–14 Engine Performance

Senator Thurmond. How has the lack of "B" engine affected the performance?

Admiral Houser. The F401–PW–400 engine, under development for the F–14B aircraft, would have provided 30–40% improvement in Intermediate thrust and 10–20% improvement in Maximum Afterburning thrust over most of the envelope. This improvement in engine performance would improve aircraft acceleration by 20–25% and combat performance (Ps) by 15–25%. Intermediate climb performance would be improved 50–100%, depending on the flight condition. Aircraft radius would be decreased by 10–15% due to the higher cruise Specific Fuel Consumption Rates.

F–401 Engine Development

Senator Thurmond. What would it cost to complete development of the F401 engine?

Admiral Houser. The cost to complete the development of the engine to the performance levels associated with the F401 (26C) would be approximately $120M in FY–75 dollars. The F401 (26C) is an F401 version currently proposed by LTV for the Navy Air Combat Fighter and has 5–10% thrust improvement over the engine performance noted in the above question. The cost includes development through qualification, including two 150 hour endurance tests. An additional $20M is required for further reliability and maintainability tests. These costs do not include the costs associated with flight test support.

Senator Thurmond. What do you estimate the cost to the Navy to correct the engine problem? The cost to the contractor?

Admiral Houser. Preliminary estimates disclose that near-term costs associated with the engine problem will approximate $13 million. Long term expenses, if any, will depend on the findings of the ongoing engineering investigation. Unless the accident investigation results in proof of fraud or gross negligence on the part of the manufacturers of the aircraft or its components, the Navy, as a self-insurer bears the loss.

Marine Corps F–14 Program

Senator Thurmond. What is the Marine Corps requirement for the F–14 as opposed to the Navy requirement?

Admiral Houser. The primary mission of Marine fighters is to provide air defense for the amphibious landing forces during subsequent operations ashore. The Marine Corps also has a collateral mission of augmenting the Navy carrier forces as required by CNO. Conversely, the primary mission of the Navy fighter forces is to provide air defense for the fleet. The Navy fighter forces, which may be augmented by Marine fighters operating from carriers or advanced bases, must also gain the initial air superiority over the amphibious objective area. Thus the majority of Navy and Marine fighter requirements stem from air defense requirements. The Air Defense mission can best be accomplished by a fighter aircraft equipped with a large volume look down radar, a data link system to exchange target data with the various command and control agencies, an all weather, all aspect, air-to-air missile system for the long range kill capability and a short range missile and gun system for the close in engagements. The F–14 is currently the only Navy fighter which possesses these capabilities.

In summary, because of the requirement for mutual support and the advantages which accrue from dual basing capability, increased tactical flexibility and logistical support it is considered essential that a maximum degree of fighter commonality must be maintained within the Navy and Marine Corps fighter communities.

Senator THURMOND. When will the Marines get their first F–14's?

Admiral HOUSER. The first Marine F–14 squadron is expected to become operational in late calendar year 1975.

CONDOR UNIT COST

Senator THURMOND. What is the program unit cost of the CONDOR?

Admiral HOUSER. As reported in the 31 December 1974 Selective Acquisition Report, the current estimate for the CONDOR program unit cost is $721 thousand each for a 455 production missile buy. This figure represents the total sunk cost plus future procurement cost amortized over the 455 missile purchase. Certain economies of scale and other costs reductions can be realized with a greater procurement objective. In any case, the current unit procurement costs for the currently approved inventory is $433 thousand each. It is recognized that the cost is not low; however, the unique capability provided is not available at lesser cost.

Senator THURMOND. How many does the Navy wish to buy and how will they be used?

Admiral HOUSER. The currently DOD-approved procurement objective of 405 missiles will support an incremental improvement in Navy TACAIR's offensive capability. The Navy has investigated the methodology previously used to determine the CONDOR inventory objective and, in view of the A–6E aircraft's improved reliability and higher sortie potential, increased capability of enemy air defense systems, and CONDOR's unique ability to precisely strike a particular aimpoint, has reallocated the strike mission targets for CONDOR to more fully exploit the distinct advantages of this powered, stand-off, guided weapon. Navy and DOD representatives are currently conducting discussions relative to an increase in the number of CONDOR necessary to satisfy Navy procurement objectives and, it is planned to bring this request forward in Fiscal Year 1977 budget requests.

Myriad potential confrontation scenarios can be offered in support of the need for CONDOR and these scenarios become examples of planned uses for the weapon. Some of these are:

a. Severe damage to a single high value target, such as power-plant, communications center, warehouse, airfield control tower, bridge, dam, missile site, oil well or refinery component, etc.

b. Destruction of a single, fortified, terrain-shielded armory, alert hanger, or other military facility.

c. High confidence in the ability to achieve timely destruction of a designated high value point-target at least risk of escalation due to loss of aircraft, capture of personnel or other incident relatable to deeper airspace penetration.

d. The destruction of a particular ship among many at sea, in an anchorage, or moored alongside a pier.

Many wartime needs also can be postulated. Some of these are:

a. Destruction of a single installation with minimal or no collateral damage, the recording of targeting information or a video tape recorder up to point of impact, and man-in-the-loop controllability to enable a target miss if so required.

b. Selective destruction of port facilities such as tugs, piers, cranes, railheads and dredges, without significant collateral damage to adjacent densely populated areas.

c. Enforcement of a blockade at a fortified, constricted sea passage without unduly hazarding U.S. equipment or personnel.

TECHNICAL PROBLEMS WITH CONDOR

Senator THURMOND. What technical problems remain for the CONDOR?

Admiral HOUSER. There are no known technical problems remaining in the CONDOR development.

FUNDING FOR CONDOR R. & D.

Senator THURMOND. How much R&D remains in this program and for what purpose will it be used?

Admiral HOUSER. The Fiscal Year 1975 Budget authorized $5.7 million for the CONDOR in R&D Funds. These funds were provided to complete the CONDOR OPEVAL and satisfy contractual obligations incurred with the termination of the dual mode seeker development program directed by congressional action.

CONDOR TEST RESULTS

Senator THURMOND. What has been the test results for the CONDOR?

Admiral HOUSER. As of 12 March 1975, there have been eleven pilot-production missiles launched during the Naval Technical Evaluation and the Operational Evaluation. Two of these launches have been termed "NO TEST" by the Navy's independent testing agency. There have been a total of two failures experienced during OPEVAL. These failures were caused by design deficiencies identified during the evaluation. Corrective action has been taken and the necessary alterations have been accomplished to preclude further incidents and, in fact, none have been experienced. The successful shots have been spectacular in all respects and serve to emphasize the quantum increase in tactical flexibility and operational capability the CONDOR will provide to the Navy and the nation. In a warhead demonstration test firing, a steel and reinforced concrete military structure, previously used for aircraft tracking operations, was completely demolished following the impact and explosion of the 650 pound linear shaped charge, conventional warhead. Launched from [deleted] nautical miles away, the missile unerringly flew to the desired impact point while the aircraft made its escape. The automatic mid-course guidance and highly accurate navigation ability inherent in this system allowed the aircraft to separate from the target so that, at impact, the aircraft was approximately [deleted] miles away. This description applies to all of the CONDOR successes experienced thus far and there is no indication that there will be any different experiences in the remaining test firings.

PROCUREMENT, MARINE CORPS

STATEMENT OF MAJ. GEN. FRANCIS W. VAUGHT, U.S. MARINE CORPS, DIRECTOR OF PLANS, PROGRAMS AND MANAGEMENT/ASSISTANT DEPUTY CHIEF OF STAFF FOR INSTALLATION AND LOGISTICS, HEADQUARTERS, MARINE CORPS

ACCOMPANIED BY:

MAJ. GEN. WILBUR F. SIMLIK, U.S. MARINE CORPS, FISCAL DIRECTOR OF THE MARINE CORPS, HEADQUARTERS, MARINE CORPS

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

JUSTIFICATION MATERIAL

Senator MCGEE. We are glad to have you here, General Vaught.

We have a portion of the justifications for Marine Corps procurement, which we will print in the record at this point.

I think we should also include the justification data relating to the Marine stock fund procurement.

[The justifications follow:]

Justification

For expenses necessary for the procurement, manufacture, and modification of missiles, armament, ammunition, military equipment, spare parts, and accessories therefor; plant equipment, appliances, and machine tools, and installation thereof in public or private plants, reserve plant and Government and contractor-owned equipment layaway; and vehicles for the Marine Corps, including purchase of not to exceed [fifty-five] one hundred and fifty-seven passenger motor vehicles, for replacement only; [$207,800,000] $285,800,000, [and in addition, $10,000,000, of which $5,000,000 shall be derived by transfer from "Procurement, Marine Corps, 1973/1975" and $5,000,000 shall be derived by transfer from "Procurement, Marine Corps, 1974/1976"] to remain available for obligation until [June 30, 1977] September 30, 1978.

For "Procurement, Marine Corps" for the period July 1, 1976, through September 30, 1976, $43,800,000, to remain available for obligation until September 30, 1978. (10 U.S.C. 5031, 7201; 31 U.S.C. 718; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed for $154,500,000 for fiscal year 1976, and for $11,100,000 for the period July 1, 1976, through September 30, 1976.)

EXPLANATION OF LANGUAGE CHANGES

Language related to purchase of passenger motor vehicles is required to permit purchase of 157 vehicles for replacement.

Change in the language shows funding required for FY 1976 in new obligational authority.

Change in the language with respect to the period of availability of these funds is required in order to establish a separate and new account under this head to remain available for obligation until September 30, 1978.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-1109-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. AMMUNITION	34,605	20,400	29,300	27,429	25,332	29,400
	2. WEAPONS AND COMBAT VEHICLES	48,208	75,500	101,600	54,345	75,559	98,400
	3. GUIDED MISSILES AND EQUIPMENT	55,110	77,600	52,900	31,849	83,559	59,300
	4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	29,400	9,900	38,000	26,754	59,251	27,400
	5. SUPPORT VEHICLES	13,907	7,900	22,600	14,022	10,280	18,800
	6. ENGINEER AND OTHER EQUIPMENT	26,502	23,300	41,400	15,675	42,873	38,200
	TOTAL DIRECT	207,732	214,600	285,800	170,074	296,854	271,500
	REIMBURSABLE (TOTAL)	516	.....	.....	688	824	.....
10	TOTAL	208,248	214,600	285,800	170,762	297,678	271,500
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-476	.....	.....	6,193	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-121,877	-136,678	-53,600
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-40	-10,000	.....	-40	-10,000	.....
	REPROGRAMING FROM OP TO PRIOR YEAR BUDGET PLANS	-16,017	.....	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-5,000	-10,000	.....	-5,000	-10,000	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	5,000	10,000	.....	5,000	10,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	136,678	53,600	67,900
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	10,000	.....	.....	10,000	.....	.....
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	6,017	.....	.....	6,017	.....	.....
	BUDGET AUTHORITY	207,732	204,600	285,800	207,732	204,600	285,800
	BUDGET AUTHORITY:						
40	APPROPRIATION	207,732	207,800	285,800	207,732	207,800	285,800
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-3,200	.....	.....	-3,200	.....
43	APPROPRIATION (ADJUSTED)	207,732	204,600	285,800	207,732	204,600	285,800
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET				176,955	297,678	271,500
72	OBLIGATED BALANCE, START OF YEAR				260,915	311,666	447,344
74	OBLIGATED BALANCE, END OF YEAR				-311,666	-447,344	-516,844
77	ADJUSTMENTS IN EXPIRED ACCOUNTS				1,953	.....	.....
90	OUTLAYS				128,156	162,000	202,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1109-0-1-051	1974 ACT	1975 EST	1976 EST
DIRECT OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	1,690	2,432	2,500
26.0 SUPPLIES AND MATERIALS	26,899	25,795	30,400
31.0 EQUIPMENT	141,485	268,627	238,600
TOTAL DIRECT OBLIGATIONS	170,074	296,854	271,500
REIMBURSABLE OBLIGATIONS:			
31.0 EQUIPMENT	688	824	.....
99.0 TOTAL OBLIGATIONS	170,762	297,678	271,500

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1972 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1109-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. AMMUNITION	.....	.....	.....	-178	.....	.....
2. WEAPONS AND COMBAT VEHICLES	.....	.....	.....	1,255	.....	.....
3. GUIDED MISSILES AND EQUIPMENT	.....	.....	.....	235	.....	.....
4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	.....	.....	.....	6,864	.....	.....
5. SUPPORT VEHICLES	.....	.....	.....	312	.....	.....
6. ENGINEER AND OTHER EQUIPMENT	.....	.....	.....	3,322	.....	.....
TOTAL DIRECT	.....	.....	.....	11,810	.....	.....
REIMBURSABLE (TOTAL)	.....	.....	.....	587	.....	.....
10 TOTAL	.....	.....	.....	12,397	.....	.....
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	.....	.....	.....	-61	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-21,352	.....	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-9,017	.....	.....	.....	.....	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	3,000	.....	.....	3,000	.....	.....
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	6,017	.....	.....	6,017	.....	.....
BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1109-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. AMMUNITION				1,867	67	
	2. WEAPONS AND COMBAT VEHICLES				7,456	5,985	
	3. GUIDED MISSILES AND EQUIPMENT				319	444	
	4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT				10,453	40,788	
	5. SUPPORT VEHICLES				4,607	676	
	6. ENGINEER AND OTHER EQUIPMENT				6,652	7,072	
	TOTAL DIRECT				31,354	55,032	
	REIMBURSABLE (TOTAL)				101	308	
10	TOTAL				31,455	55,340	
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				6,730		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR				-100,525	-55,340	
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						
	AVAILABLE TO FINANCE NEW BUDGET PLANS		-5,000			-5,000	
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-7,000					
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	2,000	5,000		2,000	5,000	
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR				55,340		
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	5,000			5,000		
	BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1109-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. AMMUNITION	34,605	.....	.....	25,740	6,865	2,000
	2. WEAPONS AND COMBAT VEHICLES	48,208	.....	.....	45,634	1,574	1,000
	3. GUIDED MISSILES AND EQUIPMENT	55,110	.....	.....	31,295	21,015	2,800
	4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	29,400	.....	.....	9,437	17,063	2,900
	5. SUPPORT VEHICLES	13,907	.....	.....	9,103	4,104	700
	6. ENGINEER AND OTHER EQUIPMENT	26,502	.....	.....	5,701	19,501	1,300
	TOTAL DIRECT	207,732	.....	.....	126,910	70,122	10,700
	REIMBURSABLE (TOTAL)	516	.....	.....	.....	516	.....
10	TOTAL	208,248	.....	.....	126,910	70,638	10,700
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-476	.....	.....	-476	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-81,338	-10,700
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-40	-5,000	.....	-40	-5,000	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-5,000	.....	.....	-5,000	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	5,000	.....	.....	5,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	81,338	10,700	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	5,000	.....	.....	5,000	.....	.....
	BUDGET AUTHORITY	207,732	.....	.....	207,732	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1109-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS	
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. AMMUNITION		20,400			18,400	1,000
	2. WEAPONS AND COMBAT VEHICLES		75,500			68,000	6,000
	3. GUIDED MISSILES AND EQUIPMENT		77,600			62,100	11,600
	4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT		9,900			1,400	6,600
	5. SUPPORT VEHICLES		7,900			5,500	1,200
	6. ENGINEER AND OTHER EQUIPMENT		23,300			16,300	5,800
10	TOTAL		214,600			171,700	32,200
	FINANCING:						
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						-42,900
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS		-10,000			-10,000	
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS					42,900	10,700
	BUDGET AUTHORITY		204,600			204,600	
	BUDGET AUTHORITY:						
40	APPROPRIATION		207,800			207,800	
41	TRANSFERRED TO OTHER ACCOUNTS		-3,200			-3,200	
43	APPROPRIATION (ADJUSTED)		204,600			204,600	

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-1109-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. AMMUNITION	.....	.....	29,300	.....	.....	26,400
	2. WEAPONS AND COMBAT VEHICLES	.....	.....	101,600	.....	.....	91,400
	3. GUIDED MISSILES AND EQUIPMENT	.....	.....	52,900	.....	.....	44,900
	4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	.....	.....	38,000	.....	.....	17,900
	5. SUPPORT VEHICLES	.....	.....	22,600	.....	.....	16,900
	6. ENGINEER AND OTHER EQUIPMENT	.....	.....	41,400	.....	.....	31,100
10	TOTAL	.....	.....	285,800	.....	.....	228,600
	FINANCING:						
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	57,200
	BUDGET AUTHORITY	.....	.....	285,800	.....	.....	285,800

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1109-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
	TRANSITION	TRANSITION
PROGRAM BY ACTIVITIES:		
DIRECT:		
1. AMMUNITION	9,600	12,400
2. WEAPONS AND COMBAT VEHICLES	400	8,000
3. GUIDED MISSILES AND EQUIPMENT	10,700	23,500
4. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	7,100	11,100
5. SUPPORT VEHICLES	2,600	8,000
6. ENGINEER AND OTHER EQUIPMENT	13,400	27,400
10 TOTAL	43,800	90,400
FINANCING:		
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-67,900
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	21,300
BUDGET AUTHORITY	43,800	43,800
BUDGET AUTHORITY:		
40 APPROPRIATION	43,800	43,800
43 APPROPRIATION (ADJUSTED)	43,800	43,800
RELATION OF OBLIGATIONS TO OUTLAYS:		
71 OBLIGATIONS INCURRED, NET		90,400
72 OBLIGATED BALANCE, START OF YEAR		516,844
74 OBLIGATED BALANCE, END OF YEAR		-554,244
90 OUTLAYS		53,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1109-0-1-051	TRANSITION
DIRECT OBLIGATIONS:	
22.0 TRANSPORTATION OF THINGS	600
26.0 SUPPLIES AND MATERIALS	7,500
31.0 EQUIPMENT	82,300
TOTAL DIRECT OBLIGATIONS	90,400
REIMBURSABLE OBLIGATIONS:	
99.0 TOTAL OBLIGATIONS	90,400

INTRODUCTORY STATEMENT

(In Thousands of Dollars)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate	FY 1977 Authorization Estimate
					63,900
Direct Obligations	170,074	296,854	271,500	90,400	64,000
Direct Obligations against prior year programs	43,164	125,154	42,900	46,600	8,000
Obligations against current year programs	126,910	171,700	228,600	43,800	55,900
Add unobligated current year program	80,822	42,900	57,200	-0-	14,000
Direct Program (TOA)	207,732	214,600	285,800	43,800	69,900

The appropriation "Procurement, Marine Corps" provides for procurement and delivery of all major items of combat, tactical equipment, and munitions, as well as plant equipment with $1,000 unit cost or greater and initial outfitting requirements.

The Marine Corps has the responsibility of equipping, training, and maintaining a body of the most modern fighting units, ready to deploy on a moment's notice to any part of the world, prepared to fight either a limited or a general war. These three factors - readiness, mobility, and modernity - form the basis upon which the Marine Corps materiel program is constructed.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate
Ammunition	34,605	20,400	29,300
Weapons and Combat Vehicles	48,208	75,500	101,600
Guided Missiles and Equipment	55,110	77,600	52,900
Communications and Electronics Equipment	29,400	9,900	38,000
Support Vehicles	13,907	7,900	22,600
Engineer and Other Equipment	26,502	23,300	41,400
TOTAL DIRECT PROGRAM	207,732	214,600	285,800
Reimbursable program	516	-	-
TOTAL PROGRAM REQUIREMENTS (Current)	208,248	214,600	285,800
Less: Portion of program to be obligated in subsequent fiscal years	81,338	42,900	57,200
Plus: Obligations incurred against prior year program funds	43,852	125,978	42,900
TOTAL OBLIGATIONS	170,762	297,678	271,500

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	FY 197T Estimate	FY 1977 Authorization Estimate
Ammunition	9,600	-
Weapons and Combat Vehicles	400	6,000
Guided Missiles and Equipment	10,700	63,900
Communications and Electronics Equipment	7,100	-
Support Vehicles	2,600	-
Engineer and Other Equipment	13,400	-
TOTAL DIRECT PROGRAM	43,800	69,900
Reimbursable program	-	-
TOTAL PROGRAM REQUIREMENTS (Current)	43,800	69,900
Less: Portion of program to be obligated in subsequent fiscal years	-	14,000
Plus: Obligations incurred against prior year program funds	46,600	8,000
TOTAL OBLIGATIONS	90,400	63,900

Justification

MARINE CORPS STOCK FUND

(WAR RESERVE MATERIEL PROCUREMENT)

For the procurement of Stock Funded War Reserve stocks required to achieve a support posture to meet authorized asset levels, inventory objectives for combat critical items of supplies and spare parts. The $8.7 million includes $.6 million for prepositioned war reserve incident to the provisioning process, $8,700,000.

(In Thousands of Dollars)
Program Requirement for FY 1976: $8,700
Program Requirement for FY 197T: -0-

PART I - PURPOSE AND SCOPE

This appropriation provides for the procurement of Prepositioned War Reserve stocks of secondary expense type items required to meet prescribed inventory objectives and maintain asset levels within the regular as well as reserve establishments. These requirements are necessary to equip and sustain the operational capability of an Amphibious Force In Readiness.

The requirements are applicable to five materiel categories as follows:

Ordnance-Tank-Automotive. This category of material provides for the procurement, management, financing and inventory control of approximately 14,300 Marine Corps managed and 10,200 Defense Supply Agency managed expense type items.

Engineer Supplies & Construction oMaterial. This category provides for the procurement, management, financing and inventory control of approximately 7,700 Marine Corps managed and 15,700 Defense Supply Agency managed expense type items.

Communication-Electronic & Electric. This category provides for the procurement, financing, management and inventory control of approximately 17,100 Marine Corps managed and 39,900 Defense Supply Agency managed expense type items.

General Property. This category provides for the procurement, management, financing and inventory control of approximately 11,000 Marine Corps managed and 42,600 Defense Supply Agency and General Services Administration managed expense type items.

Clothing and Textiles. This category provides for the procurement, financing, management and inventory control of approximately 2,200 Defense Supply Agency expense type items.

Requirements for the above materiel categories are based on Central Secondary Item Stratification Tables I, II and III as of 30 June 1974.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The $8.7 million represents the first of five subsequent increments of the total requirement which will be reflected in the FY 1977 - 1981 Program Objectives Memorandum. The plan is to provide funding for the total Marine Corps Stock Funded Prepositioned War Reserve deficiency of $31.9 million by the end of FY 1981.

The program for FY 1976 obligation requirement by major category of materiel, together with a representative selection of items required or being supported, are as follows:

Ordnance-Tank-Automotive ---------- $1.2 million

Tank, M60A1
Semi-Trailer, 6 Ton
LVTP-7

Engineer Supplies & Construction Material ---------- $1.1 million

Tractor, w/bull grader
LUB-SERV Unit
Generator Sets

Communication-Electronic & Electric ---------- $1.7 million

Radio Sets
Electronic Shelters
Radar Sets

General Property ---------- $2.4 million

Bakery Plant, trailer mounted
Clothing Repair Shop, trailer mounted
Extinguisher, fire, twin agent
Sprayer, insecticide, skid mounted

Clothing and Textiles ---------- $2.3 million

General Purpose Tents
Sleeping Bags
Cold Weather Clothing

Total Program Requirement ---------- $8.7 million

SUMMARY OF REQUIREMENTS
(In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate
Ordnance-Tank-Automotive	1,100	100	1,200
Engineer Supplies & Construction Material	900	200	1,100
Communication-Electronic & Electric	700	800	1,700
General Property	1,400	.....	2,400
Clothing and Textiles	3,000	100	2,300
Total	7,100	1,200	8,700

BIOGRAPHY AND PREPARED STATEMENT

Senator McGEE. We will make your extended statement, together with your biographical sketch, part of the record and you may continue with your summary, General Vaught.

[The biography and statement follow:]

BIOGRAPHY OF MAJOR GENERAL FRANCIS W. VAUGHT, USMC

Director, Plans, Programs and Management/
Assistant Deputy Chief of Staff
Installations and Logistics Department
Headquarters, Marine Corps

Major General Francis W. Vaught is the Director of Plans, Programs and Management for Installations and Logistics/ Assistant Deputy Chief of Staff for Installations and Logistics at Headquarters Marine Corps. He was born September 11, 1921, in Perdue Hill, Alabama. He graduated from Blacksher High School, Uriah, Alabama, in 1939, and received his B.A. Degree from George Washington University, Washington, D. C. in May 1953. He enlisted in the Marine Corps Reserve, March 3, 1942, and was commissioned a second lieutenant, April 12, 1944.

Upon completing the Reserve Officers' Course, Marine Corps Schools, Quantico, Virginia in July 1944, General Vaught served with the 7th Training Battalion, Camp Lejeune, North Carolina. He was the Logistics Officer with the 1st Battalion, 28th Marines, serving in Hawaii and Japan from December 1944 until January 1946. General Vaught integrated into the regular Marine Corps in July 1946 while stationed at Camp Lejeune, North Carolina, and in March 1950, was ordered to Norfolk, Virginia, as Detachment Supply Officer with the U. S. Navy. He was promoted to captain in January 1951.

General Vaught then attended the George Washington University Navy Comptrollership School and upon graduation was assigned to the Supply Department as Executive Officer at Headquarters Marine Corps, Washington, D. C. in May 1953. He was promoted to major in July 1955, and the following February was ordered to Marine Corps Air Station, Kaneohe Bay, Hawaii, as Supply Officer. From April 1957 to August 1958, he served as Brigade Supply Officer, 1st Marine Brigade. In September 1958, General Vaught was transferred to the Marine Corps Supply Forwarding Annex, San Francisco, California, as Executive Officer, and later became the Commanding Officer. In June 1961, he was reassigned as a group supply officer, 1st Marine Aircraft Wing.

He was promoted to lieutenant colonel in July 1962, and became the Director, Stock Management Division, Marine Corps Supply Activity, Philadelphia, Pennsylvania. During August 1965, he was transferred to Camp Pendleton, California, where he served as Executive Officer of the 1st and the 5th Force Service Regiments. He was promoted to colonel in September 1967.

General Vaught became Commanding Officer, Force Logistic Support Group A, in the Republic of Vietnam in April 1968, and later served as Assistant Chief of Staff, G-3, Force Logistics Command. Returning to the United States in June 1969, he assumed duty as Director, Storage and Transportation, Defense Depot, Ogden, Utah. Following his advancement to brigadier general in August 1971, he became the Commanding General, Marine Corps Supply Center, Albany, Georgia and assumed his current assignment following his promotion to major general on June 11, 1974.

A complete list of his medals and decorations include the Legion of Merit with Combat "V" and gold star in lieu of second award, the Navy Unit Commendation with one bronze star, the Joint Service Commendation Medal, the American Campaign Medal, the Asiatic-Pacific Campaign Medal, the World War II Victory Medal, the Navy Occupation Service Medal with Asia Clasp, the National Defense Service Medal with one bronze star, the Vietnam Service Medal with four bronze stars, the Republic of Vietnam Armed Forces Meritorious Unit Citation of the Gallantry Cross with Palm, and the Republic of Vietnam Campaign Medal.

Major General Vaught and his wife, the former Wilma Geneva James, have three children, James W., who was commissioned in the U. S. Marine Corps in June 1972; and twin sons, Donn and Kirk.

STATEMENT OF MAJOR GENERAL FRANCIS W. VAUGHT, USMC

Mr. Chairman and Members of the Committee, I am Major General Francis W. VAUGHT, the Director of Plans, Programs and Management for Installations and Logistics. I also serve as the Assistant Deputy Chief of Staff for Installations and Logistics at Headquarters, Marine Corps.

It is a pleasure for me to appear before you for the first time to present the Procurement, Marine Corps Budgets covering Fiscal Year 1976 and the Transition period between Fiscal Year 1976 and Fiscal Year 1977.

The Marine Corps has the responsibility of equipping, training, and maintaining a body of the most modern fighting units, ready to deploy on a moment's notice to any part of the world, prepared to fight either a limited or a general war. The three factors of readiness, versatility, and modernity form the basis upon which the Marine Corps

materiel procurement programs and their resultant budgets are constructed.

In its two previous fiscal year procurement budgets, the Marine Corps placed a heavy emphasis on modernizing its weaponry. To this end, the Marine Corps has devoted 54% of its Fiscal Year 1976 Procurement budget to tracked combat vehicles, weapons, and guided missiles and equipment. Perhaps of greater significance is the fact that 50.7% of this budget is dedicated to tanks, tank ammunition, tank recovery vehicles, and anti-tank missile systems. These vital procurements will enable the Marine Corps to effectively meet today's armored threat with weaponry that is capable of defeating any existing armor. More importantly, it will support our Marine infantryman with the firepower he requires to close with and destroy the enemy.

The budgets I am presenting to you today will fund for materiel to be used by both our active and reserve operating forces. They are designed not only to provide for Marine ground troops, but also to finance ground communications and electronics equipments operated by our Fleet Marine Force aviation units, base support equipment, and commercial vehicles, engineer equipment and materiel handling equipments required by our bases and air stations.

With the exception of those items which are being acquired through a phased procurement plan, the Fiscal Year 1976 and Transition budgets will enable the Marine Corps to attain its inventory objectives.

Our Procurement Budget requirements are contained within six budget activities: Budget Activity 1 contains ammunition requirements; Budget Activity 2 addresses combat vehicles

and weapons; Budget Activity 3 comprises guided missiles and related ground support equipment; Budget Activity 4 embraces communications and electronics equipments; Budget Activity 5 covers support vehicles; and Budget Activity 6 encompasses engineer equipment and general supply materiel. Significant features of the Fiscal Year 1976 and Transition period requests, by Budget Activity, are as follows:

The funding objective of Budget Activity 1 is to provide the resources to procure ammunition in sufficient quantities to meet peacetime training requirements and to assure immediate combat readiness upon mobilization. To achieve this objective, the Marine Corps is requesting $29.3 million for Fiscal Year 1976 and $9.6 million for the Transition period.

Similar to our Fiscal Year 1975 request, the preponderance of these requirements, $21.4 million in Fiscal Year 1976 and the Transition period, is for tank ammunition for the Marine Corps' new M60A1 tank. We are also requesting $6.1 million in these fiscal periods for 5.56mm ball ammunition to be used with the M16 rifle. The balance of funding requested for Fiscal Year 1976 and the Transition period, $11.4 million, will provide for small arms ammunition, a new fuze for artillery applications, ammunition modernization, first destination transportation and several minor requirements costing less than $500,000. The funds being requested for ammunition will permit the Marine Corps to meet training requirements and to phase-procure approved levels of mobilization reserve stocks.

We are requesting $101.6 million for Fiscal Year 1976 and $0.4 million for the Transition Period in Budget Activity 2.

This Budget Activity's procurement objective is to provide funding for tracked combat vehicles, such as the M60A1 tank, and other weaponry.

Over 35% of our Fiscal Year 1976 Budget funding requirements are included in this Budget Activity. Significant programs are as follows:

The first Fiscal Year 1976 program in this category is the $2.3 million modification kit for the 8 inch self-propelled howitzer, model M110E2. This will be the second of a planned three year phased procurement to convert the 175mm self-propelled gun, and the M-110 self-propelled howitzer to a new configuration, the M110E2. This modern weapon will improve reliability, maintenance, and safety of the basic M110/M107 weapons, and the range of the M110 howitzer. The conversion of the 175mm gun to the M110E2 will eliminate this weapons system from our inventory and thus effect a cost savings to the Marine Corps. The M110E2 will satisfy Marine Corps requirements for heavy, long range, self-propelled artillery weapons through the 1990 timeframe.

Fiscal Year 1976 will be the third and final year of the Marine Corps program to replace the obsolescent M48A3 and M103A2 tanks with the modern M60A1 tank. The M48 series dates back to the early 1950's. It has neither the firepower, effectiveness, maintainability, economy, nor growth potential of the M60A1 tank. The M60A1 will provide combat support for our Marine infantry units by providing mobility, armor protected firepower and shock effect to close with and destroy enemy forces, fortifications and materiel during amphibious landings and subsequent operations ashore. The

final increment of 154 tanks is budgeted at a cost of $85.5 million.

A final note of interest regarding the Marine Corps' tank program is worthy of mention. We have been able to reduce our total inventory requirements for the M60A1 by consolidating our tank training school with the Army's. This cost-savings effort has resulted in a reduction of 20 M60A1 tanks.

Fiscal Year 1976 also marks the final year for Marine Corps procurement of the M88A1 Tank Recovery vehicle. The M88A1 is designed to recover and rescue medium tanks in the battlefield, and to render limited repair support to tanks in the field. It is lightly armored to afford the crew of 4 Marines protection from small arms fire, mortar fire, and land mines.

The $6.9 million we are requesting will allow us to procure 15 vehicles, and attain our inventory objective of 53 M88A1's.

The M88A1 is replacing the obsolescent Marine Corps-peculiar M51 Recovery Vehicle which has been in our inventory for two decades and consequently has become more difficult to maintain and support.

I'd like to mention here that similar to our cost savings effort with the M60A1 tank, we have also decreased our inventory objective for M88A1 Tank Recovery Vehicles. We were able to eliminate a requirement for two M88A1's due to the consolidation with the Army of our tank training schools.

Our Fiscal Year 1976 PMC Budget includes $5.5 million for M60A1 Tank modification kits. $5.0 million of this

amount is required for the conversion of infra-red night sights to a new passive night sight. This sight represents a significant advancement in technology, for unlike the infra-red sight which can be detected and tracked by the enemy, the passive night sight has no light source. It is designed to amplify ambient light from the night sky, enabling the user to observe the battlefield as if it were day without radiating any type of emissions observable by the enemy.

The balance of $0.5 million in this line will be applied to the modification of engines, used with prior generation M48 series tanks, to an improved configuration, commonly referred to as the RISE (Reliability Improvement, Selected Equipment) engine. RISE engines will be installed in Fiscal Year 1975 and Fiscal Year 1976 M60A1 tanks when they are built. The M48 engines we modify to the RISE configuration will be installed in our M60A1 tanks at such time as they require replacement engines.

The balance of our Fiscal Year 1976 and Transition Period requests for weapons and combat vehicles totals $1.8 million and represents minor program requirements such as spares and repair parts, first destination transportation and items less than $500,000.

Budget Activity 3 funds for surface-to-air anti-aircraft and surface-to-surface anti-tank guided missile systems. Improved air defense is being provided the Marine Corps through the procurement of small, select, and closely integrated groups of tactical surface-to-air guided missile systems represented by the Improved HAWK System. Additionally, the Marine Corps is assuring its amphibious landing forces

have adequate standoff firepower and anti-tank capabilities, through the procurement of surface-to-surface guided missiles. To accomplish these goals the Marine Corps requests $52.9 million for Fiscal Year 1976, and $10.7 million for the Transition Period. Highlights of these requests follow:

The Improved HAWK Missile System will provide the Marine Corps with a highly mobile, all weather day/night air defense guided missile system for employment against high performance, low-medium altitude air targets. Both our active and reserve forces will be equipped with this modern surface-to-air missile capability.

Fiscal Year 1976 will be the fifth year of a planned six year program to procure the Improved HAWK system for the Marine Corps. We are requesting $14.3 million in the Fiscal Year 1976 budget for 140 HAWK missiles and related ground support equipment. The final increment of this procurement is scheduled for Fiscal Year 1977.

As I described to you earlier in this statement, the Marine Corps is placing heavy emphasis in this budget request on modernizing its tank/anti-tank capabilities. Towards this end, we have included $32.6 million in the Fiscal Year 1976 request for the second increment of the DRAGON anti-tank weapon system, and $3.3 million for the third increment of the TOW anti-tank missile system. These funds will procure 7015 DRAGON and 498 TOW, HEAT and Practice missiles, as well as associated launchers, trackers and ground support equipment.

Similarly, we have budgeted $10.4 million to procure 2188 DRAGON and 693 TOW missiles and associated equipment during the Transition Period.

The DRAGON is a medium range, anti-tank/assault weapon which has been developed for use by infantry troops against armor and fortified point targets. DRAGON can be carried, set up, and fired by one man. It is lightweight, highly accurate at ranges from 65 to 1000 meters, and has proved to be an extremely lethal weapon against enemy armor.

TOW is a heavy, long range, anti-tank/assault weapon for use against armor and fortified point targets ranging from 65 to 3000 meters. The Marine Corps will mount the TOW on the M151A2 jeep vehicle; it can also be fired from a tripod. The TOW anti-tank missile system proved itself, during the 1973 Mid-East war, to be an extremely effective weapon against armored targets. It will replace capabilities currently provided by the 106mm Recoilless Rifle and the 3.5 inch rocket launcher which do not have the firepower necessary to oppose modern armor.

The last Fiscal Year 1976 procurement program in this Budget Activity I'd like to describe to you is the REDEYE Launch Simulator. We are requesting $0.9 million to procure a quantity of 2250 inert missiles to be used with this training device. This is an extremely cost effective program which will enable us to train our REDEYE gunners to be proficient in their mission at a fraction of the cost of training with live REDEYE missiles. The REDEYE Simulator enables the gunner to actively participate in field training exercises by providing him with the means to experience all of the sensations of an actual REDEYE missile launch, and yet avoids the costs and special training scenarios necessary for training with live rounds.

The remaining balance of $2.1 million for the Fiscal Year 1976 and Transition Period Budget Activity 3 requests apply to spares and repair parts, modification kits, first destination transportation charges and other non-delineated minor procurements.

Budget Activity 4, Communications and Electronics Equipment, provides funds for the essential electronic and electrical networks necessary to provide adequate communications for the Marine landing force during amphibious operations; it provides for modern tactical command and control systems; as well as providing electronic alert and weapons control for defense against air and ground attacks. Towards these objectives we are requesting $38.0 million for Fiscal Year 1976 and $7.1 million for the Transition Period.

The Marine Corps has developed a new squad level radio set, the AN/PRC-68. This pocket-sized radio will provide voice communications up to a range of one mile and has the capabilities of furnishing up to 1000 different channels. We have budgeted to procure 1500 of these radios at a cost of $2.0 million in Fiscal Year 1976.

The AN/TCC-72 Telephone Terminal Set, when coupled with the AN/TRC-97 Radio Set, will provide interoperability with similar Army equipment, as well as enable the Marine Corps to meet minimum essential secure voice requirements set forth by DOD. $1.6 million has been included in this budget request for the procurement of 40 of these sets.

The Marine Corps has budgeted $5.1 million in the Fiscal Year 1976 budget to procure 424 AN/UGC-74 teletype sets. This Army-developed teletypewriter, which is designed to operate in the most severe tactical environment, will replace the

obsolescent AN/TGC-14A(V), which is proving to be difficult to logistically sustain.

The TAOC (Tactical Air Operations Central)/TDCC (Tactical Data Communication Central) subsystems of the Marine Air Command and Control System were conceived in the mid-1950's to operate in the threat environment of the 1965-1975 time-frame. In a combat environment, these subsystems have proven to be the finest, mobile, land-based, semi-automatic tactical air communications and control, and air defense systems available in the world today. Particularly worthy of note is the success the Marine Corps had with the TAOC/TDCC in Vietnam and its vital role in controlling the extraordinarily dense air traffic at Danang.

These systems are now reaching their 10 year life expectancy. The Marine Corps is experiencing parts obsolescence and operational deficiencies, as well as the problems inherent in maintaining worn-out equipment. The Marine Corps conducted an extensive cost analysis study to determine the feasibility and cost effectiveness of refurbishing/rebuilding our present TAOC/TDCC assets versus buying new systems. It was determined that a modification/modernization program would cost less than 15% of that of buying new equipment, and, accordingly, the Marine Corps has established a 5 year modification/ modernization program for the TAOC/TDCC. We have budgeted $4.1 million in Fiscal Year 1976 and the Transition Period for the purpose of purchasing modification kits with the intent of completing the program in Fiscal Year 1979. This cost-effective program will extend the life of this equipment for another 10 years and allow the Marine Corps to effectively meet the threat postulated for the 1975-1985 timeframe.

The Radar Set AN/PPS-15 is a ground surveillance radar weighing only 22 pounds. It is used by field commanders during inclement weather and darkness, together with night vision devices, to gather personnel and vehicular movement intelligence in tactical areas. It has effective ranges of up to 1500 meters for personnel and 3000 meters for vehicles. The Marine Corps has budgeted $2.1 million in Fiscal Year 1976 to procure 308 of these sets which will complete our materiel objective of 736 radars.

Unattended Ground Sensors constitute another family of intelligence gathering devices. They are emplaced in remote areas, usually in enemy territory, and have the capability of relaying data on personnel and vehicular intrusions into these areas back to Division or MAF headquarters. We are requesting $2.6 million for Fiscal Year 1976 for this multi-year phased procurement program.

The Marine Air Ground Intelligence System, or MAGIS, is a joint development with the Air Force's Tactical Information Processing and Interpretation System. MAGIS has been developed as an integral element of the Marine Corps' tactical command and Control System (MTACCS). The Fiscal Year 1976 segment of MAGIS, for which we are requesting $4.0 million, consists of sheltered equipments employing automated techniques for accomplishing photo imagery interpretation operations in a world-wide environment. The operational mission of units employing this equipment is to provide intelligence reports for Marine Corps tactical operations in a timely, complete, and accurate manner.

The Marine Corps has budgeted $1.5 million in Fiscal Year 1976 for two AN/UYK-7 computers for use with the

Semi-Automatic Direct Air Support Center, AN/UYQ-4. The DASC is utilized for operational control and coordination of close air support and assault support operations of the Marine Aircraft Wing as an integral part of a Marine Air Ground Task Force.

The Night Vision Sights, AN/TVS-5 and AN/PVS-4, are second generation, battery-powered, electro-optical instruments which utilize ambient light for illumination. The 205 AN/TVS-5's we are procuring in Fiscal Year 1976, at a cost of $0.8 million, are for use with crew-served weapons such as the M-60 machine-gun. We plan ultimately to procure 421 AN/TVS-5's. We have an inventory objective of 1669 AN/PVS-4's, of which we plan to procure 543 in Fiscal Year 1976 at a cost of $2.2 million. The AN/PVS-4 will be used with individual weapons such as the M-16 rifle.

The remaining Fiscal Year 1976 and Transition Period requirements for Communications and Electronics equipments, totalling $19.1 million apply to power supply units, interrogator sets, test equipment, spares and repair parts, modification kits, first destination transportation and other support for our communications-electronics equipment.

Budget Activity 5 funds for tactical vehicles, which provide mobility and support for Marine combat units; and for non-tactical vehicles such as buses, sedans, and commercial cargo trucks which are necessary for base support functions and administrative purposes in a garrison environment. The Marine Corps is requesting $22.6 million for Fiscal Year 1976 and $2.6 million in the Transition Period for support vehicles.

We have increased our requirements for commercial passenger and cargo vehicles in Fiscal Year 1976. This fact is due to the Marine Corps assumption from the Navy of budgeting and management responsibilities for these vehicles at our Marine Corps Air Stations. We require 157 passenger vehicles at a cost of $0.9 million and 565 cargo vehicles at a cost of $5.0 million in Fiscal Year 1976. Both of these categories of commercial support vehicles are utilized at our various Marine Corps installations and facilities to support administrative transportation functions. Use of commercial vehicles in lieu of tactical vehicles for these functions results in great cost savings derived from considerably lower procurement costs, as well as lower operational and maintenance costs.

Fiscal Year 1976 and the Transition Period will be the second and third increments of a planned four year procurement of 1¼ ton cargo trucks and ambulances. These vehicles are militarized versions of commercial 4-wheel drive trucks which will replace our antiquated M37 and M715 series trucks that date back as far as the early 1950's. These latter vehicles, because of their advance age, have become increasingly more difficult to maintain, and thus we require $8.2 million to procure 1027 cargo trucks and 120 ambulances in Fiscal Year 1976 and the Transition Period.

As in the case of our over-age trucks just described, we are also requesting Fiscal Year 1976 funds to replace 1955 vintage lowbed trailers. We plan to procure a total of 167 35 ton lowbed trailers, of which 84, at a cost of $1.8 million, are included in the Fiscal Year 1976 budget. The balance is to be procured in Fiscal Year 1977. Our present

assets of 25 ton lowbed trailers are already 5 years beyond normal life expectancy and are no longer capable of hauling some of the heavy engineer equipments now in our inventory that weigh well in excess of 25 tons.

We have established an inventory objective for 88 Fire fighting trucks, Model 530C, of which we plan to procure 53 in Fiscal Year 1976 and the Transition Period at a cost of $1.8 million. This modern equipment, mounted on a tactical vehicle 2½ ton chassis, is equipped to battle brush as well as POL fires, and has the capability of pumping while the vehicle is in motion. It will replace vintage, obsolete, vehicles now in our Marine Divisions, Force Troops, and Marine Aircraft Wings.

The Marine Corps now has in its inventory two different trucks for telephone maintenance purposes. The Telephone Line Maintenance truck and the Earth-Boring Trucks are both overage, obsolete and non-supportable. We have budgeted $1.5 million in Fiscal Year 1976 to procure 25 modern telephone line maintenance trucks to replace both vehicles. The new truck, which will be a militarized commercial model, will better perform, more safely, all of the maintenance work presently required of both vehicles, and thus will permit us to reduce our telephone maintenance truck inventory by over 50 percent.

The XM857 Aircraft Refueler Trailer has a 5000 gallon capacity fuel tank, capable of fueling or defueling any aircraft in the Marine Corps inventory. The Fiscal Year 1976 and Transition Period procurements of 125 refuelers, at a cost of $4.9 million, will be the fourth and fifth

increments of a phased-procurement program to replace non-supportable predecessors.

The remaining $1.1 million requested for Budget Activity 5 will provide for spares and repair parts, first destination transportation, and a small number of items costing less than $500,000.

Budget Activity 6 funds for procurement of engineer, combat operational support, and field medical equipments, base support items, general supply materiel, command support equipment, and data processing programs which support combat service and service support operations. The Marine Corps is requesting $41.4 million in Fiscal Year 1976 and $13.4 million in the Transition Period for Budget Activity 6 procurements.

Significant items in this Budget Activity include Environmental Control Equipment requirements totalling $4.1 million in Fiscal Year 1976 and the Transition Period. These equipments are used with vans, shelters, trailers, and transportable buildings which require heating, cooling, ventilation, dehumidification and filtering protection for Fleet Marine Force communications, electronics and data processing applications.

We have budgeted $6.2 million in Fiscal Year 1976 to procure 143 rubber-tired Tractors. This is a diesel powered 4-wheel drive, articulated steer, hydraulically operated tractor capable of utilizing a 2¼ yard bucket or lifting up to 10,000 pounds with a fork attachment. These versatile engineer and Shore Party tractors, used primarily as front-end loaders, are utilized in beach areas during amphibious operations and in forward combat areas to construct logistical

support facilities such as ammunition storage berms, and fuel farms. We plan to procure a final quantity of 223 TEREX tractors in Fiscal Year 1977.

The Marine Corps has a broad range of requirements for power equipment to provide mobile electrical support for tactical equipment such as radios, and for systems such as the Force Information System, the Marine Air Command and Control System and the Marine Air Ground Intelligence System. This electrical support is provided by DOD-standard engine-driven tactical generators and frequency convertors. We are seeking to procure 280 power equipments in Fiscal Year 1976 and the Transition Period at a cost of $7.2 million.

We have developed a 30-ton crane to replace two overage, logistically unsupportable 12½ ton cranes, which we've had in our inventory for over 20 years. The 30-ton Crane is a highly mobile four-wheel steer and drive, rubber tired crane that can be used on the beach to support amphibious operations, in storage depots for logistic support, and in various engineer applications.

Our procurement program for these cranes is phased, with the first increment funded in Fiscal Year 1974. We plan to procure 17 cranes in Fiscal Year 1976 at a cost of $1.6 million, and complete our inventory objective of 192 cranes in Fiscal Year 1978.

MUST is a modular-designed, expandable and self-contained field hospital system with a controlled environment capability. We are implementing a phased-procurement program, commenced in Fiscal Year 1973, to provide the Marine Corps with two six-surgery/200-bed hospitals and ten two-surgery/60-bed hospitals. These procurements will permit us to equip two

of our Marine Amphibious Forces with the MUST. The Fiscal Year 1976 and Transition Period increments have been included in this budget request at a cost of $8.2 million. We have programmed to complete this phased-procurement in Fiscal Year 1980.

Automated Data Processing requirements for Fiscal Year 1976 and the Transition Period total $6.1 million. A major portion of these funds will finance the procurement of interactive terminal systems/source data automation equipment that will allow field commanders as well as functional area managers to simplify data input requirements and satisfy immediate information needs.

One of the Marine Corps' workhorses in Vietnam was the 6000 pound rough terrain forklift. This diesel-powered vehicle is designed for handling, transporting, and warehousing of materiel during amphibious operations ashore. It can operate in water up to a depth of 5 feet, and thus is invaluable to the Marine Corps because of its over-the-beach capabilities. Our Vietnam-era forklifts require replacement, and, accordingly, the Marine Corps is requesting $8.1 million to procure a quantity of 230 6000 pound forklifts in Fiscal Year 1976. We plan upon completing our inventory objective of 690 forklifts in Fiscal Year 1977.

To provide the necessary funds for investment type property such as office equipment, medical/dental equipment, and industrial plant equipment for our supporting establishments, the Marine Corps has budgeted $2.3 million in Fiscal Year 1976 and the Transition Period.

The Marine Corps has developed a family of skid mount assemblies for its environmental control units, which in turn, support tactical equipments and systems. The skid mount assemblies, or kits, consist of, among other components, a skid, air flow ducting, and electrical hookups. With the kit, it will no longer be necessary to affix environmental control units to a van or shelter. Instead, they will be mounted on the skid from which they can be more easily serviced and should they fail, be expeditiously replaced without lengthly down-time for the end item equipment being supported. We have budgeted $1.6 million in the Fiscal Year 1976 and Transition Periods to procure 536 of these kits.

The 7½ ton crane we are buying in Fiscal Year 1976 is a diesel engine drive, rubber-tired, 4-wheel drive, hydraulically-operated crane. Fleet Marine Force units such as engineering battalions and bridge companies will utilize this vehicle for a wide variety of construction tasks operating in or over unimproved/rough terrain. The $1.2 million budgeted in Fiscal Year 1976 will procure 30 of the 230 7½ ton cranes we require to fill our inventory objective. The balance of this program will be procured in Fiscal Year 1977.

Garrison Mobile Engineer Equipment funding requirements of $1.2 million have been budgeted in Fiscal Year 1976. These items are commercial products which will be used to provide engineer support for the maintenance of our bases and air stations. I might add that this category of equipment, particularly those items at our air stations, is badly in need of replacement. This fact is due to a large percentage of it having exceeded DOD-established retirement criteria,

which in turn has resulted in it becoming ever more difficult to maintain in an operable state.

Remaining in Budget Activity 6 are FY 1976 and Transition Period requirements for $4.8 million for ice making machines, 3000 gallon collapsible water tanks, tactical airfield fuel dispensing systems, automated materiel handling equipment for warehousing operations, materiel handling equipment such as warehouse tractors, spares and repair parts, modification kits for equipments now in our inventory, first destination transportation, and $2.2 million for a number of minor procurements costing less than $500,000.

Gentlemen, that concludes my overview of the Procurement, Marine Corps budgets for Fiscal Year 1976 and the Transition Period. I would like to assure you that Procurement funds approved by the Congress will be carefully administered to provide the highest possible state of readiness of Marine Corps active and reserve forces.

I shall be glad to attempt to answer any questions the Committee may have regarding these requests.

BUDGET REQUEST

General VAUGHT. Mr. Chairman and members of the committee, I am Maj. Gen. Francis W. Vaught, the director of Plans, Programs and Management for Installations and Logistics.

I also serve as the Assistant Deputy Chief of Staff for Installations and Logistics at Headquarters, Marine Corps.

It is a pleasure for me to appear before you for the first time to present the procurement, Marine Corps budget covering fiscal year 1976 and the transition period between fiscal year 1976 and fiscal year 1977.

I will at this time present to the recorder my formal statement to be inserted for the record.

I would now like to offer a few remarks concerning these budget requests and give to you a very brief overview of significant programs for which we are requesting approval.

The Marine Corps has the responsibility of equipping, training, and maintaining a body of the most modern fighting units, ready to deploy on a moment's notice to any part of the world, prepared to fight either a limited or a general war. The three factors of readiness, versatility, and modernity form the basis upon which the Marine Corps materiel procurement programs and their resultant budgets are constructed.

In its two previous fiscal year procurement budgets, the Marine Corps placed a heavy emphasis on modernizing its tank/antitank warfare capabilities. The Marine Corps is again for fiscal year 1976 continuing this emphasis.

To this end, we have devoted $144.9 million, or 50.7 percent of the total fiscal year 1976 procurement, Marine Corps budget for tanks, tank ammunition, tank recovery vehicles, and antitank missile systems.

I will now briefly highlight the fiscal year 1976 and transition period requests for each of our procurement budget activities.

AMMUNITION

The funding objective of budget activity 1 is to provide the resources to procure ammunition in sufficient quantities to meet peacetime training requirements and to assure immediate combat readiness upon mobilization. To achieve this objective, the Marine Corps is requesting $29.3 million for fiscal year 1976 and $9.6 million for the transition period.

The preponderance of these requirements, $21.4 million in fiscal year 1976 and the transition period, is for tank ammunition for the marine M60A1 tank.

TRACKED COMBAT VEHICLES

We are requesting $101.6 million for fiscal year 1976 and $0.4 million for the transition period in budget activity 2.

This budget activity's procurement objective is to provide funding for tracked combat vehicles, such as the M60A1 tank, and for other weaponry, such as the M–203 grenade launcher. Over 35 percent of our fiscal year 1976 budget funding requirements are included in this budget activity.

The two most significant programs in this budget activity involve the last procurement of the M60A1 tank and the M88A1 tank recovery vehicle. Fiscal year 1976 procurements of these vehicles will allow us to attain our inventory objectives for both Active and Reserve Forces.

MISSILE SYSTEMS

Budget activity 3 funds are for surface-to-air antiaircraft and surface-to-surface antitank guided missile systems. Improved air defense is being provided the Marine Corps through the procurement of small, select, and closely integrated groups of tactical surface-to-air guided missile systems represented by the improved Hawk system. Additionally, the Marine Corps is assuring that its amphibious landing forces have adequate standoff firepower and antitank capabilities, through the procurement of Tow and Dragon surface-to-surface guided missile systems.

To accomplish these goals, the Marine Corps requests $52.9 million for fiscal year 1976, and $10.7 million for the transition period.

COMMUNICATIONS AND ELECTRONICS EQUIPMENT

Budget activity 4, communications and electronics equipment, provides funds for the essential electronic and electrical networks necessary to provide adequate communications for the Marine landing force during amphibious operations. This budget activity provides for modern tactical command and control systems, and electronic alert and weapons control for defense against air and ground attacks. Toward these objectives we are requesting $38 million for fiscal year 1976 and $7.1 million for the transition period.

TACTICAL AND NONTRACKED VEHICLES

Budget activity 5 identifies funds for tactical vehicles, which provide mobility and support for Marine combat units. It also provides for nontactical vehicles, such as buses, sedans, and commercial cargo trucks which are necessary for base support functions and administrative purposes in a garrison environment. The Marine Corps is requesting $22.6 million for fiscal year 1976 and $2.6 million in the transition period for support vehicles.

OTHER PROCUREMENT

Budget activity 6 funds are requested for procurement of engineer, combat operational support, and field medical equipments, base support items, general supply materiel, command support equipment, and data processing programs which support combat services and service support operations. The Marine Corps is requesting $41.4 million in fiscal year 1976 and $13.4 million in the transition period for budget activity 6 procurements.

Gentlemen, that concludes my overview of the procurement, Marine Corps budgets for fiscal year 1976 and the transition period. I would like to assure you that procurement funds approved by the Congress will be carefully administered to provide the highest possible state of readiness of Marine Corps Active and Reserve Forces.

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I shall be glad to attempt to answer any questions the committee may have regarding these requests.

Senator McGee. I would like to ask you about the M60 tank. How does the Army's difficulty in establishing the required production base for its tank program affect your own program for that tank?

TANK DELIVERY

General Vaught. We do not have any problems with delivery of our tanks. They are coming in on schedule, Mr. Chairman. We already have 20 of them and we foresee no problems.

Senator McGee. You plan to supply those to your Reserve Forces?

General Vaught. Yes, we plan for the Reserve to get them in the third quarter of fiscal year 1977.

FIELD TELETYPE SETS

Senator McGee. Last year the Congress denied $3.2 million requested for the procurement of 589 field teletype sets in 1975 because of a delay in your procurement schedule. Are funds included in this new request for this equipment?

General Vaught. No, not for the specific equipment for which funds were denied in fiscal year 1975. However, we are requesting $5.1 million to procure a different field teletypewriter, the AN/UGC–74, which will be provided under Army contract.

Senator McGee. And no indication when the contract may be awarded?

General Vaught. No. As I indicated, this is an Army contract.

TRUCK PROCUREMENT

Senator McGee. Last year the Congress provided $2.8 million for the procurement of 650 cargo trucks and recommended obligation of the funds be withheld until a joint buy could be made with the Army in order to achieve a lower unit cost.

What is the status of this 1975 procurement?

General Vaught. This is moving along and the Army will make the initial procurement in June of 1976 for both the fiscal year 1975 and the fiscal year 1976 requests, sir.

Senator McGee. You may get more M–60s than you asked for, I don't know. Are the funds requested in the 1976 budget for these 1¼-ton cargo trucks?

General Vaught. Yes, sir; they are.

197T BUDGET

Senator McGee. The transition period budget is in the amount of $43.8 million. Does this provide for a level effort throughout the 15-month period?

General Vaught. This represents approximately 15 percent of our fiscal year 1976 program which is $285.8 million. This is mostly for small arms, and so forth. No new initiatives are in this period.

Senator McGee. None at all?

General Vaught. No.

Senator McGee. That is all the questions I have.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I will submit some questions which you can answer for the record.

[The questions and answers follow:]

M–60 TANK PROGRAM

Senator YOUNG. How many units, regular and reserve, will be equipped with the M–60 tanks?

General VAUGHT. The Marine Corps will equip 3 active and 1 reserve battalions with the M–60A1 tank.

Senator YOUNG. How many M–60 tanks does the Marine Corps plan to procure?

General VAUGHT. The Marine Corps will procure 408 M–60A1 tanks over a 3 year period—120 in FY 1974, 134 in FY 1975 and 154 in FY 1976.

Senator YOUNG. What modifications, if any, does the Marine Corps make to the Army M–60's?

General VAUGHT. There are no modifications; however, we have additional requirements which include secure voice capability, passive night sights, fording capability and a different color of exterior paint.

TOW MISSILE SYSTEM

Senator YOUNG. Does the Marine Corps plan to equip the reserves with the TOW anti-tank missile? If so, when?

General VAUGHT. Yes, the Marine Corps Reserve is scheduled to receive the TOW Missile System in FY 1978.

ISRAELI ARMS PRODUCTION

Senator INOUYE. A few weeks ago my subcommittee went to the Middle East, and while we were there we naturally looked into the Israeli armed forces and spent about a day going through their factory, cannibalizing process they had there. The officers there were quite confident that the cannibalized version of the M–48 may be just as good as the M–60. They have been taking parts off other tanks and using guns from other Soviet tanks and they have come up with this cannibalized version and I am wondering, do you people have any opportunity to look over the inventory of the Israelis and watch them in combat operations?

General VAUGHT. We have had some people that have looked at the battlefield and evaluated the combat experiences, Senator. Whether they have specifically looked at the Israeli modified version of the M–48, I don't know.

Senator INOUYE. They have an elaborate factory there that takes all of the tanks apart and puts them together. They come up with a finished product that looks pretty good.

Am I correct in assuming that the M–60 is an all-weather type tank, all topography under all conditions?

General VAUGHT. Yes.

Senator INOUYE. Whether it is desert or jungle?

General VAUGHT. It is designed for all types of climate; yes, sir.

Senator INOUYE. Has this ever been tested in combat conditions?

General VAUGHT. The Marine Corps has not tested this tank under combat conditions.

Senator INOUYE. You have here 408; is that force level approved?

General VAUGHT. That is total amount.

M–48 REPLACEMENT AND TRANSFER

Senator INOUYE. That will bring up your tank corps to how many tanks? You are not replacing all of your old tanks, are you?

General VAUGHT. Yes, we are replacing all of our M48–A3 tanks.

Senator INOUYE. What will happen to them?

General VAUGHT. These tanks will be delivered to the Army.

Senator INOUYE. Are these also being used for the Reserve?

General VAUGHT. The Reserve uses the same tank as the Active Force, so they will get also the new tank.

Senator INOUYE. Just as a matter of curiosity, why did the Marines select the 14 over the 15?

General VAUGHT. I am unable to answer your question, sir, but I will submit it for the record.

General SIMLIK. That comes out of the other appropriation.

[The information follows:]

First of all, the primary mission of Marine fighters is to provide air defense for the amphibious landing forces while operating from carriers and/or austere land bases. Secondly, the Navy F–14 was designed and optimized for carrier operations and the all-weather air defense mission whereas the Air Force F–15 is designed for land base operations and optimized for the offensive air superiority and multi-mission fighter tasks. The F–15 program was also started some two years after the Navy/Marine F–14 program was initiated.

It was not until about the time the F–14 was being introduced to the Fleet that SecDef directed the Navy to investigate the feasibility of developing a Navy variant of the F–15 (the F–15N). During this timeframe, the Marine Corps had been excluded from the F–14 program by SecDef and SecNav and was investigating the alternative of procuring additional F–4's to modernize Marine fighter forces.

BUDGET-CUT AREAS

Senator INOUYE. I know my chairman did not ask you this, but I think that we should, realistically. Whatever program comes up before us, one can always assume a horrendous deficit.

The President's program speaks of a $52 billion deficit in addition to what we have, and the Democratic program speaks of a $62 billion deficit. So, realistically looking at it, one can almost assume that there will be some reduction in the budget estimates submitted by the administration.

This is not a fair question, but if we had to make some budgetary reduction, are you prepared to tell us where you would prefer the cuts to be made?

General VAUGHT. This budget has been washed backward and forward, and, in my opinion, it is at the bottom now. If we start taking any additional cuts, we will be cutting right into muscle.

MARINE CORPS REQUEST LEVEL

Senator INOUYE. Could you for the record provide us the original level of requests that the Marine Corps submitted to the Defense Department. We would like to compare that with the present request. You must have had several different programs rejected, and it would be helpful to have these programs listed so that we can see how far you have cut.

This would be very important for the committee to see.

General VAUGHT. Yes, sir.

[The information follows:]

We started off with total requirements of $319.5 million. Vigorous in-house review, with emphasis on priorization as a result of fiscal constraints, reduced the request to $297.6 million. OSD subsequently cut us to the $285.8 million being requested. Below is a list of programs affected:

[Dollars in millions]

Program	OSD submit		OSD cut		OSD approved	
	Quantity	cost	Quantity	cost	Quantity	cost
Radio set, AN/VRC-12	50	$0.3	50	$0.3	----	----
Recorder, repro sound set	216	.2	216	.2	----	----
Teletype AN/VRC-12	824	9.9	400	4.8	424	$5.1
Comm pass veh	226	1.2	69	.3	157	.9
Comm cargo veh	962	8.2	397	3.2	565	5.0
Tractor, R.T. artic	192	8.4	49	2.2	143	6.2
Electrical test equip	----	1.2	----	.8	----	.4

CUTS IN FUNDING

Senator INOUYE. As I understand it, you have already been cut from $319 million to $285 million.

General VAUGHT. Yes; and we had already scrubbed it down prior to going forward.

Senator INOUYE. This amount is necessary to maintain your total complement?

General VAUGHT. That is correct.

Senator INOUYE. I thank you very much, gentlemen.

SUBCOMMITTEE RECESS

This subcommittee will stand in recess until 10 o'clock tomorrow morning, at which time we will meet in room 1223 and receive testimony from the Marine Corps accounts.

[Whereupon, at 3:45 p.m. Tuesday, March 4, the subcommittee was recessed, to reconvene at 10 a.m. Wednesday, March 5.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

WEDNESDAY, MARCH 5, 1975

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m. in room 1223, Everett McKinley Dirksen Office Building, Hon. Daniel K. Inouye presiding.

Present: Senators Inouye and Young.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

OPERATION AND MAINTENANCE, MARINE CORPS

STATEMENT OF MAJ. GEN. FRANCIS W. VAUGHT, U.S. MARINE CORPS, ASSISTANT DEPUTY CHIEF OF STAFF FOR INSTALLATIONS AND LOGISTICS, HEADQUARTERS, MARINE CORPS

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

MAJ. GEN. W. F. SIMLIK, U.S. MARINE CORPS, FISCAL DIRECTOR OF THE MARINE CORPS, HEADQUARTERS, MARINE CORPS

MAJ. C. J. JOHNSTON, U.S. MARINE CORPS, HEAD, O&MMC BUDGET SECTION, INSTALLATIONS AND LOGISTICS DEPARTMENT, HEADQUARTERS, MARINE CORPS

LT. COL. E. E. PARO, JR., U.S. MARINE CORPS, HEAD, PROGRAMS AND FINANCIAL BRANCH, DEPARTMENT OF INSTALLATIONS AND LOGISTICS, HEADQUARTERS, MARINE CORPS

BUDGET REQUEST

Senator INOUYE. This morning the subcommittee will receive testimony in support of Marine Corps Personnel and Operation and Maintenance appropriations requests for fiscal year 1976.

The following witnesses will appear:

Lt. Gen. Samuel Jaskilka, Deputy Chief of Staff for Manpower; Maj. Gen. Francis W. Vaught, Assistant Deputy Chief of Staff for Installations and Logistics, and Maj. Gen. Michael P. Ryan, Director of Marine Corps Reserve.

The first witness will be General Vaught.

General VAUGHT. As backup I have General Simlik, Major Johnston and Colonel Paro.

JUSTIFICATION, BIOGRAPHY AND PREPARED STATEMENT

Senator INOUYE. Before we receive their testimony, I think it appropriate that the justification material be inserted in the record at this point along with your biography and prepared statement.

[The justification, biography and statement follow:]

OPERATION AND MAINTENANCE, MARINE CORPS

For expenses, not otherwise provided for, necessary for the operation and maintenance of the Marine Corps, as authorized by law: [$449,284,000] $507,300,000 of which not less than [$50,000,000] $55,000,000 shall be available only for the maintenance of real property facilities.

For "Operation and Maintenance, Marine Corps" for the period July 1, 1976, through September 30, 1976, $129,400,000: (5 U.S.C. 503, 3101; 3109, 5342, 5702-04, 5724-27, 5730, 5742, 5912, 5941, 5943, 5944, 7903; 10 U.S.C. 265, 276, 1037, 1071-85, 1125, 1481-88, 2110, 6911, 7214, 7571, 7580; 31 U.S.C. 22a, 104; 37 U.S.C. 404-11; 39 U.S.C. 406, 2601, 3208; Department of Defense Appropriation Act, 1975.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-10-1106-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	2. GENERAL PURPOSE FORCES	232,837	238,031	265,051
	3. INTELLIGENCE AND COMMUNICATIONS	862	872	.....
	7. CENTRAL SUPPLY AND MAINTENANCE	103,586	109,918	123,618
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	73,482	72,306	78,604
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	30,773	38,357	40,027
	TOTAL DIRECT PROGRAM	441,540	459,484	507,300
	REIMBURSABLE (TOTAL)	70,043	70,288	78,066
	SUBTOTAL	511,583	529,772	585,366
	INTRAFUND OBLIGATIONS	-11,006	-11,750	-12,000
10	TOTAL OBLIGATIONS	500,577	518,022	573,366
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-56,015	-55,538	-63,066
14	NON-FEDERAL SOURCES	-3,023	-3,000	-3,000
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR	-2,000	.....	.....
25	UNOBLIGATED BALANCE LAPSING	2,723	.....	.....
	BUDGET AUTHORITY	442,263	459,484	507,300
	BUDGET AUTHORITY:			
40	APPROPRIATION	437,545	449,284	507,300
40	RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-5,000	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	4,718	.....	.....
43	APPROPRIATION (ADJUSTED)	442,263	444,284	507,300
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	11,300	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	3,900	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	441,539	459,484	507,300
72	OBLIGATED BALANCE, START OF YEAR	64,139	123,977	129,461
74	OBLIGATED BALANCE, END OF YEAR	-123,977	-129,461	-146,761
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	5,362	.....	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	391,064	439,560	489,240
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	10,735	565
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL	.....	3,705	195

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1106-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	163,304	187,422	193,805
11.3	POSITIONS OTHER THAN PERMANENT	5,515	6,837	6,018
11.5	OTHER PERSONNEL COMPENSATION	3,276	3,081	3,545
	TOTAL PERSONNEL COMPENSATION	172,095	197,340	203,368
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	151,906	172,386	175,102
12.1	PERSONNEL BENEFITS: CIVILIAN	14,196	16,274	17,028
13.0	BENEFITS FOR FORMER PERSONNEL	.....	.....	1,229
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	17,624	15,202	18,267
22.0	TRANSPORTATION OF THINGS	14,269	17,600	19,500
23.0	RENT, COMMUNICATIONS, AND UTILITIES	28,465	37,224	39,474
24.0	PRINTING AND REPRODUCTION	3,483	3,666	4,229
25.0	OTHER SERVICES	104,354	92,261	109,033
26.0	SUPPLIES AND MATERIALS	98,808	96,217	115,012
31.0	EQUIPMENT	8,435	8,654	8,426
	TOTAL DIRECT OBLIGATIONS	441,540	459,484	507,300
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	20,189	24,954	28,266
12.1	PERSONNEL BENEFITS: CIVILIAN	1,886	2,356	2,711
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	1,270	1,556	1,657
22.0	TRANSPORTATION OF THINGS	.....	90	93
23.0	RENT, COMMUNICATIONS, AND UTILITIES	4,816	5,522	6,618
25.0	OTHER SERVICES	10,857	10,002	12,543
26.0	SUPPLIES AND MATERIALS	30,566	25,602	25,740
31.0	EQUIPMENT	459	206	438
	TOTAL REIMBURSABLE OBLIGATIONS	70,043	70,288	78,066
	SUBTOTAL	511,583	529,772	585,366
96.0	INTRAFUND OBLIGATIONS	-11,006	-11,750	-12,000
99.0	TOTAL OBLIGATIONS	500,577	518,022	573,366

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-19-1106-0-1-051			TRANSITION
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	2. GENERAL PURPOSE FORCES			68,128
	7. CENTRAL SUPPLY AND MAINTENANCE			30,187
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES			21,096
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES			9,989
	TOTAL DIRECT PROGRAM			129,400
	REIMBURSABLE (TOTAL)			19,760
	SUBTOTAL			149,160
	INTRAFUND OBLIGATIONS			-3,000
10	TOTAL OBLIGATIONS			146,160
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS			-16,010
14	NON-FEDERAL SOURCES			-750
	BUDGET AUTHORITY			129,400
	BUDGET AUTHORITY:			
40	APPROPRIATION			129,400
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET			129,400
72	OBLIGATED BALANCE, START OF YEAR			146,761
74	OBLIGATED BALANCE, END OF YEAR			-90,161
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL			186,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1106-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	48,926
11.3	POSITIONS OTHER THAN PERMANENT	800
11.5	OTHER PERSONNEL COMPENSATION	886
	TOTAL PERSONNEL COMPENSATION	50,612
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	43,243
12.1	PERSONNEL BENEFITS: CIVILIAN	4,209
13.0	BENEFITS FOR FORMER PERSONNEL	614
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	4,509
22.0	TRANSPORTATION OF THINGS	4,766
23.0	RENT, COMMUNICATIONS, AND UTILITIES	9,911
24.0	PRINTING AND REPRODUCTION	1,177
25.0	OTHER SERVICES	31,773
26.0	SUPPLIES AND MATERIALS	27,340
31.0	EQUIPMENT	1,858
	TOTAL DIRECT OBLIGATIONS	129,400
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	7,369
12.1	PERSONNEL BENEFITS: CIVILIAN	704
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	415
22.0	TRANSPORTATION OF THINGS	191
23.0	RENT, COMMUNICATIONS, AND UTILITIES	1,488
25.0	OTHER SERVICES	3,132
26.0	SUPPLIES AND MATERIALS	6,351
31.0	EQUIPMENT	110
	TOTAL REIMBURSABLE OBLIGATIONS	19,760
	SUBTOTAL	149,160
96.0	INTRAFUND OBLIGATIONS	-3,000
99.0	TOTAL OBLIGATIONS	146,160

PERSONNEL SUMMARY

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total number of permanent positions	16,855	16,721	16,344	16,342
Full-time equivalent of other positions	568	611	509	267
Average paid employment	15,815	16,795	16,868	16,564
Average GS grade	6.24	6.24	6.24	6.24
Average GS salary	11,052	11,665	11,905	11,859
Average salary of ungraded position	10,356	11,498	11,858	11,813

INTRODUCTORY STATEMENT
(In Thousands)

	1974 Actual	1975 Estimate	1976 Estimate	1977 Estimate
Total direct obligations	$441,540	$459,484	$507,300	$129,400
Unobligated balance available start of year	-2,000	-	-	-
Rescission of enacted appropriation now pending	-	+5,000	-	-
Transfer to other accounts	-	-	-	-
Transfer from other accounts	-4,718	-	-	-
Proposed supplemental for wageboard increase	-	-11,300	-	-
Proposed civilian pay increase supplemental	-	-3,900	-	-
Net adjustments	+2,723	-	-	-
Appropriation	$437,545	$449,284	$507,300	$129,400

This appropriation provides the funds for the costs of all Marine Corps missions, functions, activities and facilities except for those costs related to: Procurement of major items of equipment and ammunition, military personnel costs of the regular and the reserve establishments, military family housing, operation and maintenance of the Marine Corps Reserve, and those functions supported by Navy sponsored appropriations.

The funds contained in this appropriation are intended primarily for the support of the operating forces with particular emphasis on the Fleet Marine Forces. A significant Marine Corps objective is to train and maintain the Fleet Marine Forces at a high level of combat readiness for service with the Fleet, ashore, or for such other duties as the President may direct.

The two Fleet Marine Forces supported by this appropriation are composed of Marine Amphibious Forces (Marine Division/Marine Aircraft Wing Teams) including a combination of combat and service support organizations, and a variety of supporting units. Funds are also provided to support two landing force training commands, the Marine detachments afloat, and the security forces to Naval and other government activities ashore.

Shore facilities receiving budget support from this appropriation are: four major unit support bases, two recruit depots; ten air installations; three major supply activities; one Marine Corps Development and Educational Command; one overseas training facility at Vieques, Puerto Rico; two landing force training commands; and numerous Marine Barracks and detachments. These facilities are being maintained at standards that will permit effective utilization, avoid major replacement costs, and allow operation and maintenance on an economical and effective basis.

The individual training of enlisted personnel from recruit training to the highest Marine Corps technical training and advanced training at schools of the other services and at civilian institutions as well as individual training of officers from basic to the highest level of training is supported by funds in this appropriation. Such schooling is designed to produce highly trained and disciplined officers and men for duty with the Fleet Marine Force, capable of effective growth as well as effective performance.

This appropriation also supports the Marine Corps supply system. The principal objective of the supply system is to provide the combat forces with the proper materiel and equipment in the quantity, condition, time and place required.

Further, it supports other miscellaneous activities such as special training, recreation and welfare services, cataloging, recruiting, equipment overhaul and repair, and miscellaneous individual expenses.

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Summary of Civilian Manpower Increases/Decreases
Fiscal Year 1975 to Fiscal Year 1976
(Full Time Permanent Employees)

Operation or Activity		Year End Increases/Decreases
Direct		
Closure of MCSA, Philadelphia, Pennsylvania		-184
Defense Integrated Data System Termination		- 19
Supply Operations		-155
Commissary Store Operations		-391
Telecommunications Reduction		- 22
	Net decrease direct	-771
Reimbursable		
Dependents' Schools		+ 3
Commissary Store Operations		+391
	Net increase reimbursable	+394
	Total net decrease	-377

Summary of Civilian Manpower Increases/Decreases
Fiscal Year 1976 to Fiscal Year 197T
(Full Time Permanent Employees)

Operation or Activity	Year End Increases/Decreases
Direct	
Supply Operations	- 2
Net decrease direct	- 2
Reimbursable	
Dependents' Schools	+478
Net increase reimbursable	+478
Total net increase	+476

Direct Hire Civilian Employment
(Dollars in Thousands; Strength in Whole Numbers)

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 1977T Estimate			FY 1977 Estimate
	Average Strength	E/S 30 Jun 74	Est Oblig	Average Strength	E/S 30 Jun 75	Est Oblig	Average Strength	E/S 30 Jun 76	Est Oblig	Average Strength	E/S 30 Sep 76	Est Oblig	E/S 30 Sep 77
Direct Hire Civilians													
Full time permanent	15,247	15,923	182,662	16,184	16,473	209,133	16,359	16,096	218,318	16,297	16,194	55,339	16,194
Other	568	267	5,515	611	280	6,837	509	280	6,018	267	658	800	658
Total direct hire civilians	15,815	16,190	188,177	16,795	16,753	215,970	16,868	16,376	224,336	16,564	16,852	56,139	16,852
Detail by Budget Activity													
General purpose forces	8,246	8,210	94,065	8,532	8,401	107,571	8,681	8,402	112,757	8,620	8,779	28,527	8,779
Central supply and maintenance	3,559	3,690	43,489	3,740	3,798	50,669	3,708	3,503	53,398	3,479	3,503	12,867	3,503
Training, medical, and other general personnel activities	2,412	2,479	27,397	2,618	2,581	32,044	2,549	2,498	32,028	2,541	2,597	8,132	2,597
Administrative and associated act.	1,598	1,811	21,226	1,905	1,973	25,686	1,930	1,973	26,153	1,924	1,973	6,613	1,973
Total direct hire civilian	15,815	16,190	188,177	16,795	16,753	215,970	16,868	16,376	224,336	16,564	16,852	56,139	16,852

Other Personnel Compensation
(Dollars in Thousands)

ITEM	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
1. Overtime and holiday pay	1,337	1,281	1,745	436
2. Sunday and night differential	703	564	564	163
3. Firefighters premium pay	1,210	1,210	1,210	281
4. Other Compensation	26	26	26	6
TOTAL	3,276	3,081	3,545	886

SUMMARY OF OBLIGATIONS

(In thousands)

Budget Act. No.	Budget Activity Title	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	Diff 1976 Compared with 1975	Justification Page
2	General Purpose Forces.....	$232,837	$238,031	$265,051	$ 68,128	$+27,020	3-14
3	Intelligence and Communications.....	862	872	-	-	- 872	3-26
7	Central Supply and Maintenance.....	103,586	109,918	123,618	30,187	+13,700	3-28
8	Training, Medical and Other General Personnel Activities.....	73,482	72,306	78.604	21,096	+ 6,298	3-39
9	Administration and Associated Activities.....	30,773	38,357	40,027	9,989	+ 1,670	3-52
Total direct obligations in budget document		$441,540	$459,484	$507,300	$129,400	$+47,816	

BIOGRAPHY OF MAJOR GENERAL FRANCIS W. VAUGHT

Major General Francis W. Vaught is the Director of Plans, Programs and Management for Installations and Logistics/ Assistant Deputy Chief of Staff for Installations and Logistics at Headquarters Marine Corps. He was born September 11, 1921, in Perdue Hill, Alabama. He graduated from Blacksher High School, Urian, Alabama, in 1939, and received his B.A. Degree from George Washington University, Washington, D. C. in May 1953. He enlisted in the Marine Corps Reserve, March 3, 1942, and was commissioned a second lieutenant, April 12, 1944.

Upon completing the Reserve Officers' Course, Marine Corps Schools, Quantico, Virginia in July 1944, General Vaught served with the 7th Training Battalion, Camp Lejeune, North Carolina. He was the Logistics Officer with the 1st Battalion, 28th Marines, serving in Hawaii and Japan from December 1944 until January 1946. General Vaught integrated into the regular Marine Corps in July 1946 while stationed at Camp Lejeune, North Carolina, and in March 1950, was ordered to Norfolk, Virginia, as Detachment Supply Officer with the U. S. Navy. He was promoted to captain in January 1951.

General Vaught then attended the George Washington University Navy Comptrollership School and upon graduation was assigned to the Supply Department as Executive Officer at Headquarters Marine Corps, Washington, D. C. in May 1953. He was promoted to major in July 1955, and the following February was ordered to Marine Corps Air Station, Kaneohe Bay, Hawaii, as Supply Officer. From April 1957 to August 1958, he served as Brigade Supply Officer, 1st Marine Brigade. In September 1958, General Vaught was transferred to the Marine Corps Supply Forwarding Annex, San Francisco, California, as Executive Officer, and later became the Commanding Officer. In June 1961, he was reassigned as a group supply officer, 1st Marine Aircraft Wing.

He was promoted to lieutenant-colonel in July 1962, and became the Director, Stock Management Division, Marine Corps Supply Activity, Philadelphia, Pennsylvania. During August 1965, he was transferred to Camp Pendleton, California, where he served as Executive Officer of the 1st and the 5th Force Service Regiments. He was promoted to colonel in September 1967.

General Vaught became Commanding Officer, Force Logistic Support Group A, in the Republic of Vietnam in April 1968, and later served as Assistant Chief of Staff, G-3, Force Logistics Command. Returning to the United States in June 1969, he assumed duty as Director, Storage and Transportation, Defense Depot, Ogden, Utah. Following his advancement to brigadier general in August 1971, he became the Commanding General, Marine Corps Supply Center, Albany, Georgia and assumed his current assignment following his promotion to major general on June 11, 1974.

A complete list of his medals and decorations include the Legion of Merit with Combat "V" and gold star in lieu of second award, the Navy Unit Commendation with one bronze star, the Joint Service Commendation Medal, the American Campaign Medal, the Asiatic-Pacific Campaign Medal, the World War II Victory Medal, the Navy Occupation Service Medal with Asia Clasp, the National Defense Service Medal with one bronze star, the Vietnam Service Medal with four bronze stars, the Republic of Vietnam Armed Forces Meritorious Unit Citation of the Gallantry Cross with Palm, and the Republic of Vietnam Campaign Medal.

Major General Vaught and his wife, the former Wilma Geneva James, have three children, James W., who was commissioned in the U. S. Marine Corps in June 1972; and twin sons, Donn and Kirk.

STATEMENT OF MAJOR GENERAL FRANCIS W. VAUGHT

Mr. Chairman and Members of the Committee, I am Major General Francis W. Vaught, Assistant Deputy Chief of Staff for Installations and Logistics, Headquarters, U. S. Marine Corps. I appreciate this opportunity to appear before this Committee for the first time as appropriation sponsor for Operation and Maintenance, Marine Corps to present the Marine Corps request for funds for Fiscal Year 1976 and the three month transition budget period.

The requested funds will support an active duty Fleet Marine Force of three divisions, three aircraft wings, and their normal combat support units. Funds are also required for the Operation and Maintenance of training bases, the Marine Corps supply system, Marine detachments and security forces, and administration and associated activities.

The Marine Corps request provides support for a stabilized Marine Corps with a Fiscal Year 1976 end strength of 196,303. These are the minimum funds needed to finance essential training, material, and personnel support programs that will enable us to maintain the combat readiness posture of the Fleet Marine Force.

The Operation and Maintenance budget request totals $507.3 million for Fiscal Year 1976 and $129.4 million for the transition period. The Fiscal Year 1976 budget represents a $47.8 million increase over the revised Fiscal Year 1975 request. Two-thirds of this increase is directly attributable to inflationary cost increases experienced during the past year. Fiscal Year 1975 has been characterized by a long series of program adjustments to accommodate inflation. Many programs had to be deferred or stretched out to provide funding for unavoidable cost increases. A good example of this problem that is familiar to all of us is the area of purchased utilities where our costs are up over $8 million compared with the amount requested from Congress last year. Other programs such as real property maintenance and recruit advertising simply diminished in effective size as prices increased. Adequate funding has been maintained for direct combat readiness functions but only by "borrowing" from essential support programs that must eventually be carried out in the future at even higher costs.

As part of our effort to hold the line against increasing costs, we plan to reduce direct funded civilian employment by 771 billets during Fiscal Year 1976. Half of this cut is due to the directed phaseout of appropriated fund support for commissary stores. In addition, 184 positions can be eliminated by consolidating the Inventory Control Point function with the Supply Center at Albany, Georgia and another 155 billets will be saved by phasing out centralized retail stocks of most consumable items and authorizing Fleet Marine Force units to requisition such items directly from

the assigned integrated manager. In civilian labor costs alone, these two modifications to our logistic support structure will save over $4.5 million per year. Indirect hire foreign national employment at western Pacific bases has been reduced by 300 billets with resultant savings of over $2.7 million annually.

Major increases requested in the budget include $9 million to help slow the rate of growth in unfunded backlog of maintenance and repair of real property facilities. Even with this substantial increase in funding, we project that the backlog will still increase by $3.6 million during Fiscal Year 1976.

One-time costs associated with relocation of the Inventory Control Point from Philadelphia, Pennsylvania to Albany, Georgia amount to $6.1 million. As I mentioned earlier, this consolidation makes possible the elimination of 184 civilian billets with resultant annual savings that will fully amortize both the construction and relocation costs within four years.

Other major increases include $4.1 million for depot level equipment maintenance due primarily to a full production schedule for rebuild of our LVTP-7 amphibian tractors, $11.3 million required because of announced price increases for material purchased from defense stock funds, $3.4 million for procurement of new items for the Fleet Marine Force, and $3.3 million for recruit advertising. This latter increase deserves special attention. In late Fiscal Year 1974, Congress approved a Marine Corps reprogramming request to fund our initial entry into paid advertising. The total value of Marine Corps recruit advertising that will appear during 1975 (some $15.5 million) consists of $8.9 million in appropriated 1975 funding plus $6.6 million in end-year 1974

monies applied to paid advertising. Thus, the $12.2 million requested for Fiscal Year 1976 actually represents a decrease of $3.3 million in program size compared with 1975. We believe this smaller program can do the job in view of the lower number of accessions required and the economies gained by consolidating the regular and reserve paid advertising programs. On an average cost per accession basis, the advertising program request is down by about 9 percent.

Funds requested for the three month transition budget period provided for continuation of operation and maintenance functions at the requested 1976 level. No new starts are included in the transition budget request.

This completes my formal statement. I will be happy to answer any questions you may have concerning this appropriation request.

INTRODUCTION

Senator INOUYE. Please proceed.

General VAUGHT. Mr. Chairman and members of the committee, I am Maj. Gen. Francis W. Vaught, Assistant Deputy Chief of Staff for Installations and Logistics, Headquarters, U.S. Marine Corps. I appreciate this opportunity to appear before this committee for the first time as appropriation sponsor for "Operation and maintenance, Marine Corps" to present the Marine Corps request for funds for fiscal year 1976 and the 3-month transition budget period.

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READINESS

Senator INOUYE. How has that borrowing affected your readiness capability?

General VAUGHT. It has not affected our readiness materially. Readiness is always the first thing in the Marine Corps. We will continue to put our money where it will maintain our readiness.

Senator INOUYE. Were any essential support programs affected?

General VAUGHT. None of them has really been seriously impacted. Some examples include civilian lapse rate which was deliberately increased from a norm of 1.2 percent as contained in last year's budget to 2.0 percent now. This civilian hiring delay saved about $2 million. We have also delayed our vehicle design contract by half a year which resulted in a $1 million savings. And we have had some savings in

travel of $0.8 million. We have also temporarily cut down in recreation programs for our troops.

Senator INOUYE. Please proceed.

REDUCED CIVILIAN EMPLOYMENT

General VAUGHT. As part of our effort to hold the line against increasing costs, we plan to reduce direct funded civilian employment by 771 billets during fiscal year 1976. Half of this cut is due to the directed phaseout of appropriated fund support for commissary stores.

Senator INOUYE. We have received many letters expressing concern about this commissary support, not only by this Service but by the other Services. How will it affect the cost of goods to the personnel?

General VAUGHT. Certainly it will have an impact on the savings to individual customers but to identify a precise percentage increase is very difficult. It is generally estimated at 10 to 15 percent. The actual increase will depend on the number of patrons who will continue to visit the commissary.

Senator INOUYE. Will this make the commissary competitive with the supermarkets in the civilian sector?

General VAUGHT. We would certainly hope they would be. Every management improvement will be made in order to keep our commissaries competitive so that they will continue to be a savings for the young Marine.

EFFECT ON COMMISSARY SAVINGS

Senator INOUYE. This action will reduce the savings, won't it?

General VAUGHT. Yes, sir, it certainly will.

Senator INOUYE. You have made no study as to what the savings will be?

General VAUGHT. We do not have a study showing the degree. It is merely an estimate at this time. I don't think we can get a firm handle on it until we see what effect higher prices will have on sales volume.

Senator INOUYE. This is a decision which has already been made, and you do intend to carry it out?

General VAUGHT. We have no alternative but to carry out the decision which has been made.

Senator INOUYE. Please proceed.

CONSOLIDATION AT SUPPLY CENTER AT ALBANY, GA.

General VAUGHT. In addition, 184 positions can be eliminated by consolidating the inventory control point function with the Supply Center at Albany, Ga. and another 155 billets will be saved by phasing out centralized retail stocks of most consumable items and by authorizing Fleet Marine Force units to requisition such items directly from the assigned integrated manager. In civilian labor costs alone, these two modifications to our logistic support structure will save over $4.5 million per year. Indirect hire foreign national employment at western Pacific bases has been reduced by 300 billets with resultant savings of over $2.7 million annually.

Senator INOUYE. May I interrupt at this point, sir.

General VAUGHT. Yes, sir.

GAO SAVINGS RECOMMENDATIONS

Senator INOUYE. On the second page you advise this committee that civilian employment will be reduced by 771 billets in fiscal year 1976. As a result you will save about $4.5 million per year. I presume you have seen this GAO report dated June 19, 1974.

General VAUGHT. Is that the one relative to the ICP?

Senator INOUYE. Reduced cost and improved efficiency by employing civilians instead of Marines.

General SIMLIK. This is the one that deals with Kansas City?

Senator INOUYE. The Finance Center.

General SIMLIK. Yes, sir.

Senator INOUYE. Is the Finance Center involved in this portion of your testimony?

General VAUGHT. No, sir.

Senator INOUYE. Whose testimony will cover this section?

I want to know if the GAO report has been carried out, or if you have any disagreement with it.

General SIMLIK. I think I should handle that one, sir, since the Finance Center comes under my operational control.

Senator INOUYE. It says:

The Secretary of Defense should direct the Marine Corps to civilianize the work forces at the Marine Finance Center by June 30, 1975.

Second, adjust Marine Corps manning authorizations for the addition of 249 or fewer civilians and the reduction of approximately 300 Marines.

Third, adjust future funding for the estimated $957,500 saving identified in this report.

And fourth, have reviews made of similar activities of the Army, Navy, and Air Force.

Have you done anything about the three recommendations?

General SIMLIK. The Department of the Navy position on this GAO report is one of non-concurrence with the complete civilianization at the Kansas City Finance Center and the Automated Service Center. Over the course of the last 2 or 3 years we have conducted extensive civilianization at Kansas City. We have civilianized over 400 billets by replacing Marines with civilians. It is our position that at this time, because of the progress we have made, that we just must stop for awhile and assess our situation.

We do take basic issue with some of the findings in the GAO report relative to economies in substituting civilians for military. We also feel that we need a rotation base for some of our disbursing personnel and that the experience they get at the Finance Center in these complicated disbursing matters makes our disbursing system much more effective when these personnel go back out into the fighting units.

CIVILIANIZATION OF MARINE CORPS WORKFORCE

Senator INOUYE. I feel sure that some Member of the Senate will read this report and will be asking questions relative to the recommendations. In anticipation of that, I think it would be wise if the Marine Corps submitted a more detailed response to these first three recommendations which apply to the Marine Corps.

General VAUGHT. We will be happy to supply that.

Senator INOUYE. The information will be inserted in the record at this point.

[The information follows:]

The subject GAO report recommended to the Secretary of Defense that the Marine Corps completely civilianize the workforce at both the Marine Corps Finance Center (MCFC) and the Marine Corps Automated Service Center (MCASC) Kansas City by 30 June 1975. The Department of Defense response agreed with the basic thrust of the GAO recommendation and indicated that the Marine Corps would review the manning of both centers in light of the GAO report.

The Marine Corps has taken positive action to reduce the number of military personnel at the two Kansas City Centers. The combined number of Marines in the workforce at the two centers has been reduced from 818 in Fiscal Year 1972 to a planned 327 in June 1975. Since the total workforce has remained relatively constant, the percentage of civilian employees of the total force has increased from 25% in Fiscal Year 1972 to 70% in Fiscal Year 1975. The Marine Corps, because of other requirements and to provide a period of stabilization at the Kansas City activities, did not program to civilianize any additional billets during Fiscal Year 1976. This action was taken because of the requirement to reassess all civilianization actions that had occurred between Fiscal Year 1972 and 1975 and the inherent personnel turbulence caused by large civilian personnel increases at the two activities. Such increases saturated the training and indoctrination resources/facilities and in some cases depleted the job market skills for well qualified personnel in certain occupations.

The Marine Corps is conducting a continuing review of possible civilianization of the remaining military billets at the two centers. Military billets will be civilianized to the maximum extent practicable at these centers in line with policies of the Department of Defense.

MAINTENANCE AND REPAIR BACKLOG

General VAUGHT. Major increases requested in the budget include $9 million to help slow the rate of growth in unfunded backlog of maintenance and repair of real property facilities. Even with this substantial increase in funding, we project that the backlog will still increase by $3.6 million during fiscal year 1976.

One-time costs associated with relocation of the inventory control point from Philadelphia, Pa., to Albany, Ga., amount to $6.1 million. As I mentioned earlier, this consolidation makes possible the elimination of 184 civilian billets with resultant annual savings that will fully amortize both the construction and relocation costs within 4 years.

Senator INOUYE. Was this consolidation carried out in response to recommendations made by the GAO?

General VAUGHT. In reality, we had already kicked off our own study in early 1974, sir.

Senator INOUYE. How does it compare with the GAO report?

General VAUGHT. Basically, relative to the ICP, we have completely gotten out of the integrated manager type of items. We authorized our units to requisition directly from the integrated manager. The only integrated manager type items that we are handling are those for which the Marine Corps is the assigned integrated manager.

Senator INOUYE. Please proceed.

OTHER BUDGET INCREASES

General VAUGHT. Other major increases include $4.1 million for depot-level equipment maintenance due primarily to a full production

schedule for rebuilding of our LVTP–7 amphibian tractors, $11.3 million required because of announced price increases for material purchased from defense stock funds, $3.4 million for procurement of new items for the Fleet Marine Force, and $3.3 million for recruit advertising. This latter increase deserves special attention. In last fiscal year 1974, Congress approved a Marine Corps reprograming request to fund our initial entry into paid advertising. The total value of Marine Corps recruit advertising that will appear during 1975, some $15.5 million, consists of $8.9 million in appropriated 1975 funding plus $6.6 million end-year 1974 moneys applied to paid advertising. Thus, the $12.2 million requested for fiscal year 1976 actually represents a decrease of $3.3 million in program size compared with 1975. We believe this smaller program can do the job in view of the lower number of accessions required and the economies gained by consolidating the regular and reserve paid advertising programs. On an average cost-per-accession basis, the advertising program request is down by about 9 percent.

Funds requested for the 3-month transition budget period provides for continuation of operation and maintenance functions at the requested 1976 level. No new starts are included in the transition budget request.

This completes my formal statement. I will be happy to answer any questions you may have concerning this appropriation request.

RECRUITMENT ADVERTISING

Senator INOUYE. What agency has been retained to do your recruitment advertising?

General VAUGHT. J. Walter Thompson, sir.

Senator INOUYE. As a result of this advertising program, how many men and women responded?

General VAUGHT. Through January we have received over 90,000 responses from popup cards. It is well above that figure now and is continuing to pick up momentum.

Senator INOUYE. In your view, the advertising program is successful?

General VAUGHT. Yes, sir.

Senator INOUYE. What sort of men and women are you attracting, as far as mental categories are concerned?

General VAUGHT. We are continuing to try to improve on quality and are showing a definite improvement. Through January, 53.5 percent of our recruits were high school graduates, compared with 49 percent at the same time last year. In 1974, 7.5 percent fell in mental group IV and for 1975 we are now under 5 percent.

Senator INOUYE. You have to recruit category IV people?

General VAUGHT. Although the Marine Corps is not required by law or regulation to recruit any personnel from mental group IV, we have recruited approximately 4 percent during the current fiscal year. This percentage will decrease in future accessions as the result of increased accession testing standards placed in effect during February 1975. The projected range during fiscal year 1976 will be between 1 and 2 percent.

General SIMLIK. This might be a more appropriate question, sir, for General Jaskilka during the manpower portion.

QUESTIONS SUBMITTED BY SENATOR INOUYE

Senator INOUYE. We have prepared several questions, which you may respond to for the record.

[The questions and answers follow:]

REAL PROPERTY MAINTENANCE

Senator INOUYE. What is the Marine Corps backlog of maintenance and repair of real property facilities for fiscal year 1974 through 1976.

General VAUGHT. The backlog of maintenance and repair is $40.5 million for 1974, $54.3 million estimated for 1975 and $57.9 million estimated for 1976.

D.S.F. PRICE INCREASES

Senator INOUYE. Delineate the areas of announced price increases involving materials purchased from defense stock funds.

General VAUGHT. Stock fund price increases cover all commodity areas. Price increase information provided by the Defense Supply Agency indicates an overall average increase of about 15 percent.

Senator INOUYE. What additional items are being procedured with the extra $3.4 million for the Fleet Marine Forces.

General VAUGHT. These funds will provide $2.1 million for phased procurement of the improved frame pack, $1.2 million for chemical nerve agent therapy kits, and $0.1 million for chemical protective clothing.

ACCESSION COSTS

Senator INOUYE. Would you compare the average cost per accession for the past three years and what is estimated for FY 1976.

General VAUGHT. The actual average costs per accession for fiscal years 1973 and 1974 were $638 and $904 and the estimated costs for fiscal years 1975 and 1976 are $810 and $1,042 respectively. These average cost figures include military pay and operating costs financed from Marine Corps appropriations plus prorated costs of Armed Forces Entrance and Examining Stations for all years and Department of Defense institutionalized advertising and Army managed real estate leasing for 1975 and 1976. In addition, the Congressionally approved year-end 1974 reprogramming for paid advertising tends to overstate the average 1974 cost and understate 1975 since these funds were charged to 1974 but they benefitted 1975. If this advertising package was applied to 1975 data, the revised average cost figures would be $832, $930, and $1,042 for 1974 through 1976 respectively.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I also have several questions that I would appreciate your answering for the record.

[The questions and answers follow:]

INFLATION'S INFLUENCE ON O. & M.

Senator YOUNG. How has inflation influenced operations and maintenance activity of the Marine Corps in the fiscal year 1976 budget request?

General VAUGHT. The fiscal year 1976 budget represents a $47.8 million increase over the revised fiscal year 1975 request. Two-thirds of this increase is directly attributable to inflationary cost increases experienced during the past year.

BACKLOG COSTS

Senator YOUNG. What is the estimated cost of the real property maintenance backlog in the Marine Corps?

General VAUGHT. The unfunded backlog at the end of fiscal year 1975 will be about $54.3 million.

Senator YOUNG. What is the vehicle and combat equipment maintenance backlog?

General VAUGHT. At year end fiscal year 1975 the backlog will be about $19.6 million.

Senator YOUNG. What does the Marine Corps consider to be an optimum backlog?

General VAUGHT. $4.5 million.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator INOUYE. Chairman McClellan was unable to attend today's hearing, but he has submitted a list of questions which he felt needed attention. Would you also reply to those for the record.

[The questions and answers follow:]

"THERAPY KITS FOR CHEMICAL NERVE AGENTS"

Chairman MCCLELLAN. $1,245,000 is requested for procurement of therapy kits for chemical nerve agents. Explain what is currently available to Marine Corps Forces in this area, and why the increase is being requested.

General VAUGHT. None are currently available. This therapy kit is newly developed and incorporates a new product which improves our capability to neutralize chemical agents. Kits are required to equip operational forces.

LINCLOE

Chairman MCCLELLAN. Provide the full and phased plan/costs associated with the improved frame pack (LINCLOE) for Fleet Marine Forces.

General VAUGHT. The full and phased plan/costs associated with the LINCLOE pack for Fleet Marine Forces are:

	Quantity	Cost (thousands)
Fiscal year:		
1976	65,442	$2,107
1977T	9,348	301
1977	47,360	1,525
1978	22,205	715
Total	144,355	4,648

COST PER MAN-YEAR

Chairman MCCLELLAN. What is the average cost per military man-year (total O&M cost)?

General VAUGHT. In that the full-range of base structure, facilities, and equipment costs are not directly relatable to military man-years, an estimate of $600 per man-year is used for minor variances thereto. This estimate does not include facilities/combat unit activation/deactivation or recruit training.

PERSONNEL INCREASES AT CAMP GARCIA

Chairman MCCLELLAN. Explain the reasons for the increases in personnel for the Human Resources, and the Energy Management Programs for Camp Garcia, Vieques, Puerto Rico.

General VAUGHT. There are no increases for personnel for the Human Resources and Energy Management Programs for Camp Garcia. Increases of approximately one million dollars represent the full year funding of those programs approved by the Congress for fiscal year 1975.

COMPLETION OF MILITARY CONSTRUCTION PROGRAMS

Chairman MCCLELLAN. Describe the new facilities that have been made available (i.e. square footage that needs to be maintained) as a result of completion of new facilities under the military construction program, and identify the increases that result in added cost in fiscal year 1976.

General VAUGHT. There are 71 new facility construction projects with occupancy dates in fiscal year 1975 and fiscal year 1976 which impact on the maintenance, utilities, and other engineering support requirements in fiscal year 1976. These 71 projects total more than $108 million worth of construction of which $77 million is military construction, $15 million Okinawa Reversion, and $16 million Nonappropriated Fund. This construction adds over 2,679,000 square feet of building area and 7,523 tons of air conditioning to be maintained and operated by the Marine Corps. The effect of each project, based on its occupancy date has been calculated and the total fiscal year 1976 added costs are: maintenance and other engineering support, $1,452,000; utilities $600,000.

CHANGES IN BACHELOR QUARTERS

Chairman MCCLELLAN. Describe the Marine Corps program to improve furniture and furnishings in bachelor quarters. What are total costs, and how is it phased over the years.

General VAUGHT. The Marine Corps program to improve furniture and furnishings in bachelor quarters was begun in fiscal year 1971 to encourage retention of personnel through more desirable living quarters and to upgrade living conditions at those activities where accommodations were below standards. Included is the replacement of the outmoded steel bunk, locker, and the wooden locker box with comparable furniture and furnishings which may be found in a modern hotel/motel-style environment. Although there has been some improvement through the military construction project, improvements have not kept pace in existing facilities which by type, age, or condition are not programmed for replacement.

Based upon a worldwide inventory of furnishings, it is considered necessary to expend $8 million annually to meet a planned schedule of total replacement of old and unacceptable furniture, augmentation of new items, and total replacement of authorized furnishings at five-year intervals. Considering the extreme use to which the furniture and furnishings are subjected, replacement at five-year intervals is essential. While every item in the inventory will not need replacement at that age point, experience shows that the relatively few items that do not require such replacement are more than offset by the increases in costs of other items from year to year.

A deficiency of $25 million was reported by Marine Corps activities as of June 30, 1974.

COMMAND TRAVEL REQUIRMENTS

Chairman MCCLELLAN. Why do command travel requirements increase in fiscal year 1976?

General VAUGHT. Increased travel requirements are to provide a more adequate level of command inspection effort by the Inspector General and by representatives of the Fleet Marine Corps Commanders. In addition, to provide for increased command liaison travel in connection with the implementation of the consolidated Supported Activities Supply System (SASSY) management unit and field testing of an improved more efficient Fleet Marine Corps logistic support structure.

INTEGRATED MANAGER ITEMS

Chairman MCCLELLAN. What integrated manager items have been phased out of the Marine Corps stores system? Are other items candidates for phaseout?

General VAUGHT. The Marine Corps has phased out all operating levels of integrated manager items held within the stores system for the Fleet Marine Force. Fleet units now requisition routine operating requirements directly from the integrated manager in the same manner as base support units. Limited inventories of integrated manager items are still managed and held to meet Preposition War Reserve contingency requirements.

MOVEMENT OF SUPPLY ACTIVITY TO GEORGIA

Chairman MCCLELLAN. Why are the increased costs associated with movement of the Supply Activity to Georgia funded in two budget projects.

General VAUGHT. The Supply Activity itself is funded in two budget projects, one for the inventory control point supply operations or external support, and one for base support or internal support. It is considered appropriate to assign the various movement costs to the budget projects to which they apply.

Support of Fifth Echelon Maintenance

Chairman McClellan. Explain the statement that $4.1 million increase is required for "increase in the depot level maintenance program necessary to support fifth echelon maintenance of Marine Corps equipment in support of the Fleet Marine Forces."

General Vaught. Principal factors contributing to the increase in FY 1976 Depot Level Maintenance Program costs over FY 1975 costs are the full production of the LVTP–7 rebuild line which increases from 50 to 102 tractors, the increased rebuild cost for the MTDS AN/TYQ–2/3, an increase from 79 to 158 for 5 ton trucks, and an increased requirement for rebuild of mobile tactical power generators. All the above contribute to the maintenance of high readiness.

Cost of Training Marine Recruits

Chairman McClellan. What is the average cost to train a Marine recruit? Recruit input declines by about 9,000 from fiscal year 1975 to fiscal year 1976, yet the reduction is less than $1 million. Explain why the reduction isn't any greater than this.

General Vaught. The average cost per recruit for the recruit training period is $81.66. The reduction is not any larger since it is a factor of this average cost.

Special Education Program

Chairman McClellan. Describe the load and funding for the Special Education Program, Marine Corps participation in Navy Enlisted Scientific Education Program, Marine Corps Enlisted Commissioning Education Program, Staff Noncommissioned Officer Degree Completion Program.

General Vaught. The Marine Corps Special Education Program (SEP) was established as a means to provide qualified officers to staff specific billets identified as requiring advanced or special education. SEP is a fully-funded program in which selected officers receive advanced training in specific academic disciplines at the Service graduate schools (Naval Postgraduate School and Air Force Institute of Technology) or at a very limited number of selected civilian colleges and universities. The anticipated load for this program during fiscal year 1976 is 50 man years. Funding required includes $20,000 Operation and Maintenance, Marine Corps funds and $1,034,000 Military Personnel, Marine Corps funds.

The Navy Enlisted Scientific Education Program (NESEP) provides the opportunity for a limited number of exceptionally qualified enlisted Marines to earn baccalaureate degrees in one of the natural sciences, mathematics, or engineering disciplines and a subsequent commission as a second lieutenant. The Marine Corps Enlisted Commissioning Education Program (MECEP) provides the opportunity for a limited number of exceptionally qualified enlisted Marines to earn baccalaureate degrees in the liberal arts areas and a subsequent commission as a second lieutenant. The NESEP and MECEP will be combined as one program for funding purposes beginning in fiscal year 1976. The anticipated load for the program during fiscal year 1976 is 190 man years. Funding required includes $265,000 Operation and Maintenance, Marine Corps funds and $1,549,000 Military Personnel, Marine Corps funds.

The Degree Completion Program for Staff Noncommissioned Officers (SNCODCP) provides an opportunity for a limited number of highly qualified, career oriented Staff Noncommissioned Officers to continue their education and earn baccalaureate degrees in academic disciplines which will enhance the performance in their military occupational specialties. The anticipated load for this program during fiscal year 1976 is 70 man years. Funding required includes $114,000 Operation and Maintenance, Marine Corps funds and $561,000 Military Personnel, Marine Corps funds.

Military Construction Increase

Chairman McClellan. What was the increase in plant size resulting from military construction project completion, that resulted in a $1,880,000 increase in fiscal year 1976.

General Vaught. The $1,880,000 increase in fiscal year 1976 for Budget Project 8C is comprised of two items: $1,745,000 to slow the rate of growth of Backlog of Maintenance and Repair (BMAR) and $135,000 to support new plants resulting from construction projects.

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There are $9,975,000 of new facilities in Budget Project 8C with Beneficial Occupancy Dates (BOD's) in fiscal years 1975 and 1976 which impact the maintenance, utilities and other engineering support requirements in fiscal year 1976. This construction adds over 182,000 square feet of building area and 620 tons of air conditioning to be maintained and operated by the Marine Corps.

Flight Training Pay

Chairman McClellan. Do the funds requested for flight training pay only for temporary duty costs? If not, what for?

General Vaught. The funds included in this program pay for temporary duty costs in addition to costs necessary to provide Marine Corps peculiar administrative and personnel support items for students undergoing flight training.

Cost of Junior ROTC Program

Chairman McClellan. What is the total O&M cost of the Junior ROTC program?

General Vaught. The total cost for the Marine Corps JROTC program for fiscal year 1976 is $1,035,000.

CONCLUDING REMARKS

Senator Inouye. Thank you very much, gentlemen. We appreciate your presence this morning.

General Vaught. We appreciate being here, sir.

Reserve Personnel, Marine Corps

Operation and Maintenance, Marine Corps Reserve

STATEMENT OF MAJ. GEN. MICHAEL P. RYAN, U.S. MARINE CORPS, DIRECTOR, MARINE CORPS RESERVE, HEADQUARTERS, MARINE CORPS

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

MAJ. GEN. W. F. SIMLIK, U.S. MARINE CORPS FISCAL DIRECTOR OF THE MARINE CORPS, HEADQUARTERS, MARINE CORPS

MAJ. C. R. UPSHAW, U.S. MARINE CORPS, HEAD, BUDGET SECTION, DIVISION OF RESERVES, HEADQUARTERS, MARINE CORPS

SUMMARY STATEMENT

Senator Inouye. Our next witness is Major General Ryan, Director of the Marine Corps Reserve.

Your full statement will be placed in the record at the conclusion of your testimony, General Ryan.

MARINE CORPS RESERVE APPROPRIATION

General Ryan. Would you mind if I talked to this summary statement or read it?

Senator Inouye. Any way you wish.

JUSTIFICATION

Before you begin, however, I think we should place the information from the justifications in the record.

[The justification follows:]

Justification

RESERVE PERSONNEL MARINE CORPS

For pay, allowances, clothing, subsistence, gratuities, travel, and related expenses for personnel of the Marine Corps Reserve on active duty under Section 265 of title 10, United States Code, or while undergoing reserve training, or while performing drills or equivalent duty, and for members of the Marine Corps platoon leaders class, as authorized by law; [$66,800,000] $72,700,000.

For "Reserve personnel, Marine Corps" for the period July 1, 1976, through September 30, 1976, $28,900,000.

(10 U.S.C. 600, 683, 1475-80, 2031, 2101-11, 5456, 5458, 6081-86, 6148; 37 U.S.C. 204, 206, 301, 305, 309, 402-4, 415-18, 1002; Department of Defense Appropriation Act, 1975; additiona authorizing legislation to be proposed.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-05-1108-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. RESERVE COMPONENT PERSONNEL	56,148	60,531	67,474
	2. RESERVE OFFICER CANDIDATES	4,342	4,960	5,226
	TOTAL DIRECT PROGRAM	60,490	65,491	72,700
	REIMBURSABLE (TOTAL)	266	300	300
10	TOTAL OBLIGATIONS	60,756	65,791	73,000
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-252	-272	-272
14	NON-FEDERAL SOURCES	-14	-28	-28
25	UNOBLIGATED BALANCE LAPSING	911	1,309	.....
	BUDGET AUTHORITY	61,400	66,800	72,700
	BUDGET AUTHORITY:			
40	APPROPRIATION	62,700	66,800	72,700
41	TRANSFERRED TO OTHER ACCOUNTS	-1,300	.....	.....
43	APPROPRIATION (ADJUSTED)	61,400	66,800	72,700
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	60,490	65,491	72,700
72	OBLIGATED BALANCE, START OF YEAR	8,088	8,352	7,843
74	OBLIGATED BALANCE, END OF YEAR	-8,352	-7,843	-9,543
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	-2,313	.....	.....
90	OUTLAYS	57,913	66,000	71,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-05-1108-0-1-051		1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	45,798	46,530	52,410
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	2,885	4,016	4,452
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	6,545	7,931	8,530
26.0	SUPPLIES AND MATERIALS	5,073	6,958	7,252
42.0	INSURANCE CLAIMS AND INDEMNITIES	146	56	56
	TOTAL DIRECT OBLIGATIONS	60,490	65,491	72,700
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	250	270	270
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	2	2	2
26.0	SUPPLIES AND MATERIALS	14	28	28
	TOTAL REIMBURSABLE OBLIGATIONS	266	300	300
99.0	TOTAL OBLIGATIONS	60,756	65,791	73,000

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-05-1108-0-1-051		TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. RESERVE COMPONENT PERSONNEL	25,846
	2. RESERVE OFFICER CANDIDATES	3,054
	TOTAL DIRECT PROGRAM	28,900
	REIMBURSABLE (TOTAL)	34
10	TOTAL OBLIGATIONS	28,934
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-12
14	NON-FEDERAL SOURCES	-22
	BUDGET AUTHORITY	28,900
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	28,900
72	OBLIGATED BALANCE, START OF YEAR	9,543
74	OBLIGATED BALANCE, END OF YEAR	-8,443
90	OUTLAYS	30,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-05-1108-0-1-051		TRANSITION
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	19,016
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	2,403
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	5,012
26.0	SUPPLIES AND MATERIALS	2,455
42.0	INSURANCE CLAIMS AND INDEMNITIES	14
	TOTAL DIRECT OBLIGATIONS	28,900
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	12
26.0	SUPPLIES AND MATERIALS	22
	TOTAL REIMBURSABLE OBLIGATIONS	34
99.0	TOTAL OBLIGATIONS	28,934

INTRODUCTORY STATEMENT

The mission of the Marine Corps Reserve is to provide trained units and qualified persons for active duty in the Marine Corps in time of war or national emergency and at such other times as national security requires. The purpose of the appropriation "Reserve Personnel, Marine Corps" is to maintain an efficient, balanced Marine Corps Reserve component responsive to the initial mobilization requirements.

The fiscal year 1975 estimated paid drill end strength is 32,245 and the average paid drill strength is estimated to be 31,702. The FY 1976 budget supports a paid drill end strength of 32,911 and an average strength of 32,481. The FY 1976 end strength includes approximately 2,423 at Initial Active Duty for Training. The FY 197T estimated paid drill end strength is 33,284 and the average paid drill strength of 33,013. The FY 197T end strength includes approximately 2,701 at Initial Active Duty for Training.

This budget provides funds for 4,988 Reserve Officer Candidate training tours and clothing for an estimated 7,573 Marine Corps Junior Reserve Officer Training Corps cadets in FY 1976.

SUMMARY OF REQUIREMENTS

(In Thousands of Dollars)

	Actual FY 1974	Estimate FY 1975	Estimate FY 1976	Estimate FY 197T
Reserve Component Personnel	$56,414	$60,831	$67,774	$25,880
Reserve Officer Candidates	4,342	4,960	5,226	3,054
TOTAL PROGRAM REQUIREMENTS (Obligations)	$60,756	$65,791	$73,000	$28,934
Less Actual/Anticipated Reimbursements	266	300	300	34
Less Unobligated balance transferred from other accounts	-0-	-0-	-0-	-0-
Unobligated balance lapsing	910	1,309	-0-	-0-
Total Direct Obligations/Appropriations	$61,400	$66,800	$72,700	$28,900

Operation and Maintenance, Marine Corps Reserve

For expenses, not otherwise provided for, necessary for the operation and maintenance, including training, organization, and administration, of the Marine Corps Reserve; repair of facilities and equipment; hire of passenger motor vehicles; travel and transportation; care of the dead, recruiting, procurement of services, supplies, and equipment; and communications: [$11,700,000] $12,100,000 of which not less than $500,000 shall be available only for the maintenance of real property facilities.

For "Operation and Maintenance, Marine Corps Reserve" for the period July 1, 1976 through September 30, 1976, $3,500,000. (10 U.S.C. 262, 276, 503, 1481-88, 2110, 2202, 2231, 2233a, 2631-34, 5013, 5031, 5252, 6022; 31 U.S.C. 638a; Department of Defense Appropriation Act, 1975.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-10-1107-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. MISSION FORCES	3,774	4,336	4,536
	2. DEPOT MAINTENANCE	712	737	737
	3. OTHER SUPPORT	7,608	6,655	6,827
	TOTAL DIRECT PROGRAM	12,094	11,728	12,100
	REIMBURSABLE (TOTAL)	346	282	303
10	TOTAL OBLIGATIONS	12,440	12,010	12,403
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-345	-281	-302
14	NON-FEDERAL SOURCES	-1	-1	-1
25	UNOBLIGATED BALANCE LAPSING	285	.....	.....
40	BUDGET AUTHORITY (APPROPRIATION)	12,378	11,728	12,100
	BUDGET AUTHORITY:			
40	APPROPRIATION	11,078	11,700	12,100
42	TRANSFERRED FROM OTHER ACCOUNTS	1,300	.....	.....
43	APPROPRIATION (ADJUSTED)	12,378	11,700	12,100
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	4	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	24	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	12,094	11,728	12,100
72	OBLIGATED BALANCE, START OF YEAR	2,325	6,279	7,007
74	OBLIGATED BALANCE, END OF YEAR	-6,279	-7,007	-7,107
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	29	.....	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	8,169	10,972	12,000
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	4	.....
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL	.....	24	.....

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1107-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	655	702	716
11.5	OTHER PERSONNEL COMPENSATION	10	6	6
	TOTAL PERSONNEL COMPENSATION	665	708	722
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	572	600	631
12.1	PERSONNEL BENEFITS: CIVILIAN	42	51	60
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	1,251	1,197	1,275
22.0	TRANSPORTATION OF THINGS	500	573	573
23.0	RENT, COMMUNICATIONS, AND UTILITIES	1,269	1,361	1,361
24.0	PRINTING AND REPRODUCTION	17	26	26
25.0	OTHER SERVICES	4,801	3,980	4,141
26.0	SUPPLIES AND MATERIALS	3,469	3,809	3,896
31.0	EQUIPMENT	173	131	137
	TOTAL DIRECT OBLIGATIONS	12,094	11,728	12,100
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	93	108	91
12.1	PERSONNEL BENEFITS: CIVILIAN	7	9	9
23.0	RENT, COMMUNICATIONS, AND UTILITIES	115	113	155
25.0	OTHER SERVICES	76	31	38
26.0	SUPPLIES AND MATERIALS	55	21	10
	TOTAL REIMBURSABLE OBLIGATIONS	346	282	303
99.0	TOTAL OBLIGATIONS	12,440	12,010	12,403

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-10-1107-0-1-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. MISSION FORCES	1,528
	2. DEPOT MAINTENANCE	258
	3. OTHER SUPPORT	1,714
	TOTAL DIRECT PROGRAM	3,500
	REIMBURSABLE (TOTAL)	92
10	TOTAL OBLIGATIONS	3,592
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-91
14	NON-FEDERAL SOURCES	-1
40	BUDGET AUTHORITY (APPROPRIATION)	3,500
	BUDGET AUTHORITY:	
40	APPROPRIATION	3,500
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	3,500
72	OBLIGATED BALANCE, START OF YEAR	7,107
74	OBLIGATED BALANCE, END OF YEAR	-6,607
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	4,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1107-0-1-051			TRANSITION
	PERSONNEL COMPENSATION:		
11.1	PERMANENT POSITIONS		172
11.5	OTHER PERSONNEL COMPENSATION		1
	TOTAL PERSONNEL COMPENSATION		173
	DIRECT OBLIGATIONS:		
	PERSONNEL COMPENSATION		193
12.1	PERSONNEL BENEFITS: CIVILIAN		15
21.0	TRAVEL AND TRANSPORTATION OF PERSONS		328
22.0	TRANSPORTATION OF THINGS		247
23.0	RENT, COMMUNICATIONS, AND UTILITIES		340
24.0	PRINTING AND REPRODUCTION		7
25.0	OTHER SERVICES		1,124
26.0	SUPPLIES AND MATERIALS		1,212
31.0	EQUIPMENT		94
	TOTAL DIRECT OBLIGATIONS		3,500
	REIMBURSABLE OBLIGATIONS:		
	PERSONNEL COMPENSATION		
12.1	PERSONNEL BENEFITS: CIVILIAN		20
23.0	RENT, COMMUNICATIONS, AND UTILITIES		2
25.0	OTHER SERVICES		19
26.0	SUPPLIES AND MATERIALS		28
			3
	TOTAL REIMBURSABLE OBLIGATIONS		92
99.0	TOTAL OBLIGATIONS		3,592

PERSONNEL SUMMARY

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total number of permanent positions	77	77	77	77
Average paid employment	68	75	75	75
Average GS grade	3.90	3.90	3.90	3.90
Average GS salary	$ 8,967	$ 9,094	$ 9,172	$ 9,172
Average salary of ungraded position	$10,800	$10,909	$11,727	$11,727

INTRODUCTORY STATEMENT
(In thousands)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total direct obligations	$12,094	$11,728	$12,100	$3,500
Transferred from other accounts	-1,300	-	-	-
Proposed civilian pay increase supplemental	-	- 28	-	-
Net adjustment	+285	-	-	-
Appropriation	$11,078	$11,700	$12,100	$3,500

This appropriation provides the funds for the day-to-day costs of operating and maintaining the Marine Corps Reserve forces, functions, activities and facilities except for those costs related to: Procurement of major items of equipment and ammunition, military personnel costs, and those functions supported by Navy sponsored appropriations for aircraft operations and procurement and support of aircraft and associated equipment.

The funds contained in this appropriation are intended for support of Marine Corps Reserve Forces. The Marine Corps Selected Reserve is the Reserve component of the Fleet Marine Force. This Reserve is organized to permit assignment of trained units and qualified personnel to active duty in time of war or national emergency, and at such other times as required for national security.

The Marine Corps Selected Reserve includes 65 aviation units, 30 battalions, 15 separate companies and batteries, 10 staff groups, and 3 selective service units.

This appropriation provides funds for equipment authorized in Marine Corps Tables of Equipment and unit allowances and used in Organized Marine Corps Reserve training as follows: Operation and local maintenance of equipment; depot level maintenance of major end items; and procurement of minor items of equipment.

This appropriation also supports the operation and maintenance of Marine Corps facilities such as training centers for use of Reserve units. It provides resources for maintenance and repair of facilities, minor construction, purchase of utilities and communications, rental of data processing equipment, postal costs, recruiting, hire of passenger motor vehicles, uniform alterations, travel, operation and maintenance of assigned military vehicles, civilian personnel costs, and procurement of minor items of office and other administrative support.

Direct Hire Civilian Employment
(Dollars in Thousands; Strength in Whole Numbers)

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 1977 Estimate			FY 1977 Estimate
	Average Strength	E/S 30 Jun 74	Est Oblig	Average Strength	E/S 30 Jun 75	Est Oblig	Average Strength	E/S 30 Jun 76	Est Oblig	Average Strength	E/S 30 Sep 76	Est Oblig	E/S 30 Sep 77
Direct Hire Civilians													
Full time permanent	68	66	714	75	77	768	75	77	791	75	77	190	77
Other													
Total direct hire civilians	68	66	714	75	77	768	75	77	791	75	77	190	77
Detail by Budget Activity													
Other Support	68	66	714	75	77	768	75	77	791	75	77	190	77
Total direct hire civilians	68	66	714	75	77	768	75	77	791	75	77	190	77

Summary of Civilian Manpower Increases/Decreases
Fiscal Year 1975 to Fiscal Year 1976
(Full Time Permanent Employees)

Operation or Activity	Year End Increases/Decreases
Direct	
Secretarial Support of 4th Marine Air Wing	+2
Net increase direct	+2
Reimbursable	
Secretarial Support of 4th Marine Air Wing	-2
Net decrease reimbursable	-2
Net total	-0-

Other Personnel Compensation
(Dollars in Thousands)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
1. Overtime and holiday pay	10	6	6	1
2. Sunday and night differential	-	-	-	-
3. Firefighters premium	-	-	-	-
4. Other Compensation	-	-	-	-
TOTAL	10	6	6	1

SUMMARY OF OBLIGATIONS

(In thousands)

Budget Activity Number	Budget Activity Title	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
1	Mission Forces.....	$ 3,774	$ 4,336	$ 4,536	$1,528
2	Depot Maintenance.....	712	737	737	258
3	Other Support.....	7,608	6,655	6,827	1,714
	Total direct obligations in budget document	$12,094	$11,728	$12,100	$3,500

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SUMMARY OF REQUIREMENTS BY SUBACTIVITY

($ in Thousands)

1. PAY AND ALLOWANCES OF OFFICERS	FY 1974	FY 1975	FY 1976	FY 197T
Basic Pay	$ 255,314	$ 261,291	$ 266,284	$ 66,630
Incentive Pay	12,638	13,178	12,849	3,251
Special Pay	116	92	47	12
Basic Allowance for Quarters	26,507	26,216	26,745	6,715
Basic Allowance for Subsistence	10,772	10,923	11,215	2,822
Station Allowances Overseas	1,462	1,426	1,426	356
Uniform Allowances	426	616	564	145
Family Separation Allowances	1,038	1,027	1,040	259
Separation Payments	8,148	8,421	8,300	1,822
Social Security Tax -- Employer's Contribution	12,672	13,154	13,526	3,634
Missing-in-Action	(1,489)	(1,153)	(921)	(198)
Reimbursables	346	407	389	84
Total Obligations	329,439	336,751	342,385	85,730
Less Reimbursements	346	407	389	84
Total Direct Obligations	329,093	336,344	341,996	85,646
2. PAY AND ALLOWANCES OF ENLISTED PERSONNEL				
Basic Pay	899,900	963,090	995,541	249,248
Incentive Pay	2,618	2,400	2,399	605
Special Pay	5,039	5,053	5,016	1,254
Proficiency Pay	10,052	9,009	4,526	1,031
Reenlistment Bonus	20,924	13,773	13,833	4,658
Combat Arms Enlistment Bonus	4,194	5,695	7,226	2,000
Basic Allowance for Quarters	90,816	94,614	97,541	24,331
Station Allowances Overseas	3,596	3,596	3,596	1,200
Clothing Allowances	29,483	34,114	31,879	8,340
Family Separation Allowances	3,232	3,022	3,022	761
Separation Payments	25,156	24,564	23,277	6,210
Social Security Tax -- Employer's Contribution	52,644	56,215	58,241	14,565
Missing-in-Action	(474)	(588)	(345)	(83)
Reimbursables	304	445	445	111
Total Obligations	1,147,958	1,215,590	1,246,542	314,314
Less Reimbursements	304	445	445	111
Total Direct Obligations	$1,147,654	$1,215,145	$1,246,097	$314,203

SUMMARY OF REQUIREMENTS BY SUBACTIVITY

($ in Thousands)

	FY 1974	FY 1975	FY 1976	FY 197T
3. SUBSISTENCE OF ENLISTED PERSONNEL				
Basic Allowance for Subsistence	$ 48,242	$ 57,516	$ 59,440	$ 14,821
Subsistence in Kind	47,256	55,620	57,934	18,499
Reimbursables	8,471	6,043	6,420	1,605
Total Obligations	103,969	119,179	123,794	34,925
Less Reimbursements	8,471	6,043	6,420	1,605
Total Direct Obligations	95,498	113,136	117,374	33,980
4. PERMANENT CHANGE OF STATION TRAVEL				
Accession Travel	12,349	17,409	16,698	4,309
Training Travel	3,077	3,966	4,436	1,806
Operational Travel	9,456	7,767	18,026	5,449
Rotational Travel	46,195	48,099	59,391	15,358
Separation Travel	13,538	17,537	18,461	5,998
Travel of Organized Units	-	-	3,727	1,273
Total Obligations	84,615	94,778	120,739	34,193
Less Reimbursements	645	850	850	213
Total Direct Obligations	83,970	93,928	119,889	33,980
5. OTHER MILITARY PERSONNEL COSTS				
Apprehension of Military Deserters, Absentees and Escaped Military Prisoners	1,600	1,550	1,400	350
Interest on Uniformed Services Savings Deposits	690	450	450	125
Missing-in-Action	933	1,082	1,094	276
Death Gratuities	1,198	665	-0-	-0-
Servicemen's Group Life Insurance	4,421	3,747	2,944	751
Total Obligations				
Less Reimbursements	$ 4,421	$ 3,747	$ 2,944	$ 751
Total Direct Obligations				

RESERVE RECRUITER AIDES

General RYAN. This appropriation is for members of the Marine Corps Reserve. It also provides for assigning of Reserves to active duty to support the Reserve program.

Now, beginning in fiscal year 1976, this appropriation also provides funds for the support of Reserve recruiter aides. This is a program that was formerly funded in the regular Marine Corps personnel appropriation. The appropriation for operation and maintenance supports training costs including exercises, maintenance of equipment, replacement of minor items of equipment.

THE USMC RESERVE MISSION

Now we have a threefold mission in the Marine Corps Reserve in the event of a national emergency. One is to provide a combat-ready division wing team. Second, to provide selected units as required to fill out regular divisions and, last, to provide individual fillers to the regular establishment.

Senator INOUYE. Are you able to carry out this mission at this point today?

General RYAN. Yes; we are. We do have a combat ready Reserve. Regular units check our Reserve units during their 2 weeks active duty. The commanders submit their evaluation of how long it would take these units to be ready for combat. Of our units that went to active duty last year, 154 were listed by the regular commander as being ready for combat in 30 days or less; 123 in 60 days or less; and 2 in over 60 days.

TRAINING SUPPORT

Senator INOUYE. I noticed there is a restriction on travel outside of CONUS. How do you carry out your jungle training and your assault-landing training?

General RYAN. This is difficult, Mr. Chairman. As a matter of fact, we would like to see that restriction lifted. What I have been doing this year, in order to accomplish this, is to use National Guard aircraft because the restriction says we cannot go out of CONUS unless we can travel by Reserve component aircraft. The National Guard provided us support to get one company to Alaska for arctic mountain warfare training.

Senator INOUYE. Who pays for that?

General RYAN. It is part of the Air National Guard's training allowance. We more or less scrounged. We sent an artillery battery to fire with the Regular artillery in Vieques, Puerto Rico. We sent an engineer unit to construct installations at Kaneohe Bay, Hawaii. We hope to be able to send a company, if we can get the National Guard lift, to Panama for jungle training. We need training in various climes and terrain that we can't duplicate in the United States.

Senator INOUYE. If the restriction is lifted, will you continue using National Guard airlift?

General RYAN. To the extent that we can; yes, sir. We will use it first because that money is already appropriated. So what we are using is training time that the National Guard would have to fly. We

try to time out training to take advantage of when the lift is available, that is, in the winter months.

Senator INOUYE. If the restriction is lifted, how much more do you envision requesting, sir?

General RYAN. I do have a figure and the number of units. It would come to about $150,000 additional in our program to send these overseas.

Senator INOUYE. That's your total?

General RYAN. Yes, sir; because you see I have subtracted what they would have paid to go to their regular training. In some instances it costs less. I have one unit that if sent to Puerto Rico instead of where they are scheduled to go it would cost $4,000 less because of the distance involved.

So, $151,000 would enable me to send a rifle company to Fort Greeley, Alaska, a rifle company to Panama, and a unit to Roosevelt Roads, Puerto Rico.

It would enable me to send an artillery battery to fire with the Regular artillery. It would enable me to send an engineer unit to Vieques Island, to rebuild the training camp there, and two air units to Roosevelt Roads where we would be able to participate in amphibious exercises and combined arms training which we can't do in the eastern part of the United States.

Senator INOUYE. That sounds very reasonable.

REGULAR-RESERVE INTERACTION

General RYAN. Thank you, sir.

It enables us to get our Reserve units in with the Regulars.

Senator INOUYE. Will this require action by the authorizing committee, or can it be done by the Appropriations Committee?

General RYAN. I think the Appropriations Committee in the House last year, Mr. Chairman, said that all overseas training will be terminated until it has been studied. As far as I know, no study has been made.

Senator INOUYE. If the restriction were modified so that you could not go outside of CONUS, but could go to Puerto Rico, Panama, Hawaii, Alaska—would that meet your requirements?

General RYAN. It would help, Mr. Chairman. We would like to see the restriction lifted completely. It would enable us to send our air units to participate with the 6th Fleet in the Mediterranean. It would enable our infantry units to exercise in rapid aerial reinforcement of the units in the Mediterranean. I am not looking for a liberty port. I am looking for a chance to put our Reserve units in with Regular units and demonstrate to the Europeans and others that we have a viable reserve.

Senator INOUYE. Thank you.

CONGRESSIONAL REQUESTED STUDY

General RYAN. Last year we were directed by Congress to make a study to see whether there were any equipments or mission trade offs between the Regulars and Reserves. We have conducted that study in conjunction with DOD. Because of the time constrained missions of

the Regular forces we could find no mission or equipment trade offs but we have a continuing study underway to insure that each of our reserve units is justified and can be supported.

What we are doing in this particular study is to see whether or not some of our support units should be converted to combat units. In other words, if a unit is not required in combat in the first 90 days it raises a question whether we should really have it or change it to a combat unit that would be required.

SUPPORT-COMBAT BALANCE

Senator INOUYE. What is the desirable balance between support and combat?

General RYAN. Sir, I will have to furnish the figures for the record, I think we have about a 20 to 80 percent ratio at this time. I am frank to say that this is an off-the-cuff estimate. I will have to go back to see.

[The information follows:]

Unlike the active structure, the Marine Corps Reserve has no units with a purely base or administrative supporting mission upon mobilization. The Marine Corps Reserve is entirely combat oriented. The present combat to combat service support ratio within the Reserve structure, however, is 69.3/30.7. The Marine Corps Reserve currently is evaluating its combat service support units, and any not determined critical to operations within the first 90 days of combat, or which can be rapidly staffed from the Individual Ready Reserve, will be converted to combat units.

DRILL PAY STRENGTH

General RYAN. We do have some units that will not be needed in the first ninety days, in my opinion, and we are recommending that those be changed to combat units.

We want to reduce our drill pay strength to that for which we can provide equipment. We have no intention of deactivating units. For instance, in our Aircraft wing, our T/O's were based on a full bag of aircraft to every squadron. Some squadrons have six aircraft, some nine, some 12. As in the regular forces, we are revising the T/O on the basis of assigned aircraft. This is continuing.

Senator INOUYE. Equipment is the controlling factor?

General RYAN. Yes, sir. For instance, in the wing we have reduced our Reserve personnel requirements by 1,000 in this revision of T/O's. It doesn't reflect any reduction in units. It does not reflect any reduced dependence on the Reserve, it is just realistic.

Senator INOUYE. If the table of equipment calls for 12 in a squadron, but you have only six, does that limit your personnel to six?

General RYAN. That is right. The Regulars do this. The wartime strength of a squadron would be about 20 aircraft. Our regular squadrons don't have that. So they revise their T/O's to what they are assigned. If we get more aircraft our T/O's would be higher. There is no use recruiting people to man equipment that we don't have and which is not programed. Then we have to be prepared for the introduction of new antitank missiles. As a result of our review to date we have reduced our requirement for Reserve personnel. In other words, to man our Division/Wing Team. It will take 41,126 personnel. Ninety percent of the Regulars who are attached to the Reserve division and wing will mobilize with these units which further reduces our Reserve requirement to 37,188.

EFFECT OF REDUCTIONS ON CAPABILITY

When I appeared last year I said our requirement was 38,500. Again I would like to emphasize that that reduction in requirement does not reflect a reduction in capability.

Last year I mentioned that we had devised a long-range personnel plan to get us to our required strength. I said it would take until 1979. But our improved procurement and retention figures indicate that we can get up to our mobilization requirement by the end of fiscal year 1978.

In the last fiscal year we went down 5,000 in strength in our Organized Reserve units. So far this year we have come up 1,700. This is due both to improved procurement and improved retention.

Last year we had a reenlistment rate for first term personnel of 2 percent. So far this year it has run about 20 percent Now, our heavy loss period occurs beginning in January through June. But I still think we can maintain the 20 percent first-term reenlistment rate.

Senator INOUYE. To what do you attribute that increase?

REENLISTMENTS

General RYAN. Several things. Obviously the economy has had an effect. But I think a more effective program of retention and procurement, and actually working at retention has been the biggest factor.

I don't think that we had a very good program last year to retain people. So we have done things both to improve the quality of our training and to convince the Marines to stay with us and it has been successful.

Senator INOUYE. What percentage of your men are black?

General RYAN. It is about 14 percent of our overall strength. Our input this year, new input, that is nonprior service recruits, is running about 24 percent black. But our overall minority strength is about 14 percent. This will probably rise over the years I would think. Regarding our prior service personnel, we've had about 3,000 join so far this year, and I don't know how many were black or other minorities.

RACIAL DIFFICULTIES

Senator YOUNG. Before you leave that subject, the Marine Corps had a racial problem at Camp Lejeune. Has that problem improved?

General RYAN. It had improved considerably by the time I left, and I think the improvement has continued.

I don't have the personal knowledge of what is occurring down there. I haven't heard of any problems so I presume it is better.

General JASKILKA. The situation is improving in the complex at large. The way we measure it is in the number of racial incidents that occur on a monthly basis. In the period when General Ryan was commanding general of the division the incidents ran on the order of 60 to 70 a month. Today it is down to less than half of that. Most of them are not serious.

We think the education program that the Marine Corps instituted in 1969 and the efforts that the officers at all levels and staff NCO's

have been making since that time have tended to ameliorate race relations.

The ingredients for explosion are always there without a doubt. The fact is that we think it is much better, there is greater understanding among black and white. We think we are doing much better.

Senator YOUNG. That is encouraging. As you know, we have two big air bases in North Dakota. We have only about 200 blacks in the State. We have an increasing problem. Part of it is understandable because they have no place to go to be with their own people.

General RYAN. I was in Wespac with the 3d Division 1½ years ago and my experience there bears out what General Jaskilka said. You can have a fight any time you want it. If you had one it would tend to separate along racial lines. But they were very few and far between.

Senator YOUNG. Minority groups are getting more disturbed than ever. We never used to have Indian problems. Now we are having them more and more.

EDUCATION

General RYAN. Along with improving our procurement procedures we are working to improve the quality of the personnel we procure. The Commandant has decreed that the same criteria would apply for enlistments in both the Reserves and Regulars. We have noticed a gradual improvement in our recruit quality. Our attrition rate at boot camp last year was 20 percent, but it is now about 15 percent due, we think, to improved quality. Our aim is 55 percent high school graduates. In January we had 61 percent high school graduates or their equivalent in GED.

Senator INOUYE. Could you tell us more about the program which enlists high school students prior to graduation?

General RYAN. This is a program that was instituted by the Department of Defense last year. It allows us to enlist high school students 6 months prior to graduation, put them in a unit, pay them, then send them to boot camp in the summer months after they complete high school.

Senator INOUYE. They are not taking basic training while in high school?

General RYAN. No. They are drilling with their units. The unit usually runs a little basic training section for these individuals.

Senator INOUYE. What do you pay these fellows?

General RYAN. They are paid at the rate of a private, which is approximately $45 a drill weekend. They drill once a month. We had programed for 400 this year.

Senator INOUYE. What is the total cost of this program?

General RYAN. Total cost is $67,000 this year and $73,000 is in the budget for next year. For training alone $50,000 is in the budget this year and $58,000 for next year, although we are programing fewer recruits in fiscal year 1976.

Senator INOUYE. Are the other services doing the same thing?

General RYAN. They are authorized to do the same thing. I am under the impression they are. I don't know how successful they are. We have not been as successful as I would have liked. I think we can do better.

Senator INOUYE. Have you had any resistance to this on the campuses.

General RYAN. Only on those where it is difficult to get on for any type of recruiting.

Senator INOUYE. What is the general picture on recruiting on the campuses of colleges and high schools?

There was a period not too long ago when military people were being thrown off many campuses.

CAMPUS RECRUITMENT PROSPECTUS

General JASKILKA. The recruiting picture has improved very markedly in the past few years. We have had only one or two isolated incidents of Marine recruiters on college campuses being troubled. Except for that, it has been excellent. The high schools in particular have improved in that they allow our recruiters in greater groups now to come onboard and recruit. I think we can trace that back to an American Personnel Guidance Association meeting that took place in New Orleans last April. I think there were about 5,000 such counsellors from both the colleges and high schools who attended. They invited Admiral Zumwalt to speak, and every service was represented. I happened to be there as well.

It was a very interesting thing in that they were not warm in their reception of us initially but they were cordial and correct.

The next morning when we met the leaders of that group to talk about the specifications of the manual the counsellors could use to describe opportunities in the Armed Forces they seemed to warm up.

When we left we felt that they had agreed that we had a place on the college and high school campuses; that we are a bona fide and viable employer of their graduates, and that it was their duty to make their students available to be informed of all the opportunities that the Armed Forces have to offer.

On balance I think the picture has improved greatly.

ACADEMY APPLICANTS

Senator INOUYE. I am glad to hear that. However, there is one more area that I personally feel has not improved at all, and that is in attracting young men for the Academies. When I came to the Senate 16 years ago, I must have had at least 30 first-class young men applying for every opening available to me. I am sad to tell you that for the past 5 years, I haven't been filling all the openings because I refuse to submit names, just for the sake of submitting names.

There are some who just don't cut the mustard. I don't know what we can do. I don't know if other Senators are experiencing this. In fact, most of my appointees are now sons of military personnel.

General JASKILKA. My impression, sir, is that the Naval Academy at least is turning applicants away. They have more candidates than they have positions.

Admiral COOKE. Overall, in the Naval Academy we have some ratio of 7 to 1 applicants for admission. I don't know how that breaks down in individual areas. I had not known that you had such a situation.

DROPOUT RATE AT NAVAL ACADEMY

Senator YOUNG. May I ask a question at this point. What is the dropout rate at the Navy Academy? Has it increased in the last few years?

Admiral COOKE. I don't know what it was. It was about 20 percent, I believe, but I am not sure of that figure. I will get an accurate figure. It did go up in the last few years.

I don't know where it is now. I don't know in the last year or so what the trend is. I will have to get that for you.

[The information follows:]

ATTRITION RATE AT NAVAL ACADEMY

Total attrition for the Class of 1974 was 34.0%. Attrition at the Naval Academy is about 10% higher than we would like, but is still about 10% lower than the national average of all institutions in the U.S. offering a 4-year bachelors degree, and 5% lower than the 4-year colleges in the highest category of academic selectivity with which we might reasonably be compared.

It has risen slowly at about ½% a year since 1964. This increase appears to have been arrested in the two most junior classes at the Naval Academy, where the rates are lower than at any other service academy. It is too early however to predict whether the long term upward trend in 4-year attrition has been fully turned around.

Three components, each with different trends make up total attrition. Voluntary resignations comprise the largest portion, and have been steadily and slowly increasing since the Class of '64 with 23.2% of the last class to graduate leaving voluntarily. Academic discharge has been a slowly decreasing cause of separation for 15 years and was 6.7% for the Class of '74. All other causes including conduct and aptitude failures, and medical discharges have been relatively constant for many years at about 4 to 5%.

BLUE AND GOLD PROGRAM

Senator INOUYE. You give them a hard time the first 2 years. You really wash out the ones who are not interested.

Admiral COOKE. Yes, sir.

General RYAN. We are doing two things in the Marine Corps Reserve to help recruiting for the Naval Academy. First we are cooperating with the Navy blue and gold program because eventually some graduates of the Naval Academy will end up in the Marine Corps Reserve.

Second, we have one Reserve general who is a professor at a university. He is on the doctoral level and is accepted in the educational community. He has been given the task of deputy for procurement to talk to guidance counsellors and things of this nature. He is one of the team, so he is accepted and has been very effective in getting us into schools.

IMPROVED TECHNICAL TRAINING

We are also studying ways to improve our ability to provide trained technicians. One of our most successful programs is our vocational technical program. This is a program where we are authorized to send the individual to a civilian educational institution, excuse him from drill, pay him his drill pay, and pay his cost of tuition.

Senator INOUYE. Is this in this immediate neighborhood?

General RYAN. Yes, sir, it is in this immediate neighborhood. We don't pay any travel cost off to some other place. We train such technicians as welders, mechanics. We send electronic technicians to a basic electronics course. We usually go to the institution and take a military course and say, "Can you duplicate it or can you do it as close as possible?"

Senator INOUYE. The individual receives drill pay?

General RYAN. Yes, a total of four drills a month. He may go to school longer than that but he only gets paid what the drill pay is authorized.

Senator INOUYE. What is the relationship between the Marine Corps and the civilian establishment?

General RYAN. We only go to the school and say, "Will you do this, and will your training meet our requirements?"

Senator INOUYE. Do you pay the school?

General RYAN. Yes. Any tuition that is involved. The average cost per hour this year for training was $1.35.

Senator INOUYE. Is that less expensive than it would be in the corps?

General RYAN. That is much cheaper. I don't have any figures to quote. In Peoria I talked to an engineering unit there. They took the syllabus of the engineering school to a local technical school. And the school was able to practically duplicate the course for our engineers in that unit. They have been very cooperative and glad to participate. The $1.35 does not include, of course, the pay to the individual. That would raise it considerably, you see.

WARRANT OFFICER PROGRAM

In order to improve our technical proficiency we are looking into the possibility of expanding our warrant officer program. Right now if a highly qualified noncommissioned officer makes warrant officer he has to drop out of the program because there is no billet for him. We want to see if we can expand it.

Senator INOUYE. How many slots do you have now?

General RYAN. We have 289. I don't have an answer as to what we would like to have but I think it would be in the vicinity of 330, which I think we can show a definite requirement for.

Senator INOUYE. What would the Table of Organization call for?

General RYAN. If I added all the command echelons I think it would be in the vicinity of 300.

Senator INOUYE. So you are understrength, as far as warrant officers are concerned.

General RYAN. If I considered the mobilization requirement, I am not under strength in an individual unit.

Senator INOUYE. Do sufficient numbers respond to fill the slots?

General RYAN. Yes. Even though some of them turn it down because if they make warrant officer they have to drop out of the program.

Senator INOUYE. You may proceed.

RESERVE OUTFITTING

General RYAN. As far as equipment is concerned, our Reserve division is equipped exactly like a Regular division. When we buy equip-

ment for an active division we buy it for the Reserve division, too.

We have introduced the LVTP–7 and the Gamma Goat. We are scheduled to get the M–60 tank and the antitank missile. Regarding the Reserve aircraft wing it is a little different. It is too expensive to buy new aircraft for a Reserve wing. So we have older aircraft but highly efficient ones.

Senator INOUYE. What type of aircraft?

General RYAN. At the end of the year we will have all F–4's in our three fighter squadrons. Currently we have two squadrons of F–8's and one of F–4's. Our A–4's will be the A–4E and F models by the end of the year.

Our transports are C–119, a very aged bird. We will have six KC–130's by the end of the year.

Senator INOUYE. Will you need additional personnel?

General RYAN. I think we can man the wing within our present manning level. When we reduced our TO's we planned for the increased aircraft. We will increase flying officers by 35 because the F–8 is a single seat while the F–4 is dual seated. We will be going up 35 flying officers but we will be within the personnel request that we have in the budget which is a slight increase from last year.

Senator YOUNG. May I ask a question?

MIDEAST WAR EQUIPMENT LOSSES

Did the marines lose any equipment during the recent Mideast war?

General RYAN. I don't know about the overall Marine Corps. We did lose some A–4's from the Reserve, I think it was six, something of that nature, and I will have to furnish it for the record. How much came out of both the Regulars and Reserves sir, I don't known.

[The information follows:]

Within the Department of the Navy, 46 A–4E/F aircraft were shipped to Israel in the 1973 Mid-East War. Twenty-nine of these were taken from USN support and 17 from Marine Corps active and reserve light attack squadrons and from the Marine Corps A–4 replacement training squadron. The Marine active tactical forces deficit was made up within 6 months while Marine reserve light attack modernization has continued to run behind pre-Middle East War schedules. Marine Corps active tactical and training assets were reconstituted from Navy support assets, with Marine reserve modernization receiving second priority.

Eight CH–53A+ helicopters were diverted from delivery to the 3d Marine Aircraft Wing to Israel. These particular helicopters had been on loan to the Navy for minesweeping operations and had been uprated to the more capable CH–53D configuration (More powerful engines and uprated components). Presently 3d Marine Aircraft Wing is operating eight of the less capable CH–53A helicopters that were to be replaced with those eight CH–53A+ diverted to Israel.

TANKS

Senator YOUNG. You don't know the information about tanks?

General RYAN. We lost no tanks from the reserve.

General SIMLIK. We supplied some M–48 tanks to the Army, who in turn sent them to Israel. This did not bother us a bit because we are in the process of converting M–48's to M–60's.

Senator YOUNG. How many M–60's is the Marine Corps getting?

General RYAN. So far we have had no delay in the M–60 program.

Senator INOUYE. Do you still show this on your table of equipment?

General SIMLIK. As material which we have given to Israel?

Senator INOUYE. How do you show it in your table? Like the M–48's, that you sent out?

General SIMLIK. Those M–48's were not taken out of the operating units, Mr. Chairman, they were taken out of the war reserves. So there was no loss of M–48 tanks in our operating units.

Senator INOUYE. What about the aircraft?

General SIMLIK. The aircraft came out of the training squadron but they have been replaced. We have gotten them back.

Senator INOUYE. All right, thank you.

RESERVE TRAVEL

General RYAN. Mr. Chairman, I want to bring up the problem of travel for the Marine Corps Reserve. Report No. 931255 of the House of Representatives published in August 1974 reflected a personnel travel request for the Marine Corps Reserves of $23,488,000. It recommended a reduction of $3,300,000 to this. In actuality, our request was only $8,349,000. The same recommended reduction comes to 40 percent of our actual travel budget.

Senator INOUYE. How did this occur?

General RYAN. We think it was a mistake and pointed it out. Maybe it was not considered a mistake by the House, and we are due to go up for a reprograming request, $3 million, a little later. When we got this cut, we made every effort to live within it. Selected units that had not trained at their home station in 1974 were ordered to do so. 1,200 approximately—I don't have the exact numbers yet—were scheduled to train at their home station.

We established an 800-mile bus policy, I will call it. In other words, if the unit is within 800 miles of the training, they had to go by bus. We rescheduled certain units to train at installations of other services nearby. That came to 3,200 people. Then we went to the Air National Guard and said: "If you are moving on a training flight, can you carry some of us?"

All of that reduced our cost but it did so at a training cost. For instance, the 800-mile bus policy meant that 4 of our 15 annual days were spent traveling or recovering from traveling. So I have rescinded that 800-mile bus policy down to 400 or eight hours so that we can get in the training time that we need.

TRAVEL COST REPROGRAMMING

The other actions that we have taken have reduced our requirements. We have gone in for $2,300,000 in reprograming. Actually I think that when we get up—and I know we will be able to say that, instead of the $2.3 million, it will be about $1 million additional in travel because these steps we have taken have reduced our requirement.

I will need the money that we were going to reprogram for pay and allowance because of our increased strength and the success of our program.

Senator INOUYE. In your attempt to reduce cost, you increased it?

General RYAN. No, sir; we had asked for $8,349,000. We reduced it. Now we are saying that, because of the success of the efforts to reduce cost, it would come to $6.5 million. So we reduced our cost almost $2 million from what we originally asked for.

We do have a reprograming request that is due for consideration before the House on Thursday. We are going to work to keep those travel costs to an absolute minimum. We are planning to see whether we can train closer to home, however, being an amphibious force, we do have to go to the coast. We can train at home for 1 year or 2 but then we have to send the units over to the coast for amphibious training and to work with the regular forces.

I have already mentioned, Mr. Chairman, our requirement for overseas training. I think I clarified our position.

So our budget request for the appropriation fiscal years 1976 and 197T is for $72.7 million and $28.9 million, respectively. This compares to the current fiscal year 1975 total obligational authority of $65.5 million, and is an increase of $7.2 million; due to the increased strength for drill purposes, an increase of approximately 1,000 in non-prior-service recruit input, an increase of $1.3 million due to the transfer of the recruiter aid program, the full funding of the October first pay raise and an increase of 317 Reserve officer candidates. The reason for the 3 months being $28.9 million is because most of our annual training for active duty is during that period.

RESERVES OPERATION AND MAINTENANCE

Changes in the operations and maintenance appropriation have been driven by factors, both internal and external, to the Reserve. Some of the self-imposed changes include increased effort to support recruiting, a stepped-up program to increase technical proficiency and, consequently, readiness by means of an increased vocational-technical training program. External forces, of course, are inflation caused, the most prominent being fuel price increases, civilian pay raise, increases for supplies and training, administrative support, and support for recruiting.

We are requesting $12.1 million in fiscal year 1976 and $3.5 million in the follow-on transition period, compared to the obligational authority of $11.7 million for fiscal year 1975. It is essentially a level program.

The Marine Corps Reserve is programed to stay relatively stable under the Fourth Marine Division Combat Wing team concept with a strength approaching 100 percent of that required for mobilization by the end of fiscal year 1978.

I am encouraged by the recent increase in non-prior-service recruiting and, as an aside here, the procurement of prior-service personnel and getting them to stick around with us.

The current end-strength deficiencies will not be resolved immediately. It will take us approximately 2 years but a gradual and orderly growth is planned to meet our full mobilization requirement.

Equipment modernization is proceeding as well as can be expected. When we complete these programs in 1978, we will have a modern, well-equipped organized Reserve.

Mr. Chairman, that completes my summary statement.

BIOGRAPHY AND PREPARED STATEMENT

Senator INOUYE. Thank you, General Ryan. Your biography and prepared statement will be placed in the record at this point.

[The biography and statement follow:]

MAJOR GENERAL MICHAEL P. RYAN, USMC
Director of Marine Corps Reserve Division, HQMC

Michael Patrick Ryan, who earned the Navy Cross and the British Distinguished Service Cross at Tarawa, was born in Osage City, Kansas, January 31, 1916, and attended high school in Atchison and Kansas City, Kansas. He attended Rockhurst College in Missouri and, later, George Washington University, majoring in Political Science.

Enlisting in the Marine Corps Reserve in 1933, he was called to extended active duty in November 1940 with the 15th Reserve Battalion of Galveston, Texas, and commissioned a Marine second lieutenant.

As a major during World War II, he served initially with the Sixth Marines in Iceland. Later assigned to the Second Marines, 2d Marine Division, Major Ryan took part in combat on Guadalcanal, Tarawa, Saipan, and Tinian. The Navy Cross was awarded him for heroism in leading his company and two others, which he organized into a composite infantry battalion, in a bitterly fought attack on Betio in the Tarawa campaign. He also received the British Distinguished Service Cross for his actions at Tarawa, Gilbert Islands, on November 20-24, 1943.

Following the war, he served at Marine Corps Schools, Quantico, Virginia, until 1948; at Headquarters Marine Corps until 1951; and with the U. S. Naval Mission in Venezuela from 1951 until 1953. In July 1954, he reported to the 1st Battalion, Seventh Marines in Korea, as a battalion commander. He was promoted to lieutenant colonel in April 1950, and to colonel 1958.

During subsequent assignments, he served as a training officer with Fleet Marine Force, Pacific, in Hawaii (1955-57); with the G-1 Division, Headquarters Marine Corps (1957-60); and as Commanding Officer, Recruit Training Regiment, Recruit Depot, Parris Island, South Carolina (1960-63). He was designated Assistant Director, Joint Planning Group, Office of the Deputy Chief of Staff (Plans & Programs), Headquarters Marine Corps, in July 1964.

He completed the Junior Course, Amphibious Warfare School, Quantico (1946); Command and General Staff College, Fort Leavenworth, Kansas (1954); and the National War College, Washington, D. C. (1964).

In January 1966, he was promoted to brigadier general and assumed duties as Assistant Chief of Staff, G-2, while serving concurrently with the Joint Planning Group at Headquarters Marine Corps. He received his B. A. degree from George Washington University in 1966.

From April 1966 until December 1966, BGen. Ryan served as Commanding General, 9th Marine Amphibious Brigade/Commanding General, FMF, Seventh Fleet. From January until May 1967, he was Assistant Division Commander, 3d Marine Division, Republic of Vietnam. For his service in the latter capacity, he was awarded the Legion of Merit with Combat "V".

Upon his return to the United States, Ryan reported to the Marine Corps Base, Quantico, and served for one year as Director, Command and Staff College, and was further assigned in June 1968 as Deputy for Education/Director, Education Center. On Sept. 1, 1968, he was promoted to major general.

After his detachment from Quantico, in May 1969, MajGen. Ryan served for two years as Commanding General, 2d Marine Division, FMF, Marine Corps Base, Camp Lejeune, N. C. This was followed by duty as Deputy Commander, FMF, Atlantic, in Norfolk, Virginia, from June 1971 to December 1972. He assumed the assignment as Commanding General, III Marine Amphibious Force in January 1973. In January 1974, he assumed his present assignment.

A complete list of his medals and decorations includes: the Navy Cross; the Legion of Merit with Combat "V"; the Presidential Unit Citation with two bronze stars; the American Defense Service Medal; the European-African-Middle Eastern Campaign Medal; the Asiatic-Pacific Campaign Medal with five engagement stars; the American Campaign Medal; the World War II Victory Medal; the National Defense Service Medal with one bronze star; the Korean Service Medal; the Vietnam Service Medal; the Distinguished Service Cross (British Award); the Vietnamese Cross of Gallantry with Palm; the Vietnamese National Order, 5th Class; the United Nations Service Medal; and the Republic of Vietnam Campaign Medal.

MajGen. Ryan and his wife, the former Marjorie Allen of Galveston, Texas, have three children: Michael Jr., Allen, and Theresa.

STATEMENT OF MAJOR GENERAL MICHAEL P. RYAN

Mr. Chairman...members of the Committee:

I am Major General Michael P. RYAN, Director of Marine Corps Reserve. I appreciate the opportunity to appear before you today to present information relative to the Fiscal Years 1976 and 197T budget requests for the Appropriations Reserve Personnel, Marine Corps and Operations and Maintenance, Marine Corps Reserve.

The Appropriation Reserve Personnel, Marine Corps provides for pay and allowances, clothing, and travel and per diem for members of the Marine Corps Reserve and for reserve officer candidates. It also provides for assigning reserves to active duty to support the Marine Corps Reserve program as authorized under Section 265 of Title 10, U. S. Code and for clothing for the Marine Corps Junior ROTC program. Beginning in Fiscal Year 1976 this appropriation also provides funds for support of reserve recruiter aides; a program formerly funded in the Regular Marine Corps Personnel Appropriation (MPMC).

The Appropriation Operations and Maintenance, Marine Corps Reserve provides funds for the operating and training costs for Marine Corps Reserve units not provided for by other appropriations. Activities funded by this appropriation include training exercises; maintenance of equipment used for training; replacement of minor end items of equipment used in training; maintenance of reserve training centers; recruiting efforts for the Selected Reserve, and administrative support for the Marine Corps Reserve program.

MISSION AND FORCES

A threefold mission is perceived for the Marine Corps Reserve in the event of war or national emergency: providing, (1) a combat ready division/wing team, (2) selected units, or (3) individual fillers to the regular establishment. The mission executed would depend upon the mobilization scenario. The Marine Corps Reserve is structured to facilitate accomplishment of these missions and is comprised of the Fourth Marine Division, the Fourth Marine Aircraft Wing, Combat Support, Combat Service Support units, and individual ready non-drill pay reservists.

MANPOWER REQUIREMENT

Our reserve force is the primary source of additional units and individuals in any rapid expansion of the Marine Corps. This includes augmenting the three active division/wing teams, mobilizing a fourth division/wing team and expanding the supporting establishment.

The organized reserve is structured to provide the basis for meeting the mobilization requirement for four division/wing teams. This, in turn, determines the manpower requirement and the projected strength for our organized reserve component for the fiscal year for which we program. Specifically, the size, or the manpower requirement for the Marine Corps Selected Reserve, is determined by the following factors:

(1) Approved Tables of Organization

(2) Strength of regular personnel assigned to Selected Reserve units as Inspectors-Instructors or Marine Air Reserve Training Detachment staffs. Ninety percent of

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these individuals mobilize with their respective reserve units. This reduces the manpower requirement for Selected Reservists as compared to the total Marine Corps Reserve requirement and provides the Selected Reserve with a hard core nucleus of active force Marines at mobilization.

CHANGE IN MANPOWER REQUIREMENTS

In compliance with a congressional directive, we have reviewed mission and equipment trade-offs between our regular and reserve forces. This review was conducted in conjunction with the OSD "Total Force Study". Due to the time constrained missions of the regular forces, neither we nor DOD have found any areas where mission or equipment trade-offs between Marine Corps Regular and Reserve forces would be advisable.

However, we do have under way a critical analysis of our structure both to reduce our response times to combat and to insure that our units and personnel are justified. This is a continuing review and is designed to (1) convert support units whose missions are not time constrained into combat units; (2) reduce paid drill strength to that for which equipment can be provided; and (3) to provide for the introduction of new weapons such as anti-tank missiles.

So far, as a result of our review, we have reduced our aviation tables of organization to a size commensurate to the assigned aircraft. Our tables of organization were originally designed to support an optimum wartime aircraft inventory of over 300 aircraft. In actuality, due to fiscal realities, the programmed and on-hand aircraft inventory totals only slightly more than 200 aircraft. As a result

of this review, we have reduced our reserve manpower requirement for aviation by about 1,000. While we have reduced overall aviation manpower requirements to conform to the number of aircraft programmed for the Marine Corps Reserve, the number of reserve flying officers will increase by 35 in Fiscal Year 1976. This is due to aircraft modernization. Our single seat F-8s will be replaced by F-4s which require a two man crew. Replacement of the C-119 by the larger KC-130 also contributes to this increase.

We are reviewing our ground tables of organization in the same way and have thus far converted a searchlight unit to an infantry company. We will make further changes, as necessary, in the future. Last year, we stated that our reserve manpower requirements were 38,500 personnel. As a result of our tables of organization revisions, our reserve manpower requirement is now 37,188., or a reduction of 1,312 drill pay reservists. The total table of organization calls for 41,126 for the Marine Corps Reserve. Subtracting 90 percent of the 4,375 billets of the Table of Organization for Regular Marine personnel assigned to train reserve units, gives us a Selected Reserve requirement of 37,188 for drill pay purposes.

While we have a drill pay requirement of 37,188, our actual onboard strength including those presently in recruit training as of 31 January was 32,877.

MANPOWER PROCUREMENT

We have devised a long range personnel plan which will enable us to gradually build up to our required strength. Last year, we estimated that this would require five years,

or until 1979. Our improved procurement and retention picture has convinced us that we can now reach our required strength in an orderly manner by end Fiscal Year 1977. If this occurs, we would need more funds than present DOD fiscal constraints permit. In fact, this is true for FY-76, and 197T also. End strength in the current year is already over that budgeted for. This may result in curtailment of other essential programs to provide funds for pay and allowances, but achieving maximum force readiness hinges upon reaching our mobilization requirement as soon as possible.

In Fiscal Year 1974, our strength declined by about 5,000 men. So far this year we have increased our strength by some 1,700 Reserve Marines and confidently expect to continue our buildup. Our personnel plan provides for an input of 7,000 non-prior service recruits and 5,200 prior service personnel each year. We are currently meeting these goals and have improved our first term retention rate from 2 percent to over 20 percent in the first six months of this fiscal year.

The improved personnel picture is partially the result of the present economic climate, but we give greater credit to the success to prior service procurement and overall improvement in retention on the part of our Reserve units.

We are concentrating our efforts on increasing the quality of our accessions. The Commandant's policy is that the same standards will apply for both Regular and Reserve accessions. In the first six months of FY-75, the percentage of high school/GED graduates was 42 percent as

compared to 35½ percent for FY-74. In addition, the dropout rate at recruit training is down from 20 percent to 15 percent; another indication of improving quality.

We are reviewing our program in order to improve our procurement of high school graduates; our goal is a minimum of 55 percent. In April of 1974, we received approval for and began enlisting high school students within six months of graduation and paying them for attending drill. We plan to send them to recruit training in the summer upon graduation. It is too early to tell how successful this program will be. Our continued aim will be improving quality in both procurement and retention.

In addition to efforts to improve quality of new accessions, we are studying current and proposed programs to upgrade the technical skills of personnel presently on board in an effort to meet skill requirements demanded by sophisticated equipment and modern warfare methods.

One such program which has been highly successful is the Vocational Technical Training Program (VOTEC). This program provides for training of reservists at civilian institutions for the development of military skills in technical areas. In Fiscal Year 1974, 624 personnel in 24 different military occupational skills were trained at a cost of $1.49 per hour. In Fiscal Year 1975, we plan to train 1,371 reserves in 46 military occupational skills at a cost of $1.35 per hour. In Fiscal Year 1976, we have requested an additional $86,000 for a total program of $400,000 which will enable us to expand this program to

include 2,250 Reserve Marines at an approximate cost of $1.27 per hour.

Another effort to improve the quality of our on board personnel assets is underway in an evaluation of the feasibility of expanding our reserve warrant officer program to help meet skill requirements. We are losing some of our best trained enlisted personnel because they apply for warrant officer and then must drop into an inactive status due to the limited number of warrant officer billets in drill units. Such a program would both enable us to retain these highly skilled people and, in addition, would act as a procurement incentive. We anticipate that such a program would be within our current manning level requirements.

EQUIPMENT

The Marine Corps wishes to design and equip its reserve as a strong, combat ready, responsive force. Our ground units are organized and equipped just like regular ground units. When equipment is bought for a regular division, the buy includes the reserve division. Modernization of our ground units therefore is proceeding as fast as funding and manufacturing capabilities will permit. For example, our amphibious capability has been greatly enhanced by completion of the introduction of the LVTP-7 (Landing Tracked Vehicle Personnel) series, and infantry mobility is improved by near completion of the introduction of the Gama Goat, a new highly mobile, rough terrain vehicle. In Fiscal Year 1978, we will start receiving M-60 tanks and anti-tank missiles.

Fixed wing aircraft modernization in the 4th MAW is proceeding somewhat more slowly. This can be attributed to the fact that fixed wing aircraft are normally introduced into the Wing only when newer weapons systems are procured and introduced in the active Navy and Marine Corps inventory. While the 4th MAW's fixed wing inventory is, in fact, older than their active counterparts, it should be noted that these aircraft are modified and overhauled to provide the Reserves with fully combat capable aircraft. This whole process is exemplified by the fact that during FY-76, the 4th MAW will complete the modernization of their fighter force with the addition of 18 more F-4Bs. Additionally, in this time frame, six KC-130 aerial refuelers will replace the C-119s. Update of the older A-4 light attack aircraft models is also scheduled for FY-76 with the introduction of the newer A-4 series aircraft. These replacements will, when accomplished, complete the current modernization of the 4th MAW fixed-wing inventory.

The Marine Reserve Wing already possesses a modern helicopter inventory which provides us with a strong vertical assault capability. Highly sophisticated aircraft such as reconnaissance, electronic counter-measure, and all-weather attack aircraft are not programmed for the Marine Corps Reserve. The complexity and cost of these aircraft systems, and the concomitant active duty support required to maintain them makes it desirable to concentrate our Reserve efforts on maintaining less sophisticated and less expensive weapons systems. Obviously, if we mobilize our Fourth Wing we would have to be reinforced by regular

wing aircraft, just as some of our A-4 squadrons would have to reinforce the regular wings since we maintain a considerable portion of the Marine Corps A-4 assets.

TRAVEL

Annual Training Duty in FY-75 may have to cease at the end of Aprilbecause of a shortage of travel funds.

Report No. 93-1255, of the House of Representatives published in August of 1974, reflected a personnel travel request of $23,488,000 for the Marine Corps Reserve and recommended a reduction of $3,300,000 from this amount. In actuality, the personnel travel request was only for $8,349,000. The recommended reduction of $3,300,000 which was subsequently approved, resulted in only $5,049,000, or 60 percent of our requirements being appropriated.

I implemented the following actions to try to remain within this travel limitation:

(1) Selected units which had not trained at their home training centers during FY-74, were rescheduled to stay home.

(2) An 800-mile bus policy was implemented for travel to annual training duty.

(3) Rescheduling of units to the nearest major military installation that could accept them vice going to a major Marine Corps installation.

It soon became apparent that these actions were creating significant problems in the area of training. I had to rescind the 800-mile bus policy because it caused us to lose two additional days of training to travel. Almost 30 percent of the two weeks annual training period was being

wasted on travel. The effort to reschedule units from Marine installations to other bases has met with only limited success; they had their own Reserve forces to accomodate. Lastly, travel costs increased and on board strength climbed.

Feeling that we had exhausted all efforts to stay within the limitation and still have realistic and meaningful training (albeit at a reduced level), we found it necessary to request reprogramming to increase funding for travel to annual training duty. Our reprogramming request is currently being considered by the Appropriations Committees of both houses. If reprogramming is not approved, or not approved in sufficient time, we will run out of funds for Reserve travel by the end of April. Needless to say, our combat readiness will be considerably degraded from that required to mobilize.

It is our intention to keep our travel costs to the absolute minimum possible and to this end we are reviewing our active duty for training schedules and, wherever possible, scheduling them nearer to home armories.

TRAINING

As regards to quality of training the Congress disallowed any training outside of CONUS for guard and reserve units last year except for that which could be accomplished within their normal flying hour programs. I fully support efforts to reduce costs at a time when the economy requires austerity in public expenditures. However, the Marine Corps Reserve's mission of augmenting Regular and/or allied units

anywhere in the world mandates training under all climatic and terrain conditions.

The majority of overseas training travel done in the past by the Marine Corps Reserve has been to Puerto Rico to utilize the training area and firing ranges which are maintained by the Regular Marine Corps. These training facilities far surpass anything available to us on the East Coast of the United States. Also, the incremental cost to travel to Puerto Rico as compared to training in the United States is very small. For instance, the additional cost to send a squadron located in South Weymouth, Massachusetts to Puerto Rico vice El Toro, California is only $13,044. Also, this cost is offset by a savings five times as great because the planes sent to El Toro have to fly 400 miles round trip on each gunnery and bombing sortie since the nearest live aerial range is 200 miles away; in Puerto Rico, it is only minutes away.

I would also like to send a small number of people to Alaska for cold weather training and to the Canal Zone for jungle warfare training at the U. S. Army school located there. Eventually, this would give us the capability of operating anywhere in the world under any climatic conditions. It would also enable us to train instructors in specialized warfare, who in turn could train other reservists.

The most severe impact of the "out-of-CONUS" restriction, however, is in the area of amphibious training. We are an amphibious force and must train accordingly. As you are aware, the number of naval ships is decreasing.

Also, funding constraints severely limit the number of naval exercises each year. We must be able to take advantage of the few remaining amphibious exercises that are held, whether they be in the Caribbean or a NATO country area. These exercises, held with Regular and allied units, would also greatly enhance total force capability upon mobilization.

Gentlemen, I respectfully request that the Congress rescind this limitation and allow some program that at least permits Reserve combat units to travel outside of CONUS to take advantage of training which is being conducted under conditions or circumstances more favorable than in the U. S. or which is unavailable in the U. S. at all.

COMBAT FLIGHT PROFICIENCY TRAINING

During this fiscal year, fuel and AFTPs were sufficient to provide our reserve pilots with an average of 110 flight hours. Next year will see the completion of our transition from the F-8 single seat fighter to the more sophisticated two seated F-4. Further, the replacement of our aged C-119 reserve transports by the KC-130 refueler-transport, with its increased flight crew, will also be accomplished. Therefore, the Naval aviator and Naval flight officer requirement in the 4th Wing will increase by 35 officers in FY 1976.

In order to achieve and maintain the minimum combat capability in the new and older aircraft, an average of 130 hours per year will be required. This budget provides for the flight hours to enable us to achieve these minimums. While 110 hours, achieved this year, can

reasonably be depended upon to maintain pilot safety in most aircraft, it will not provide the transition to new aircraft flight training required nor will it meet the minimum combat capability that is required of combat pilots. It is for this reason that this budget provides for an increase in AFTPs from 18,718 to 23,300 in the 4th Marine Aircraft Wing.

BUDGET REQUESTS

Reserve Personnel, Marine Corps. The budget requests for this appropriation for Fiscal Years 1976 and 197T are for $72.7 million and $28.9 million, respectively. This compares to a current Fiscal Year 1975 Total Obligational Authority of $65.5 million. The increase of $7.2 million in Fiscal Year 1976 over Fiscal Year 1975 is due to, (1) an increased average strength of 780 personnel for drill pay purposes; (2) an increase of approximately 1,000 in non-prior service recruit input; (3) an increase of $1.3 million due to the transfer of the Reserve Recruiter Aides program; (4) full year funding of the October 1, 1974 pay raise, and (5) an increase of 317 Reserve Officer Candidates. The reason that our budget request for Fiscal Year 197T of $28.9 million is considerably higher for that three month period than the normal one fourth of a year's request would be is because over half of our two weeks of Annual Training Duty is performed during that period. An increase in average strength of 532 personnel is also programmed for that period.

I would like to digress for a moment at this point to mention our Section 265 program, that is, our reserves on

full-time active duty in support of the reserve program. In Fiscal Year 1974, the Congress authorized and appropriated funds to allow us to increase this program from 66 to 80 personnel. In Fiscal Year 1975, you reduced this program back to a level of 66. Besides creating personal problems for the individuals effected, an 18 percent reduction in a program this small resulted in a disproportionally severe impact on our ability to manage the Marine Corps reserve program. I am aware that the other services suffered the same percentage reduction in their Section 265 programs, but an 18 percent reduction of over 200 people has a lesser impact than it does when applied against 80. Department of Defense funding constraints prevented us from asking for a restoration of the 14 personnel cut from this program, but meanwhile, our ability to manage the Marine Corps Reserve has been decremented by more than the 18 percent reduction effected against this program.

Operation and Maintenance, Marine Corps Reserve. Changes within this appropriation have been driven by factors both internal and external to the Marine Corps Reserve. Some self-imposed changes include increased efforts to support recruiting and a stepped-up program to increase technical proficiency and consequently readiness by means of the Vocational and Technical Training Program.

The external factors are the result of inflation, not program increases. The more prominent include fuel price

increases, the civilian pay raise, and price increases for supplies used for training, administrative support, and support of recruiting.

We are requesting $12.1 million in Fiscal Year 1976 and $3.5 million for the follow-on three month transition period. This compares to a Total Obligational Authority of $11.7 million for Fiscal Year 1975.

This essentially is a level program. Therefore, as our on-board strength increases in 1976 and 197T, we will have to redirect some recruiting support back to training.

SUMMARY

The Marine Corps Reserve will remain relatively stable under the Fourth Division/Wing team concept, with strength approaching 100 percent of that required for mobilization by the end of FY-77.

We will continue to place emphasis on increasing combat to support ratios.

I am encouraged by the recent increases in non-prior service recruiting and the improvement in the area of reenlistments of our Reserve Marines. Current end-strength deficiencies will not be resolved immediately, but a gradual and orderly growth is planned to meet full mobilization requirements in the foreseeable future.

Equipment modernization is progressing as rapidly as can be expected considering the overall economic situation. When modernization is completed, the capability of the Marine Corps Reserve to fulfill its mission will be significantly enhanced.

CONCLUSION

Mr. Chairman, this concludes my prepared statement. I have tried to touch briefly on those areas which I thought would be of special interest to the committee. I hope your examination of our budget requests will reveal that we have responded appropriately to your previous counsel and direction. I will be pleased to attempt to answer any questions you may have or to provide such additional information that you may require.

QUESTIONS SUBMITTED BY SENATOR INOUYE

Senator INOUYE. I believe you have before you a list of questions. The committee would appreciate your responding to them for the record.

[The questions and answers follow:]

RESERVE RECRUITER AIDES

Senator INOUYE. How much is being transferred into this appropriation from the regular Marine Corps appropriation to fund reserve recruiter aides. How many aides will be funded in FY 1976 compared with FY 1975?

General RYAN. The funding responsibility for reserve recruiter aides was transferred to the Reserve Personnel appropriation to align the financial responsibility with the purpose of the aides. The principal duty of the recruiter aide is to assist in reserve recruiting. The actual funds were not transferred because the initial program was absorbed by the active accounts within the authorized end strength and man-years. The amount being funded within RPMC is $1.2 million. This will provide for 120 man-years in both Fiscal Years 1975 and 1976.

SELECTED RESERVE REQUIREMENT

Senator INOUYE. Explain the basis for 90% of the inspector-instructors or training detachment staffs to be in the selected reserves. Are all individuals in approved tables of organization and equipment in the selected reserve?

General RYAN. The basis for 90% of the regular personnel assigned as inspector-instructors to Marine Corps Reserve units being assigned to fill billets in selected reserve units is that they provide a hard core nucleus to the reserve unit upon mobilization and would facilitate coordination with regular Marine units both before and after mobilization. Active duty personnel account for 5.7% of the Table of Organization for the 4th Marine Division and 22.8% of the Table of Organization for the 4th Marine Aircraft Wing. On board regular and selected reserve personnel, including those at IADT, are at 88% of the Table of Organization for the Marine Corps Reserve. The remaining 12% will be on board by the end of Fiscal Year 1977.

PRIOR SERVICE RECRUITING RESULTS

Senator INOUYE. What has been the recent success of prior service recruiting for the past two years? What kind of prior service recruiting target are you aiming for?

General RYAN. Prior service recruiting results during the past two years are:

PRIOR SERVICE GAINS AND LOSSES HISTORY

Year	Gains	Losses	Differences
Fiscal year 1973	2,677	2,718	−41
Fiscal year 1974	4,090	3,440	+650
Fiscal year 1975 to Jan. 31, 1975	3,682	2,260	+1,422

Note: It is intended that net prior service gains during fiscal year 1975 will total 2,000.

ENLISTING HIGH SCHOOL STUDENTS

Senator INOUYE. Explain in more detail the program for enlisting high school students prior to graduation. At what rate are they paid? What can these men accomplish prior to receiving basic training, which your statement indicates they do not receive until they graduate from high school? What is the total cost of this program in FY–1975 and FY–1976?

General RYAN. High School students can now be enlisted provided they are available for assignment to boot camp within six months after enlisting and no later than 60 days after graduation. Students so enlisted are encouraged to attend regular monthly drills for pay. They are paid at the rate of a private E–1 if they elect to drill. On-the-job training is provided at the local training center prior to basic training. This reduces the attrition rate at basic training

and shortens the time required for Military Occupational Specialty training after basic. Budgeted total cost for this program in FY–1975 is $67,000 and $73,000 in FY–1976.

VOCATIONAL-TECHNICAL TRAINING PROGRAM

Senator INOUYE. What are some of the skills involved in the vocational technical training program?

General RYAN. The vocational technical training program has provided skill training for some of the duties, tasks, and basic qualifications specified by the Marine Corps for certain of its military occupational specialties. Military occupational specialty skill training for which this program has been used include the following:

Personnel Administration (Typing and office machines).
Utilities (Plumbing and water supply, electrician, refrigeration machanic).
Construction and equipment (Engineer equipment mechanics, carpentry, metal working).
Drafting, surveying and mapping (Map compiler).
Armament repair (Diesel engine mechanics, repair shop machinist).
Radio repair.
Operational communications (Radio and electronics).
Supply administration and operations.
Food service (Cook, baker).
Motor Transport (Auto mechanics).
Data systems.
Bookkeeping and merchandise management.
Photography.
Electronic maintenance.
Aircraft maintenance (Structural mechanics, hydraulic and pneumatic power systems, cleaning and corrosion control).
Avionics (Communications/navigation systems technician, electrical systems technician).
Aircraft crash, fire and rescue.
Weather service.

Reservists are trained at the home training centers and at civilian training facilities within easy commuting distance from reserve training centers since funds are not paid for student transportation to or from the training site.

WARRANT OFFICERS

Senator INOUYE. How many warrant officer slots does the Marine Corps Reserve now have? What are you seeking in the way of an increase?

General RYAN. There are 289 billets for warrant officers in the reserve division and wing. We would like to increase this to approximately 330.

TRAVEL REDUCTIONS

Senator INOUYE. You indicated that your actions, which were taken in order to reduce costs of reserve travel, actually increased them. Would you explain this?

General RYAN. Our efforts to reduce travel costs saved two million dollars.

OVERSEAS TRAINING

Senator INOUYE. How much is budgeted in FY 1976 for overseas training travel? If you could travel overseas, how many individuals would do this overseas training, and what would be the cost as well as the locations and individuals involved?

General RYAN. There are no funds in our FY 1976 budget request for overseas training travel. The incremental cost of such travel would be approximately $156,000. One company (approximately 200 personnel) each would be sent to Cold Weather Training in Alaska, Jungle Warfare Training in Panama and amphibious exercises in Vieques, Puerto Rico and one other site in that area.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I also have some questions to submit for your responses.

Senator INOUYE. Without objection the questions and answers will appear at this point.

[The questions and answers follow:]

TOTAL FORCE CONCEPT

Senator YOUNG. Does the Marine Corps Reserve conform to the "Total Force Concept" of the Department of Defense?

General RYAN. The 4th Marine Division/Aircraft Wing Reserve Structure conforms to the "Total Force Concept" with an austere but capable Reserve providing the added combat and support capabilities required by the strategy but not programmed within the Active Forces.

RESERVES MISSION

Senator YOUNG. What roles and missions will the Reserve be capable of accomplishing in an emergency?

General RYAN. The Organized Marine Corps Reserve provides the initial and primary source for timely augmentation of the active forces during time of emergency when the national security requires additional capability beyond that available in the regular component. Such augmentation may comprise qualified individuals, effective combat and support elements, or a fourth division and aircraft wing, with appropriate support.

RESERVE UNITS STRENGTH

Senator YOUNG. Will Reserve units be at the same strength as like regular units?

General RYAN. The Marine Corps Reserve continually makes those adjustments necessary to "mirror" Regular units; therefore if mobilized, the Reserve units will be manned with the same strength as Regular units.

RESERVE EQUIPAGE

Senator YOUNG. Will the Marine Corps Reserve be equipped with the same equipment as the regular units, if mobilized?

General RYAN. Marine Corps equipment procurement programs include Reserve requirements. Accordingly, the Marine Corps Reserve will have the same ground oriented equipment, within funding and manufacturing constraints upon mobilization as regular units. Since aircraft assigned to our Reserves have first been flown by the active forces, our Reserves upon mobilization will be flying older model aircraft than the regular squadrons. Additionally, our Reserve aircraft do not possess sophisticated electronic countermeasure and all weather attack capabilities presently employed by active forces.

RESERVE RECRUITING

Senator YOUNG. What has been the Marine Corps Reserve experience in recruiting new recruits as well as prior service personnel for Reserve units?

General RYAN. Recruiting new recruits has proven to be much more difficult than recruiting prior service personnel. During the first seven months of Fiscal Year 1975, prior service attainment continued at over 90% of quota and non-prior service increased dramatically from the 45.9% attainment experienced in Fiscal Year 1974 to 86.3% thru January of this year. Indications are for a continued increase in the non-prior service attainment percentage.

RESERVE UNITS SKILL LEVEL

Senator YOUNG. Will the Reserve units assigned F–4 fighters and KC–130 transports have the pilots and enlisted skills to operate them?

General RYAN. Both the F–4 and the KC–130 have been in the active forces for over a decade, therefore, the availability of reserve aircrew members, and prior service enlisted technicians familiar with these aircraft is good. The Marine Corps provides its Reserve with active duty support in the operation and maintenance of Reserve aircraft. Ninety percent of these regular Marines would mobilize with the units they support.

Marine Corps Reserve Program

Senator Young. What effect has the limitation on the active duty reserves in support of the Reserve Program had on the Marine Corps Reserve Program?

General Ryan. The recent reduction has had a serious effect on the program.

In 1970 the Marine Corps renewed a phased implementation and growth of the program, and reached the authorized and funded level of 80 assignments in FY–74. As billets and requirements were identified and fully justified they were approved by the Commandant of the Marine Corps and also included in the manpower and budget submissions. The 80 officers were selected by board action and actually assigned to the required billets. However, in FY–75 the Congress cut that previously approved number back to 66.

The impact of this reduction has been:

(*a*) That 14 formerly occupied billets are being vacated by not renewing the officers' contracts.

(*b*) The previously planned FY–76 full program level of 100 assignments has been delayed several years.

(*c*) The workload of those officers previously assigned in preparing and administering the policies and regulations governing the Marine Corps Reserve has had to be redistributed or left unassigned, with the result of being less responsive or of indefinitely deferring some required Reserve management functions.

Questions Submitted by Senator Thurmond

Senator Inouye. As an ex officio member of this subcommittee, Senator Thurmond has submitted questions relative to your testimony. Would you please answer those for the record.

[The questions and answers follow:]

Reserve Response Time

Senator Thurmond. General Ryan, what progress has been made in the Marine Corps Reserve in the past few years towards reducing the response time of your combat and combat support units?

General Ryan. Steady progress has been made during the past few years toward increasing readiness and reducing response times, beginning with the major reorganization of the Selected Marine Corps Reserve in 1971. That action provided the Marine Corps with a Reserve Force structured and tailored similar to a Regular division/wing team, containing a division, an aircraft wing, combat support and combat service support units. From the beginning, its specific objective was to make the Marine Corps Reserve more responsive for immediate mobilization and subsequent deployment to combat with the least cost and disruption possible. The realignment was particularly dramatic on the ground side, and for the first time, each ground unit was given a clearly defined mission and function within a division/regiment/battalion structure. Continued building upon this close parallel to the active forces in mission, structure, manning, command, control and supervision, training, continual and concurrent modernization of aircraft, weaponry and equipment, along with continuing programs of review and refinement, should result in a concomitant reduction of the gap between a Reserve and an active force level of readiness and responsiveness. Today, our battalions and squadrons are prepared to make the transition from the civilian climate to the deployed, combat environment within 30 days of mobilization, and the entire division/wing team within 60 days. This is a higher level of readiness and responsiveness than has existed for many years.

Equipment Shortages

Senator Thurmond. What are the main equipment shortages in your Reserve units at the present time?

General Ryan. There are no major Marine Corps furnished equipment shortages which would preclude the mobilization of the Marine Corps Reserve. Further, there are no significant aircraft inventory shortages in the 4th Marine Aircraft Wing. There are occasions when individual squadrons experience temporary shortages when individual aircraft are sent to overhaul; however, these shortages are short term and readiness is not adversely affected.

Sub-Optimum Inventory

Senator Thurmond. Explain for the Subcommittee how the 200 aircraft inventory reduces the Marine Air Reserve readiness as compared to the situation when you had the optimum inventory.

General Ryan. The 4th Marine Aircraft Wing has never had what is considered to be an "optimum" aircraft inventory (optimum is meant, in this instance, a wartime inventory of the numbers and types of aircraft normally programed for an active wing). For the 4th MAW this would exceed 300 aircraft. Due to fiscal constraints and manufacturing pipeline, that inventory of aircraft is not currently achievable. The 200 aircraft inventory, however, is adequate for training and a high degree of operational readiness within the 4th MAW. This inventory, when combined with the appropriate post-mobilization aircraft inventory, will enable the Reserves to adequately accomplish their stated mission.

Gama Goat Vehicle

Senator Thurmond. General Ryan, what has been the impression of your units with the Gama Goat vehicle? Where is it assigned in your units?

General Ryan. The response from the field concerning the Gama Goat has been favorable. The Marine Corps has assigned the vehicle, which replaced a ¾ ton cargo truck, to the motor transport section of most ground Reserve units, and to the Marine Wing Control Squadron in the 4th Marine Aircraft Wing.

Anti-Tank Missiles

Senator Thurmond. What anti-tank missiles are in your inventory at present? What types are to come in the next few years?

General Ryan. At present, the Marine Corps does not have any anti-tank missiles in its inventory. [Deleted.] These missile systems will provide a medium and long range anti-tank capability and replaces the 3.5 inch rocket launcher and the 106mm recoilless rifle.

A–4 Procurement Program

Senator Thurmond. Why are the Marines still buying the A–4 aircraft for the light attack and close air support mission?

General Ryan. The FY 76 procurement request for A–4M aircraft is the continuation of a procurement plan designed to modernize our A–4 light attack capability and maintain it until the 1980's. We believe the A–4 aircraft provides the Marine Corps with a very effective and economical weapon system. We have determined that continued operation of the A–4 into the 1980's will allow for an orderly definition and development of an advanced V/STOL aircraft for our light attack needs. As you know, the Marine Corps successfully introduced the first V/STOL aircraft into the U.S. arsenal. Our experience with V/STOL has led us to believe that V/STOL is ideally suited to our light attack mission.

A–10 Suitability

Senator Thurmond. Does the A–10 meet your requirements for close air support, and if not, why not?

General Ryan. No. The Marine Corps has followed the A–10 program since its inception and our conclusion is that the airplane does not meet our requirements.

The A–10 is not carrier suitable and the Marine Corps must maintain its capability to operate from carriers as well as land bases. The AV–8 aircraft with its basing flexibility has proven the responsiveness of V/STOL aircraft to satisfy the immediate close air support requirements of the ground commanders. As a result the Marine Corps plans to modernize to an all V/STOL light attack force. The Marine Corps concept of aircraft survivability differs from that of the Air Force and is based on speed and hit avoidance rather than on the aircraft's ability to absorb hits.

PILOT TRAINING CONSOLIDATION

Senator INOUYE. I have here a GAO report dated May 3, 1974. The title is "Need to Assess Potential for Consolidating Undergraduate Helicopter Pilot Training." I don't know if this applies to you but the recommendation reads as follows:

GAO recommends that the Secretary of Defense consider directing the Navy to discontinue fixed-wing training and move toward consolidating undergraduate training at one site under joint all-helicopter program."

Are you aware of this?

General RYAN. No, I am not. I think General Armstrong, who will testify for Marine Aviation, will be better equipped to answer.

Senator INOUYE. Will you have the appropriate officer respond to this. I am certain someone will bring this up; I would like to have it for the record.

Once again, thank you, gentlemen.

Admiral COOKE. Yes, sir.

[The information follows:]

HELICOPTER PILOT TRAINING

Admiral Cooke. The Interservice Training Review Organization recently reported on three alternative plans for consolidated undergraduate helicopter pilot training. These are the Navy Long Range Pilot Training System currently being implemented, an All-Helicopter Option which would consolidate training under Army management, and a Combined Training Option which would provide primary training at a Navy site and all helicopter training at Fort Rucker. The Report states:

1. "The All-Helicopter Option . . . does not satisfy the requirements of all the services."

2. "The Long Range Pilot Training System (LRPTS) Option . . . satisfies the requirements of the Navy/Marine Corps and does not affect the Army/Air Force."

The Navy concurs in those findings. Upon review, it was further concluded that the Combined Training Option could meet requirements but would not be cost effective.

Cost analysis shown in the Report reflected relative savings in favor of the All-Helicopter Option. That analysis has been found to be very sensitive to changes in the underlying assumptions and did not consider certain contributing costs. Recomputation, taking these considerations into account, result in the following comparisons of one-time (OT) costs and annual recurring (AR) savings.

[In millions]

	Study results		Recomputation	
	OT costs	AR savings	OT costs	AR savings
LRPTS	17.6	6.7	16.2	7.1
All helo	.2	11.7	3.2	4.9
Combined	12.8	6.3	11.2	1.5

A fundamental requirement of any training system is that it produce graduates of the quality required by the operating forces. In this case, that requirement can best be satisfied by the system having the greatest overall efficiency—the Navy Long Range Pilot Training System.

Consolidation of fixed-wing pilot training is now being studied by the Interservice Training Review Organization. Completion of this study is expected in the near future.

MILITARY PERSONNEL, MARINE CORPS

STATEMENT OF LT. GEN. SAMUEL JASKILKA, U.S. MARINE CORPS, DEPUTY CHIEF OF STAFF FOR MANPOWER, HEADQUARTERS, MARINE CORPS

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

MAJ. GEN. W. F. SIMLIK, U.S. MARINE CORPS, FISCAL DIRECTOR OF THE MARINE CORPS, HEADQUARTERS, MARINE CORPS

LT. COL. S. S. EISENHAUER, U.S. MARINE CORPS, HEAD, PROGRAM BUDGET SECTION, PLANS AND POLICY DIVISION, DEPARTMENT OF MANPOWER, HEADQUARTERS, MARINE CORPS

LT. COL. C. R. FRANKLIN, U.S. MARINE CORPS, ASSISTANT HEAD, PROGRAM BUDGET SECTION, PLANS AND POLICY DIVISION, DEPARTMENT OF MANPOWER, HEADQUARTERS, MARINE CORPS

BIOGRAPHY AND PREPARED STATEMENT

Senator INOUYE. Our final witness this morning is Lt. Gen. Samuel Jasklika, Deputy Chief of Staff for Manpower, Headquarters, Marine Corps. Without objection, your biographical sketch and your full statement will be made part of the record, sir.

[The biography and statement follow:]

BIOGRAPHY OF LT. GEN. SAMUEL JASKILKA, USMC

Lieutenant General Jaskilka was born December 15, 1919, in Ansonia, Conn. He completed high school there and graduated from the University of Connecticut where he received a B.S. in Business Administration in May 1942.

He accepted an appointment as a second lieutenant in the U.S. Marine Corps Reserve on September 26, 1942, and was assigned to active duty. He completed the Reserve Officers' Class, Marine Corps Schools, Quantico, Va. in 1942, and Sea School at Portsmouth, Va. in 1943. He accepted an appointment in the regular Marine Corps in March 1943.

During World War II, General Jaskilka served aboard the USS Princeton anr participated in the Tarawa Island raid, the Gilbert and Marshall Islands Operations, Palau, Yap Ulithi, Wolei raids, Marianas Operation, Western Caroline Islands Operation, and the Leyte Operation. He was promoted to first lieutenant on June 23, 1943.

Upon his return to the United States, he was assigned duty as an Instructor at Camp Pendleton, Calif., until August 1945. He was promoted to captain in January 1945. From Stepember 1945 until May 1947, General Jaskilka served on recruiting duty.

He completed the Amphibious Warfare School, Junior Course, Marine Corps Schools, Quantico, in January 1948, and became Commanding Officer, Marine Detachment, U.S. Naval Air Activities, Port Lyautey, French Morocco. In September 1949, he joined the 1st Marine Division. During the Korean Conflict, he served successively as Battalion Executive Officer and Commanding Officer of Company F, 2nd Battalion, Fifth Marines. For heroism in combat he received two awards of the Silver Star Medal and a Bronze Star Medal with Combat "V."

Promoted to major in January 1951, he returned to the United States the following February and served in the Officer Assignment Branch, Personnel Department, Headquarters Marine Corps. In July 1954, he was transferred to Camp Pendleton, Calif. for duty as Operations Officer, Marine Corps Test Unit #1. He was promoted to lieutenant colonel in December 1955.

Upon completion of the Amphibious Warfare School, Junior Course at Quantico, in June 1957, General Jaskilka saw duty as Assistant G–3 Operations and Plans Officer with Fleet Marine Force, Pacific. He returned to Quantico in July 1960, and again served as an Instructor.

He reported to the 3rd Marine Division in July 1963, and was assigned duty as Executive Officer, Third Marines, and later, Assistant Chief of Staff, G–3, SEATO Expenditionary Brigade. Returning to the United States, he assumed duty as Joint Staff Officer in the Office of the Joint Chiefs of Staff, and earned the Joint Service Commendation Medal. Promoted to colonel in July 1964, he was reassigned to Headquarters Marine Corps in August 1966 where he served as Deputy Manpower Coordinator for Research and Information Systems, Director, Data Systems Division, and as Director, Management Analysis Group. He earned the Legion of Merit for this service and was promoted to brigadier general October 19, 1968.

Ordered to Vietnam in February 1969, General Jaskilka served as Assistant Division Commander, 1st Marine Division. In August 1969, he was reassigned duty as J–3 Operations, Military Assistance Command, Vietnam (MACV). He was awarded the Distinguished Service Medal for his Vietnam service.

General Jaskilka returned to the United States in August 1970, and reported to Quantico where he served as Director, Command and Staff College, then as Deputy for Development/Director, Development Center, Marine Corps Development and Education Command. Following his promotion to major general in August 1972, he became Assistant Chief of Staff, G–1, Headquarters Marine Corps. Transferred in July 1973 to Camp Lejeune, N.C., he served as Commanding General, 2nd Marine Division until his selection to lieutenant general. On January 2, 1974, he was assigned as Deputy Chief of Staff for Manpower at Headquarters Marine Corps.

General Jaskilka also holds the following personal decorations: the National Order of Vietnam, and the Army Distinguished Service Order, 1st Class.

Lieutenant General Jaskilka and his wife, the former Norma Blick of Stafford Springs, Conn. have four children: Michael C., Diane, Ann, and Samuel M.

STATEMENT OF LIEUTENANT GENERAL SAMUEL JASKILKA

Mr. Chairman and members of the Committee-

It is my pleasure to make my third appearance before this Committee to present the highlights of the Marine Corps' military manpower programs for Fiscal Year 1976 and the Transitional Year 197T, and to present our estimate of the Military Personnel Appropriation which supports them.

In my two previous appearances, I commenced my statements by discussing the fluctuations in the size of the Marine Corps over previous years and mentioned the personnel turbulence resulting primarily from these changes. For instance, during the Vietnam conflict, we rapidly expanded to a peak strength of 317,000 in 1969 and then contracted over three short years to our present level of less than 200,000. The combination of large strength reductions and massive troop redeployments combined to make this period one of the most turbulent in our history. Such changes, however exacting they may be, are to be expected. We believe our mission is not only to provide a trained force, available and fully prepared for immediate commitment, but also to maintain a capability for rapid expansion.

Today, even though our authorized strength has remained relatively level since 1972, personnel turbulence is still with us. As you know, we experienced a shortfall of approximately 7,000 personnel at end Fiscal Year 1974 primarily due to a recruiting deficit. Our success thus far this year has been encouraging. We are guardedly optimistic that we can recoup our shortfall and attain our current objective end strength. Our present program projects a significantly reduced and essentially constant recruiting requirement in Fiscal Year 1976 and beyond.

To minimize personnel turbulence in the future, we are making a concerted effort to achieve increased stability through improved long range planning and reduced turnover in our force.

We have developed a long range enlisted force management plan which more clearly defines our management objectives and which introduces a year group management concept to our enlisted force similar to that now utilized for officers. Retention among our officers this year has been good and enlisted reenlistments have exceeded expectations. Also, as we have done in each of the last four years, we continue to increase the average length of enlistment contracts and after 1 July, will no longer offer two year enlistment contracts. All of these factors will serve to reduce turnover in our force and further contribute to improved stability in manpower management in the Marine Corps. More importantly, improved stability will contribute directly to greater readiness for the nation's amphibious force-in-readiness.

UPDATE OF FY 75

The allocation of manpower for Fiscal Year 1975 is substantially as submitted to the Congress last year; however, as I pointed out at that time, failure to meet the Fiscal Year 1974 recruiting objective would result in a temporary reallocation of our manpower resources. Because we did suffer a shortfall at end year, additional manpower is allocated to individual training and approximately two thousand fewer Marines will be in the Land Forces part of General Purpose Forces at end Fiscal Year 1975 than originally planned. I also reported last year that permanent change of station travel tariff costs have increased sharply after submission of the budget request and prior to hearings on

that request. The necessary funds to support these increases were not identified at that time. Additional increases have occurred in the past year. Although requested funds which would have established junior enlisted travel entitlements were denied, and an additional reduction of $1.75 million in PCS funds was imposed by the Congress on the FY 75 request, we are unable to support the present program even at the reduced level. Therefore, authority is being requested to reprogram $4.9 million within the MPMC appropriation from Pay and Allowances, Enlisted into the Permanent Change of Station Travel account.

FY 76 REQUEST

The Marine Corps is requesting an authorization for 196,303 Marines at end Fiscal Year 1976; 196,498 at the end of Transitional Year 197T; and 197,646 at end Fiscal Year 1977. The modest increase which we are requesting from 1976 through 1977 is to improve the average manning of our General Purpose Forces. We have examined every possible alternative to an increase in end strength, but have been unable to produce further substantive reductions in our support area given that our current deployment and basing pattern continue. While this requested increase is small, it will contribute significantly to our combat potential.

This authorization request represents a fiscally constrained but realistic program which has been developed in response to specific commitments in support of the national military strategy. It does not include the total number of military personnel that we require to fully man the Marine Corps under our current peacetime conditions, which would be a force of approximately 212,000; it will, nevertheless, allow the Marine Corps to provide ready forces

as well as form a sound base for rapid expansion if this becomes necessary.

The manpower request is also based upon a systematic manpower requirement determination process which is started with the basic combat element of the Marine battalion. Through simulations, field tests, and actual combat experience, we have developed the current structure and derived manning for each of these units. The combat support units, such as aviation or artillery, are sized to provide the necessary support during an amphibious assault or, if required, sustained land warfare. In the case of the Marine Corps security forces for Navy installations and the Department of State, both functions which are assigned by law, each request for manpower is examined to assure the necessity to utilize Marines. Intensive studies are undertaken to determine that sufficient, but only the minimum, manpower is allocated. Likewise, the manpower for our supporting establishment, our bases, training, and logistics commands, has been developed from analyses of the minimum required services which must be furnished.

I would like to add that the analyses and manpower determination effort is not a one-shot event, but rather a continuing project, so that all organizations, both combat and support, are reexamined on a regular cycle. This is to assure that the structure and the manpower requested support the national strategy and that the constrained manpower level will allow the Marine Corps to meet its assigned commitments at an acceptable level of risk. The entire determination process is covered in considerable detail in the Manpower Requirements Report, copies of which have been transmitted to the Congress, and

I would refer you to that source document rather than continue the discussion here.

Allocation of Manpower

The following table shows the allocation of the total Marine Corps military manpower requested in the Defense Planning and Programming categories:

FISCAL YEAR 1974-1977 MILITARY MANPOWER DISTRIBUTION
BY DEFENSE PLANNING AND PROGRAMMING CATEGORIES
(Active Duty End Strength In Thousands)

	FY 1974		FY 1975		FY 1976		FY 197T		FY 1977	
Category	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Strategic Forces	*		*		*		*		*	
General Purpose Forces	103.2	54.7	111.3	56.7	113.0	57.5	110.5	56.2	111.7	56.5
Auxiliary Forces	1.9	1.0	1.9	1.0	1.8	.9	1.7	.9	1.7	.9
Mission Support Forces	24.0	12.7	22.3	11.3	22.3	11.4	22.2	11.3	22.2	11.2
Central Support Forces	24.3	12.9	22.5	11.5	22.4	11.4	22.4	11.4	22.4	11.3
Individual	35.4	18.7	38.4	19.5	36.9	18.8	39.7	20.2	39.7	20.1
Totals	188.8	100.0	196.4	100.0	196.4	100.0	196.5	100.0	197.7	100.0

* Less than 50 Marines assigned.

As can be seen from the table, the General Purpose Forces represent the greatest single share of the total Marine Corps manpower request. These are our Infantry Divisions and their supporting arms, such as artillery and the Marine Aircraft Wings. Together, these Marine air/ground teams comprise three completely deployable, highly specialized, Marine Amphibious Forces which are capable of conducting amphibious assaults against heavily fortified and well defended positions. Alternatively these forces, when adequately supported are capable of sustained land based operations.

The increased manning of General Purpose Forces in Fiscal Year 1975 above the 1974 level reflects the increase in total end strength. Not all of the large 1975 input, however, have completed training by end year and for this reason the Individuals account in that year, specifically the trainee subcategory, remains relatively large. Because the recruit input returns to a normal level in Fiscal Year 1976, the Individuals account declines and General Purpose Forces manning further improves at end year. In Transitional Year 197T and Fiscal Year 1977, a reduced proportion of the total Marine Corps manpower appears in General Purpose Forces due to the cyclical nature of our recruiting which peaks in the summer and results in a greater number of Marines in training on 30 September.

The number of Marines assigned to the program within Auxiliary Forces is small, totaling approximately 1900. The majority of these Marines are in two program areas: Intelligence and Security, and Research and Development. The Intelligence and Security manpower request will enable the Marine Corps to provide our share of the manning and

security of crytographic centers, while the Research and Development personnel plan and develop the structure of our Fleet Marine Force, as well as test their tactics, techniques, and equipment. This work is conducted primarily by our Development Center at Quantico, Virginia.

The Marines accounted for as Mission Support Forces are equally as essential to the mission accomplishment as the General Purpose Forces whom they support. Almost one-half of the military manpower allocated to the Mission Support Forces is in the Base Operating Support category. These are the permanent personnel who, along with their civilian counterparts, provide fixed base operating support, that is, operate and maintain the fixed facilities at the 15 major installations in the U.S. and overseas which host the Fleet Marine Forces. To minimize the amount of manpower required for this base support, the Marine Corps has devised the Fleet Assistance Program. Through this program, Marines from tenant combat units are temporarily assigned to the host base to provide additional support which is necessary only because of the presence of the tenant unit.

Also in the Mission Support category are approximately 9000 Marines who staff the Marine barracks which provide security at 51 Navy installations around the world. In addition, there are a lesser number of Marines assigned to the other programs of the Mission Support Forces; i.e., Reserve Component Support, and Force Support Command, which includes the Fleet Marine Force headquarters.

Our plan allocates approximately 22,000 Marines to our Central Support Forces. About one-fifth of this

manpower is devoted to base operating support for our three logistics installations: Philadelphia, Pennsylvania; Albany, Georgia; and Barstow, California; and our three training installations: Quantico, Virginia; Parris Island, South Carolina; and San Diego, California. This category also includes 1600 Marines for our embassy guards who provide security at embassies and consulates in 92 different countries throughout the world. Such security is a responsibility assigned the Marine Corps by law but is also considered to be a normal function of the Department of Defense to perform in the course of carrying out its responsibilities to provide security to the U.S. and its territories. For this reason, the Secretary of Defense made the decision that our Direct Funding program, in lieu of our reimbursable program, would include funds for our Marine embassy guards. This, of course, excludes those items for which the State Department has, in the past, provided reimbursement.

Finally, the requested manpower in this category includes centralized logistics, training and administrative overhead. One area of this category where we have substantially reduced the programmed manpower requirement is in individual training overhead, both instructors and support. By the end of Fiscal Year 1975, the reduction will amount to 1230 Marines or 10 percent-below the level programmed for end Fiscal Year 1973. Changes of this magnitude have required an increase in on the job training with a commensurate reduction in formal school courses. Further substantive reductions in this area cannot be made without adversely affecting the overall level and quality of training with a resultant impact on operational readiness.

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The final category of manpower is the "Individuals" accounts. This is perhaps the least understood category and yet it is equally as necessary as our General Purpose Forces. It comprises our request for manpower for trainees and students, transients, patients, and prisoners. By far the largest proportion, approximately 65% of the total, is for trainees and students. The requirement for these accounts, is a reflection of our requirement to access and train Marines, to deploy these trained Marines, and to maintain the proper grade and skill balance in our forces. The requirement is susceptible to management action only to the extent that policies affecting accessions, training, and deployments are changed. Reductions or undermanning of the Transient account without accompanying changes in the policies affecting that account are reflected in a reduction of the manning level of combat and support forces.

Deployment

An important factor affecting the management of our manpower is the geographical deployment of our forces. Most of our Marines are, of course, stationed within the contiguous forty- eight states but generally divided between the east and west coast. 32% are stationed in the three states of Virginia, North Carolina, and South Carolina, and 26% of the Corps are stationed in California, primarily in southern California. Another 17% are spread throughout the remainder of the continental U.S. This leaves approximately 25% of the total Marine Corps who are assigned to overseas units. More than one-half of these are in our forward deployed Fleet Marine Forces units in the Western Pacific. These Marines are not

accompanied by dependents, significantly improving their readiness for immediate deployment and dramatically reducing costs for overseas dependent facilities, such as schools, hospitals, and commissaries.

FUNDING

The funds required to support the manpower programs in the budget years are $1.84 billion in Fiscal Year 1976 for an average strength of 196,076 and $0.47 billion in Transitional Year 197T based upon an estimated 49,069 manyears. These dollars when combined with funding for reserve and civilian manpower represent 76.4% of the Marine Corps' total appropriation request for Fiscal Year 1976 (79.9% in Transitional Year 197T), making the Marine Corps the most manpower intensive of the Services.

Although funding for civilians is not included in this appropriation request, civilians are, nevertheless, an important part of our manpower "family." Civilian personnel are employed to meet the personnel requirements of supporting activities to the maximum extent practicable, consistent with Marine Corps requirements for use of the military personnel by reason of law, security, discipline, rotation, operational readiness, and cost. However, as in the past, the civilians requested for Fiscal Year 1976 represent a relatively small proportion of our total manpower which means the Marine Corps is not only the most manpower intensive but also, the most intensive in military manpower. All of our civilians are concentrated in our support forces which means that the maximum possible proportion of Marine Corps manpower dollars are invested in combat trained and combat deployable forces.

The allocation of our appropriation request by budget activity is illustrated below:

FISCAL YEAR 1974-197T MILITARY PERSONNEL, MARINE CORPS
BUDGET BY BUDGET ACTIVITY
($ in millions)

Budget Activity	FY 1974 $	FY 1974 % of Total	FY 1975 $	FY 1975 % of Total	FY 1976 $	FY 1976 % of Total	FY 197T $	FY 197T % of Total
1. Pay & Allowances of Officers	$ 329	19.7	$ 337	19.0	$ 342	18.6	$ 86	18.3
2 Pay & Allowances of Enlisted	1,148	68.7	1,216	68.7	1,247	67.9	314	66.8
4. Subsistence of Enlisted Personnel	104	6.2	119	6.7	124	6.8	35	7.4
5. Permanent Change of Station Travel	85	5.1	95	5.4	121	6.6	34	7.4
6. Other Military Personnel Costs	4	0.3	4	0.2	3	0.2	1	0.2
Total Program 1/	$ 1,670	100.0	$ 1,770	100.0	$1,836	100.0	$ 470	100.0

1/ Numbers may not add because of rounding.

The increase associated with pay and allowances for officers and enlisted are partially the result of increased manyears. More significantly, however, they are the result of pricing the October 1974 cost of living pay raise for the full twelve months of Fiscal Year 1976 compared to nine months for Fiscal Year 1975. While the amount of funds requested for pay and allowances of officers and enlisted increases, these funds, as a proportion of the total appropriation request, continue to decrease in each of the budget years. To keep these costs at a minimum, the average grade of officers has been further reduced and the percentage of the enlisted force in the top six grades has been kept below 46 percent.

The inflationary impact on subsistence of enlisted personnel is evidenced by a greater than 20 percent increase in rates over the last two years. An increase of similar magnitude is felt in permanent change of station travel.

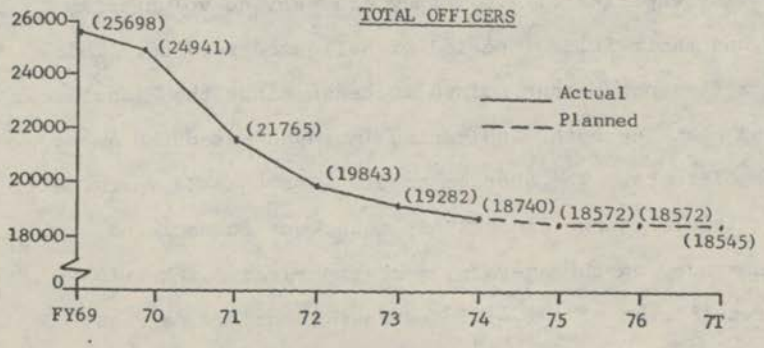
Officers

Before outlining the details of our officer program, I would like to present some descriptive characteristics of our present officer force. Over 72% of our officers are in the grade of captain or below, the same proportion that was in those grades when we were at our peak Vietnam strength. 67% of our officers have over five years of service experience; i.e., they are serving voluntarily beyond their initial period of obligated service. This is a five percentage points increase since the Fiscal Year 1968 peak strength, indicating improved retention among our officers. The average age is less than 32 years, a negligible change since 1969; thus, our force is no older but, on the average, more experienced. Nearly three-fourths of our officers have bachelors degrees;

two percent of all our officers are women and nearly three percent represent racial minorities, a proportion which is steadily increasing. Our officers are skilled in 136 different occupational specialties, ranging from infantry platoon leaders to automated data systems officer to pilot of the only VSTOL (Vertical Take Off and Landing) jet attack aircraft in the US Armed Forces. Approximately one-third of our officers are aviation personnel.

Our authorization request includes 18,572 officers at end Fiscal Year 1976 and twenty-seven fewer at end Transitional Year 197T. 18,572 is also the number we project at end of the current year. This has been reduced below the plan submitted last year to expedite the stabilization of our officer force strength. While the programmed number of Marine Corps officers has been reduced concurrently with the total Vietnam phasedown force reductions, the size of the officer force is not directly based upon any arbitrary officer/enlisted ratio. Instead it is a summation of our estimate of those positions in the programmed force structure which require certain skills, education and managerial talent available only in the officer Corps.

Since 1969, we have reduced our officer force by nearly 28% as shown on this chart.



By anticipating the Vietnam phasedown, continually looking ahead to future reductions, and programming to meet these changes, we have been able to effect these planned decreases gradually. While some severe actions were required initially in Fiscal Years 1971 and 1972 to accomplish this, subsequent reductions have been accomplished through normal attrition and without disruptive personnel action.

Although we do not attempt to size our officer force through applications of ratios, we recognize that these ratios are used as measures of our effort to maintain a low cost force. The results of these efforts are illustrated in the following table, which we believe indicates the Marine Corps' true concern for rising manpower costs.

OFFICER TO ENLISTED RATIOS

Fiscal Year	Officers as % of Total Strength	Officer to Enlisted Ratio
1972	10.01	1:8.76
1973	9.82	1:8.99
1974	9.92	1:9.07
1975	9.46	1:9.57
1976	9.46	1:9.57
197T	9.44	1:9.60

The number of colonels has been reduced below even the pre-Vietnam level and both colonels and lieutenant colonels will comprise a smaller proportion of the total officer force in 1976 than in Fiscal Year 1964. The number of officers in the grade of major at end Fiscal Year 1976 will be 1090 below the peak Vietnam strength, a reduction proportional to the total officer strength reduction.

The past year actual and the planned future officer grade distribution is shown below.

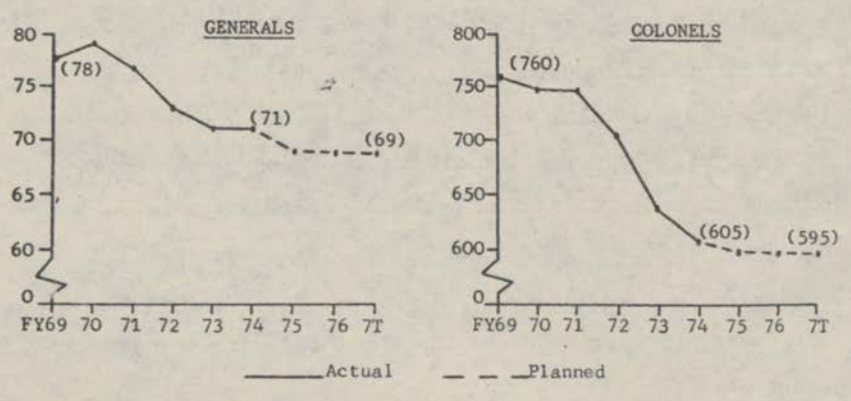
OFFICER GRADE DISTRIBUTION

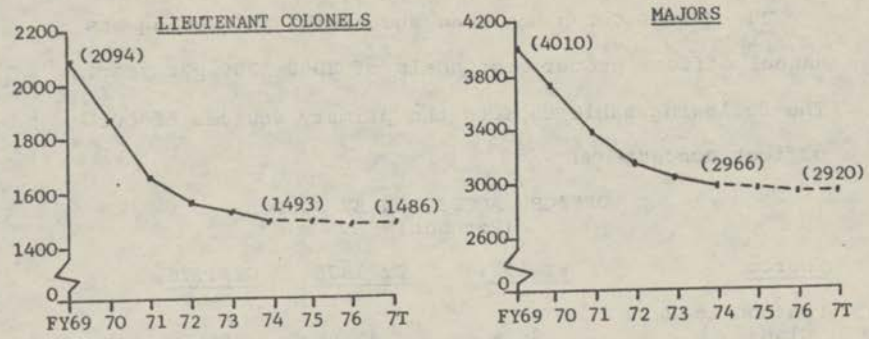
Grade	FY 1974		FY 1975		FY 1976		FY 197T	
	#	%	#	%	#	%	#	%
General	71	0.4	69	0.4	69	0.4	69	0.4
Colonel	605	3.2	597	3.2	595	3.2	595	3.2
LtColonel	1493	8.0	1494	8.0	1486	8.0	1486	8.0
Major	2966	15.8	2940	15.8	2920	15.7	2920	15.7
Capt & Below 1/	13605	72.6	13472	72.6	13502	72.7	13475	72.7

1/ Includes Warrant Officers.

In the course of effecting reductions in the total officer force requirements, we have also made similar reductions in the senior officer grades and have complied with the provisions of Section 846 of the Fiscal Year 1975 DOD Appropriations Act without serious disruptions to our officer plans. The following charts demonstrate recent actual changes and programmed changes in officer grade structure.

SENIOR OFFICER GRADE REDUCTIONS





Coupled with the reduction of senior officer grades is a corresponding increase in the times in service for promotion throughout the officer grade structure.

OFFICER PROMOTIONS

Promotion to the grade	FY 1974 TIS 1/	FY 1974 OFP 2/	FY 1975 TIS	FY 1975 OFP	FY 1976 TIS	FY 1976 OFP
0-7, Gen	24 1/2	9.7%	24 3/4	10%	24 1/2	10%
0-6, Col	21 1/2	55%	21 3/4	50%	22	50%
0-5, LtCol	16 1/2	70%	16 1/2	70%	16 1/2	70%
0-4, Major	9 1/2	80%	9 1/2	80%	9 3/4	80%
0-3, Capt	4 1/2	95%	4 1/2	95%	4 3/4	95%

1/ Time in Service
2/ Opportunity for Promotion

Under current plans, the promotion points for Marine Corps officers will be increased to the maximum point deemed acceptable, and yet still maintain a viable, vigorous officer force with adequate career flow. Any further decreases of senior grades would force the Marine Corps to exceed maximum desirable promotion points and would result in stagnation and undesirable aging of the officer career force.

The Marine Corps has been successful in meeting its annual officer procurement goals of 2000-2200 per year. The following table depicts the primary sources of our officer accessions:

OFFICER ACCESSION BY SOURCE
(Percent)

Source	FY 1974	FY 1975	FY 1976
Platoon Leaders Class	36.6	41.0	38.5
Officer Candidate School	43.7	38.6	32.5
NROTC	11.4	9.9	13.0
Naval Academy	4.9	4.4	4.6
Women	3.4	2.9	3.2
Other		3.2	8.2

Of particular concern and importance to the Marine Corps is the Platoon Leaders Class (PLC) program with its current incentives. This program is the keystone of the Marine Corps' officer procurement program and the largest single source of new second lieutenants. It has historically provided us with quality officers whose retention rate is second only to those from the Naval Academy. It is the most cost effective procurement program available to the Marine Corps, and we would like to increase our dependence on this program in future years.

Experience gained in the All-Volunteer environment has indicated that the incentives of the PLC program are absolutely essential to keep the program competitive with the larger ROTC programs available to the other services. Of immediate concern to the Marine Corps is the 30 June 1976 expiration date of Public Law 92-172, which provides financial assistance option to the PLC program. This voluntary option provides $100 a month

during the academic year for a maximum of three years. It has proven to be a valuable recruiting feature. Additionally, this option requires a firm commitment for a longer period of active commissioned service, thereby further increasing the cost effectiveness of the PLC program. However, because of the impending expiration date of this financial assistance option, our recruiting effort loses credibility when we can no longer assure students enrolling this year of their eligibility to receive this assistance for the maximum three academic years. Therefore, we are asking for your support to establish permanent authority for the financial assistance provision of the PLC program.

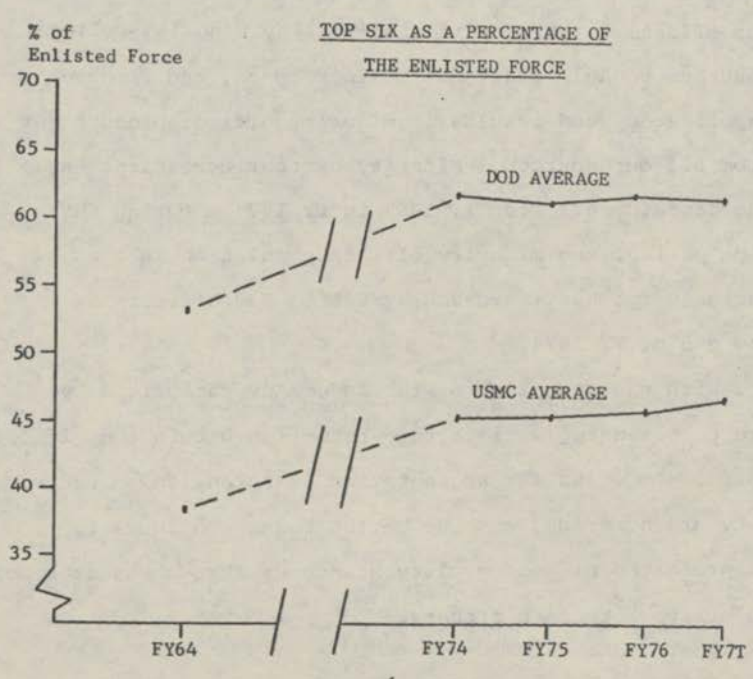
While there is a constant drive to meet the required officer procurement goals, we are also striving to improve the qualifications of our officers at entry. We have initiated plans to improve procurement from the Naval Academy and NROTC sources. We are continuing to press our efforts to attract the top-quality minority college students to help staff the officer corps, and we have experienced good results in minority officer procurement from all our sources. Minority officer accessions have increased by 67% from FY 1969 to FY 1974. During the same period, the minority officer population in the Marine Corps has increased by 84% to 538 officers at the end of FY 1974.

With the exception of the Judge Advocate field, we are experiencing satisfactory retention within the officer force. Requests for augmentation or retention on active duty are numerous, and the Marine Corps continues to maintain the highest quality standards through an extremely selective retention process.

Only retention of lawyers continues to be a problem which has created a significant shortage of Marine Corps judge advocates in the field grades. The Funded Law Program and the Excess Leave Program (LAW), legal education programs for Marine Corps officers, are helping us to overcome that shortage.

Enlisted

Our enlisted force will total 177,731 in Fiscal Year 1976, 73 less than our objective strength for the current year. The increase in Transitional Year 197T to 177,953 reflects our programmed gradual increase towards the expanded level in General Purpose Forces which I mentioned earlier. Because there is little change in our mission and force structure, our grade structure also remains relatively unchanged. We continue to maintain approximately 46% in our top six grades, a proportion which is well below the DOD norm and which contributes directly to a lower average cost per Marine.



Recruiting

As you know, we experienced a shortfall in our recruiting for Fiscal Year 1974 which resulted, in part, in an end year strength deficit in excess of 7000. This occurred, first, because the Marine Corps had not fully foreseen all the problems of recruiting in an all volunteer environment and, second, because of the restriction of Section 718 of the Fiscal Year 1974 DOD Appropriation Act (P.L. 92-238) which limited the percentage of non-high school graduates among recruits.

Through the first seven months of this fiscal year, we have achieved 100.4% of our active duty recruit quota even though the quota has been increased to recoup the FY 1974 shortfall; and for the first time, in December and January we met our regular and reserve recruit quotas simultaneously. We have not sacrificed quality to achieve this. While relieved of the legal requirement to obtain 55% high school graduates among our recruits, we continue to strive to meet this goal voluntarily. For the first seven months of this fiscal year 53.4% of our recruits have been high school graduates or possess the equivalency certificate. More importantly, we have recruited over 4700 more high school graduates than in the same period last year.

Much of our success thus far is the result of our own management actions. Some is, undoubtedly, due to the present economy. However, a large measure of that success can be directly attributed to the support of the Congress in authorizing programs which have aided our recruiting efforts. The new Bonus Revision Act, enacted into law in May 1974 and which extended enlist-

ment bonus payments to critically short technical skills, has proven effective. Since graduated Special Duty Assignments payments of up to $150 per month were authorized in June 1974, additional qualified Marines have volunteered to be recruiters. Also in June, the Congress authorized reprogramming of $4.6 million for paid print mass media advertising. Although these were Fiscal Year 1974 funds, most of the impact is being felt this year and has contributed significantly to the improved outlook for recruiting in Fiscal Year 1975. For the first time, we believe we are competitive in reaching the eligible youth population.

Assuming we attain our current recruit and end strength objectives, our recruiting requirement in Fiscal Year 1976 will be reduced to 50,300 non-prior service males and females, compared to the current year's quota of 58,400.

Recruiting Resources

The Marine Corps continues to share the desire of the Congress that our armed forces consist of the best quality personnel available. Higher quality does, however, demand a higher price in terms of enlistment incentives as well as recruiting resources.

As I mentioned, the Marine Corps entered into paid mass media advertising for the first time last summer after the Congress authorized reprogramming of funds for this purpose. Every measure indicates it has been significantly effective.

In June 1974, prior to initiation of our paid advertising program, research disclosed that the Marine Corps' advertising message was reaching only 20% of potential prospects in the youth market on an average of 1 1/2 to two times a month. That was considerably less than the 90% reach and frequency

of contact of 10 - 12 times per month enjoyed by the other services. By end December, through a media mix of newspapers, magazines, direct mail, and billboard advertising, surveys indicated we had attained a reach of 86% and a frequency level of 10. A further indication of the effectiveness of advertising is the fact that during the first six months of Fiscal Year 1975, after the paid advertising had been implemented, 82,000 individuals responded to Marine Corps paid advertising. This equals the total response to non-paid advertising in all of Fiscal Year 1974.

Although funds for advertising are not provided by the Military Personnel appropriation, I urge your support of the Marine Corps' request for that funding when it is presented because of its direct impact on our total manpower plans. Due to DOD fiscal constraints and other higher priority programs, the funds requested for Fiscal Year 1976 will actually be less than the total amount available in Fiscal Year 1975. While we expect our quantitative requirements to be less next year, I am concerned that the Fiscal Year 1976 funds will not be adequate to enable us to continue to reach the numbers of young men and women required to make a substantial impact on quality improvement.

Recruiters themselves are our most important recruiting resource. No other asset can completely replace face to face contact with a prospective applicant and we continually seek new ways to improve the effectiveness of the individual recruiter. We are now in the process of implementing the Recruit Automated Data System (RADS) which is a management control system designed to provide us with a means for monitoring

the effectiveness of the recruiting service. When fully implemented, we will be able to relate the success of recruits through recruit training to individual recruiters and to recruiting stations and districts. Thus, if a trend develops indicating that a greater than normal number of recruits, obtained by one recruiter or recruited from one district, are not successfully completing recruit training, we can take prompt corrective action. The RADS system will assist us in insuring that recruit quality as well as recruit quotas are obtained. We are well pleased with the initial results of RADS and believe that the system has excellent potential.

In Fiscal Year 1975, each production recruiter is expected, on the average, to obtain 33 accessions; regular and reserve, male and female, and prior service and non-prior service. A small temporary overstaff of the recruiting force, which was added to assist with the large 1975 quota will be removed prior to 30 June 1975. In spite of that reduction in the force, the accession requirement per recruiter will be less in Fiscal Year 1976 because total accession requirements will be down. We do not, however, plan to further reduce the level of manpower devoted to recruiting because of the uncertainties of the present recruiting climate and because we plan to utilize those resources for improvement in the quality of enlistees.

Retention

Fiscal Year 1974 was our best year for reenlistments in 15 years and this success is continuing into the current year. Through January, we have reenlisted

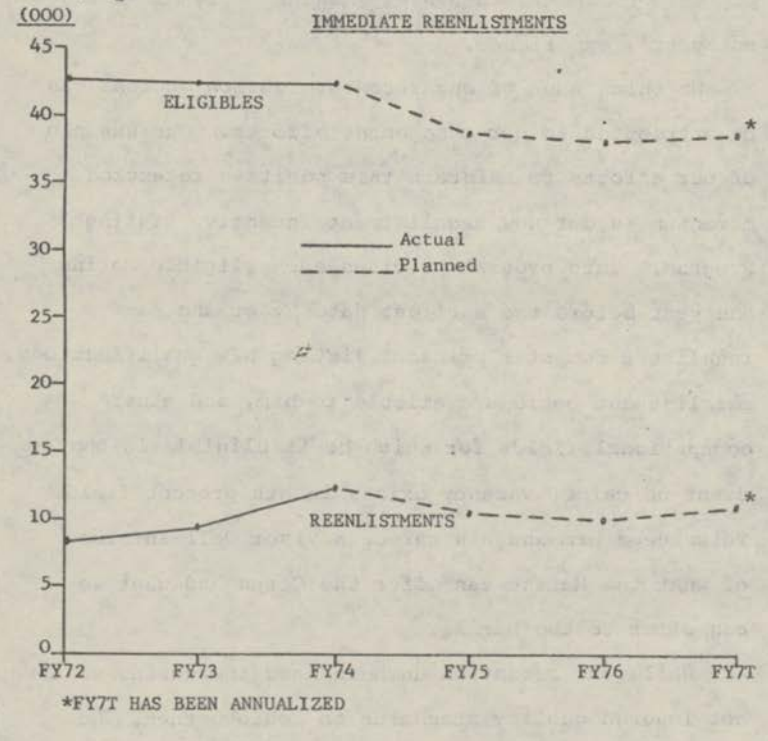
7300 first term and career Marines. Because of these favorable results, we have revised our estimate for this year by 1,000 reenlistments above what we projected a year ago. While some of this success can certainly be attributed to the present economy, the Selective Reenlistment Bonus payments implemented with the new Bonus Revision Act have been effective in encouraging extended service among our technically skilled first term Marines. However, the full effect of these payments cannot be accurately measured with less than one year's experience.

We think much of our recent retention success can be attributed to our management efforts. One example of our efforts to maintain this positive retention momentum is our new Reenlistment Incentive Listing Program. This program provides each eligible Marine one year before the earliest date he or she can reenlist a computer printout listing his qualifications, reenlistment options available to him, and other occupational fields for which he is eligible in the event no career vacancy exists in his present field. This keeps him and his career advisor well informed of what the Marine can offer the Corps and what we can offer to the Marine.

While our retention numbers have increased, we have not lowered quality standards to achieve them. We continue to reassert and stress retention requirements so that only quality Marines of demonstrated potential and professional competence are allowed to reenlist. These criteria serve to improve the quality of our force. They also encourage retention of additional

quality Marines because quality begets quality. Feedback from the field indicates that Marines are looking carefully at who is retained and who is not and that this is affecting their own reenlistment decisions.

One result of our increased quality standards is that fewer Marines are eligible for reenlistment but, most important, a greater proportion of those who are eligible are choosing to make the Marine Corps a career. This is illustrated in the following chart.



As the graph shows, fewer total reenlistments are projected in both Fiscal Years 1975 and 1976. This occurs because, in addition to the increased quality criteria, fewer Marines will be reaching the end of their enlistments during those years.

Related to our efforts to retain experienced Marines is our program to enlist prior service Marines who have already returned to civilian life but who possess sorely needed military skills. We stress the same quality standards for prior service enlistments that apply to immediate reenlistment of active duty Marines to ensure that the quality of our career force is not diluted. Approximately 2000 of our skill shortages are filled each year through this program.

Women Marines

We continue to expand the role of women in the Marine Corps, both in numbers of women and in terms of opportunities available to them. The number of women Marines was increased by 20% in the past year and we plan to further expand to just under 3100 by 30 June 1976. Women Marines both officer and enlisted, have the opportunity to serve in approximately 70% of all Marine Corps occupational fields and, also, can now be assigned to major Fleet Marine Force headquarters units as a result of a successful pilot program conducted in 1974. Their assignment opportunities are limited only by their occupational skills, physical capabilities and our policy that they will not be assigned to combat deployable units. This policy does, however, limit the total number of women we can utilize because they are not available for rotation to our overseas combat units.

In our continuing effort to attain equal treatment of our male and women Marines, we have recently abolished six separate women administrative units and assigned these women to previously all male organizations. Women also receive equal consideration for promotion

within legal limitations. Enlisted women are selected for promotion in competition with their male counterparts within their occupational skill and women officers are considered for selection by the same boards that effect the male selections.

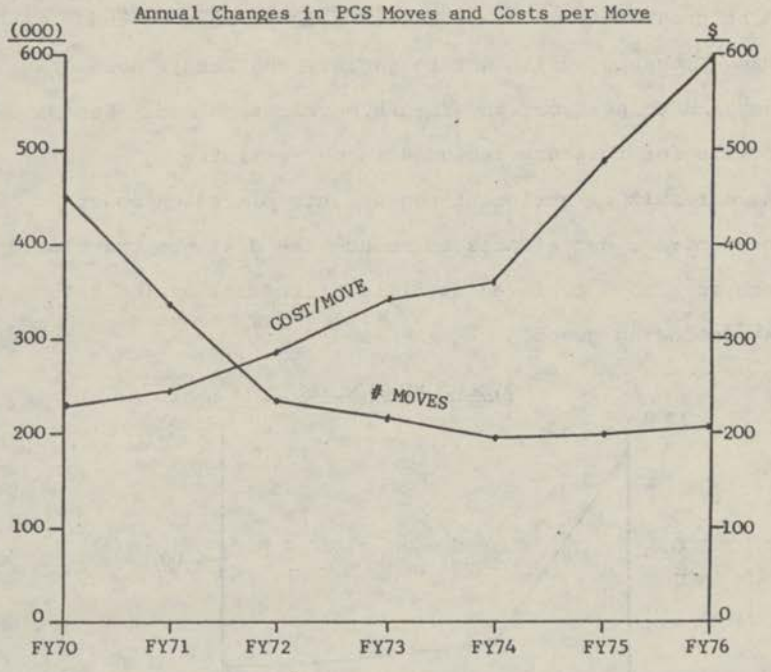
Women Marines make a direct and positive contribution to the readiness of our Corps and we will continue to ensure that they receive their well earned recognition through fair and equal opportunity.

Permanent Change of Station Travel

Last year Congress clearly indicated that permanent change of station travel (PCS) has become a topic of increased concern as the inflationary factor drove the costs of these moves to all-time record highs even though the number of moves was declining. The Marine Corps has continually stressed the stabilization of personnel and the reduction of PCS moves to the lowest possible level commensurate with our mission as a force-in-readiness. The reduction in the number of moves reflected in the chart below indicates that almost continual progress has been made in that area. However, the same chart indicates how dramatically the average cost per move has escalated.

U.S. MARINE CORPS FISCAL YEARS 1970-1976

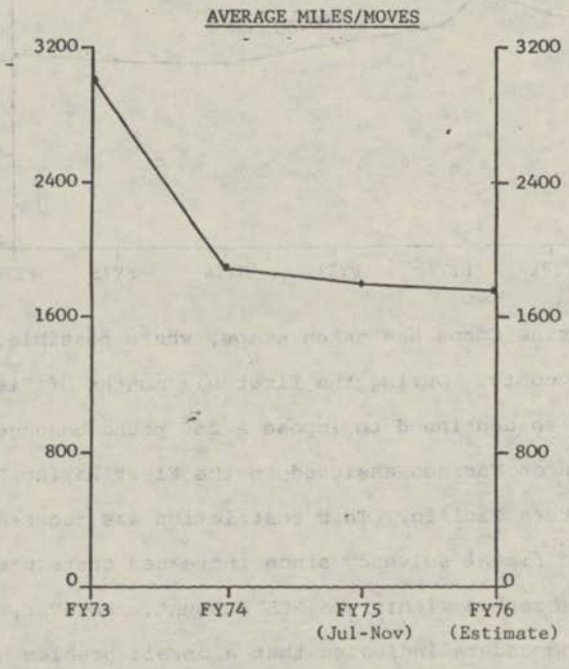
Annual Changes in PCS Moves and Costs per Move



The Marine Corps has taken steps, where possible, to reduce PCS costs. During the first six months of Fiscal Year 1975, we continued to impose a 250 pound baggage restriction on Marines assigned to the Fleet Marine Forces in the Western Pacific. This restriction was necessary to maintain fiscal solvency since increased costs per move had to be absorbed within the PCS account. However, reports from our commanders indicated that a morale problem had arisen of sufficient impact that we chose to raise the level from 250 pounds to 500 pounds commencing 1 January 1975. PCS funds for this purpose became available as a by-product of the implementation of the Roth Amendment (Section 205 of P.L. 93-554). The Marine Corps is not at all amenable to authorizing Fleet Marine Force Marines in the Western Pacific the option of shipping personal property up to the maximum

weight allowed in the Joint Travel Regulations; the costs would be prohibitive. We do consider 10 percent of the maximum allowance sufficient to satisfy the actual need of Marines and to head off any future morale problems. Funds to provide for this are included in our estimate.

As a result of stringent constraints placed on coast to coast moves, our efforts to reduce the distance traveled on each move have achieved significant results as indicated by the following graph.

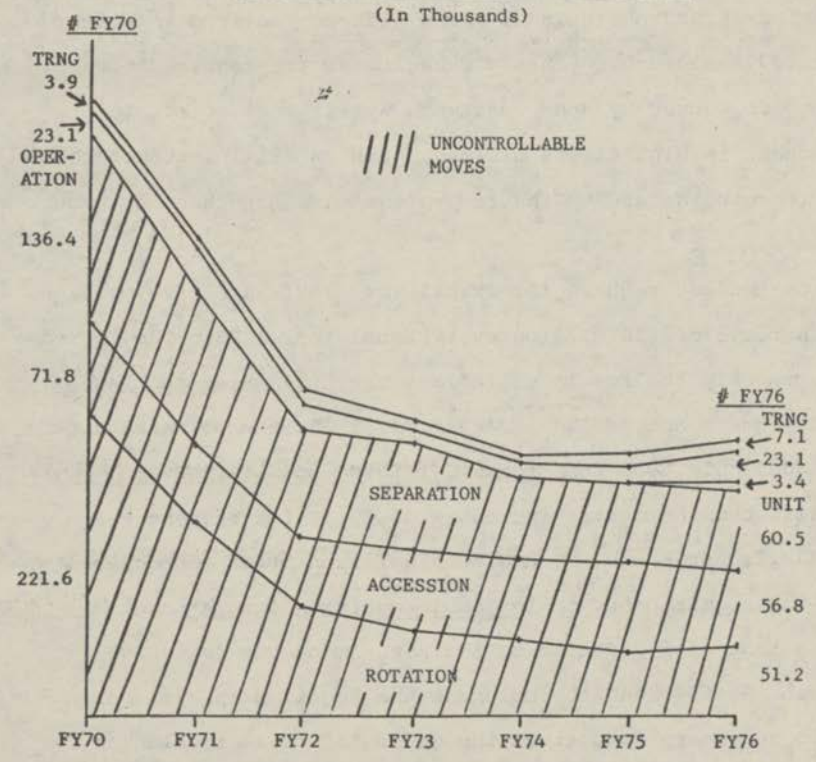


The average miles per move will continue to decrease as our management efforts to schedule post rotational duty stations begin to show benefits. Under this concept, which is in the trial stage, selected officers receive notification of their next CONUS duty station before departing on their 13 month unaccompanied tour in the Western Pacific. This

allows the officer to locate his family in the vicinity of his next duty assignment, thereby decreasing a portion of a PCS move with its attendant family turbulence and cost. It is believed that this policy will be effective and will be expanded to the maximum level consistent with the need for some assignment flexibility.

The next step after minimizing, to every extent possible, the cost per move was to analyze the requirement for the total numbers of moves. The following chart illustrates the categories of moves in Fiscal Years 1970 to 1976 which are controllable by the Marine Corps.

MARINE CORPS PCS MOVES FY 1970 - FY 1976
(In Thousands)



Since separation, accession or rotational moves are relatively fixed by the size of the force or the mission requirement, only operational and training moves are subject to any degree of control. Even at that, training moves respond directly to the skill requirements of the force and, if deferred, impact immediately on readiness. So in reality, the only moves left to manipulate are the operational moves.

The number of such moves requested for Fiscal Year 1976 does show a large increase over the previous years, but these additional moves are required to offset the grade and skill imbalances which have occurred over the past two years due to the restriction placed on operational travel. A steady state of 16,500 operational moves will be realized in Fiscal Year 1977 and future years. These moves are required to fill vacancies caused by non-programmed attritions; to rotate personnel in high stress billets, such as drill instructors and recruiters; and to insure professional growth among career Marines.

Our budget request for Fiscal Year 1976 is $119.9 million, an increase of $26 million over Fiscal Year 1975. The increase is primarily the result of inflationary pressures such as a full year impact of the 1 January 1975 15.5% rate increase for Household Good Commercial Carriers, and Military Airlift Command tariff increases of 29.9% for passenger and 13.7% for cargo. Added to significant rate increases are the requirements to implement additional rotational moves that were deferred by the Roth Amendment (sec. 205 of P.L. 93-554) and to implement the required operational moves necessary to correct the grade and skill imbalances built up over the two previous years.

MATTERS OF SPECIAL INTEREST

Headquarters and Support Forces

Although final decisions on the DoD command structure in the Pacific have not been made, we have programmed reductions by end Fiscal Year 1975 in our two Fleet Marine Force headquarters. The reduction of 254 Marines recommended by the Congress has been spread between Fleet Marine Force (FMF) Pacific and Atlantic headquarters resulting in a total reduction in Fiscal Year 1975 of 20% from their combined programmed strength. Also, as a result of our continuing efforts to minimize manpower assigned to headquarters and other support organizations, we have conducted manpower surveys in other areas and have identified 294 positions which can be eliminated from the Marine Corps Development and Education Command at Quantico, Virginia. These Marines, as well as those trimmed from the FMF headquarters, will be reassigned to combat units to improve the manning of our General Purpose Forces.

MARINE CORPS MANAGEMENT HEADQUARTERS

FY 1975

	Pres. Budget	FY 1975	FY 1976	FY 197T
HQMC 1/	2390	2389	2389	2389
Marines	(1240) 2/	(1240)	(1240)	(1240)
Navymen	(16)	(16)	(16)	(16)
Civilian	(1134)	(1133)	(1133)	(1133)
FMFPAC	743	588	588	588
Marines	(688)	(533)	(533)	(533)
Navymen	(33)	(33)	(33)	(33)
Civilian	(22)	(22)	(22)	(22)
FMFLANT	615	516	516	516
Marines	(598)	(499)	(499)	(499)
Navymen	(16)	(16)	(16)	(16)
Civilian	(1)	(1)	(1)	(1)

1/ A study is currently being conducted to realign HQMC in accordance with the new DOD management headquarters definition.
2/ Includes 145 spaces restored by SecDef memo of 3Apr74.

Camp Butler

Reductions have also been effected from our base support structure at Camp Butler on Okinawa. Permanently assigned military personnel have been reduced by 200, as recommended by the Congress, although the tenant combat units will increase their support through the Fleet Assistance Program to continue those functions which cannot be eliminated. A reduction of 300 civilians, to be completed by 31 March 1975, will be spread among these base support organizations: Camp Butler; Iwakuni, Japan; and Marine Corps Air Station, Futema, Okinawa. Further reductions in the civilian force could not be absorbed in those organizations, nor could Marines from tenant combat units be substituted above their present level of support without adversely affecting unit readiness. Also, many of the base support functions such as drivers and security guards, i.e., those who come into contact with Japanese citizens and who must be especially familiar with local laws, are best performed by indigenous civilian personnel.

Recruit Screening Process

Last year, implementation of a program similar to the Army's Trainee: Discharge Program was recommended by the House Armed Services Committee. I have personally examined the concept of this program and in November visited the Army Training Center at Fort Jackson, South Carolina. I found our procedures to be similar to the basic concept of the Army program.

The fundamental objective of our Marine Corps recruit training is to transform young men and women

into Marines and, in the process, identify those who will not or cannot make that transition. Obviously, it is best to screen out as soon as possible those who can't. In Fiscal Year 1974, 5108 were released because we found they would not make satisfactory Marines. They were not, however, released without deliberate consideration.

We believe we have an obligation to these young men and women to afford them every reasonable opportunity to learn and demonstrate their ability to serve as Marines. Therefore, each recruit who is having difficulty is counseled concerning his or her deficiencies and afforded a reasonable opportunity to correct them. If his difficulties persist, his case is carefully reviewed by a board of officers. Only after a recruit has demonstrated beyond a doubt that he cannot succeed is he discharged.

We do not expect to identify all non-performers in recruit training. I stated in reply to your questions last year that recruits are under close supervision with nearly all their time programmed for them. Consequently, some will appear to perform well in recruit training, in that particular environment, but fail to perform satisfactorily afterwards.

Ideally, the initial screening process at the time of enlistment should be sufficiently effective to deny enlistment to anyone who cannot measure up to Marine Corps standards. Every effort is made to achieve this. Enlistment criteria are reviewed continuously and revised when appropriate to improve the selectivity of the enlistment process. For example, in April of 1973,

the Commandant set a goal of no more than 10% Mental Group IV among our new recruits. In July 1974 we introduced a new enlistment test (Armed Services Vocational Aptitude Battery). In December of 1974, correlation studies indicated the new test was not providing the desired quality enlistee and, on 1 February 1975, we applied a new interpretation to the test to further increase our enlistment standards.

We seek to man our Corps with only the highest quality young men and women available. Our enlistment standards and training procedures are designed to accomplish that goal.

Reenlistment Travel

As directed by the Congress, effective 1 January 1975, reenlistment travel payments are no longer paid to Marines who reenlist immediately upon completion or termination of an enlistment. We foresee no increase in separation payments resulting from attempts to skirt the intent of this restriction.

Accumulated Leave

To reduce the average number of days of unused leave for which a Marine must be reimbursed upon separation, we have reiterated our long standing policy that Marines will be given every reasonable opportunity to take leave and will be encouraged to take their authorized leave annually. Commanders have been reminded of their responsibility to insure this policy is carried out. We fully expect to realize some immediate reduction in the annual payments but significant progress will necessarily be gradual as many Marines slowly decrease their previous

accumulations. Expected reductions are reflected in our budget estimate.

Matters of Special Concern to Marine Corps

I just discussed several topics which have been of special concern to the Congress. I assure you they are also of concern to the Marine Corps. But there is one additional area of special concern to the Marine Corps which I would like to call to the attention of the Congress.

We acutely recognize that the costs of all manpower are rising rapidly. Since 1972, the Marine Corps strength has declined by one percent but the military personnel budget request in Fiscal Year 1976 reflects an increase of 26% above the 1972 level. We continually seek ways to hold down the rate at which these costs are rising; for instance, we maintain relatively low average grades in both the officer and enlisted forces when compared to the DOD norm, and we maintain by far the most favorable officer to enlisted ratio in DOD. An indication of our success in holding down these costs is the fact that while the size of the Marine Corps in terms of manpower strength is essentially the same, our military personnel appropriation request for Fiscal Year 1976 represents only a four percent increase above the present Fiscal Year 1975 estimate.

We cannot, however, continually squeeze our manpower plans to obtain savings. Because we are a manpower intensive service, restrictions on total funding impact on Marine Corps manpower more quickly than in the

JUSTIFICATION

Senator INOUYE. Before you begin, I would like to have the justification information for the Marine Personnel Account inserted at this point in the record.

[The justification follows:]

(The justification follows:)

remainder of DOD. This has forced us at times to curtail manpower programs to remain within funding constraints.

Directly related to the concern for the increasing costs of manpower is the concern that the manpower available be utilized effectively. The Marine Corps has aggressively pursued the general sense of Congress that the mission of the Department of Defense is to maintain strong combat forces. In so doing, all support forces have been reduced to the bare minimum in our programs. Therefore, attempts to impose reductions in support can only result in concomitant reductions in the associated combat forces supported.

SUMMARY

Mr. Chairman, members of the Committee. You have heard the highlights of our Manpower Plans and our estimate of the funds required to carry them out. We believe they reconfirm our reputation for being frugal managers of our share of the taxpayers' dollars. We seek your support in providing the resources to make these plans a reality.

I would be pleased to attempt to answer any questions you may have.

Justification

Military Personnel, Marine Corps

For pay, allowances, individual clothing, subsistance, interest on deposits, gratuities, permanent change of station travel (including all expenses thereof for organizational movements), and expense of temporary duty travel between permanent duty stations, for members of the Marine Corps on active duty (except members of the Reserve provided for elsewhere); [$1,695,456,000] $1,828,300,000.

For Military Personnel, Marine Corps for the period July 1, 1976, through September 30, 1976, $467,900,000. (10 U.S.C. 1035, 1212, 1475-80, 2634, 5402, 5404-5, 5409, 5413-17, 5441, 5443, 5445-6, 5448, 5451, 5454-6, 5458, 5502-3, 6032, 6081-6, 6148, 6222; 12 U.S.C. 1715m; Chapters 3, 5, 7 and 9 of Title 37, U. S. Code; 42 U.S.C. 1594d; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-1105-0-1-051		1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	2. GENERAL PURPOSE FORCES	976,571	1,035,585	1,091,466
	3. INTELLIGENCE AND COMMUNICATIONS	16,738	10,462	10,562
	5. GUARD AND RESERVE	42,823	43,356	42,368
	6. RESEARCH AND DEVELOPMENT	549	9,599	9,662
	7. CENTRAL SUPPLY AND MAINTENANCE	18,369	19,260	16,261
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	547,345	577,387	594,800
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	57,231	59,428	62,320
	10. SUPPORT OF OTHER NATIONS	1,011	1,083	861
	TOTAL DIRECT PROGRAM	1,660,636	1,756,160	1,828,300
	REIMBURSABLE (TOTAL)	9,766	7,745	8,104
10	TOTAL OBLIGATIONS	1,670,402	1,763,905	1,836,404
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-6,697	-4,146	-4,329
14	NON-FEDERAL SOURCES	-3,069	-3,599	-3,775
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR	-766	.....	.....
25	UNOBLIGATED BALANCE LAPSING	4,464	.....	.....
	BUDGET AUTHORITY	1,664,334	1,756,160	1,828,300
	BUDGET AUTHORITY:			
40	APPROPRIATION	1,668,934	1,695,456	1,828,300
41	TRANSFERRED TO OTHER ACCOUNTS	-4,600	.....	.....
43	APPROPRIATION (ADJUSTED)	1,664,334	1,695,456	1,828,300
44.30	PROPOSED SUPPLEMENTAL FOR MILITARY PAY RAISES	.....	60,704	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	1,660,636	1,756,160	1,828,300
72	OBLIGATED BALANCE, START OF YEAR	82,719	100,119	123,173
74	OBLIGATED BALANCE, END OF YEAR	-100,119	-123,173	-134,719
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	-62,114	.....	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	1,580,621	1,676,498	1,813,658
91.30	OUTLAYS FROM MILITARY PAY RAISE SUPPLEMENTAL	.....	57,508	3,096

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-1105-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.7	MILITARY PERSONNEL	1,218,284	1,282,178	1,315,790
11.8	SPECIAL PERSONAL SERVICES PAYMENT	256	150	150
	TOTAL PERSONNEL COMPENSATION	1,218,540	1,282,328	1,315,940
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	1,218,147	1,281,783	1,315,413
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	294,124	309,763	317,868
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	41,322	44,132	51,362
22.0	TRANSPORTATION OF THINGS	39,171	45,737	62,525
25.0	OTHER SERVICES	1,165	1,867	2,411
26.0	SUPPLIES AND MATERIALS	65,134	71,346	77,177
42.0	INSURANCE CLAIMS AND INDEMNITIES	933	1,082	1,094
43.0	INTEREST AND DIVIDENDS	690	450	450
	TOTAL DIRECT OBLIGATIONS	1,660,636	1,756,160	1,828,300
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	393	545	527
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	257	307	307
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	645	850	850
25.0	SUPPLIES AND MATERIALS	8,471	6,043	6,420
	TOTAL REIMBURSABLE OBLIGATIONS	9,766	7,745	8,104
99.0	TOTAL OBLIGATIONS	1,670,402	1,763,905	1,836,404

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-05-1105-0-1-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	2. GENERAL PURPOSE FORCES	274,009
	3. INTELLIGENCE AND COMMUNICATIONS	2,555
	5. GUARD AND RESERVE	10,784
	6. RESEARCH AND DEVELOPMENT	2,424
	7. CENTRAL SUPPLY AND MAINTENANCE	4,101
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	158,151
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	15,674
	10. SUPPORT OF OTHER NATIONS	192
	TOTAL DIRECT PROGRAM	467,900
	REIMBURSABLE (TOTAL)	2,013
10	TOTAL OBLIGATIONS	469,913
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-1,477
14	NON-FEDERAL SOURCES	-536
	BUDGET AUTHORITY	467,900
	BUDGET AUTHORITY:	
40	APPROPRIATION	467,900
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	467,900
72	OBLIGATED BALANCE, START OF YEAR	134,719
74	OBLIGATED BALANCE, END OF YEAR	-136,619
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	466,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-1105-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.7	MILITARY PERSONNEL	329,340
11.8	SPECIAL PERSONAL SERVICES PAYMENT	40
	TOTAL PERSONNEL COMPENSATION	329,420
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	329,317
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	41,635
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	13,454
22.0	TRANSPORTATION OF THINGS	18,733
25.0	OTHER SERVICES	821
26.0	SUPPLIES AND MATERIALS	23,539
42.0	INSURANCE CLAIMS AND INDEMNITIES	276
43.0	INTEREST AND DIVIDENDS	125
	TOTAL DIRECT OBLIGATIONS	467,900
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	103
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	92
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	213
26.0	SUPPLIES AND MATERIALS	1,605
	TOTAL REIMBURSABLE OBLIGATIONS	2,013
99.0	TOTAL OBLIGATIONS	469,913

(SUPPLEMENTAL NOW REQUESTED)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-05-1105-1-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	2. GENERAL PURPOSE FORCES	.....	3,930	.....
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	.....	2,210	.....
10	TOTAL OBLIGATIONS	.....	6,140	.....
	FINANCING:			
40	BUDGET AUTHORITY (PROPOSED SUPPLEMENTAL APPROPRIATION)	.....	6,140	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	.....	6,140	.....
72	OBLIGATED BALANCE, START OF YEAR	.....	.....	246
74	OBLIGATED BALANCE, END OF YEAR	.....	-246	.....
90	OUTLAYS	.....	5,894	246

INTRODUCTORY STATEMENT

This appropriation provides funds for the pay and allowances, subsistence in kind, travel and transportation costs related to permanent change of station, and other personnel costs, as authorized by law and regulations, for Marines on active duty with the regular establishment. The program and financing schedule for this appropriation reflects program activity classifications which are identical to the ten major program classifications used for management purposes throughout the Department of Defense.

The tables immediately following include manyears and end strength, increases and decreases, detailed requirements for the military personnel appropriations by budget activities and special analyses.

The final section summarizes the Active Duty Military Personnel Manpower by Program Activity, as in the Five Year Defense Plan, and by Operating Program. Operating Programs are: Operation of the Marine Corps, Operation of Other Defense Agencies, and Research and Development Defense Agencies.

Operation of the Marine Corps includes Marines performing Marine missions as well as Marines assigned in support of the Navy, performing Navy missions. Marines assigned to other defense agencies are shown under Operation of Other Defense Agencies, and Marines performing research and development for other defense agencies are shown under Research and Development Defense Agencies. In addition, a small number of Marine Corps military personnel are assigned to other Government agencies outside the Department of Defense. The costs of these personnel are financed as a part of the reimbursable program for this appropriation, with reimbursements received from the Government agencies to which such personnel are assigned.

Obligations for military personnel are distributed to each of the program activities on the basis of average rates. These rates are derived by averaging total obligations for officers and enlisted personnel. The resulting rates are multiplied by the number of manyears in each activity. Obligations for permanent change of station travel are excluded from these standard rates and entered directly in Program 8. The remainder of the book, except for special analyses, contains material in the same form that has been used for a number of years to present the detailed requirements for the military personnel appropriation by budget activities. The concluding pages have been used for special analyses for those areas in which there has been special interest.

SUMMARY OF MILITARY PERSONNEL STRENGTH

	FY 1974 Actual		FY 1975 Planned		FY 1976 Planned		FY 1977 Planned		FY 1977 Planned
	Man-Years	End Strength	Man-Years	End Strength	Man-Years	End Strength	Man-Years	End Strength	End Strength
DIRECT PROGRAM									
Officers.....	18,749	18,725	18,255	18,558	18,499	18,558	4,655	18,531	18,373
Enlisted.....	172,281	170,062	174,528	177,804	177,563	177,731	44,411	177,953	179,259
Subtotal.....	191,030	188,787	192,783	196,362	196,062	196,289	49,066	196,484	197,632
REIMBURSABLE PROGRAM 1/									
Officers.....	14	15	14	14	14	14	3	14	14
Enlisted.....	-	-	-	-	-	-	-	-	-
Subtotal.....	14	15	14	14	14	14	3	14	14
TOTAL PROGRAM									
Officers.....	18,763	18,740	18,269	18,572	18,513	18,572	4,658	18,545	18,387
Enlisted.....	172,281	170,062	174,528	177,804	177,563	177,731	44,411	177,953	179,259
TOTAL.....	191,044	188,802	192,797	196,376	196,076	196,303	49,069	196,498	197,646

1/ Military personnel assigned to agencies outside of Department of Defense on a reimbursable basis under the provisions of 10 USC 5416

Military Personnel, Marine Corps
End Strengths by Grade 1/
(Total Program)

	30 June 19 74	Reimbursables Included	30 June 19 75	Reimbursables Included	30 June 19 76	Reimbursables Included	30 Sep 19 7T	Reimbursables Included
Commissioned Officers								
O-10 General	2		2		2		2	
O- 9 Lt. General	7		8		7		7	
O- 8 Major General	26		24		25		25	
O- 7 Brigadier General	36		35		35		35	
O- 6 Colonel	605	6	597	6	595	6	595	6
O- 5 Lt. Colonel	1493	6	1494	6	1486	6	1486	6
O- 4 Major	2966	3	2940	2	2920	2	2920	2
O- 3 Captain	4973		4850		4850		4850	
O- 2 1st Lieutenant	3963		4229		4207		4217	
O- 1 2nd Lieutenant	3411		3196		3280		3284	
Total	17482	15	17375	14	17407	14	17421	14
Warrant Officers								
W-4 Chief Warrant Officer	170		150		311		295	
W-3 Chief Warrant Officer	518		506		284		264	
W-2 Chief Warrant Officer	341		271		188		183	
W-1 Warrant Officer	229		270		382		382	
Total	1258	0	1197	0	1165	0	1124	0
Total Officer Personnel	18740	15	18572	14	18572	14	18545	14
Enlisted Personnel								
E-9 Sergeant Major/Master Gunnery Sergeant	1322		1249		1249		1249	
E-8 First Sergeant/Master Sergeant	3310		3314		3314		3314	
E-7 Gunnery Sergeant	8676		8697		8697		8697	
E-6 Staff Sergeant	14238		14372		14372		14372	
E-5 Sergeant	23374		23727		23727		24355	
E-4 Corporal	25845		29035		30035		31138	
E-3 Lance Corporal	29631		32612		32153		32923	
E-2 Private First Class	32667		33413		34697		30977	
E-1 Private	30999		31385		29487		30928	
Total	170062	0	177804	0	177731	0	177953	0
Total End Strength	188802	15	196376	14	196303	14	196498	14

1/ Excludes active duty personnel paid from Civil Functions, Reserve, and Guard Appropriations

Military Personnel, Marine Corps
Man-Years Strengths by Grade 1/
(Total Program)

	Man-Years FY 1974	Reimbursables Included	Man-Years FY 1975	Reimbursables Included	Man-Years FY 1976	Reimbursables Included	Man-Years FY 1977	Reimbursables Included
Commissioned Officers								
O-10 General	2		2		2		1	
O-9 Lt. General	7		7		7		2	
O-8 Major General	25		25		25		6	
O-7 Brigadier General	37		35		35		8	
O-6 Colonel	632	5	605	6	597	6	148	1
O-5 Lt. Colonel	1511	6	1500	6	1494	6	372	2
O-4 Major	2976	3	2943	2	2937	2	730	
O-3 Captain	5007		4793		4850		1213	
O-2 1st Lieutenant	3858		3650		3919		1016	
O-1 2nd Lieutenant	3388		3305		3468		876	
Total	17443	14	17065	14	17334	14	4372	3
Warrant Officers								
W-4 Chief Warrant Officer	176		160		179		76	
W-3 Chief Warrant Officer	579		473		476		68	
W-2 Chief Warrant Officer	364		333		237		46	
W-1 Warrant Officer	201		238		287		96	
Total	1320	0	1204	0	1179	0	286	0
Total Officer Personnel	18763	14	18269	14	18513	14	4658	3
Enlisted Personnel								
E-9 Sergeant Major/Master Gunnery Sergeant	1357		1255		1249		312	
E-8 First Sergeant/Master Sergeant	3341		3296		3314		828	
E-7 Gunnery Sergeant	8724		8594		8697		2174	
E-6 Staff Sergeant	13417		14084		14372		3593	
E-5 Sergeant	23743		23431		23730		5832	
E-4 Corporal	22140		26819		29531		7814	
E-3 Lance Corporal	32949		30726		32213		8134	
E-2 Private First Class	33453		33195		33495		8165	
E-1 Private	33157		33128		30962		7559	
Total	172281	0	174528	0	177563	0	44411	0
Total Man-Years	191044	14	192797	14	196076	14	49069	3

1/ Excludes active duty personnel paid from Civil Functions, Reserve, and Guard Appropriations

Military Personnel, Marine Corps
Active Duty Strengths by Month 1/
(In Thousands)

	FY 1975			FY 1976			FY 197T		
	Officer	Enlisted	Total	Officer	Enlisted	Total	Officer	Enlisted	Total
June.....	18.7	170.1	188.8	18.6	177.8	196.4	18.6	177.7	196.3
July.....	18.6	170.8	189.4	18.5	177.9	196.4	18.6	177.7	196.3
August.....	18.6	171.7	190.3	18.7	178.2	196.9	18.8	177.4	196.2
September.....	18.2	174.0	192.2	18.4	178.8	197.2	18.5	178.0	196.5
October.....	18.2	174.1	192.3	18.5	178.2	196.7			
November.....	18.1	173.9	192.0	18.5	177.4	195.9			
December.....	18.1	173.9	192.0	18.4	176.1	194.5			
January.....	18.1	175.8	193.9	18.5	176.6	195.1			
February.....	18.1	176.5	194.6	18.5	177.1	195.6			
March.....	18.2	176.9	195.1	18.4	177.7	196.1			
April.....	18.1	176.7	194.8	18.5	177.5	196.0			
May.....	18.2	176.1	194.3	18.6	177.5	196.1			
June.....	18.6	177.8	196.4	18.6	177.7	196.3			
Average.....	18.3	174.5	192.8	18.5	177.6	196.1	4.7	44.4	49.1

1/ Includes Reimbursable active duty military personnel but excludes active duty personnel paid from Reserve Appropriations.

SUMMARY OF REQUIREMENTS BY BUDGET PROGRAM
(In Thousands of Dollars)

Identification Code: 07-05-1105-0-1-051	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Direct Program:				
1. Pay and allowance of officers	$ 329,093	$ 336,344	$ 341,996	$ 85,646
2. Pay and allowance of enlisted	1,147,654	1,215,145	1,246,097	314,203
4. Subsistence of enlisted personnel	95,498	113,136	117,374	33,320
5. Permanent change of station travel	83,970	93,928	119,889	33,980
6. Other military personnel costs	4,421	3,747	2,944	751
Total direct program	1,660,636	1,762,300	1,828,300	467,900
Reimbursable Program:				
1. Pay and allowance of officers	346	407	389	84
2. Pay and allowance of enlisted	304	445	445	111
4. Subsistence of enlisted personnel	8,471	6,043	6,420	1,605
5. Permanent change of station travel	645	850	850	213
Total reimbursable program	9,766	7,745	8,104	2,013
TOTAL PROGRAM:				
1. Pay and allowances of officers	329,439	336,751	342,385	85,730
2. Pay and allowances of enlisted	1,147,958	1,215,590	1,246,542	314,314
4. Subsistence of enlisted personnel	103,969	119,179	123,794	34,925
5. Permanent change of station travel	84,615	94,778	120,739	34,193
6. Other military personnel costs	4,421	3,747	2,944	751
Total Program	$1,670,402	$1,770,045	$1,836,404	$469,913

SCHEDULE OF INCREASES AND DECREASES
(Increases and Decreases over $200 Thousand)

		AMOUNT ($ Millions)
FY 1975 Direct Program		$1,762.3
INCREASES:		
Full year impact of 1 October 1974 pay raise and increased manyears	+45.5	
Combat arms enlistment bonus increased number of payments	+ 1.5	
Subsistence increase in cost to feed and increased manyears	+ 2.4	
Training requirements associated with the F-14 aircraft	+ .5	
Carrier tariff increases for passenger and cargo in Permanent Change of Station Travel	+12.9	
Number of moves for relief of grade and skill imbalances	+ 5.3	
Number of moves deleted by Section 205 P. L. 93-554 in FY 1975 carried forward into FY 1976	+ 3.7	
Number of personnel in separation travel	+ 1.4	
Unit moves, a new travel category for the Marine Corps which includes operational requirement	+ 2.3	
Increase baggage allowance to 10% of authorized weight allowance for Marines on dependent restricted tours vice 250 pounds maximum	+ 1.8	
TOTAL INCREASES		+ 77.3
DECREASES:		
Incentive Pay reduction in flight payments for "save pay"	- .3	
Proficiency Pay reduction in number of payments	- 4.4	
Clothing reduction of initial issues	- 2.3	
Separation payments decrease in number and amount of payments	- 1.5	
Reduction in accession travel	- 2.0	
Servicemens' Group Life Insurance extra hazard payments terminated	- .8	
TOTAL DECREASES		- 11.3
Total FY 1976 Direct Program		$1,828.3

MANPOWER INTRODUCTION

Senator INOUYE. I notice you have a summary statement. You may proceed in any way you desire, sir.

General JASKILKA. Mr. Chairman and Senator Young, I am pleased to make my third appearance before this committee to present the highlights of the Marine Corp's military manpower programs for fiscal year 1976 and the transitional year 197T and to present our estimate of the military personnel appropriations which supports them.

When I presented our appropriation request last year, the Marine Corps was experiencing problems in recruiting which resulted in an end year strength deficit in excess of 7,000.

This occurred, first, because the Marine Corps had not fully foreseen all the problems of recruiting in an all-volunteer environment and, second, because of the restriction of section 718 of the fiscal year 1974 DOD Appropriation Act, which limited the percentage of non-high school graduates among recruits.

RECRUITING SUCCESS

Our success thus far this year has been encouraging. Through the first 7 months of this fiscal year, we have achieved 100.4 percent of our active duty recruit quota even though the quota has been increased to recoup the fiscal year 1974 shortfall; and for the first time, in December and January, we met our regular and Reserve recruit quotas simultaneously.

We have not sacrificed quality to achieve this. While relieved of the legal requirement to obtain 55 percent high school graduates among our recruits, we continue to strive to meet this goal voluntarily. For the same 7 months, 53.5 percent of our recruits have been high school graduates or possess the equivalency certificate. More importantly, we have recruited over 4,700 more high school graduates than in the same period last year.

As we have done in each of the last 4 years, we continue to increase the average term of enlistment; and, commencing in fiscal year 1976, we will eliminate 2-year enlistments and offer only 3- and 4-year contracts.

Much of our success is the result of our own management actions; some is, undoubtedly, due to the present economy; however, a large measure of that success can be directly attributed to the support of the Congress in authorizing programs which have supported our recruiting efforts.

BONUS REVISION ACT

The new Bonus Revision Act, enacted into law in May 1974, and which extended enlistment bonus payments to critically short technical skills, has proven effective. Since graduated special duty assignment payments of up to $150 per month were authorized in June 1974, additional qualified Marines have volunteered to be recruiters. Also in June the Congress authorized reprograming of $4.6 million for paid print mass media advertising.

Although these were fiscal year 1974 funds, most of the impact is being felt this year and has contributed significantly to the improved outlook for recruiting in fiscal year 1975. For the first time, we believe we are competitive in reaching the eligible youth population.

Assuming we attain our current recruiting and end strength objectives, our recruiting requirements in fiscal year 1976 will be reduced to 50,300 non-prior-service males and females, compared to the current year's quota of 58,400. This will permit us to concentrate our recruiting resources on further improving the quality of our enlistees.

Procurement of young officers has been similarly encouraging, and retention of both officers and enlisted has recently exceeded our expectations. While we are encouraged by our recent success in attracting and retaining quality Marine, we are concerned about another topic, which is on everyone's lips today—that is, rising costs.

Since 1972 the Marine Corps strength has declined by 1 percent but the military personnel budget request in fiscal year 1976 reflects an increase of 26 percent above the 1972 level. We continually seek ways to hold down the rate at which these costs are rising. For instance, we maintain relatively low average grades in both the officer and enlisted forces when compared to the DOD norm and we maintain by far the most favorable officer-to-enlisted ratio in DOD.

Senator INOUYE. What do you mean by "relatively low average grades compared with the DOD norm"? Can you give us a few examples?

AVERAGE GRADE-RANK

General JASKILKA. Yes, we can, sir. The average grade DOD-wise is 4.06, from E–1 through E–9. To compute this we multiply the pay grade number by the number in that grade, and then divide by the total. That gives you an average enlisted and officer grade. I believe the Marine Corps enlisted average grade is 3.48.

Senator INOUYE. What is the ratio of officer to enlisted?

General JASKILKA. It is 1 to 9.6.

Senator INOUYE. What is that ratio for the DOD norm?

General JASKILKA. The DOD normal is 1 to 6.5.

Admiral COOKE. Is it that low?

General JASKILKA. Yes, sir.

Senator INOUYE. In other words, you are maintaining responsibilities at a rank lower than that set forth in the DOD norm?

General JASKILKA. There is no question about that, sir. The measurement we use is the top six enlisted pay grade versus the lower three.

Senator INOUYE. Are the other services keeping up with the DOD norm or, like the Marine Corps, going below the norm?

General JASKILKA. I would say the Air Force, Army, and the Navy are generally at or above the DOD norm and the Marine Corps below it.

Admiral COOKE. The Navy is about seven enlisted to one officer. It is because of the structure. We are not a large manpower organization. We have a lot of equipment—and, in general, a little higher-rated personnel. We do not have the total number of personnel that the Army does.

Senator INOUYE. The Marine Corps is without certain skills which would increase your officer rates. For example, you don't have a medical corps.

General JASKILKA. No, sir, we do not, nor a dental corps nor a chaplain corps.

Senator INOUYE. The Navy has to take up the officer load there.

SECURITY PERSONNEL

General JASKILKA. They do. I would add that, whereas the Navy gives us wonderful support in these areas, the Marine Corps supports the Navy in providing security forces of about 9,500 Marines.

Senator INOUYE. How many Marines do you have assigned to embassies throughout the world?

General JASKILKA. We are authorized 1,549, I believe, sir. We are not quite there yet because the increase was authorized about 2 years ago, and we are working with the State Department to build it up to the level consistent with their ability to house the Marines at the various embassies for which they are required. Today we have around 1,400 actually onboard in support of the embassies throughout the world.

Senator INOUYE. You have over 2,000 men who are assigned to duties, who are really not part of your mission?

General JASKILKA. Sir, we consider it part of our mission. It is a duty assigned to the corps to provide security for our embassies. It is not a combat mission, although you would have a tough time explaining that to the yong man in Cyprus last year.

MARINE BAND

Senator INOUYE. For example, your Marine Band is assigned to the White House?

General JASKILKA. It is assigned to the Marine Barracks and they support the White House. They provide music at our Friday night parades. They go on concert tours throughout the country from time to time and will especially do so during the bicentennial year. They are not assigned to the White House full time, although they are considered the "President's own."

Senator INOUYE. Please proceed.

Senator YOUNG. Do you provide Marines for all the new countries? We must have 125 nations now.

General JASKILKA. Not every country, sir, only those in which the State Department thinks it needs security. I think it is something like 96 countries today.

Senator YOUNG. The ones you don't provide Marine Guards are the new, emerging countries?

General JASKILKA. We provide some to the new, emerging countries as well as the old, established ones, sir. The State Department makes a decision as to where they need Marines. Together with the Department of Defense and, of course, the Congress, we provide the manpower required.

Senator YOUNG. Where is your biggest mission?

General JASKILKA. I would say probably the largest detail we have would be in Saigon, next would be Paris, then Rome.

SECURITY REQUIREMENTS

Senator INOUYE. What are the security requirements in those places?

General JASKILKA. The average security unit at one of these embassies, sir, totals as few as six or eight. The larger ones would go as high as 20 or 30 but no more than that in any single embassy except Saigon.

[Discussion off the record.]

Senator INOUYE. You may proceed.

MANPOWER FUNDING

General JASKILKA. We cannot, however, continually squeeze our manpower plans to obtain savings. Because we are a manpower-intensive service, restrictions on total funding impact on Marine Corps manpower more quickly than in the remainder of the Department of Defense. This has forced us at times to curtail manpower programs to remain within funding constraints.

While manpower costs are rising and the labor market appears favorable today for maintaining an all-volunteer force, premature diminution or loss of manpower programs could be counterproductive to the continued success of an all-volunteer force.

Directly related to the concern for the increasing costs of manpower is the concern that the manpower available be utilized effectively. The Marine Corps has aggressively pursued the general sense of Congress that the mission of the Department of Defense is to maintain strong combat forces.

In so doing, all support forces have been reduced to the bare minimum in our programs with the maximum investment of manpower in our operating forces. Our fiscal year 1976 program provides for more than 63 percent of our marines to be assigned to the combat units of our Fleet Marine Forces, to our auxiliary and security forces.

Mr. Chairman, members of the committee, the Marine Corps is requesting $1.84 billion to fund an end strength of 196,303 marines and an average strength of 196,076 in fiscal year 1976. For the transitional year 197T, we are requesting $0.47 billion to fund an end strength of 196,498 and 49,069 man-years.

A more detailed description of our manpower plans and the estimate of the funds required to carry them out have been submitted to you for the record. We believe they reconfirm our reputation for being frugal managers of our share of the taxpayer's dollars. We seek your support in providing the resources to make these plans a reality.

I would be pleased to attempt to answer any questions you may have.

QUESTIONS SUBMITTED BY SENATOR INOUYE

Senator INOUYE. General, we have prepared several questions which I would like to submit to you for your response. Without objection, the questions and answers will appear at this point.

[The questions and answers follow:]

Manpower Shortfalls

Senator Inouye. Why does the request include a shortfall of 16,000 Marines below the 212,000 required? What specific shortfalls in units exist? How were the shortages allocated to the force?

General Jaskilka. I would like to point out one thing, Sir. The 212,000 end strength requirement was developed based upon current peacetime conditions. This number would allow the Marine Corps to perform its assigned mission under current national strategy with what we feel is an acceptable degree of risk. This, however, is not a fully structured, fully manned Marine Corps necessary to conduct sustained combat operations. The difference between the current request and the 212,000 man peacetime requirement is caused by fiscal constraints. As a result of this request we have reduced the manning level of the General Purpose Forces by 6,000 Marines; reduced the number of Marines undergoing training by approximately 6,000; and, reduced our other Individuals, mostly transients, by 1500. Finally, we have reduced our support structure, primarily in training overhead, by approximately 2,500 spaces. Specifically, the reduced manpower request means that the 1st Marine Division will be manned at 80% of structured strength; the 2d Marine Division at 96%; and the 3d Marine Division at 88%. The 1st and 2d Marine Aircraft Wings are currently programmed at 90% manning and the 3d Marine Aircraft Wing will be manned at 80% of structure.

Development Center Manpower

Senator Inouye. What is the manpower at the Development Center (military and civilian), and what are the annual costs and funds managed at this installation?

General Jaskilka. There are 338 Marines and 144 civilians programmed to be assigned to the Development Center, Quantico, Virginia at the end of Fiscal Year 1976. The Marine Corps is reimbursed from RDT&EN appropriation for 124 of the 144 civil servants. The programmed costs of the Development Center for Fiscal Year 1976 is $7 million, and the total funds to be managed by the Development Center during Fiscal Year 1976 are $34 million.

Deployed Personnel's Dependents Policy

Senator Inouye. Your statement indicates that forward deployed Marines are not accompanied by dependents. Has this always been the Marine Corps policy? What is the estimated additional cost if dependents were allowed to accompany Marines deployed in these areas?

General Jaskilka. It has always been our policy that Marines assigned to our forward deployed Fleet Marine Forces not be accompanied by their dependents. The policy ensures that the combat readiness of our units in the Western Pacific not be impaired by large numbers of dependents in an area where base support activities, medical facilities, housing, commissaries and exchanges are inadequate. In dollar cost alone, it would take an additional 350 million dollars to construct sufficient housing, hospitals, schools and commissaries to support the dependents of our Western Pacific Marines. Permanent change of station travel cost for transportation of these dependents would total 13 milloin dollars per fiscal year.

O.C.S. Eligibility Criterion

Senator Inouye. What are the requirements and selection procedures for enlisted men entering officer candidate schools?

General Jaskilka. A board of officers selects enlisted applicants from among those who meet the following requirements:

1. Be a citizen of the United States.
2. Be of unquestioned moral integrity and of commisisoned officer caliber.
3. Not have previously attended and failed to successfully complete any Marine Corps officer training program.
4. Have executed a waiver of rights, if entitled to a restrictive assignment.
5. Have a General Classification Test Score of 120 or higher.
6. Ground officer applicants must be at least 19½ years of age on date application is submitted.
7. Naval Aviation/Naval Flight Officer applicants must be at least 19½ years of age but less than 26½ years of age on date application is submitted.
8. Be physically qualified.

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9. Must be a high school graduate and must have satisfactorily completed not less than 1 year of unduplicated college work.
10. Must have at least 12 months remaining on current enlistment.

Partially Funded Educational Programs

Senator Inouye. Describe the partially funded educational programs available to both officers and enlisted men. Explain what portion of tuition, fees or other costs are paid for from appropriated funds, and identify the amounts by appropriation for Fiscal Years 1974, 1975, and 1976. Indicate the number of personnel who will utilize such programs by fiscal year and the number of new entrants.

General Jaskilka. The Marine Corps Tuition Assistance Program provides 75 percent of the cost of tuition at civilian colleges and universities for off-duty study by officers and enlisted men. A maximum number of six semester hours or the equivalent is normally authorized during any one academic term.

Operation and Maintenance Marine Corps funds expended or estimated for the Tuition Assistance Program and the total participation by officer and enlisted personnel are:

O. & M.M.C. FUNDS FOR TUITION ASSISTANCE PROGRAM

	O. & M.M.C. funds	Participants
Fiscal years:		
1974	$938,000	14,000
1975	946,000	13,514
1976	1,213,000	16,392

The Predischarge Education Program which is funded by the Veterans Administration, provides part-time opportunities for military personnel to pursue high school level work, or remedial/refresher/deficiency work required for post-secondary training. During Fiscal Year 1974, Marines enrolled in 22,500 of these courses. It is anticipated that Marines will enroll in more than 30,000 courses during Fiscal Year 1975.

Education Incentives

Senator Inouye. Explain what incentives are given to individuals to avail themselves of these partially funded or part-time programs (such as time off from the normal work week, administrative leave, etc.).

General Jaskilka. The most important incentives for participation in the Tuition Assistance Program are the availability of programs of study offered on military bases or at nearby campuses by civilian colleges and universities and the scheduling of classes after normal working hours.

The Predischarge Education Programs or PREP programs are also offered on military bases. Released time from regular duty is provided for these programs to assist Marines in completing their high school education and to provide some incentive for participating in the program. At least one-half the time required for participation in PREP courses is normally released time.

Additionally, all major commands have education officers specifically trained to identify command needs and make arrangements for appropriate courses as well as provide testing and information on all educational opportunities.

Formal Education Programs

Senator Inouye. Describe the full-time college, junior college, undergraduate and graduate programs for which funds are requested. Identify the total funding required for these programs, by appropriation, for Fiscal Years 1974, 1975, and 1976. Also indicate the number of new entrants programed for each fiscal year, divided into officers and enlisted.

General Jaskilka. Marine Corps full-time undergraduate programs include the College Degree Program for officers and, for enlisted personnel, the Marine Corps Associated Degree Completion Program, the Degree Completion Program for Staff Noncommissioned Officers, the Navy Enlisted Scientific Education Program which is a commissioning program, and the Marine Enlisted Commissioning Education Program. Full-time graduate programs, which are for officers only, include, the Advanced Degree Program, the Special Education Program, and the Funded Law Education Program.

College Degree Program

The College Degree Program provides an opportunity for qualified officers to attend regionally accredited colleges and universities on a full-time basis to fulfill residence requirements for a baccalaureate degree. Participation in this program is limited to Regular officers and Reserve officers on extended active duty in the grades of warrant officer through lieutenant colonel who have sufficient college credits to permit them to obtain baccalaureate degrees in a maximum period of 21 months. Selection for the program is based on past performance of duty, career potential, previous academic record with consideration given to efforts made and grades received by the officer to complete college courses on off-duty time. Officers participating in the program receive regular pay and allowances. Tuition and matriculation fees, costs of books and materials, and all similar fees and expenses are borne by the officer concerned. An officer participating in the program incurs a four-year service obligation after completing the degree requirements, or a three-year obligation if the requirements are completed within one year.

Marine Corps Associate Degree Completion Program

The Marine Corps Associate Degree Completion Program provides selected, well qualified professional enlisted Marines with the opportunity to complete the requirements for an associate of arts or science degree in a full-time on-campus program. Participation in the associate degree program is limited to enlisted members of the Regular Marine Corps in the grade of Lance Corporal or above who have completed a minimum of three and not more than 12 years active service and are capable of completing the requirements for an associate degree in a maximum period of 21 months. Selection for the program is based on past performance of duty, career potential, and previous academic record with consideration given to efforts made to complete college courses on off-duty time and the resulting grades. Marines participating in this program receive regular pay and allowance, tuition and matriculation fees, and the costs of books and related materials. A Marine participating in the program incurs an obligation to serve two years of active service for every one year spent in school. We are complying with the directions of the 93rd Congress by making no new enrollments into this program subsequent to 1 October 1974, but only continuing the participants that were in school at that time. This last of the present participants are scheduled to graduate in June 1976.

Degree Completion Program for Staff Noncommissioned Officers (SNCODCP)

The Degree Completion Program for Staff Noncommissioned Officers (SNCODCP) provides an opportunity for selected, career oriented Staff Noncommissioned Officers to continue their education and earn baccalaureate degrees in disciplines which will enhance the performance of their Military Occupational Specialties. Participation in the program is limited to sergeants selected for promotion to staff sergeant through first sergeant/master sergeant who have sufficient college credits to permit them to obtain a baccalaureate degree in a maximum period of 21 months. Other selection criteria are the same as for the associate degree program. Marines participating in the degree completion program receive regular pay and allowances, tuition and matriculation fees, and the costs of books and related materials. Participants incur a four-year service obligation after completing degree requirements.

Navy Enlisted Scientific Education Program

The Navy Enlisted Scientific Education Program provides the opportunity for exceptionally qualified enlisted Marines to earn baccalaureate degrees and commissions as second lieutenants. This highly selective program allows the participants to attend college for a maximum of four years to complete the requirements for baccalaureate degrees in one of the natural sciences, mathematics, or engineering.

Participation in this program is limited to enlisted members of the Regular Marine Corps or Marine Corps Reserve on active duty who have attained the rank of Lance Corporal or above, completed one year of active service after completion of recruit training, and are at least 20 but not more than 26 years of age at the time of entering college. Selection for the program is based on past performance of duty, potential for service as a commissioned officer, and previous academic record with consideration given to self-improvement efforts

made during off-duty time. Marines receive regular pay and allowances, tuition and matriculation fees, and the costs of books and related fees. A Marine incurs an obligation to serve four years as a commissioned officer after completing degree requirements.

Marine Corps Enlisted Commissioning Education Program

The Marine Corps Enlisted Commissioning Education Program is similar to the scientific education program except that it affords an opportunity to enlisted Marines to earn baccalaureate degrees in the liberal arts areas and commissions as second lieutenants. This program allows the participants to attend college up to a maximum of four years to complete the requirements for baccalaureate degrees in one of five non-technical disciplines: business management, English, political science, history, or economics. Criteria for selection, financial aid and incurred obligation after completion of the program are the same as for the scientific education programs.

Advanced Degree Program

The Advanced Degree Program provides selected commissioned officers an opportunity to receive advanced degrees at regionally accredited colleges and universities. The program was established to augment the Special Education Program—a fully-funded program—by providing an additional source of officers trained in specific academic disciplines to meet the graduate or special education requirements of the Marine Corps. Participation in the program is limited to officers in the grades of first lieutenant through lieutenant colonel who can complete the requirements for advanced degrees in a maximum period of 18 months. Selection for the program is based on past performance of duty, career potential, previous academic record with consideration given to efforts made and grades received by the officer to complete graduate level courses on off-duty time; and Marine Corps personnel requirements and assets in the various academic disciplines. Officers participating in the program receive regular pay and allowances. Tuition and matriculation fees, costs of books and materials, and all similar fees and expenses are borne by the officer concerned. An officer participating in the program incurs a four-year service obligation after completing degree requirements, or a three-year obligation if the requirements are completed within one year.

Special Education Program

The Special Education Program was established as a means to provide qualified officers to staff specific billets identified as requiring advanced or special education. It is a fully-funded program in which selected officers receive advanced training in specific academic disciplines at the Service graduate schools such as the Naval Postgraduate School and Air Force Institute of Technology or at a very limited number of selected civilian colleges and universities. Participation is limited to officers in the grades of first lieutenant through lieutenant colonel who have not previously participated in a full-time graduate program. Selection for the program is based on past performance of duty, career potential, previous academic record and potential, and Marine Corps personnel requirements and assets in the various academic disciplines. An officer incurs a service obligation equal to three times the length of schooling not to exceed four years.

Funded Law Education Program

The Funded Law Education Program was implemented during 1974, subsequent to the authorization in Public Law 93-155, to send officers to law school while receiving full military pay and allowances for the purpose of obtaining law degrees and subsequent service as career judge advocate officers. Participation in the program is limited to active duty commissioned officers who have served on active duty not less than two years nor more than six years, and who are serving in pay grade O-3 or below at the time training is to begin. Participation in the program must be at an accredited law school located in the United States and the training, which leads to the degree of bachelor of laws or juris doctor, must be completed within thirty-six months. Selection for the program is based on past performance of duty, career potential, and previous academic record. An officer incurs a service obligation of two years for each year or part thereof of the legal training obtained after commencing the program.

The funding required for the full-time programs and the numbers of new entrants by fiscal year are:

FULL TIME EDUCATION PROGRAM FUNDING AND NUMBER OF NEW ENTRANTS

Undergraduate Programs	New Entrants			Operation And Maintenance Marine Corps Appropriated Funds (O&MMC) ($000)			Military Personnel Marine Corps Funds (MPMC) ($000) 1/		
	FY74	FY75	FY76	FY74	FY75	FY76	FY74	FY75	FY76
College Degree Program (CDP) (Officer)	118	125	140	0	0	0	3,952	3,761	3,827
Marine Corps Associate Degree Completion Program (MADCOP) (Enlisted)	168	115	0	90	152	66	1,945	1,807	819
Degree Completion Program for Staff Noncommissioned Officers (SNCODCP) (Enlisted)	55	27	55	137	114	114	550	555	561
Navy Enlisted Scientific Education Program (NESEP) (Enlisted)	44	19	*	163	190	*	825	911	*

*Program combined with MECEP beginning FY76.
1/ Pay and allowances for Participants.

Graduate Programs	New Entrants			Operation And Maintenance Marine Corps Appropriated Funds (O&MMC) ($000)			Military Personnel Marine Corps Funds (MPMC) ($000) 1/		
	FY74	FY75	FY76	FY74	FY75	FY76	FY74	FY75	FY76
Marine Enlisted Commissioning Education Program (MECEP) (Enlisted)	29	33	50	33	62	265	232	445	1,549
Special Education Program-Military Schools (SEP) (Officers)	22	20	35	0	0	0	802	843	869
Special Education Program-Civilian Institutions (Officer)	18	2	7	71	38	20	563	230	165
Funded Law Education Program (FLEP) (Officer)	0	16	8	0	48	72	0	285	415
Advanced Degree Program (ADP) (Officer)	55	39	24	0	0	0	1,598	1,013	710

1/ Pay and allowances for participants.

ROTC Program

Senator Inouye. What are the opportunities for enlisted personnel to attend college through an ROTC program? How does this program compare with the others? How many are programmed in Fiscal Years 1974, 1975, and 1976, and how much is requested in those years?

General Jaskilka. Enlisted Marines are eligible to apply for ROTC scholarship programs in the same manner as any civilian applicant, and the Marine must meet the same program eligibility criteria as any other applicant. Marines selected to receive ROTC scholarships are ordered to the Marine Corps activity nearest the university they will attend. They are then released from active duty and transferred to the Marine Corps Reserve, Class III where their enlistment continues to run while the Marine is in the ROTC program. A Marine who fails to successfully complete the program or who is disenrolled for any reason, must then serve any remaining portion of his enlistment. The number of enlisted personnel who avail themselves of ROTC scholarship programs has been very small, and we plan on only about five Marines per year for these programs. The Marine Corps does not have its own ROTC program, but rather relies on the Naval ROTC program as a source of officer accessions, which is limited to 16⅔ percent of NROTC graduates. The NROTC program is funded entirely by the Navy.

Recruiting Effort

Senator Inouye. How large is the Marine Corps' recruiting effort; military and civilian, and costs for FY 1974–1976?

General Jaskilka. This chart shows the manpower involved in the Marine Corps recruiting effort and the costs for Fiscal Year 1974–1976:

	Fiscal year—		
	1974	1975	1976
Military	3,309	3,135	3,135
Civilians	110	113	113
Costs (thousands):			
(a) Advertising O. & M.M.C. [1]	$12,892	$8,929	$12,235
(b) Military Personnel Marine Corps [2]	24,560	26,334	25,335
(c) Civilian O. & M.M.C. [3]	1,163	1,330	1,356
(d) Other support O. & M.M.C. [4]	9,383	9,856	11,079
Total	47,998	46,449	50,005

[1] Advertising includes the advertising costs of the active duty forces only.
[2] MPMC includes pay and allowances, permanent change of station funds, and subsistence allowances for active duty military personnel.
[3] Civilian O. & M.M.C. includes pay and allowances for civilian personnel.
[4] Other support, O. & M.M.C. includes funds for office and vehicle rental and other costs for administration of the active duty recruiting effort.

Recruiting Force Strength

Senator Inouye. What has been the authorized and assigned strength of the recruiting force?

General Jaskilka. The authorized size of the recruiting force during Fiscal Years 1975 and 1976 is 3135 Marines and 113 civilians. The assigned strength has been 3309 Marines and 110 civilians. There has been a temporary augmentation of 112 Marines which will be terminated prior to the end of this fiscal year.

Reenlistment Disqualification

Senator Inouye. How many individuals who have attempted to reenlist have been denied reenlistment on the basis of quality or professional competence? How is this managed so as not to be capricious or arbitrary in such details?

General Jaskilka. The Career Planning Branch monitors and determines the reenlistment eligibility of all Marines. First term Marines below the grade of sergeant, who meet all reenlistment criteria and desire to be retained on station, may be reenlisted by their commanding officer without approval of the Headquarters. Former Marines below the grade of sergeant who meet all reenlistment criteria and request no other special considerations may be reenlisted by the recruiting service without higher approval.

Permanent records are not maintained on Marines who are not approved for reenlistment. Records of individual disapprovals are administratively for 3 months to expedite and answer individual requests. In all instances, correspondence relative to approval or disapproval of reenlistment is filed in each individual's permanent case file. Although statistical information of the nature requested is not maintained, the currently active 3 month file has been reviewed provide an indicator to the question posed. A compilation of these data shows:

Three-month Marine Corps sample of reenlistment cases considered

First term Marines:	
Monthly averages of cases considered	823
Monthly average of cases disapproved	84
Percentage of monthly disapprovals	10.2
Marines with broken service:	
Monthly average of cases considered	150
Monthly average of cases disapproved	45
Percentage of monthly disapprovals	30.0

Pertinent directives delineate prerequisites required for reenlistment, and provide waiver authority for those cases where sound professional judgment determines that the individual case warrants special consideration. This waiver authority is not all encompassing and is not utilized where specific cases cannot be waived without the personal approval of the Commandant of the Marine Corps.

The premise and guidelines established by the Commandant dictate that each case will be considered on its individual merit with the whole person concept in mind. Under this concept, each case is evaluated and decisioned via a network of officer and enlisted personnel. At least three individuals review each request, and afix comments prior to forwarding it to the next higher echelon. In routine cases the process is relatively simple. In those cases where no clear cut decision can be determined, the case is briefed to the next higher echelon until a policy decision can be rendered. The ultimate decision may then be rendered by the Commandant himself.

Women Marines

Senator Inouye. Are there any units remaining which are all women?

General Jaskilka. Yes sir, there are Women Marine Detachments located at seven locations:

Henderson Hall, Washington, D.C.
Marine Corps Base, Camp Lejeune, N.C.
Marine Corps Base, Quantico, Va.
Fleet Marine Force Headquarters Atlantic, Norfolk, Va.
Fleet Marine Force Headquarters Pacific, Hawaii
Marine Corps Recruit Depot, Parris Island, S.C.
Marine Corps Recruit Depot, San Diego, Calif.

Statutory Promotion Policy

Senator Inouye. What is meant by the statement "women also receive equal consideration for promotion within legal limitations"?

General Jaskilka. Prior to Fiscal Year 1967, women officers were placed before selection boards solely as a result of eligibility for consideration accrued by time in grade, irrespective of the number of vacancies in the next higher grade. There were no promotion zones for women officers, so women were not legally failed of selection for promotion. These features, which were unique to woman officer promotion procedures, were eliminated by the enactment of PL 90–130 in Fiscal Year 1967.

The laws now applicable to women are quite similar to those which apply to male officers. Determination of numbers of selections for promotion, establishment of zones and computation of promotion opportunity are all done in the same manner as that prescribed by law for male officers.

However, there remains some important differences. Women are not considered with, and do not compete with male officers for promotion. Women first lieutenants and captains are not statutorily separated as a result of a second failure of selection, but remain eligible each year until, upon completion of seven and 13

years of commissioned service, respectively, they are separated if their names do not appear on a promotion list. Also, PL 90–130 eliminated fixed grade limitations for women. The Secretary of the Navy has established a grade distribution procedure wherein the allowance for each women officer grade is based upon the same percentage by grade which is currently effective for the active duty male structure.

In developing its woman officer promotion plans, the Marine Corps strives for women officer promotion points (commissioned service) and opportunity which are equal to male promotion points and opportunity. Occasionally, it is not possible to make these factors equal because of the above mentioned remaining differences in law, and because of the small numbers of women officers eligible for consideration for promotion each year. However, the Marine Corps assures that, overall, women officers are afforded equitable promotion points and opportunity.

Personnel Tour Lengths

Senator Inouye. What is the average tour length of officers and enlisted personnel in the Marine Corps?

General Jaskilka. The average number of months a Marine spends on station in the Continental United States when the tour of duty terminated in the fiscal year are as indicated:

MARINE CORPS AVERAGE CONUS TOUR LENGTH (MONTHS)

	Fiscal year—					
	1970	1971	1972	1973	1974	1975
Grade:						
O–6	28	27	28	31	30	31
O–5	26	28	29	29	31	32
O–4	26	27	28	27	31	32
O–3	24	26	26	28	30	30
E–9	26	26	30	32	38	46
E–8	25	25	27	29	34	37
E–7	26	26	29	29	33	34
E–6	25	25	28	27	31	33
E–5	23	23	26	26	28	28

Programming data on which to determine an average CONUS tour of duty for junior officers and junior enlisted Marines is not readily available. However, the trend of longer CONUS tours as displayed on the chart extends to all grades. Overseas tour lengths for all services are prescribed by the Department of Defense and vary among countries and areas. The overseas tour for Marines is applied regardless of rank and is generally 30 to 36 months when accompanied by dependents and 18 to 24 months unaccompanied. The Marine Corps has been authorized an exception to the 18 to 24 month unaccompanied tour for our approximate 25,000 Marines assigned to the Fleet Marine Forces in the Western Pacific. Both officers and enlisted Marines serve 13 months in this dependents restricted tour.

PCS Funds

Senator Inouye. Explain how PCS funds for increasing the baggage allowance became available as a byproduct of the Roth Amendment.

General Jaskilka. The Roth Amendment limited the amount of funds which could be spent for the movement of people in Fiscal Year 1975 but did not limit the funds which could be spent for the movement of things. The amendment did not reduce the total funds available. Funds which could not be spent for the movement of people were then transferred to fund the increased, but more equitable, baggage allowance.

Rotational Moves

Senator Inouye. Explain why rotational moves (moves from the U.S. to overseas locations) are considered relatively uncontrollable.

General Jaskilka. The number of rotational moves are determined by the size of forces overseas and the tour length. With force levels determined by the requirements to support the national strategy, and tour lengths determined by

Department of Defense policy and guidelines, the Marine Corps then has relatively little control over the number of rotational moves necessary to meet these requirements.

GRADE/SKILL IMBALANCES

Senator INOUYE. Explain the specific grade and skill imbalances that have built up over the two previous years. What grades and what skills are involved, and why is this a result of PCS funding shortfalls?

General JASKILKA. To stay within the PCS budget constraints in Fiscal Years 1974 and 1975, the Marine Corps imposed cuts in operational moves. These moves are the only moves which are completely controllable by the Marine Corps since the others are driven by strength and strategic requirements. The number of moves completed or required are:

MARINE CORPS OPERATIONAL MOVES, FISCAL YEARS 1974–76

	Fiscal year 1974		Fiscal year 1975		Fiscal year 1976	
	Officer	Enlisted	Officer	Enlisted	Officer	Enlisted
Operational moves required based on 4 yrs between PCS moves	1,980	11,792	1,668	14,012	1,462	13,306
Operational moves authorized/requested (fiscal year 1976)	900	10,042	900	10,083	1,798	21,300
Operational moves differences		−2,380		−4,697		+8,327

Operational moves are used to offset grade and skill imbalances, move Marines in and out of high stress billets and for administrative reasons, for example, humanitarian transfers or security reasons, etc. within CONUS. Examples of these billets are:

(a) High Stress Billets. 1. Marines who have served on Recruiting Duty longer than 3 years—708—Normal tour length 3 years. 2. Marines serving as Drill Instructors for longer than 2 years—510—Normal tour length 2 years.

(b) Extended period of time at one duty station. 1. Marines assigned to the same Marine Bases and Air Stations for over 4 years—327. 2. Marines in the same Fleet Marine Force commands for over 4 years—502. 3. Marines serving in the same CONUS Marine Barracks for over 3 years—292.

(c) Grade Imbalance. 1. CONUS Marine Barracks are currently overstaffed with Sergeants and Staff Non Commissioned Officers by 625 Marines. To move these Marines out to Fleet Marine Force units and lower rated enlisted Marines into the Barracks will require 1250 operational moves. 2. The 1st Marine Division requires 265 moves to bring its Staff Non Commissioned Officers ranks up to its authorized strength.

(d) Skill Imbalance. 1. Fleet Marine Forces Atlantic units are short 82% of the Marines required in MOS 2533, Radio Telegraph Operator. 93 moves are required to counter this skill imbalance. 2. The units at Camp Lejeune are currently 71% over authorized strength with Marines in MOS 5831, Corrections man. 120 moves are required to bring them down to their authorized strength. 3. The 2d Marine Air Wing is 31.3% over with Marines in MOS 3111, Freight Operations Man. Twenty-five moves would be required to correct this imbalance.

(e) Other factors effecting grade imbalances are: 1. Marines who are found not qualified after arrival at a high security installation must be replaced. 2. When units move, a number of personnel for one reason or another, such as expiration of active service and overseas rotation tour date, cannot move with that unit. Operational moves are required to relocate these Marines where their skills can be used. The total number of moves required is hard to quantify since filling shortages in one command could cause a grade or skill imbalance in another. It must be realized, however, that even though skill shortages do exist, not all shortages can be filled by additional operational moves. Certain skills do not exist in the Marine Corps in the quantity desired.

MANPOWER, MORALE, AND EFFICIENCY

Senator INOUYE. I would like to ask one general question relating to manpower, morale, and efficiency. In recent years, in order to attract

men and women to our services, we have spent considerable sums providing greater comfort for personnel. It is not proper to compare our time and today. We lived in barracks and we did KP work and cleaned the yard.

Today I notice that many services have no KP's and enlisted men live in apartments. I visited one that was beautifully carpeted, with separate bedrooms for the men, with a bathroom shared by two.

I am wondering what this does to the efficiency of the men. Does it help? Is it cost-efficient? Are we softening the troops?

General JASKILKA. I will answer the question this way: First, I will note that the marines do KP.

Senator INOUYE. You just changed that.

BACHELOR QUARTERS

General JASKILKA. No, sir. We had a very few on a trial basis. We are providing KP at some of our bases but not in any of our combat units. We have never had that.

With respect to housing, the Marine Corps has made a concerted effort to improve the habitability of bachelor housing. The Marine Corps military construction programs have been and will continue to be developed with a minimum of half the available funds dedicated to bachelor housing. The new construction critera provides three marines to a room and sharing a bath.

I must say this does pose problems, Senator, for the leaders. I am certain that the troopers enjoy it. It poses some problem in leadership and in control. When a man can lock up his room and not be subject to an immediate opening or supervision, you never know what he has in that room. He might be taking drugs. He might be drinking. He might do all sorts of things. It is a leadership problem.

Senator INOUYE. On balance, would you prefer to take that risk or change the scheme now?

General JASKILKA. On balance, sir, we prefer to take the risk and provide room-configured bachelor housing for enlisted marines.

DEPENDENTS OVERSEAS

Senator INOUYE. The other services generally permit officers and certain enlisted personnel to be accompanied by their families on overseas tours. Your Service does not permit this as a rule for overseas tours, does it?

General JASKILKA. Sir, I think our total will show that we have somewhere in the neighborhood of 3,200 officers and men assigned overseas who have their dependents with them. I think what you have made reference to is our marine division and wing in the western Pacific. Those officers and men are not allowed to have their dependents with them.

Senator INOUYE. How does it affect the morale when they notice the other services in the immediate vicinity with their wives and children?

General JASKILKA. It varies with people, Senator. I would suppose that the cycle would go something like this: Any time anybody has to leave his family he suffers a little depression and sadness. In my case about 2 months before I go I start to feel sorry for having to be

separated from my family. A month or two after you are in your tour you experience an upswing in morale because you are looking forward to the end of the tour and rejoining your family.

A situation most marines get into on Okinawa and Japan, particularly on Okinawa because of the proximity of our sister services, is seeing their personnel with their families, and I am sure some guys wonder why. I explain to them the main reason is that we are a combat-ready force.

Senator INOUYE. Aren't the others supposed to be a combat-ready force?

General JASKILKA. Yes, sir, they are. The difference is that about one-third of our time in the Western Pacific is spent off the island. We provide special landing forces in the South Asia area. Let me illustrate by saying that if the ready force is off Thailand and the need arises, that force can evacuate U.S. nationals, or friendly persons, or respond to disasters.

Senator INOUYE. You might be called in pretty soon to evacuate Phnom Penh——

General JASKILKA. We might be, sir, and we can do that.

The point is that about a third of our time is spent off island. These troops go to the Philippines to train. Only 10 days ago we finished a landing exercise in Korea with our Korean friends.

A young man can expect to spend some time in Japan in the training areas at Camp Fuji. We recently had an exercise in Australia.

Because of the mobility given to us by our great navy, we can spend a substantial portion of our time off the island in training exercises. Conversely, our army friends in South Korea, to the north of us, stay in the general location of where they are now based. So they don't get to move about as we do. Of course, at the same time, the Army division does not have their dependents there, either, sir.

MARRIED PERSONNEL

Senator YOUNG. What percentage of the combat-ready marines are married?

General JASKILKA. It is a pretty good bet to say that overall about 75 percent of the officers are married and about 36 percent of the enlisted are married. When you look at each grade at both the officer and enlisted level you will find that from E–1 through about E–3 there will be a marriage rate of 18 percent. Then as you go up to the E–7, E–8, E–9 level you will find it runs close to 90 percent.

In our lieutenant ranks you will find about half are married upon entering the corps. By the time a young man gets to be a major the marriage rate jumps dramatically up to and over 90 percent. And most colonels and generals are married.

Senator YOUNG. Going back to the barracks, the marines have some racial problems. Don't the marines prefer to lock their quarters at night? Like at Camp Lejeune a few years ago when you had this trouble, it seems to me they would have preferred to be able to lock their rooms at night.

General JASKILKA. Sir, there is no door for them to lock at Camp Lejeune. That is a wide-open base. The way we solved that problem,

Senator, was in two ways: No. 1, we lit up the area well. No. 2, we increased our external security. I should add a third way: We have increased attention by our leaders. We now direct our officers to visit the barracks from waking hours up until about 10 o'clock at night.

The Commandant last year made it a requirement that staff noncommissioned officers will maintain a presence in every barracks where junior enlisted marines live. We provide that type of senior supervision and stability to help reduce the kind of things you are talking about. I think we have it under control now.

Senator YOUNG. That is all.

SERVICE ACADEMY GRADUATES

Senator INOUYE. As a matter of curiosity, what percentage of your officers are service academy graduates?

General JASKILKA. It is a low percentage, Senator. This fiscal year, for example, I think we are getting about 92 officers out of the class of 1975; last year, 88. Although our full quota was about 125, we didn't meet our goals. I don't know if we have the numbers here or not. I can provide that for the record, Senator.

[The information follows:]

The Marine Corps currently has 1,173 Naval Academy graduates out of 16,213 unrestricted officers which equate to 7.2 percent of the population. During fiscal year 1974 we accessed 90 officers from the service academies and 92 midshipmen have opted for the Marine Corps for fiscal year 1975.

RECRUITING AGREEMENT WITH NAVY

Senator INOUYE. I suppose percentagewise, it is lower than the Navy.

General JASKILKA. Much lower; yes, sir. We have an agreement with the Navy that we are authorized to recruit up to 16⅔ percent of each graduating Naval Academy class. We made it 3 years ago. We didn't make it the last 2 years. We expect to make it again next year. The percentage of Navy Academy graduates who make the corps a career is the highest of any source that we have.

Senator INOUYE. Maybe it is because of my service in the Infantry that I am a bit partial to ground combat troops. It used to dismay me when others would tell us that the Infantry was usually filled with men who were unfit for other services.

MENTAL ABILITIES DIRECTIVE STATUS

General JASKILKA. That is why I am here.

General SIMLIK. You had a question earlier, Mr. Chairman, about whether we have a requirement to recruit any mental group IV's?

Senator INOUYE. Yes.

General SIMLIK. I think General Jaskilka might be the appropriate witness to answer that.

Senator INOUYE. Are you required to recruit from that category?

General JASKILKA. No; we are not. We were until January 1972. At one time by DOD directive we were required to take as many as 24 percent for the Marine Corps. The Army was either 18 or 20 percent and Navy and Air Force just a little bit lower than us.

The advent of AVF and our constant badgering of DOD caused them to relieve us from that requirement 3 years ago in January. Now we have been on our own—"Get as many of the best quality you can find"—and that is what we want.

Senator INOUYE. Would you be able to have a Corps made up of men in the first three categories?

General JASKILKA. Sir, if you had asked me that question a year ago, I would have expressed great doubts about it. But today, I think the prospects are very good. I base this on the fact that this year we are averaging less than 5 percent category IV personnel in our new accessions.

We have just raised our enlistment standards in February to the extent that if we are successful they will tend to drive the numbers of mental group IV personnel, down to an absolute zero. If we are successful in fiscal year 1976 it is my guess that mental group IV population will be down to 1 or 2 percent or maybe zero. But I would add that we would like to have a Marine Corps comprised of mental groups I through III.

Senator INOUYE. Gentlemen, on behalf of the subcommittee I thank you very much for your assistance this morning. You may be assured that your statement will be studied very carefully.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator INOUYE. Chairman McClellan has submitted questions for you to answer, General. Would you please respond to them for the record?

[The questions and answers follow:]

COMMISSARY PERSONNEL REIMBURSEMENT

Chairman MCCLELLAN. Are military members assigned to commissary functions reimbursed from sale proceeds, or are they financed from the direct program?

General JASKILKA. Military personnel assigned to commissary functions are currently compensated from the direct program. These personnel will be shifted into the reimbursable category during Fiscal Year 1977 as the commissaries become completely self-supporting.

SKILL IMBALANCES

Chairman MCCLELLAN. Considering current recruiting successes, why are there such skill imbalances that additional operational travel moves are required in FY 1976 to achieve balance? Cannot you recruit in those shortage areas?

General JASKILKA. The shortages which are being experienced due to skill imbalances are in the more technical areas and consist of shortages of both lower skill requirements and experienced personnel normally associated with higher grades. To train a new Marine accession in one of these technical skills requires, in certain cases, over a year. The Marine Corps is currently attempting to recruit into these fields, however, this will not relieve all the imbalances and in particular the requirements for advanced skills. Loss patterns, which are not firmly controllable, dictate a redistribution of personnel assets in order to promote maximum unit efficiency. Operational moves are considered essential for the movement of these critical skill requirements.

"DELAYED ENTRY" PROGRAM

Chairman MCCLELLAN. Does the Marine Corps have a "delayed entry" program wherein personnel are recruited for subsequent months' induction? If so, how large is the pool, and for how far in the future?

General JASKILKA. The Marine Corps utilizes the Delayed Enlistment Program as a management tool to facilitate quota attainment in any given month and to

enable planning within the recruiting cycle for out month quota. The program consists of a 180 Day Delay Program for personnel wanting to enlist but who desire to delay their enlistment for a period of time. Additionally, there is a 270 Day Delay Selective Exception Program where applicants of high quality may be delayed for 270 days to enable them to complete scheduled terms of civilian schooling. As of 5 April 1975, a total of 10,648 Regular male recruits were "pooled" for enlistment during the six months following April. This figure represents 38.4% of quota for that time frame. An additional 32 individuals have been "pooled" for enlistment in the seven to nine months time frame.

Trainee Discharging

Chairman McClellan. The Marine Corps seems to have a program similar to the Army's Trainee Discharge Program. Is it truly voluntary on the part of the enlistee? The Army's program is designed to eliminate the unsatisfactory prior to the 180th day; is it the same for USMC? Does the Marine Corps have any other programs for discharge short of punitive discharge?

General Jaskilka. The Marine Corps does not have a formal program comparable to the Army's Trainee Discharge Program but, as was indicated in the formal statement, the Marine Corps' recruit screening procedures are similar to the basic concept of the Army program. The fundamental objective of the Marine Corps' recruit training is to transform young men and women into Marines and, in the process, identify those who cannot make that transition. Those so identified would be released administratively vice punitively in less than 180 days because recruit training is approximately three months in length. This is the only program available and is not voluntary on the part of the enlistee.

ROTC Consolidation

Chairman McClellan. Has any consideration been given towards establishing a single, centrally-managed ROTC program for all services? What would be the major objections to such an approach?

General Jaskilka. No formal consideration has been given to establishing a single, centrally-managed ROTC program. Possible objections would depend upon the form such a program would take. The primary interest of the Marine Corps would be to insure that it receives sufficient qualified candidates to meet total officer procurement and retention goals.

Compensation for M.I.A. Families

Chairman McClellan. What are the total FY 1974, 1975 and 1976 costs, by category, paid to families of servicemen who are missing-in-action? What steps are being taken to reduce these amounts? What is the legal status of these individuals, and what is your intention regarding ultimate resolution of these cases?

General Jaskilka. The costs, actual or estimated, are as follows:

MILITARY COSTS FOR PERSONNEL MISSING-IN-ACTION

[Dollar amounts in thousands]

	Fiscal year 1974		Fiscal year 1975		Fiscal year 1976	
	Cost	Man-years	Cost	Man-years	Cost	Man-years
Officer	$2,039	64	$1,453	47	$1,221	37
Enlisted	614	39	549	33	495	27
Total	2,653	103	2,002	80	1,716	64

By court action, the services are not allowed to take action to declare Missing-in-Action (MIA) personnel dead. This action can be accomplished only in those cases where service Secretaries receive written requests for a change in status from MIA to Killed-in-Action (KIA) from the next of kin. Until this issue is resolved the courts, the Marine Corps is obligated to disburse full pay and allowances to the next of kin of MIA's. If the issue is resolved in favor of the services, each case will be reviewed individually. Where circumstances indicate, taking

into consideration the passage of time and lack of information on survival, the individual would be declared dead in accordance with the Missing Persons Act and current Department of the Navy Regulations.

"DO-IT-YOURSELF" MOVEMENT PROGRAM

Chairman MCCLELLAN. Has the Marine Corps instituted a "do it yourself" move program for military personnel? What are the basic ground rules of the plan, and what has been the experience to date? Is it available to members of all commands? Can it be expanded further?

General JASKILKA. The Marine Corps has not executed a "do it yourself" move program. Under current regulations a Marine can, however, rent a "U haul" trailer to move himself and be reimbursed up to the actual cost of the trailer. Marines have taken advantage of this regulation. Statistics are not available on the extent of its use.

ROTH AMENDMENT TRAVEL CONSTRAINTS

Chairman MCCLELLAN. Explain the $3.7 million requirement for travel resulting from Roth Amendment constraints in Fiscal Year 1975.-How many moves and of what type?

General JASKILKA. When the Roth Amendment was enacted, certain reduction actions had to be implemented to bring the PCS program in line with the guidelines as set forth in the amendment. The Marine Corps reduced 4,200 rotational moves, 200 training moves, and 200 operational moves. Since orders had been cancelled or modified and all commands were informed by message that certain Marines would be involuntarily extended at their present duty station (CONUS and Overseas), it would have caused additional turbulence on the Marines to reinstate their moves in Fiscal Year 1975. These moves have now been programmed for Fiscal Year 1976, and will be executed during the first quarter of Fiscal Year 1976.

SELECTIVE REENLISTMENT BONUSES

Chairman MCCLELLAN. In a 23 January letter to the Chairman, House Appropriations Committee, the Comptroller General expressed the opinion that legal entitlement to the full Selective Reenlistment Bonus accrues at completion of reenlistment procedures, and that obligation should be so recorded, even though payments may be made incrementally. What is the current status of this dialog, and what would be the FY 1976 dollar impact if this view prevails?

General JASKILKA. Paragraph 10915 of DoD Pay Manual establishes policy relative to member entitlement to the full Selective Reenlistment Bonus. This policy is paraphrased as follows: The right to a SRB vests at the time of reenlistment, even though payment may be made in installments over the course of the enlistment. Additionally, once a member establishes his right to the SRB upon reenlistment, he is entitled to continued receipt of annual installment payments without further qualification in his critical military skill. The latter policy, however, is being reviewed and pending legislation is being staffed.

This legislation has been drafted to amend title 37, United States Code, to provide for termination or recoupment of enlistment or selective reenlistment bonuses in certain cases.

No additional cost would be involved in the passage of this legislation. The Fiscal Year 1976 dollar impact for SRB first installment Zone A payments is $3,323,000.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I would like to submit questions for General Jaskilka to answer for the record.

Senator INOUYE. Without objection, the questions and answers will appear at this point in the record.

[The questions and answers follow:]

PERCENTAGE MANNING STRENGTH

Senator YOUNG. Will the personnel strength requested provide for 100% manning for combat units or something less than 100%?

General JASKILKA. The Personnel strength requested will not provide for 100% manning for combat units. The Land Forces manpower program will man the infantry, aviation, and other combat units at approximately 90% of the structure. Specifically, the 1st Marine Division will be manned at 80%; the 2d Marine Division will be manned at 96%; the 3d Marine Division will be manned at 88%. The Force Troops will be manned at 81% while most Land Force aviation units will be at 90% of structure. Within the Tactical Air Forces, the 1st Marine Aircraft Wing and the 2d Marine Aircraft Wing will be manned at 90% while the 3d Marine Aircraft Wing, including its Land Forces aviation components, will be manned at 80%.

Senator YOUNG. Does the Marine Corps plan on reserve personnel or units to fill combat units in an emergency similar to the Navy?

General JASKILKA. A threefold mission is perceived for the Marine Corps Reserve in the event of war or national emergency: providing a combat ready division/wing team, providing selected units, or providing individual fillers to the regular establishment.

PERCENT OF BUDGET FOR MANPOWER

Senator YOUNG. What percent of the Marine Corps budget request is for manpower?

General JASKILKA. 76.4% for Fiscal Year 1976 and 79.9% for Transitional Year 197T of the Marine Corps' total appropriation request is for manpower, including funding for reserve and civilian manpower.

CIVILIAN PERSONNEL

Senator YOUNG. How many civilians does the Marine Corps employ?

General JASKILKA. The Marine Corps' planned end strength for Fiscal Year 1975 is 20,294 direct and indirect hire civilians. We are requesting an authorization for 19,917 direct and indirect hire civilians at end Fiscal Year 1976 and 20,393 at the end of Transitional Year 197T.

OFFICER-ENLISTED RATIOS

Senator YOUNG. What is the ratio of officers to enlisted as compared to the other services?

General JASKILKA. The ratio of officers to enlisted is:

ALL SERVICES OFFICER TO ENLISTED RATIO

	Fiscal year—			
	1974	1975	1976	197T
Marine Corps	1:9.07	1:9.57	1:9.57	1:9.60
Air Force	1:4.83	1:4.88	1:4.87	1:4.92
Army	1:6.39	1:6.66	1:7.00	1:7.11
Navy	1:7.12	1:7.16	1:7.33	1:7.42

Note: These ratios are based on the services' fiscal year 1976 President's budget.

UNACCOMPANIED TOURS MORALE LEVEL

Senator YOUNG. Does the Marine Corps experience any particular disadvantages by unaccompanied tours for combat units overseas?

General JASKILKA. The Marine Corps recognizes that lengthy and repetitious family separations are unpleasant and undesirable and where possible, to be avoided. It is the general policy of the Marine Corps that dependents should accompany the Marine if an accompanied tour is consistent with duty assignments. However, our Fleet Marine Force units deployed in the Western Pacific present special circumstances warranting an authorized exception to this basic policy. Mission requirements for constant combat readiness in these units and the prohibitive cost of transporting dependents and constructing adequate dependent's support faciltiies in the area where these units are based demand that Marines assigned to Western Pacific Fleet Marine Forces serve tours which do not authorize them to be accompanied by their dependents.

Dependents of Base Personnel

Senator Young. In view of the cost for sending dependents overseas, will Marine Corps continue the policy of sending dependents of base personnel overseas?

General Jaskilka. Yes, consistent with Department of Defense guidelines and the need to maintain continuity in certain essential billets at these base locations. Marines assigned to these bases, of course, perform support functions for the tenant Fleet Marine Force units but are not members of combat deployable units.

Officer Strength

Senator Young. Has the Marine Corp officer strength stabilized?

General Jaskilka. Yes sir, although minor adjustments may be made in the future as we seek to refine the proper balance between the officer and enlisted forces, and as we identify additional officer billets which may be converted to enlisted positions.

Pay Grade Structure

Senator Young. How does the Marine Corps' top six pay grades compare as a percent of enlisted men with the other services?

General Jaskilka. The comparison of the top six pay grades for each service is:

ALL SERVICES TOP 6 ENLISTED GRADES AS PERCENT OF TOTAL ENLISTED FORCE

	Fiscal year—			
	1974	1975	1976	197T
Marine Corps	45.14	45.22	45.80	46.71
Air Force	70.33	67.37	67.00	67.00
Army	60.19	62.92	62.56	61.77
Navy	60.12	61.49	61.89	60.88

Note: These data are based on the services' fiscal year 1976 President's budget.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator Inouye. We also have some questions by Senator Thurmond Would you please include those with the others.

[The questions and answers follow:]

Consequences of Longer Enlistments

Senator Thurmond. "General, what impact on Marine enlistments do you expect when two year enlistments are discontinued in favor of three and four year contracts?"

General Jaskilka. Three and four year terms of enlistment are generally more difficult to sell. Consequently, they require more attractive guarantees or greater effort in terms of recruiting time and resources. We can expect to have to devote more of our total resources to sell the longer term of enlistment.

The longer term of enlistment will produce more manyears of productive service for each enlistment obtained. The increased manyears contribute to less turnover in the enlisted force and slightly smaller recruit quotas in the outyears. None of these benefits are realized, however, until Fiscal Year 1980 and beyond when normal end of active service losses decrease.

Congressional Relationship to Recruiting

Senator Thurmond. "What programs approved by Congress do you feel have been the most helpful in your upturn in recruiting?"

General Jaskilka. As I mentioned in my formal statement, much of our success is the result of Congressional support. The new Bonus Revision Act, Special Duty Assignment pay and paid print mass media advertising have had a significant impact on our recruiting program.

Need for Additional Programs

Senator Thurmond. "Do you see the need for any additional programs, and if so, what would you recommend?"

General Jaskilka. Although no new recruiting programs are requested for Fiscal Year 1976, an upturn in the economy or other changes affecting the recruiting effort could result in a requirement for additional resources, such as advertising funds.

While our officer programs are currently producing the quality and quantity required, there is a definite need to support the major Marine Corps officer producing program, the Platoon Leaders Class (PLC) Program.

A proposal to amend the Act of November 24, 1971 (Public Law 92–172), to make permanent the existing temporary legislation which provides for subsistence allowance for members of the Marine Corps officer candidate programs, has been initiated within DOD. The subject Law expires on 30 June 1976. In that Officer Selection Officers are involved in procurement activities which will result in the recruitment of candidates for the PLC Program who will be affected by expiration of the current Law, it is desired that affirmative action be taken on the proposed legislation as soon as possible.

It has also been suggested that certain features of the PLC Program be deleted in the future and that this Program be integrated into a proposed intra-service program entitled the Special Officer Commissioning Program (SOCP). Intervention through either method would prove to have a critically negative impact on the PLC Program. It must be emphasized that the PLC Program will account for about 40% of the total officers commissioned in the Marine Corps from direct procurement sources this fiscal year and that the ability to offset any losses therefrom is severely limited due to the lack of a Marine Corps service academy or ROTC program dedicated totally to the Marine Corps.

It has been strongly recommended that changes as noted not be directed for the PLC Program. It is a unique program specifically tailored by, and for, Marine Corps needs which has historically proven to be extremely cost effective.

Factors Influencing Enlistment

Senator Thurmond. What have the surveys taken by the Marines shown to be the chief attractions of a first term enlistment in your service?

General Jaskilka. A recent survey of prospective Marines in the Delayed Entry Pool indicated the following reasons for enlisting: education 40%, Pride in the Tradition of the Marine Corps 29%, Discipline/Strictness 23%, and miscellaneous reasons 8%.

Early Release Program

Senator Thurmond. Are the Marines using the early discharge program to eliminate those whose early performance indicates they are not good investments?

General Jaskilka. The Marine Corps' program is not an early release program per se. The Marine Corps maintains an effective screening process during recruit training which evaluates trainee performance and under which many potentially unsuccessful Marines are discharged. In addition, we continually evaluate our Marines beyond the basic training level, and based on their commanding officer's evaluation, they may be eligible for an administrative discharge as a consequence of poor performance.

Manpower Goal Prospectus

Senator Thurmond. General, since the Marines will be seeking only 8,000 less recruits in Fiscal Year 1976 and requiring three or four year contracts, are you confident the manpower goals can be met?

General Jaskilka. Yes, sir, we are. Only nineteen percent of our enlistees for Fiscal Year 1975 are planned to be for two years, and that equates to 10,830 accessions. So with a requirement for 8,000 less total non-prior service accessions, we foresee few problems in meeting our quotas of three and four year enlistees.

Ten Year Combat/Support Ratios

Senator Thurmond. General, provide for the record the combat/support ratio for the Marine Corps during the past ten years.

General Jaskilka. This table shows the combat/support ratio for the Marine Corps for the past ten years:

COMBAT TO SUPPORT RATIO

[In percent]

	Combat	Support
Fiscal year:		
1967	64	36
1968	57	43
1969	56	44
1970	55	45
1971	57	43
1972	59	41
1973	59	41
1974	60	40
1975	63	37
1976	63	37
TQ	62	38

Combat manpower is defined as those Marines assigned to Strategic, General Purpose, and Auxiliary Forces plus the manpower associated with the security of naval installations and embassy guards.

Support Mobilization Timespan

Senator Thurmond. General, should mobilization be required, what support units would have to be reconstituted immediately and would any be needed before the time it would take to reform and train them?

General Jaskilka. None of the units presently in a cadred status are in the support category. However, should mobilization be required most of the units in the support category would have to be "beefed up", but none would have to be reconstituted from zero strength. It has been the policy of the Marine Corps to cadre only those units which can be reconstituted most easily.

Outyear Manpower Problems

Senator Thurmond. General, what do you see as the main manpower problems for the Marines in the next few years?

General Jaskilka. Senator, there still exists an area of uncertainty when dealing with the accessions of our enlisted Marines. It is difficult to predict how much effect a turnabout in the nation's economic conditions will have on the recruiting climate. Therefore, my major concern within manpower continues to be the problems associated with the accession of the requisite numbers of Marines with the desired level of quality. The Marine Corps must remain competitive with civilian industry for high school graduates. It is the expressed desire of the Commandant to continue to improve the percentage of high school graduates accessed each year.

Hand in hand with accessions will be the retention of our Marines under this same area of uncertainty. However, I am sure that with the same cooperative help, that has been extended to the Marine Corps in the past in the form of Congressional action, we will continue to be innovative and responsive to the needs of our Marines.

SUBCOMMITTEE RECESS

Senator Inouye. This subcommittee will stand in recess until 2 p.m., at which time we will meet in room S–126 to receive testimony from the Navy on research, development, test, and evaluation on the fiscal year 1976 budget request. Thank you very much.

General Jaskilka. Thank you, Mr. Chairman.

[Whereupon, at 11:25 a.m. the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

(Afternoon Session, 2 O'Clock, Wednesday, March 5, 1975)

DEPARTMENT OF DEFENSE

Department of the Navy

Research, Development, Test and Evaluation

STATEMENT OF HON. H. TYLER MARCY, ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH AND DEVELOPMENT

ACCOMPANIED BY:

VICE ADM. W. J. MORAN, U.S. NAVY, DIRECTOR OF RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

BRIG. GEN. H. L. WILKERSON, U.S. MARINE CORPS, DEPUTY CHIEF OF STAFF FOR RESEARCH, DEVELOPMENT, AND STUDIES, HEADQUARTERS, MARINE CORPS

REAR ADM. E. W. COOKE, DEPUTY COMPTROLLER OF THE NAVY

BUDGET REQUEST

Senator Inouye. This afternoon the subcommittee will receive testimony from H. Tyler Marcy, Assistant Secretary of the Navy for Research and Development, who will speak in support of the fiscal year 1976 budget request for the research, development, test and evaluation, Navy, appropriation account.

JUSTIFICATION

Before we hear Secretary Marcy's testimony, I think we should have the pertinent material from the justification inserted in the record. Without objection, it will appear at this point.

[The justification follows:]

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, as authorized by law; [$3,006,914,000] $3,467,700,000 to remain available for obligation until [June 30, 1977] September 30, 1977.

For "Research, development, test and evaluation, Navy", for the period July 1, 1976, through September 30, 1976, $903,800,000 to remain available for obligation until September 30, 1977, (10 U.S.C. 174, 2352-4, 5150-3, 7201, 7203, 7522; 31 U.S.C. 718; Department of Defense Appropriation Act, 1975); additional authorizing legislation to be proposed for fiscal year 1976, and for the period July 1, 1976; through September 30, 1976.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-20-1319-0-1-051	BUDGET PLAN (AMOUNTS FOR ROT+F ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. MILITARY SCIENCES	132,443	138,118	152,985	129,995	138,467	151,945
2. AIRCRAFT AND RELATED EQUIPMENT	257,982	245,718	405,262	251,787	288,580	403,399
3. MISSILES AND RELATED EQUIPMENT	980,526	1,068,835	1,313,461	959,919	1,074,592	1,308,401
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	52,544	53,995	41,459	52,349	54,035	43,595
5. SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT	633,998	665,301	664,345	647,832	663,026	664,146
6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	85,150	93,448	101,642	87,029	93,734	102,093
7. OTHER EQUIPMENT	198,494	456,544	501,499	391,088	469,008	497,970
8. PROGRAMWIDE MANAGEMENT AND SUPPORT	163,144	279,615	330,051	161,352	279,758	328,951
TOTAL DIRECT	2,704,473	3,051,614	3,517,700	2,674,351	3,065,200	3,500,500
REIMBURSABLE (TOTAL)	69,217	97,000	97,000	69,091	99,200	97,000
SUBTOTAL	2,773,690	3,148,614	3,614,700	2,743,442	3,165,400	3,597,500
INTRAFUND OBLIGATIONS	-20,502	-34,000	-34,000	-20,241	-34,000	-34,000
10 TOTAL	2,753,188	3,114,614	3,580,700	2,723,201	3,131,400	3,563,500
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-47,853	-62,100	-62,100	-48,714	-62,100	-62,100
13 TRUST FUNDS	-434	-28,150	-50,450	-434	-28,150	-50,450
14 NON-FEDERAL SOURCES	-428	-450	-450	-447	-450	-450
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-82,835	-111,221	-94,435
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-2,476	.....	.....	.....	.....	.....
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-23,700	.....	.....	-23,200	.....	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	111,221	94,435	111,635
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	2,476	.....	.....	2,476	.....	.....
BUDGET AUTHORITY	2,681,273	3,023,914	3,467,700	2,681,273	3,023,914	3,467,700
BUDGET AUTHORITY:						
40 APPROPRIATION	2,680,690	3,006,914	3,467,700	2,680,690	3,006,914	3,467,700
42 TRANSFERRED FROM OTHER ACCOUNTS	583	.....	.....	583	.....	.....
43 APPROPRIATION (ADJUSTED)	2,681,273	3,006,914	3,467,700	2,681,273	3,006,914	3,467,700
44.20 PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	17,000	.....	.....	17,000	.....
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET				2,673,611	3,040,700	3,450,500
72 OBLIGATED BALANCE, START OF YEAR				1,239,938	1,293,609	1,435,309
74 OBLIGATED BALANCE, END OF YEAR				-1,293,609	-1,435,309	-1,636,809
77 ADJUSTMENTS IN EXPIRED ACCOUNTS				3,493	.....	.....
90 OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL				2,623,433	2,884,000	3,247,000
91.20 OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL				.....	15,000	2,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-20-1319-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	75,135	86,026	86,356
11.3	POSITIONS OTHER THAN PERMANENT	1,222	694	872
11.5	OTHER PERSONNEL COMPENSATION	2,811	2,769	2,767
	TOTAL PERSONNEL COMPENSATION	79,168	89,489	89,995
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	65,947	70,069	70,736
12.1	PERSONNEL BENEFITS: CIVILIAN	5,904	6,409	6,505
13.0	BENEFITS FOR FORMER PERSONNEL	30	60	30
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	10,258	10,640	11,000
22.0	TRANSPORTATION OF THINGS	1,403	2,400	1,500
23.0	RENT, COMMUNICATIONS, AND UTILITIES	9,655	9,700	9,800
24.0	PRINTING AND REPRODUCTION	1,026	1,100	1,200
25.0	OTHER SERVICES	2,462,974	2,847,452	3,278,359
26.0	SUPPLIES AND MATERIALS	95,375	96,000	98,000
31.0	EQUIPMENT	21,412	22,000	23,000
32.0	LANDS AND STRUCTURES	200	200	200
41.0	GRANTS, SUBSIDIES, AND CONTRIBUTIONS	167	170	170
	TOTAL DIRECT OBLIGATIONS	2,674,351	3,066,200	3,500,500
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	13,221	19,420	19,259
12.1	PERSONNEL BENEFITS: CIVILIAN	1,184	1,776	1,771
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	551	600	600
22.0	TRANSPORTATION OF THINGS	438	450	450
23.0	RENT, COMMUNICATIONS, AND UTILITIES	494	500	500
24.0	PRINTING AND REPRODUCTION	155	160	160
25.0	OTHER SERVICES	48,112	71,264	69,230
26.0	SUPPLIES AND MATERIALS	4,608	4,700	4,700
31.0	EQUIPMENT	328	330	330
	TOTAL REIMBURSABLE OBLIGATIONS	69,091	99,200	97,000
	SUBTOTAL	2,743,442	3,165,400	3,597,500
96.0	INTRAFUND OBLIGATIONS	-20,241	-34,000	-34,000
99.0	TOTAL OBLIGATIONS	2,723,201	3,131,400	3,563,500

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-1319-0-1-051

		BUDGET PLAN (AMOUNTS FOR RDT&E ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. MILITARY SCIENCES				901		
	2. AIRCRAFT AND RELATED EQUIPMENT				10,504		
	3. MISSILES AND RELATED EQUIPMENT				17,491		
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT				45		
	5. SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT				29,567		
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT				4,465		
	7. OTHER EQUIPMENT				9,689		
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT				3,351		
	TOTAL DIRECT				76,013		
	REIMBURSABLE (TOTAL)				4,960		
	SUBTOTAL				80,973		
	INTRAFUND OBLIGATIONS				261		
10	TOTAL				81,234		
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				-861		
14	NON-FEDERAL SOURCES				-14		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				-82,835		
	REPROGRAMING FROM OP TO PRIOR YEAR BUDGET PLANS	-2,476					
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	2,476			2,476		
	BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-1319-0-1-051	BUDGET PLAN (AMOUNTS FOR ROT+E ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. MILITARY SCIENCES	132,443	.....	.....	129,094	3,349	.....
2. AIRCRAFT AND RELATED EQUIPMENT	257,982	.....	.....	241,283	16,699	.....
3. MISSILES AND RELATED EQUIPMENT	980,526	.....	.....	933,428	47,098	.....
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	52,544	.....	.....	52,304	240	.....
5. SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT	533,990	.....	.....	618,265	15,725	.....
6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	85,350	.....	.....	82,564	2,786	.....
7. OTHER EQUIPMENT	398,494	.....	.....	381,339	17,095	.....
8. PROGRAMWIDE MANAGEMENT AND SUPPORT	163,144	.....	.....	160,001	3,143	.....
TOTAL DIRECT	2,704,473	.....	.....	2,598,338	106,135	.....
REIMBURSABLE (TOTAL)	69,217	.....	.....	64,131	5,086	.....
SUBTOTAL	2,773,690	.....	.....	2,662,469	111,221	.....
INTRAFUND OBLIGATIONS	-20,502	.....	.....	-20,502	.....	.....
10 TOTAL	2,753,188	.....	.....	2,641,967	111,221	.....
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-47,853	.....	.....	-47,853	.....	.....
13 TRUST FUNDS	-434	.....	.....	-434	.....	.....
14 NON-FEDERAL SOURCES	-428	.....	.....	-428	.....	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-111,221	.....
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-23,200	.....	.....	-23,200	.....	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	111,221	.....	.....
BUDGET AUTHORITY	2,681,273	.....	.....	2,681,273	.....	.....
BUDGET AUTHORITY:						
40 APPROPRIATION	2,680,690	.....	.....	2,680,690	.....	.....
42 TRANSFERRED FROM OTHER ACCOUNTS	583	.....	.....	583	.....	.....
43 APPROPRIATION (ADJUSTED)	2,681,273	.....	.....	2,681,273	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-1319-0-1-051

		BUDGET PLAN (AMOUNTS FOR ROT+E ACTIONS PROGRAMED)			OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. MILITARY SCIENCES	.....	138,118	.....	.....	135,118	3,000
	2. AIRCRAFT AND RELATED EQUIPMENT	.....	285,718	.....	.....	271,881	13,837
	3. MISSILES AND RELATED EQUIPMENT	.....	1,068,835	.....	.....	1,027,494	41,341
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	.....	53,995	.....	.....	53,795	200
	5. SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT	.....	665,301	.....	.....	652,301	13,000
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	.....	93,448	.....	.....	90,948	2,500
	7. OTHER EQUIPMENT	.....	466,584	.....	.....	451,913	14,671
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT	.....	279,615	.....	.....	276,615	3,000
	TOTAL DIRECT	.....	3,051,614	.....	.....	2,960,065	91,549
	REIMBURSABLE (TOTAL)	.....	97,000	.....	.....	94,114	2,886
	SUBTOTAL	.....	3,148,614	.....	.....	3,054,179	94,435
	INTRAFUND OBLIGATIONS	.....	-34,000	.....	.....	-34,000	.....
10	TOTAL	.....	3,114,614	.....	.....	3,020,179	94,435
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	-62,100	.....	.....	-62,100	.....
13	TRUST FUNDS	.....	-28,150	.....	.....	-28,150	.....
14	NON-FEDERAL SOURCES	.....	-450	.....	.....	-450	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-94,435
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	94,435	.....
	BUDGET AUTHORITY	.....	3,023,914	.....	.....	3,023,914	.....
	BUDGET AUTHORITY:						
40	APPROPRIATION	.....	3,006,914	.....	.....	3,006,914	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	17,000	.....	.....	17,000	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-1319-0-1-051	BUDGET PLAN (AMOUNTS FOR NEW OBLIGATIONAL AUTHORITY AND NEW CONTRACT AUTHORITY)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. MILITARY SCIENCES			152,985			148,985
2. AIRCRAFT AND RELATED EQUIPMENT			408,262			389,562
3. MISSILES AND RELATED EQUIPMENT			1,313,460			1,267,060
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT			43,455			43,355
5. SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT			664,746			651,146
6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT			103,642			99,593
7. OTHER EQUIPMENT			501,499			483,299
8. PROGRAMWIDE MANAGEMENT AND SUPPORT			330,051			325,951
TOTAL DIRECT			3,517,700			3,408,951
REIMBURSABLE (TOTAL)			97,000			94,114
SUBTOTAL			3,614,700			3,503,065
INTRAFUND OBLIGATIONS			-34,000			-34,000
10 TOTAL			3,580,700			3,469,065
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS			-62,100			-62,100
13 TRUST FUNDS			-50,450			-50,450
14 NON-FEDERAL SOURCES			-450			-450
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						111,635
BUDGET AUTHORITY			3,467,700			3,467,700

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-20-1319-0-1-051	BUDGET PLAN (AMOUNTS FOR ROT+E ACTIONS PROGRAMED) TRANSITION	OBLIGATIONS TRANSITION
	PROGRAM BY ACTIVITIES:		
	DIRECT:		
	1. MILITARY SCIENCES	39,682	41,982
	2. AIRCRAFT AND RELATED EQUIPMENT	93,113	94,413
	3. MISSILES AND RELATED EQUIPMENT	324,531	331,131
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	6,193	6,093
	5. SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT	140,743	140,743
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	29,675	31,975
	7. OTHER EQUIPMENT	136,136	137,936
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT	93,727	95,927
	TOTAL DIRECT	903,800	920,200
	REIMBURSABLE (TOTAL)	25,000	25,400
	SUBTOTAL	928,800	945,600
	INTRAFUND OBLIGATIONS	-8,000	-8,000
10	TOTAL	920,800	937,600
	FINANCING:		
	RECEIPTS AND REIMBURSEMENTS FROM:		
11	FEDERAL FUNDS	-16,800	-16,800
13	TRUST FUNDS	-100	-100
14	NON-FEDERAL SOURCES	-100	-100
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-111,635
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	94,835
	BUDGET AUTHORITY	903,800	903,800
	BUDGET AUTHORITY:		
40	APPROPRIATION	903,800	903,800
	RELATION OF OBLIGATIONS TO OUTLAYS:		
71	OBLIGATIONS INCURRED, NET		920,600
72	OBLIGATED BALANCE, START OF YEAR		1,636,809
74	OBLIGATED BALANCE, END OF YEAR		-1,894,409
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL		663,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-20-1319-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	21,113
11.3	POSITIONS OTHER THAN PERMANENT	192
11.5	OTHER PERSONNEL COMPENSATION	665
	TOTAL PERSONNEL COMPENSATION	21,970
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	
12.1	PERSONNEL BENEFITS: CIVILIAN	16,368
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	1,509
22.0	TRANSPORTATION OF THINGS	2,600
23.0	RENT, COMMUNICATIONS, AND UTILITIES	400
24.0	PRINTING AND REPRODUCTION	2,500
25.0	OTHER SERVICES	300
26.0	SUPPLIES AND MATERIALS	865,423
31.0	EQUIPMENT	25,000
32.0	LANDS AND STRUCTURES	6,000
41.0	GRANTS, SUBSIDIES, AND CONTRIBUTIONS	50
	TOTAL DIRECT OBLIGATIONS	920,200
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	
12.1	PERSONNEL BENEFITS: CIVILIAN	5,602
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	517
22.0	TRANSPORTATION OF THINGS	150
23.0	RENT, COMMUNICATIONS, AND UTILITIES	110
24.0	PRINTING AND REPRODUCTION	125
25.0	OTHER SERVICES	40
26.0	SUPPLIES AND MATERIALS	17,576
31.0	EQUIPMENT	1,200
	TOTAL REIMBURSABLE OBLIGATIONS	80
	SUBTOTAL	25,400
96.0	INTRAFUND OBLIGATIONS	945,600
99.0	TOTAL OBLIGATIONS	-8,000
		937,600

PERSONNEL SUMMARY

Identification Code: 07-20-1319-0-1-051	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Total number of permanent positions	5,646	5,819	5,573	5,573
Full-time equivalent of other positions	147	132	55	52
Average number of all employees	5,590	5,958	5,731	5,596
Average GS grade	8.6	8.6	8.6	8.6
Average GS salary	$15,017	$16,042	$16,575	$16,567
Average salary of ungraded positions	$11,371	$12,386	$13,034	$13,093

PROJECT LISTING
INTRODUCTION AND EXPLANATION OF CONTENTS

1. General. This section has been prepared to provide specific data at the Research and Development project level in support of the budget request for Research, Development, Test and Evaluation, Navy. A Research and Development project represents a grouping of tasks or efforts directed toward a single end result. As such, a project contains effort unique to a single program element and the budget activity of which that program element is a part. The project listing is preceded by two summaries: the first by Budget Activity, the second by Program Category.

2. Relationship to "Supporting Data for FY 1976/FY 197T Budget Estimates--Descriptive Summaries." A separate document, "Supporting Data for FY 1976/FY 197T Budget Estimates--Descriptive Summaries" provides narrative information on all program elements for which funds are requested and on projects of $3.0 million or more. The index number in the right hand column of this project listing refers to the appropriate page in the Descriptive Summaries. The funding information reflected in the project listing and in the Descriptive Summaries corresponds to that contained in the President's Budget.

3. Classification. Classified information is identified by use of brackets [ ].

4. Glossary of Terms. A glossary of terms is included in the Supporting Data Book immediately following the table of contents. The glossary is a listing of acronyms or projects together with their formal titles or descriptions, with an index to the pages where these items appear in the budget books.

5. Cross Reference. The program element numbers in parentheses after the R&D project titles represent a cross reference for comparability of funding data in FY 1974, FY 1975, FY 1976, FY 197T, and FY 1977. The projects in question have migrated between RDT&E categories based upon their changing developmental status.

6. Relationship of FY 1976/FY 197T Budget Structure to the FY 1975 Budget Structure Approved by Congress. The project and program element structure contained in the Navy's FY 1976/FY 197T budget request is consistent with the guidance provided by the Congress in its action on the FY 1975 DOD Appropriation Act. However, the FY 1976/FY 197T program does reflect a number of evolutionary changes resulting from the initiation of new programs and the separation from existing program element of Research and Development projects requiring their own program element in the interest of control and visibility. The following list explains the origin of all program elements which do not appear on the Base for Reprogramming Action (DD 1414) for Research, Development, Test and Evaluation, Navy which was prepared pursuant to final Congressional Action on the FY 1975 DOD Appropriation Act. Data for FY 1974 and FY 1975 has been adjusted to achieve comparability with the revised structure for FY 1976/FY 197T.

PROJECT LISTING
INTRODUCTION AND EXPLANATION OF CONTENTS

Program Element		Remarks
Budget Activity 2: Aircraft and Related Equipment		
63251N	Aircraft Systems (Advanced)	New program proposed for FY 1976.
63254N	Reserve Merchant Ship Defense System	New program initiated in FY 1975 as recommended by the H.A.C.
63262N	Aircraft Survivability and Vulnerability	New program proposed for FY 1976.
63263N	Modular FLIR (Forward Looking Infrared)	New program proposed for FY 1975. DD 1415 pending.
63264N	All Weather Attack	New program proposed for FY 1976.
64264N	Life Support Equipment	New program proposed for FY 1977.
Budget Activity 3: Missiles and Related Equipment		
63304N	Advanced Surface-to-Air Weapon System	New program element for project moved back from Engineering Development; S1770 ASMD Missile System (64352N)
63307N	Advanced Fuze Design	New program proposed for FY 1977.
63308N	Air-to-Air Missile Technology Demonstrator	New program proposed for FY 1976.
63365N	TARPON	New program proposed for FY 1977.
63367N	Submarine ASW Standoff Weapon	New program proposed for FY 1977.
63368N	Surface Launched Multi-Guided Glide Bomb Technology	New program proposed for FY 1976.
64304N	CSEDS (Combat Systems Engineering Development System)	New program proposed for FY 1976.
64354N	Anti-Aircraft Missile Systems Engineering	New program element formed by the combination of project W1625 Agile, previously included in program element 63305N, and the following new projects: W16AA, Short Range AAM Component Engineering (AIM 9L), W16BB, Medium Range Component Engineering (SPARROW), W16CC, Long Range AAM Component Engineering (PHOENIX).
64367N	Cruise Missile (Engineering)	New program element for project migrating from Advanced Development W15X2 SLCM (63361N).
64368N	Verticle Launched Standard Missile	New program element proposed for FY 1977.
Budget Activity 5: Ships, Small Craft and Related Equipment		
64506N	[D] Countermeasures	New program element proposed for FY 1976.
64561N	Submarine (Engineering)	New program proposed for FY 1977.

[D]=Deleted

Program Element		Remarks
Budget Activity 6: Ordnance, Combat Vehicles and Related Equipment		
25630N	Torpedo Support Equipment	New program element proposed for FY 1976.
25661N	Submarine ASW Weapons Improvement	New program element proposed for FY 1976.
63655N	Advanced Naval Gun Systems	Consolidation of similar projects from Program Elements 63609N, 63652N, and 63653N.
63656N	Shipboard Intermediate Range Combat System	Consolidation of similar projects from Program Elements 63609N, 63652N, and 63653N
64604N	[Deleted]	New program proposed for FY 1976.
64655N	Major Caliber Lightweight Gun	New program element formed by the combination of project S1210 from 64652N and a new project for Major Caliber Gun Ammunition.
Budget Activity 7: Other Equipment		
33124N	Naval Communications	New program proposed for FY 1976.
34113N	Special Systems	New program element for project migrating from Advanced Development; X3519 Space Systems (63763N).
63735N	WWMCCS Architecture Support	New program element for FY 1976 to consolidate all WWMCCS Architecture effort.
63788N	Moored Surveillance System	New program element for project X24X3, previously included in program element 63794N.
63789N	Surveillance Towed Array Sensor	New program element for part of the effort previously funded in project X24X2, Towed Array Surveillance System (63794N).
63790N	Escort Towed Array Sensor	New program element for part of the effort previously funded in project X24X2, Towed Array Surveillance System (63794N).
64711N	Fleet Command Support	New program element for projects migrating from Advanced Development; X31X3 Fleet Command Support Centers (63723N), X3133 ASW Centers Communication Control System (63723N), and X3515, Ocean Surveillance Information System (63717N)
64712N	SEMI	New program element established from a part of project R3364, Tactical Electromagnetic Support (65858N).
64789N	Surveillance Towed Array Sensor	New program element for project migrating from Advanced Development; X2423, SURTAS (63789N)
Budget Activity 8: Programwide Management and Support		
65867N	Laboratory Fleet Support	New program element proposed for FY 1976.

PROJECT LISTING
SUMMARY BY BUDGET ACTIVITY
($ in Thousands)

	FY 1974 ACTUAL	FY 1975 ESTIMATE	FY 1976 ESTIMATE	FY 197T ESTIMATE	FY 1977 ESTIMATE
MILITARY SCIENCES	132,443	138,118	152,985	39,682	158,385
AIRCRAFT AND RELATED EQUIPMENT	257,982	285,718	408,262	93,113	587,761
MISSILES AND RELATED EQUIPMENT	980,526	1,068,835	1,313,460	324,531	1,233,484
MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	52,544	53,995	43,455	6,193	21,168
SHIPS, SMALL CRAFT, AND RELATED EQUIPMENT	633,990	665,301	664,346	180,743	745,656
ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	85,350	93,448	103,642	29,675	119,967
OTHER EQUIPMENT	398,494	466,584	501,499	136,136	560,699
PROGRAMWIDE MANAGEMENT AND SUPPORT	163,144	279,615	330,051	93,727	370,980
TOTAL RDT&E - DIRECT	2,704,473	3,051,614	3,517,700	903,800	3,798,100
FOREIGN MILITARY SALES RECEIPTS	-	-27,700	-50,000	-	
NEW OBLIGATION AUTHORITY	2,704,473	3,023,914	3,467,700	903,800	
REIMBURSEMENTS	48,715	63,000	63,000	17,000	
TOTAL PROGRAM	2,753,188	3,086,914	3,530,700	920,800	

PROJECT LISTING
SUMMARY BY PROGRAM CATEGORY
($ in Thousands)

		FY 1974 ACTUAL	FY 1975 ESTIMATE	FY 1976 ESTIMATE	FY 197T ESTIMATE	FY 1977 ESTIMATE
6.1	RESEARCH	114,194	118,835	131,379	33,764	135,262
6.2	EXPLORATORY DEVELOPMENT	287,137	289,108	321,612	84,402	341,076
6.3	ADVANCED DEVELOPMENT	517,186	669,034	885,614	274,994	1,161,502
6.4	ENGINEERING DEVELOPMENT	1,047,712	1,224,567	1,437,301	305,458	1,352,688
6.5	MANAGEMENT AND SUPPORT	249,939	298,898	351,657	99,645	394,103
	TOTAL RESEARCH AND DEVELOPMENT PROGRAM	2,216,168	2,600,442	3,127,563	798,263	3,384,631
	TOTAL OPERATIONAL SYSTEMS PROGRAM	488,305	451,172	390,137	105,537	413,469
	TOTAL RDT&E - DIRECT PROGRAM	2,704,473	3,051,614	3,517,700	903,800	3,798,100
	FOREIGN MILITARY SALES RECEIPTS	-	-27,700	-50,000	-	
	NEW OBLIGATION AUTHORITY	2,704,473	3,023,914	3,467,700	903,800	
	REIMBURSEMENTS	48,715	63,000	63,000	17,000	
	TOTAL PROGRAM	2,753,188	3,086,914	3,530,700	920,800	

INTRODUCTION OF ASSOCIATES

Senator INOUYE. Welcome to the committee, Mr. Secretary.

Mr. MARCY. Good afternoon, Mr. Chairman. It is a great pleasure for me to appear for the first time before this subcommittee.

My predecessor, Dr. Potter, is now the Under Secretary of the Navy. He was here for just 1 year.

I might add this is my first appearance in front of any committee.

My principal assistants this afternoon are Vice Admiral Moran, who is Director of Research, Development, Test and Evaluation in the Office of the Chief of Naval Operations; Brigadier General Wilkerson, who is Deputy Chief of Staff for Research, Development, and Studies, for the Commandant, Marine Corps; and Rear Adm. E. W. Cooke, Deputy Comptroller of the Navy.

You have my statement. I propose not to read from the statement.

BIOGRAPHY AND PREPARED STATEMENT

Senator INOUYE. Without objection your biography and your full statement will be made part of the record, and you may proceed to summarize it.

[The biography and statement follow:]

BIOGRAPHY

H. TYLER MARCY - ASN(R&D)

Mr. Marcy was born September 14, 1918 in Rochester, New York, and attended Massachusetts Institute of Technology, from which he received a B. S. degree in Electrical Engineering in 1940 and a M. S. degree in Electrical Engineering in 1941.

Upon receiving his Masters from MIT, Mr. Marcy worked on gun control systems in the MIT Servomechanism Laboratory until 1946; at that time he became Associate Director of the Special Projects Department of M. W. Kellogg Company. Mr. Marcy's area of interest with Kellogg Company was rocket engine development, missile controls, and analog air defense systems.

Mr. Marcy became employed with IBM in 1951 at Endicott, New York. For the first two years at IBM he was assigned to work on the bombing/navigation system for the B52. Following this he was assigned to commercial development in data processing machines and peripheral devices. In 1956 he became Assistant Manager of Product Development, a corporate headquarters post in New York City and in 1957 he was made Manager of the IBM Poughkeepsie Laboratory. It was during his stay there -- to 1962 -- that the major transition was made from vacuum tube to solid-state computers and major developments were made in magnetic ink banking systems, magnetic tape devices and magnetic core memories.

In 1962, Mr. Marcy became Vice President of the General Projects Division which developed and produced punch card machines, basic accounting computers, data acquisition systems, and related data processing equipment. In 1965 Mr. Marcy became Vice President of the newly formed Systems Development Division. He was in operational charge of seven development laboratories with line responsibility for advanced development technology, engineering services, and factory support product engineering. In 1967, in the same Division, he shifted to management of new but related business areas such as process control and publishing systems. From 1968 to 1972 Mr. Marcy was Director of Technology at IBM Corporate Headquarters in Armonk, New York, reporting to the IBM Vice President for Programming Technology and Engineering.

From 1972 until 1974, Mr. Marcy was self-employed as a consultant in engineering management/technology and program review.

Also active in civic affairs Mr. Marcy served on the Board of Trustees for Dutchess Community College (Poughkeepsie, New York) from 1958-1962 and on the Engineering Advisory Board of Manhattan College (New York City) from 1968-1972.

Mr. Marcy has been a member of the Instrument Society of America since 1963 and has served as President of the Society since 1971. Mr. Marcy became a Fellow of the Institute of Electrical/Electronic Engineers (IEEE) in 1967 for his leadership in feedback control and significant contribution to the management of technical enterprise.

Mr. Marcy was appointed by the President to his present position in October 1974.

Mr. Marcy currently resides in Arlington, Virginia with his wife, the former Cynthia Spencer of Baltimore, Maryland. The Marcys have five children: Carol, Susan, Jane, Alan, and Barbara (ages 23-31). They have all finished their principal education. Carol and Susan are married.

STATEMENT OF HON. H. TYLER MARCY

INTRODUCTION

Mr. Chairman, Members of the Committee:

I am honored to appear before this committee for the first time in order to present and support the Navy Research, Development, Test and Evaluation Program and Budget for Fiscal Years 1976, the three-month transition period and, for authorization purposes, FY 1977.

As has been the custom of my predecessors, and in order better to present our program and answer your questions, I will be assisted today by Vice Admiral W. J. Moran, Director of Research, Development, Test and Evaluation in the Office of the Chief of Naval Operations; Rear Admiral M. D. Van Orden, Chief of Naval Research; and Brigadier General H. L. Wilkerson, Deputy Chief of Staff for Research, Development and Studies for the Commandant of the Marine Corps, all of whom have appeared in this capacity before. Here for the first time as the new Chief of Naval Development is Rear Admiral C. P. Ekas whom you may remember as the former project manager for HARPOON.

I propose to present my prepared statement for inclusion in the record and then make a short, verbal statement in order to allow maximum time for discussion. I have for your viewing about 15 minutes of film clips of some recent events in Navy R&D.

With your permission, Mr. Chairman, I will proceed with my presentation and show the flim clip at the conclusion of my oral remarks.

I am acutely aware in discussing the Navy situation today that this is the second year that you have heard from a new Assistant Secretary of the Navy for Research and Development. In the present instance, however, I have been fortunate to have continued guidance and counsel from my predecessor, Dr. D. S. Potter, now Under Secretary of the Navy.

During the past few months, I have undertaken a substantial orientation program in Navy R&D. I have visited all of the major Navy R&D centers as well as a set of key contractors. The span of technology in these efforts is very large, necessitating a substantial technical effort. The Navy laboratories are indeed centers of excellence which have established an enviable record of achievement. The laboratories have the principal mission of monitoring or leading technical advances in systems architecture and our basic technologies. They are also an indispensable resource in support of material acquisition and the operating forces especially in times of critical need. The contractors have the principal role of design development and production in a competitive environment.

In discussing the activities of research and development in the Navy, I would like to separate conceptually those activities which relate to <u>how</u> we manage our research and development from those activities which are <u>what</u> we are doing in research, development, test and evaluation.

There have been in the recent past a number of studies made of the laboratory system in the Navy and of the acquisition process employed by the Navy. This material has been valuable in allowing me to become oriented to the current situation among the laboratories and other development agencies. I have estab-

lished a set of management objectives with the intent of reflecting advice, counsel and my own opinions on how activities in the Navy should now evolve to adapt to the changing economic and technical environment.

First, with respect to research activities, we have designed and installed a more effective mechanism for programmatic review of our research programs by those in the Navy who will be recipients of the results. We have also been fortunate to obtain the assistance of the select Naval Studies Board of the National Academy of Sciences. The Board is reviewing the broad content of the Navy research program to ascertain what new or additional criteria we should use in relating our work to the total scientific program in the United States and what criteria we should use in selecting innovative research people who can contribute to Navy needs. This study, together with an improved internal mechanism for technical base cross review, should give us a better mechanism for establishing priorities for Navy problems for the scientists and engineers participating in our programs. We want these technical leaders to articulate and defend their plans before their peers. Such a technical base cross review borrows from industry the practice of stimulating focus on plans for technical work by the proper type of inter-divisional review.

The second activity we are undertaking is to aggregate related Exploratory Development projects into a cohesive program structure to improve the identification of the work and its management by the laboratory technical directors. This is intended to overcome the tendency to task our technical people with a large number of small projects.

A third objective is to find improved means to couple our research and development people to operational and equipment problems. Often very fundamental scientific and technical insights are needed to understand failure mechanisms both in devices and systems which emerge in equipment after fleet introduction. I am concerned that we tend to consider R&D completed when the programs transition to production and out of the purview of the R&D appropriation. This can lead to failure to have the right technical people available to work on very erudite problems associated with newly deployed equipment. While Navy laboratory personnel (and contractors, too) are proud of their role in "fleet support", there is evidence that our performance here is uneven and should be strengthened. We have in the FY 1976 budget a 3 million dollar element, entitled Laboratory Fleet Support, which will be used to speed up and add to our capabilities in conducting specialized technical investigations.

The fourth objective is one related to improving our management coordination and control of development of computer software in our technical systems and systems integration. I anticipate such activities will require an increasing share of the RDT&E resources and it is essential that we try to optimize the use of this investment. One of the Special Assistants to my office will devote full time to this task. We will initiate new polices for tactical and strategic software development. Our goal is to set the stage for the long term.

A fifth objective is related to a significant drawdown in the numbers of people in the Navy RDT&E activities. This has been coordinated by the Department of Defense and is intended to shift the balance of R&D efforts somewhat from within the Navy

to industry. A drawdown of 3000 people is scheduled to take place between the end of FY 1974 and the end of FY 1976, with 800 of this total occurring during FY 1975. As we have not yet completed a detailed study of how to effect these reductions, the plan indicated in the Installations Analysis exhibit is based on a pro rata drawdown, with some adjustment for relative size of the activities. However, when we complete the study of our activities to determine where we can best effect the personnel reductions, I plan to reassign those reductions amongst the RDT&E activities in such a way as best to protect the Navy's interests and to effect the maximum savings possible. Therefore, the execution plan for these reductions may be different from the changes reflected in the Installations Analysis exhibit. We will, of course, advise the members of Congress in advance of any planned reductions of significant size in their respective districts in accordance with prescribed policy. We will also utilize attrition to the maximum extent feasible in reaching the lower in-house personnel level.

During the past year the Navy has undertaken a program to improve its long range planning. I personally have not had the opportunity of going through a cycle of this planning as a preparatory operation for the budget of the next fiscal year. I am firmly of the opinion that it is in the framework of an adequate long range plan that the best choices can be made for the expenditures of RDT&E dollars. It is an objective of the program to provide the new Navy platforms with the most modern and yet thoroughly tested systems appropriate to their operation.

The long times necessary in design and fabrication of platforms and the inevitable advance of technical capability in

subsystems along the way makes for a special problem that has always characterized our work. Our R&D planning needs to allow means to effect some orderly and appropriate technological updating of equipment during platform and systems development without unduly delaying the introduction of needed capabilities to the fleet.

I have been attempting to develop an understanding of the comparative strengths and weaknesses of our Navy relative to that of potential adversaries for the purpose of guiding priorities in our R&D work. Much has been written about the maritime balance in the number of ships, submarines, planes and their capabilities. These analyses are of great importance, but they of themselves are not sufficient in managing R&D. The Soviet Union is continuing an intensive effort to improve both the quality and quantity of their naval forces. In order for the U.S. to maintain its relative strength, we must lead the Soviets in technical developments.

From what has been reported it would seem, for example, that the following are activities that deserve highlighting because of a potential or existing deficiency in our relative military capability:

- Further improvements in anti-submarine warfare acoustic detection and torpedo capability in the face of (deleted) and potentially higher-performance quiet submarine operation as a result of improved technology.

- Further improvement in seeker jamming and decoy devices for use against missiles and torpedoes.

- Improved communications for coordinated ASW forces (i.e., submarines, surface ships, aircraft and ashore command centers) that will impose the least restrictions on the submarines' speed and depth requirements.

- A defense in depth against cruise missiles.

- Improved capability to acquire, identify and program offensive missiles or other weapons for over-the-horizon targets at sea and also land targets at amphibious landing sites.

- Need for modernizing our own communications and radar systems to make them less subject to neutralization by electronic warfare; and, conversely, need to advance our own ability to engage in electronic warfare.

- Need for cruise missiles of the appropriate variety to provide our fleet units with the long-range offensive they require when confronted with a capable and more numerous threat.

There are also some areas where we believe we have substantial capability and technical leadership which we should use to maximum advantage. Among these are:

- New design-to-cost combat fighter aircraft.

- Continued evolution of vertical and short takeoff aircraft.

- Advances in submarines and their propulsion systems as well as advances in the strategic missiles they carry.

- Flexibility and comprehensive control of weapon systems by intensive use of computer technology.

- Continued work on "smart" weaponry and on radiant energy weapons.

For the long haul, we should expect some significant help from our research program. A few examples are:

- The potential for generating very high power pulses of microwaves by using intense relativistic electron beams has been demonstrated recently in experiments at the Naval Research Laboratory. These unique microwave sources, with peak powers of up to one thousand megawatts, may find applications in new generations of electronic warfare systems, electromagnetic weaponry, communication systems and radars. Because of encouraging laboratory results, a significantly expanded effort is planned with a goal of producing a field-test ready system within five years.

- As part of the DoD tri-service Global Positioning System (GPS), the Naval Research Laboratory Navy Technology Satellite 1 (NTS-1) was launched successfully last spring. It is the first of three such satellites expected to be fabricated by the Navy to support the clock technology program necessary for a successful implementation of the GPS. NTS-1 is testing rubidium clocks; the next satellite will incorporate cesium clocks; with the third satellite in the series expected to test flight-qualified hydrogen maser atomic clocks. This clock development is critical as the ultimate position location accuracies and the ability to maintain this accuracy in a jamming environ-

ment, are dependent upon the precision of the clocks aboard the navigation satellites.

- The Navy has been doing research to put to practical use the phenomenon of superconductivity which occurs in some metals at temperatures near absolute zero. In one application, small superconducting devices are employed now in a magnetometer and later, hopefully, will be used in an extremely low frequency receiver. Airborne Magnetic Anomoly Detectors would be two to six times more sensitive with this technology. In another application, practical ship generators and propulsion motors are being built with 1/4 the size and 1/2 the weight of conventional electrical equipment. Ongoing research is trying to enhance this potential further through improved wire metallurgy.

New systems do not often parade from Research through Exploratory Development as is commonly perceived. A new system will more likely have a spectrum of new and old ideas put together to match an advanced objective. Hence a recitation of exploratory developments does often sound like bits and pieces waiting to be picked up in a modernization program.

This year the Navy took delivery of an 85 foot, 50,000 pound aluminum ship model to be used in fatigue tests at the Naval Ship R&D Center. (This model was the largest volume object ever airlifted.) These tests will enable us to predict in months the effects of 15 to 20 years of stress on new types of aluminum ships.

The acoustic towed array program has been pursued to provide the Navy with a passive tactical capability against the quiet submarine threat. Present towed arrays are limited in performance and by the towing speed at which acceptable acoustic performance can be achieved. A new (deleted) inch diameter array employing a flexible hose with an internal strength member and signal processing devices has been demonstrated. The array is (deleted) the diameter of present systems. If tests of a ruggedized version prove as promising as initial indications, the performance and towing speeds of such an array should be significantly improved.

We continue to study Small Water Area Twin Hull (SWATH) Ship hydromechanics. We intend to initiate mission analysis utilizing motion characteristics of the SWATH concept to assess the value of this concept to the Navy's mission. We are concurrently pursuing the technology required to further the development of high performance vehicles such as hydrofoil craft, surface effect ships, and planing hulls - and including their propulsors.

It is our objective to make maximum use of economic momentum in industry by adapting our work to monitoring their endeavors and capitalizing on their results. On the other hand, some root technologies such as high power radars, missile propulsion systems and explosive technologies must be selectively and thoroughly sponsored by the military.

PROGRAM SUMMARY

The FY 1976 request for the RDT&E,Navy appropriation amounts to $3467.7 million of New Obligational Authority. The transition period (FY 197T) is $903.8 million and the authori-

zation request for FY 1977 New Obligational Authority is $3798.1 million. Shown here is the RDT&EN program divided among eight budget activities as traditionally requested by the Congress.

RDT&EN PROGRAM BY BUDGET ACTIVITY

($ in millions)	FY 75	FY 76	FY 7T	FY 77
1. Military Sciences	138.1	153.0	39.7	158.4
2. Aircraft & Rel. Equip.	285.7	408.3	93.1	587.7
3. Missiles & Rel. Equip.	1068.8	1313.5	324.5	1233.5
4. Military Astronautics	54.0	43.5	6.2	21.2
5. Ships, Small Craft and Related Equipment	665.3	664.3	180.8	745.6
6. Ordnance, Combat Veh. and Related Equip.	93.5	103.6	29.7	120.0
7. Other Equipment	466.6	501.5	136.1	560.7
8. Programwide Mgt and Support	279.6	330.0	93.7	371.0
TOTAL	3051.6	3517.7	903.8	3798.1
Anticipated Receipts from Foreign Military Sales	-27.7	-50.0	--	--
New Obligational Authority	3023.9	3467.7	903.8	3798.1

Of the $466.1 million increase in FY 1976 program over FY 1975, it should be noted that $64.6 million is attributed to adjustments between RDT&EN and other appropriations. Of this total, $60.2 million results from the revision of funding responsibilities among various appropriations and $4.4 million from the net effect of a number of functional transfers. These adjustments continue a trend ($44.9 million was shifted to RDT&EN in FY 1974 and $80.7 million in FY 1975) which, when compounded by inflation, makes RDT&EN appear to grow more than is really the case. Details of these transfers as well as details

of the application of Foreign Military Sales receipts are contained in the appendices of this statement.

In the Department of Defense we also divide our budget into categories as in this table:

RDT&EN BY PROGRAM CATEGORY

($ in millions)	FY 75	FY 76	FY 7T	FY 77
1. Research	118.8	131.4	33.8	135.2
2. Exploratory Develop.	289.1	321.6	84.4	341.1
3. Advanced Develop.	669.0	885.6	275.0	1161.5
4. Engineering Develop.	1224.6	1437.3	305.5	1352.7
5. Management & Support	298.9	351.7	99.6	394.1
6. Operational Develop.	451.2	390.1	105.5	413.5
TOTAL	3051.6	3517.7	903.8	3798.1
Anticipated Receipts from Foreign Military Sales	-27.7	-50.0	--	--
New Obligational Authority	3023.9	3467.7	903.8	3798.1

I want to specifically address the increases in the Research and Exploratory Development programs. For at least the last 12 years, the Navy funding of base technology in categories 1 and 2 has been essentially constant in then-year dollars. The result has been an erosion of approximately 50 percent in terms of real effort. This year we are seeking to reverse this trend. I estimate that more than half of the increase for these categories requested this year will be used to offset inflationary effects and that an increase of only about three percent in actual Research effort and about four percent in actual Exploratory Development will be realized. I believe this small increase in these categories is justified by the central role these efforts have in the total Navy RDT&E program. Scientific

research and the range of problems addressed by this research are dynamic, changing and expanding. It is very difficult to maintain technological excellence with a declining program in technical base. Since all areas of Research have, in some sense, fallen behind, the increases will be spread over all activities. Our program thrusts for the coming year correspond to our best estimates at this time of the future needs of the Navy and Marine Corps, and of the opportunity to make progress. We plan to maintain emphasis on oceanography, on research on personnel and human factors, and to place new emphasis on materials.

Because the problems faced by the Navy are not getting smaller or simpler, I believe it is of the greatest importance to maintain a broad and strong research effort. In our efforts, we have adopted, where appropriate, work supported by others, and we will continue to take advantage wherever possible of such work. We will use the technique of monitoring a lot, participating to a degree and pioneering in special areas.

Before completing my prepared oral remarks, I would like to take this opportunity to express my appreciation - on behalf of the Navy R&D community - for the support afforded to us by the Congress. This support, along with the recommendations and guidance you have offered, have permitted the Navy to maintain a capability to contribute to the defense of our nation.

With your help we will have launched new classes of ships. Included are the PHM, DD-963, LHA, SSN-688, and the CVN-68. We have added two very capable new aircraft to the fleet - the S-3A ASW aircraft and the F-14 with its PHOENIX long range weapons system. We have added or improved upon missile systems, sonars and torpedoes, and will introduce the CAPTOR mine.

Development of these systems has taken time, much effort and, above all, money. The Congress has been patient in our need for time, has provided guidance and support in our application of effort and has made available to us the funds which have permitted us to accomplish these things. With this help, we have made progress.

Our Navy R&D effort consists of about 275 Program Elements, many of which consist of several projects. The range of content of these programs is broad. We are working on new aircraft such as the Navy Air Combat Fighter, the CH-53E and LAMPS MK III helicopters, and we are investigating VSTOL technology concepts. We are concluding development of the SIDEWINDER AIM-9L air-to-air missile and are undertaking a joint USN/USAF effort for the next generation of such weapons. Our Surface Warfare capabilities will be enhanced by our investigations into Surface Effect Ship and Advanced Hydrofoil technology and the development of the air cushion Amphibious Assault Craft. The AEGIS and HARPOON missile systems will move closer to operational status during this period. There are two major missile systems in the Strategic area - the TRIDENT and the Sea Launched Cruise Missile. We are initiating development of the intermediate depth Propelled Ascent Mine, PRAM, which will complement the deep water mine CAPTOR and shallow water mine QUICKSTRIKE.

These programs and others which are discussed in some detail in the statement submitted for the record, when coupled with our technology base efforts, will provide a balanced program to continually improve the combat capability of the United States Navy.

Mr. Chairman, this concludes my oral statement. We are now prepared to answer questions from the Committee.

SIGNIFICANT PROGRAMS IN NAVY R&D

In moving now to the specific "what" we are doing in Navy RDT&E, I have selected several programs which have proven of interest to the Congress or which I believe will be of current interest.

The FY 1975 budget for RDT&EN proposed the VFAX concept leading to a lower cost fighter to augment the F-14 and to eventually serve as a replacement for the light attack A-7.

In the FY 1975 Appropriations Bill, the Congress stated that the Navy should rename the program the NACF - Navy Air Combat Fighter - and directed the Navy to make maximum use of the USAF lightweight fighter prototype technology by developing a derivative of the USAF Air Combat Fighter.

The challenge now is to insure that the dramatic performance of the USAF ACF candidates is not lost when modified to meet naval mission requirements. We must also be certain that steps to achieve a degree of interservice commonality do not impact on intraservice commonality lest the benefits of lower cost production are lost during full life cycle support of extra systems.

Although the aircraft will be used to complement the F-14 for the fighter mission, it will also have excellent air-to-ground capability. Emphasis is being placed on total readiness, which is the sum of reliable equipment, ease of maintenance, and simplified skill training required both for maintenance personnel and aircrews.

A total procurement in excess of 800 aircraft is envisioned with fleet delivery commencing in 1981. The preliminary design-to-cost goal will be under $6.0 million in FY 1975 dollars for the average unit fly-away cost.

The Navy has received responses from the Air Combat Fighter contractors which describe naval derivatives. We expect that the Navy's evaluation of these proposals will be completed in March.

In response to Congressional direction, the Navy has suspended all development work on the F-401 Engine. The FY 1976 budget contains a small request for funds to finish documentation and ensure that once an airframe is identified, the option to develop the engine can be reinstituted. This seems a prudent action, for the engine represents the most advanced power plant in the thrust class. Future performance of advanced aircraft will be dependent upon high thrust-to-weight engines.

The United States has worked for many years on the development of a useful VSTOL aircraft. The U.S. Marine Corps is now operating three squadrons of the United Kingdom-developed AV-8 HARRIER, thus demonstrating the use of this type of aircraft in the close air support of ground forces. However a more capable VSTOL aircraft is needed for both the Marine Corps and the Navy. In addition, a long range look of several decades at the potential of VSTOL to reduce Navy requirements for high energy catapults and arresting gear to operate tactical aircraft is clearly warranted. The transition to the VSTOL must be gradually validated to reduce risk prior to a significant change.

The Department of the Navy VSTOL development program has been reoriented toward two goals. First, we will examine the

evolutionary growth potential which can be derived from the operational AV-8 HARRIER. The options for the next generation AVX range from aerodynamic refinement of the AV-8 design with the presently installed engine to a redesigned aircraft incorporating the PEGASUS 15 engine. We expect to be in a position to select a final design this summer with contract definition commencing so as to permit full-scale engineering development in FY 1977. The resultant advanced vectored thrust subsonic VSTOL aircraft will replace the A-4 and the AV-8A in the Marine Corps inventory as those aircraft reach the end of service life.

The second goal of our program is to continue examination of the VSTOL approaches that would permit development of a supersonic VSTOL weapons system for the next decade. At present, we are considering three candidate technologies. The XFV-12A Thrust Augmented Wing technology prototype program will be continued to completion to resolve the transfer of this lift principle from subscale laboratory demonstration to full-size, flight-worthy hardware. The remaining technologies, Lift-Plus-Lift/Cruise and Supersonic Vectored Thrust, will be pursued with a view toward a decision by the end of this decade.

One demonstration of deficiency in Navy capability is the lack of adequate air lift for transporting heavy loads from ship to shore, shore to ship, and ship to ship. To solve this deficiency, we embarked upon a program which would provide the Navy and the Marine Corps with a significant increase in short-range helicopter heavy-lift capability. The effort encompasses the need to be compatible with existing shipboard platforms such as amphibious and service force ships. It is also imperative that the capability be attained at minimum RDT&E cost, minimum pro-

curement, and minimum impact to personnel, operations and maintenance efforts. Thus a growth version of an existing system, i.e., the CH-53 series, rather than a totally new development, was considered more cost effective. This approach initiated development of the CH-53E program.

This program has been very successful. However, as many of you will recall, on 15 September 1974 at the Sikorsky plant, the Navy sustained a ground accident to prototype No. 1 aircraft. The aircraft was destroyed by fire. The subsequent investigation revealed that a design deficiency in the method of retention of the main rotor head sleeve and spindle assemblies had resulted in separation of No. 1 blade from the rotor head during a ground 100 RPM single engine operation, causing catastrophic failure to the rotor assembly. This deficiency has been rectified and No. 2 prototype is currently flying.

The loss of No. 1 aircraft delayed completion of Navy Preliminary Evaluation I until February 1975. A DSARC II review is now scheduled to be held in March 1975 to evaluate the success of the program and to determine if justification exists for release of presently deferred FY 1975 RDT&EN funds. The funds would enable the Navy to develop two additional test vehicles and one static test aircraft. By the present plans, the DSARC will be requested to release long lead production funds based upon successful completion of contractor aerodynamic and structural demonstrations and completion of Navy Preliminary Evaluation III. It is estimated that completion of NPE III will occur in May 1975. Then by November 1976, sufficient data should be available for a DSARC III to make a final production decision.

It is worthy to note that the CH-53E utilizes approximately 60 percent parts commonality with other CH-53 series aircraft currently in inventory. The CH-53E has already demonstrated a 16-ton lift capability which more than doubles the seven-ton capability of current operational aircraft.

The Light Airborne Multi-Purpose System (LAMPS) MK III development will provide surface combatants with improved anti-submarine warfare (ASW) and anti-ship missile defense (ASMD) capabilities beyond the ranges of current systems, including LAMPS MK I. In addition, LAMPS MK III will provide airborne targeting for the ship-launched HARPOON missile. The LAMPS MK III will be a twin-engined, 19,000 pound helicopter equipped with radar, Magnetic Anomoly Detector, sonobuoys, electronic support measures, acoustic processing/display equipment and torpedoes. The MK III differs from the MK I primarily in longer range and endurance, newer sensors, improved reliability and maintainability, and on-board acoustic processing.

RDT&E funding for LAMPS MK III provides for the development of new airborne and shipboard equipment, the total integration of the aircraft/ship systems, acquisition and testing of prototype aircraft.

It is intended that the LAMPS MK III aircraft will be a marinized version of the Army UTTAS. Navy development of LAMPS MK III is planned to dovetail systems to this aircraft. Hardware and software acquisition and H-2 helicopter modification for initial baseline MK III at-sea testing is completed. Additional procurement of hardware and modifications to software have commenced in preparation for the 1976 at-sea development testing of the extended mission MK III using a H-3

helicopter testbed. In FY 1976 engineering design contracts will be awarded for LAMPS MK III prototype airframe definition and development contracts for marinizing the basic UTTAS engines. In FY 1977 contracts will be awarded for the acquisition of prototype MK III airframes.

Plans call for the completion of full system testing by 1980 with award of initial production contracts to permit an initial operational capability in FY 1982.

Before I leave the discussion of aircraft platform requirements, I would like to discuss the VCX Carrier On-Board Delivery (COD) Aircraft. The need for aerial resupply is not a unique requirement for a moving base. A carrier supports approximately 80 tactical aircraft and a complement of over 5000 men. Thus, the resupply needs of a moving air base, such as the carrier, when combined with support ships, equates to the operational resupply needs similar to any remote major air base. The present C-1A and C-2A aircraft fail to fulfill the Navy COD requirements. The C-1A, a propeller driven aircraft introduced in FY 1955, is inadequate to meet the long range cargo requirements experienced in our current operational scenarios. Furthermore, this aircraft is approaching service life termination at which time it can no longer be employed safely in a carrier environment. The second asset, the C-2A, while capable of carrying large quantities of cargo, has experienced numerous deficiencies, poor maintainability characteristics and unacceptable reliability. At present, there are only 12 C-2As remaining from a total force procurement of 19.

To meet the demand of a replacement aircraft, the Navy solicited proposals from industry. Although some two dozen

designs were proposed, it became clear that for a small production run (about 24-36), a completely new design was impractical. It also became apparent that for such a mission, the lowest risk approach was to modify an already carrier-suitable airplane. Such a course would also benefit from commonality. With this approach, trained maintenance personnel and spare parts would already be in place on all the carriers the VCX would serve.

The FY 1974 VCX RDT&E funds of approximately $1 million were invested in further studies of the requirement, study contracts with Grumman and Lockheed for high and low capability adaptations of the C-2 and S-3 respectively, and computer simulation of these candidates. Additionally, unsolicited proposals from other aircraft companies were considered. An extensive analysis of possible existing commercial designs was also performed.

The result of all these efforts led to the conclusion that only a major change to the S-3 (which provides essentially a new fuselage) would create a COD at low risk which meets all the Navy requirements. However, the cost associated with this alternative was considered too high (about $130 million RDT&E in FY 1974 dollars). All other alternatives decreased cost by deleting some capability or a combination of capabilities such as range, payload, outsize cargo, speed, etc. The Navy thoroughly examined these tradeoffs in the light of an integrated logistic force which includes service-life-extended C-2As and greatly improved vertical lift capability of the CH-53E. The Navy also examined the possible impact of base denial, and performed computer simulations of the carrier task force air resupply needs under these conditions.

As a compromise, we propose engineering development of a minimum modified S-3 variant which requires approximately $3.7 million RDT&E. As such, ASW mission equipment would not be installed during aircraft assembly, and minor changes would be incorporated to accommodate the carrying of passengers, mail and high priority cargo.

While it is recognized that the proposed S-3 variant is primarily a replacement for the C-1 and will not fulfill the total future COD needs, it does provide for the most critical requirements of extended-range carrier on-board delivery at the lowest expenditure of appropriated funds. It is planned that procurement costs will be maintaned at an absolute minimum by not incurring a production line gap.

There are two air-to-air missiles which are of special interest to the Congress. With the cancellation of the AGILE program by Congress in FY 1975, the Navy has been engaged in a joint effort with the Air Force to define requirements which would lead to the development of a common short range air-to-air missile. Though significant progress has been made, no firm agreement has been reached regarding the final characteristics of such a missile. The primary problem appears to be a substantive difference in the concept of operations of the two Services. It is not clearly axiomatic that both goals can be achieved in a single missile. Nevertheless, a joint program, endorsed by DOD and fully supported by both Services, has been structured for FY 1975 and FY 1976 for the specific purpose of providing a new, in-depth look into the question of requirements definition. Because desired missile capability and performance requirements must be rationalized with engineering practicality,

a technical demonstration program parallels the requirements definition process. Briefly stated, the Navy's program over the next two years will consist of analysis of simulator and in-flight generated data using manned simulators and the Air Combat Maneuvering Range. The purpose of this effort is to further refine the military worth of theoretical missile performance. Engineering investigations and demonstrations will be conducted on such technical issues as off-boresight seeker/gimbal design and thrust-vector-controlled propulsive steering units.

Operational factors require widespread use of a relatively small, affordable Anti-Radiation Missile (ARM) that can be carried easily and used freely in attacks against radar directed defense systems employing Surface-to-Air Missiles (SAMs), Anti-Air Artillery (AAA) and interceptor aircraft. The HARM program is developing a single ARM to combine the capabilities of the existing SHRIKE and STANDARD ARM and to eliminate their principal deficiencies.

HARM will have automatic target data handoff and high velocity (twice that of SHRIKE) to provide the necessary time margin in SAM/ARM engagements. Having a (deleted),

Primary employment of HARM will be on the Navy A-7 and Air Force Wild Weasel F-4 aircraft. Future plans provide for HARM compatibility with the A-6, A-4, F-4 and F-14, and may possibly include S-3, P-3 and other aircraft.

Missile flight performance has been demonstrated by unguided aerodynamic firings, captive seeker flight tests and guided firings. A total of 12 missiles (9 aerodynamic, 3 guided) have been fired. Two recent guided firings (October/November 1974) achieved direct hits on the targets.

The program is in the final stages of advanced development. In July 1975, the first contractor developed HARM missile is scheduled for delivery to the Naval Weapons Center, China Lake, California, for test and evaluation. DSARC II will be held in approximately February/March 1976 to consider transition of the HARM weapons system into engineering development. The engineering model phase of the engineering development program is scheduled to commence in April 1976 and to be completed by the end of FY 197T. The results of those tests will provide the basis for a decision to proceed into the prototype phase of engineering development.

The HARM rocket motor development has met all design objectives to date and will be available for the forthcoming series of contractor produced developmental missile firings scheduled for early 1976.

In the TRIDENT Submarine System, equipment developments are continuing to support the lead TRIDENT system. Included are an improved oxygen-generating system, hardware procurement for the Land Based Evaluation Facility integrated radio room, and the command and control system which includes the TRIDENT Sonar System. In developing the subsystem designs, the full-scale mock-up of the submarine is being used to assure operational compatibility and suitability, and equipment accessibility. Fabrication of the missile tube prototype is continuing as planned based upon the successful completion of the confirmation model testing at the Naval Ship R&D Center.

The plans for FY 1976 and FY 197T include the complete fabrication of the sonar system engineering model and software package for integration and testing, continuation of engineering

and integration efforts for the command and control system (including system level test and evaluation) and installation and testing of the integrated radio room full-scale prototype at the Land Based Evaluation Facility, and technical and operational testing and evaluation of the TRIDENT equipment and subsystems. It should be noted that submarine RDT&E has peaked and will continue to decline as submarine production proceeds.

Accomplishments in the TRIDENT Missile System program include, in addition to initiation of full-scale engineering development, Phase III development of the nuclear warhead and completion of three MK-4 Re-entry Body supplemental flight tests. The electrostatically supported gyro monitor has undergone at-sea advanced development model testing. Included in this development are the advanced development effort to demonstrate compatibility of the Maneuvering Re-entry Vehicle (MARV) with the C-4 missile and full-scale missile propulsion tests of all three stages. The Simulated Underwater Partial Launch System facility construction has also been completed.

Development efforts for shipboard-installed Strategic Weapon System (SWS) subsystems are being continued on schedule to support delivery of this equipment as Government Furnished Equipment to the lead submarine shipbuilder.

Under the planned [deleted] program, flight test hardware is to be delivered so that the C-4X developmental flight test program can proceed. The Simulated Underwater Partial Launch System will be towed to sea off San Clemente and submerged to test the load on the missile nose fairing and to test the launch tube closure interface underwater. Completion of underground nuclear test and MK-4 and MARV supplemental flight test programs are

also scheduled for (deleted) along with system level testing of prototype ship-installed subsystem hardware. Advance development of the TRIDENT II missile will commence with an operational availability date of (deleted)

The FY 197T program includes the start of at-sea testing of the electrostatically supported gyro monitor pre-production unit, fabrication of performance evaluation missiles, and dock-side delivery of SWS equipment to the lead submarine. The development flight tests of the C-4 missile will start in (deleted).

The SSBN Subsystem Technology Program is a new start. Its purpose is to identify areas where advances in technology could potentially improve the cost effectiveness of SSBN subsystems, either by reducing costs or by providing significant performance increases.

The Sea Launched Cruise Missile (SLCM) is being developed for launch from the torpedo tubes of attack submarines and also will be capable of adaptation for launch from cannisters aboard surface ships. The missile will have a strategic, nuclear configuration to complement the present strategic triad of land, air and sea launched weapons for employment against land targets, plus a long range tactical variant with a conventional warhead for use against enemy surface ships. Both weapons are constrained by the torpedo tube size to a diameter of 21 inches and an overall length of 246 inches, including booster. The strategic version has a flight weight of 2400-2700 pounds and a maximum range of about 2000 nautical miles. The tactical variant of the missile is being designed for maximum commonality with the strategic version with only those changes necessary to permit the engagement of surface ships with a conventional, high-

explosive warhead. This weapon, when launched from either a submarine or surface ship, affords high single-shot kill probability against destroyer-sized targets at ranges up to 300 nautical miles. The missile will be able to accept mid-course updates.

The program is presently in its validation phase. The primary objective of this phase is to design and develop both the strategic and tactical SLCM developmental prototype models, and demonstrate the attainment of the SLCM performance objectives prior to the DSARC II decision on initiation of full-scale development phase in FY 1977. Current DOD guidance is that the SLCM program will continue in advanced development using the current competitive contractor teams and on a schedule which will permit important milestones to be reached consistent with the Air Launched Cruise Missile milestones. Further, the missile will be compatible with launch from B-52 aircraft. It is intended that this phase will culminate in a fly-off and selection of one of the airframe contractors as the prime SLCM weapon system contractor.

During the remainder of FY 1975 and throughout the FY 1976/197T timeframe, it is planned to continue contractor competitive demonstrations with a series of successively more complex test vehicles which will demonstrate the full range of SLCM performance goals. In a separate, but parallel effort, there are contractual requirements for the competitive demonstration of the strategic version of the SLCM guidance system. The final phase of the FY 1976/197T program will result in the selection of the full-scale development contractors for the airframe and the guidance system.

A final strategic warfare program of continuing interest and high Navy priority, whose need has recently been reaffirmed by the Secretary of the Navy and the Chief of Naval Operations, is the SANGUINE Extremely Low Frequency (ELF) communications system. Initial ELF research was conducted in the late 1950s. Since that time, follow-on investigations and tests have demonstrated the technical feasibility of ELF communications to submerged submarines. There are two areas of concern yet to be resolved. First, there is some question as to whether ELF has harmful environmental or biological consequences. Both laboratory and field tests have been conducted for several years in an effort to answer those concerns. In the last five years, over 35 separate studies have been conducted by the Navy and independent research teams. To date, results show no known harmful effects on humans, animals, plants, or micro-organisms at electromagnetic field levels to be used for the operational SANGUINE system. In fact, there is no conclusive evidence of any harmful effects at field levels significantly higher than SANGUINE levels. Publication of completed research is continuing to allow peer review of the results.

Second, proposed locations of an ELF communications system have generated considerable local concern. As a result, site investigations are continuing to determine the utility of federally owned lands of greater than 500 square miles on which the ELF system could be constructed. The result will be a listing of sites that are technically suitable. Site recommendations for FY 1976 and the outyear program are scheduled for review by the World Wide Military Command and Control Systems (WWMCCS) Council.

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The major efforts in FY 1976 and FY 197T will be the continuation of Design Validation and propagation validation efforts initiated in FY 1975. Design Validation will reduce the concepts of the selected contractor (GTE-Sylvania) to engineering test articles. This will insure that the proposed equipment, such as transmitters, cable, switching components, and the message input equipment can be built and operated as specified prior to a production decision. Similarly, the propagation validation receivers, when installed in a limited number of submarines and deployed in the operating areas, will permit the gathering of data which will contribute to final system design. The 24-hour per day operation of the Wisconsin Test Facility to facilitate this testing will also accelerate the ecological/environmental effects research at the test facility to provide a longer term data base of the potential environmental impact on an operational site. Work will continue on biological and ecological investigations (to include modulated signals) outside the Wisconsin Test Facility. Finally, on the premise that the site recommended by the Navy/DoD will be acceptable to the Congress, we have provided startup funds to begin the full-scale development, site-dependent, final system design late in FY 1976. This work would continue for approximately one year. Prior to proceeding with final system design, a DSARC II review would be held. Based on approval to proceed with the FY 1976/FY 197T program, a SANGUINE system could achieve an initial operational capability in FY 1981.

A major thrust of the Navy's communications program is to provide improved, reliable, long-range communications by satellite relay for command and control of naval forces worldwide,

thereby partially satisfying the Navy's most urgent near-term communications requirements. The major element of this satellite communications program, the Fleet Satellite Communications (FLTSATCOM) Program, is intended to satisfy the need for a worldwide, mobile user system with provision for accommodating high priority tactical Air Force requirements. It is a UHF (Ultra High Frequency) system except for the fleet broadcast SHF (Super High Frequency) uplink. The Congress last year provided additional funding to the RDT&EN appropriation to assist the Navy in the solution of its pressing FLTSATCOM problem.

Present planning is to launch the first FLTSATCOM satellite in early calendar year 1977. In the interim, and until sufficient FLTSATCOM spacecraft are in orbit to handle the Navy's communications requirements, the Navy will lease two GAPFILLER satellites commencing about the middle of this year.

During 1974, the developmental effort on the FLTSATCOM spacecraft encountered a significant radio frequency intermodulation problem. This problem was solved by redesigning the antenna system.

In addition to the FLTSATCOM program, the Navy is also developing SHF shipboard equipment to connect flagships and major combatants to the Defense Communications System via the Defense Satellite Communications System.

Our Surface Warfare programs fall roughly into two broad categories - ship platforms and shipboard systems (weapons, sensors and components). I will discuss three of the more significant ship platform programs - NATO PHM, Surface Effect Ships and the Amphibious Assault Craft.

The U.S. version of the NATO PHM is a 235-ton patrol hydrofoil having a speed of [D] knots and armed with eight surface-to-surface missiles (HARPOON) and a 76mm gun. The lead ship, USS PEGASUS (PHM-1), was built using R&D funds and was launched on 9 November 1974. It is currently undergoing extensive platform testing with concurrent test and evaluation of its weapons systems and associated equipments. Contractor testing is scheduled for completion in June followed by operational evaluation. Cost growth and escalation in the program, largely associated with technical and production difficulties experienced in welding of stainless steel and aluminum on PHM-1, resulted in suspending construction of PHM-2 in August 1974. Since PHM-2 will not contribute to the test and evaluation program as was originally planned, the Navy is not planning to restart construction of this ship. It is planned to utilize its structure and equipment in support of PHM-1 test and evaluation and, wherever possible, in the production program. It is anticipated that the U.S. and Germany will make a production decision in FY 1976 for a quantity buy of PHMs.

The Surface Effect Ship program is intended to design and build a large-scale prototype ship, employing the surface effect principle, capable of open ocean operations in order to demonstrate the feasibility of applying this technology to warships. The prototype would also permit us to explore and demonstrate mission utility and tactics for such ships which have the potential to revolutionize naval warfare. No technological problems have surfaced as yet to cause the feasibility of the program to be questioned. Possible problem areas requiring further investigation with ships of this type are associated with self-generated

[D]=Deleted

noise and high fuel consumption. Last spring, one of our 100-ton testcraft exceeded its design goal of 80 knots. Our work on advanced development of components and subsystems for the large-scale prototype is proceeding satisfactorily, increasing our confidence that this technology is well in hand. Nevertheless, present day budgetary pressures have forced us to reduce the program from two to one ship, and to extend the schedule to design and built it by about a year. This stretch out of the program from that previously presented to the Congress will permit the further refinement of engineering knowledge in this technology and will provide additional test validation prior to selection of a single contractor for the design and construction of the ocean-capable prototype. It is anticipated that a DSARC will be convened late in FY 1976 to decide upon the design and construction of the large-scale prototype. Operational analysis studies to evaluate the potential utilization of advanced naval vehicles will be conducted.

A variation of the air cushion principle is being used on the Amphibious Assault Craft. These craft are designed to carry 60 tons of troops and equipment from amphibious ships to shore at a speed of 50 knots. They are completely amphibious. Their high speed and load capacity will permit the projection of more amphibious force ashore per increment of time than has ever been achieved in the past. And while transiting on a cushion of air, they have the potential to move inland over beaches we are not now able to cross to offload cargo. The vulnerable beach bottleneck of World War II is minimized. There are two different complementary prototypes of this craft being built. Both hulls are being assembled by the contractors. Engines are being manu-

factured; propellers, transmissions, shrouds and fans are being assembled and tested; and rubberized "skirt" fabrication is underway.

Norfolk Naval Shipyard is proceeding with design of ship/craft interface hardware. Both craft are expected to complete assembly during FY 1976 with rollout early in the spring of 1976. They will then undergo extensive engineering tests to prove that they can achieve design performance. The Navy test crews will be selected, assembled into the Experimental Trials Unit and receive extensive classroom and on-the-job training in craft operations and maintenance. The target is to have proven prototype craft delivered to the Navy and have trained crews available early in 1977.

Before moving into the shipboard systems area, I would like to highlight two programs which give us a particularly high return on our R&D investment.

The first of these, the Shipboard Systems Component Development Program, involves a number of hull, electrical and machinery auxiliary systems projects which show excellent promise of increased performance, improved safety, maintainability, reliability and reduced life cycle cost.

The tasks selected are all chosen for their high payoff. Relatively small R&D investments of one or two million dollars spread over a short two to three year development period can return approximately 20 times this amount annually, just in reduced maintenance fees.

The second of these programs is the Advanced Ship Development Program which provides the conceptual efforts and preliminary design for all non-strategic ships in the Navy's shipbuilding

program. It should be noted that the requirements of this element will vary from year to year reflecting policy changes within the Navy, DoD and Congress. Factors such as design-to-cost, life cycle cost analysis, nuclear/conventional propulsion options and studies to determine the numbers and types of ships required define the efforts required in this program. We have learned that relatively small investments made in the early formulation phases of a ship program return enormous dividends over the life of a ship system. The reason we are asking for considerably more funds to support our ship design efforts this year is that we are now looking at the preliminary design of three very expensive and very complex weapon systems - a nuclear powered guided missile strike cruiser, a nuclear powered aircraft carrier and a nuclear powered attack submarine.

A very important ship system is the HARPOON weapons system which is an anti-ship missile capable of being launched from ships, aircraft and submarines. The HARPOON range, 60 miles, provides for standoff attack of ships armed with surface-to-air missiles and surface-to-surface missiles. HARPOON employs existing ASROC, TARTAR and TERRIER guided missile launchers. Additional launch platform options include PHMs, PFs, and SES. The primary launch aircraft is the P-3, with compatibility required for the S-3, A-6 and A-7. The submarine version uses the basic ship type missile encapsulated in a rigid shell compatible with a 21-inch torpedo tube. The program is mid-way through a two-year engineering development phase which will produce 40 prototype missiles for Initial Operational Test and Evaluation. Twenty-one missiles have been tested to date with

18 successes. DSARC IIB was held on 25 June 1974 which approved release of FY 1975 procurement funds for a pilot production of 150 missiles. The remainder will be used for Fleet Operational Test and Evaluation and fleet introduction in late (deleted) Navy Technical Evaluation commenced in November 1974. There has been a cost growth in the production program which is currently under comprehensive Navy/contractor study with the objective of modifying the program or designing corrective action.

You may remember the Navy concept of defense-in-depth against anti-ship missiles, where the outermost defenses were provided by aircraft, followed by the long-range area defense systems such as TARTAR, TERRIER and, in the future, AEGIS. Further into the defense perimeter are the point defense systems such as NATO SEASPARROW and Basic Point Defense, and finally, guns and the Close In Weapons System, PHALANX.

AEGIS will automatically perform all weapon system functions including search, detection, identification and prioritization of targets, weapon selection and control, and finally, kill assessment. It will be capable of launching the STANDARD surface-to-air missile, the Antisubmarine Rocket (ASROC) and our new anti-ship missile HARPOON.

AEGIS will integrate all shipboard sensors and weapons and will be able to coordinate other off-ship systems via data link. It is capable of 360 degree, horizon-to-zenith search extending to [D] nautical miles, maintenance of [D] active tracks, control of friendly combat air patrols and up to [D] simultaneous weapons engagements. In its automatic mode, the system's detection to fire reaction time is [D] seconds. It will communicate with

[D]=Deleted

the STANDARD Missile in flight by up and down links to provide mid-course guidance, and will illuminate targets for terminal missile homing. The system also features increased resistance to electronic countermeasures.

Reliability and maintainability have been engineered into AEGIS. For example, redundancy in the radar design insures minimal performance degradation due to component failure. AEGIS will monitor its own performance, isolate component failures and can be repaired without shutdown. It will also simulate combat engagements for operator training. It has a four-face non-rotating planar array, radar antenna, command and control, and a complete display system.

At-sea testing of the Engineering Development Model is presently underway in USS NORTON SOUND at the Pacific Missile Range. To date, we have fired eleven SM-1 missiles with six successes. In mid-1975 we expect to commence firing the SM-2 missile. As for the SM-2 missile, we have fired five at White Sands with four successes. Fourteen more shots are scheduled at White Sands prior to the NORTON SOUND launches.

In FY 1976, we plan to commence work on the AEGIS Combat System Engineering Development Site (CSEDS). CSEDS will consist of a partial AEGIS system (one array of the SPY-1 radar) plus either actual or simulated equipment comprising the Ship Combat Suite, including the navigation system, ASW systems, guided missile fire control and launcher systems, and other associated weapons such as HARPOON. This site will be used for integration of a complete ship combat system and design and demonstration of tactical computer programs. Further, it will serve for training of lead- and follow-ship combat crews.

As a supplement to the SEASPARROW derivative point defense systems, the Navy was investigating the use of a Dual Mode REDEYE system. This project was deleted by Congress in FY 1974 due to doubts that a 2.75" diameter missile (REDEYE and STINGER) would provide sufficient lethality to counter anti-ship missiles. Navy has since dropped the 2.75" missile from consideration and is evaluating instead a 5" diameter missile. The purpose of the ASMD Missile System is to provide self defense against the current anti-ship missile threat for ships which, because of size/mission, cannot accommodate NATO SEASPARROW or Basic Point Defense. The goal is development of the smallest, cheapest missile which will provide reasonable assurance of target kill.

The project is currently in concept validation and although not yet firm, will probably evolve into a 5" rolling airframe, dual mode Anti-Radiation Missile/Infrared missile, featuring fixed-angle or vertical launch and minimum essential command and control. The dual mode passive guidance technique is borrowed from Dual Mode REDEYE and is preferred since sophisticated, heavy shipboard fire control equipment is not required (deleted).

Lock-on before launch and mid-course guidance in the ARM mode, followed by switchover to IR terminal homing, is the anticipated launch sequence. Fixed-angle or vertical launch, if feasible, will conserve shipboard space and obviate the need for heavy launching equipment. An (deleted) initial operational capability is planned.

The development and testing of the Close-In Weapon System, PHALANX, have been subject to considerable scrutiny by the Congress. We have conducted extensive tracking and firing

tests of the weapon system and lethality tests of the projectile. The Navy has proven that the system can hit its targets. We confidently believe that the projectile can "kill" an anti-ship missile warhead. We are now conducting tactical anti-missile tests to demonstrate, to the best of our ability, that the complete system can, in fact, kill incoming anti-ship missiles at a safe range from the defended ship. These tests include both warhead lethality and dynamic flight tests against representative targets to provide a sound basis for the determination of PHALANX effectiveness against a variety of tests. A prototype system has been installed on a destroyer hulk which is moored at the Pacific Missile Range and is being tested in a realistic, at-sea environment. These tests with the system remotely controlled and instrumented are very complex and represent a new dimension of testing realism.

Three target types have been selected on the basis of both availability and the extent to which they simulate the threat characteristics. [Deleted] The targets chosen also approximate the terminal speeds of many of the threat missiles.

Destruction performance will be evaluated in two related tests. Recently, we completed a series of static firings against actual missile warheads with real or simulated forebodies. [Deleted]

The tactical missile tests will be complex and costly, but we consider they will, to the best of our ability, demonstrate overall system performance. The Navy believes we are conforming to the direction of Congress and that these tests will provide a good basis for assessment of system capability.

Proven by these tests, the PHALANX system's completely automatic detection through destruction sequence, closed-loop gunfire capability, autonomous operation, unitized construction and rapid total reaction time will offer a close-in kill capability unmatched by any other system in the world.

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As a result of Congressional concern over the Navy gun programs last year, I have taken a special interest in this area. In response to Congressional direction, I believe substantial progress has been made in achieving a more systems oriented approach in gunnery improvement and development programs and in the utilization of authorized funds within the gunnery programs. (In no case have funds which were appropriated for gunnery programs been reprogrammed to efforts outside the gunnery areas. In fact, funds have been reprogrammed to these areas.)

In regard to a more systems oriented approach in naval gunnery development programs, the Navy has recently promulgated a concept for the development, acquisition and employment of naval gun systems. Fundamental to the development of this concept were the following factors:

A. Development, procurement and installation funds available to the Navy have been and will continue to be limited. It is imperative, therefore, to extract the maximum military value from each dollar spent.

B. In recent years, surface weapons systems' developments and improvements have concentrated heavily in support of the AAW mission area. To some extent, dual purpose gun systems' improvement goals have over-

lapped into AAW-optimized guided missile systems' goals, sometimes without hard analysis of alternatives or total weapons system tradeoffs.

C. Although it is possible to achieve marginal performance improvements in major and intermediate caliber gun fire control systems in the AAW mission area, these improvement efforts will be effected only after analysis of total weapons systems alternatives and with consideration given to the effects of such AAW improvements on the systems' surface strike warfare mission area capabilities.

D. Major (8-inch and larger) and intermediate (80mm to 8-inch) caliber gun systems are ideally, and in some instances, uniquely, capable in the surface strike warfare role. These systems, when optimized to support the surface strike warfare mission area, together with the HARPOON and tactical Sea Launched Cruise Missile systems, will restore to the surface warfare forces the offensive strike capability which is a major Navy policy objective.

E. Passive guided projectile developments promise to provide a substantial ASMD capability to intermediate caliber gun systems with minimal impact on these systems' surface strike warfare capabilities. Additional ASMD capability can be achieved through developing single purpose minor caliber gun systems, e.g., the PHALANX Close-In Weapon System.

With the foregoing as background, the Navy's gunnery concept is as follows:

A. Major and intermediate caliber gun systems in being (or nearly so) shall be optimized for roles in support of surface strike warfare. In the case of major caliber systems, AAW capabilities shall be limited to that which is inherent in the surface strike warfare optimized design. In the case of intermediate caliber systems, AAW improvements must complement capabilities of those weapons systems whose primary role is AAW and must not be effected so as to adversely impact upon the intermediate caliber gun systems' surface strike warfare performance.

B. Minor caliber gun systems' development shall continue to support the mission areas for which each system was called out.

In order to preserve program stability, continued development and, if warranted, subsequent fleet introduction of the 5-inch and 8-inch guided projectile programs is fully supported. There will be no immediate change in other development efforts, such as the gunnery improvement programs, in order that proper utilization of such development costs and proper evaluation of development efforts can be achieved. However, on a case basis, the Navy will examine and reshape programs on a total systems basis to conform with the above concept as time goes on.

At this time, we have in the fleet 55 ships with the MK-68 Gun Fire Control System and the 5-inch/54 caliber gun which are scheduled for improvement. Conceptually, we have undertaken a three-pronged effort to improve that system in a Gunnery Improve-

ment Program (GIP): 5-inch/54 caliber gun mount reliability; 5-inch ammunition safety and effectiveness; and MK-68 Gun Fire Control System improvements. The 5-inch efforts of this program are well in hand. The 5-inch/54 caliber gun mount is being replaced with a newer, more reliable version. A High Fragmentation (HIFRAG) Projectile is under development and we hope to qualify a cheaper explosive and do some incendiary tests for this projectile in FY 1976. The Adaptive Microwave Fuze is a variable-time, proximity fuze which will adapt the burst of the projectile to the optimum position for a particular target's velocity. We expect to complete the demonstration of this fuze during FY 1976.

However, it is in the MK-68 fire control modifications for GIP that we have had some problems. The actual testing of a fire control prototype is underway at the Naval Surface Weapons Center, Dahlgren, Virginia, in preparation for at-sea testing aboard USS CHARLES F. ADAMS (DDG-2) in calendar year 1976. We have overcome some of our radar modifications difficulties at this land-based test site. However, as we have moved through RDT&E, we have found that the actual procurement costs of the modifications have more than doubled. Therefore, as these costs start to approach the costs of other fire control systems such as the MK-86 or MK-92, we intend to evaluate the MK-68 GIP effectiveness against those other two near-term systems as possible alternate candidates for the GIP fire control system when the time comes for procurement (starting in FY 1977).

The MK-86 Gun Fire Control System has completed Operational Evaluation and is at sea on USS CALIFORNIA (DLGN-36). It is also being installed on the ships of the LHA, DD-963, DLGN-36 and 38

classes. However, as service acceptance has been conditional on the RDT&E development of an electro-optical system, we are integrating the electro-optical sensor system being developed for the MK-68 system in the GIP program into the MK-86 Gun Fire Control System.

The MK-92 Fire Control System is under development for the PHM and PF programs. In addition to a fire control tracking radar, the system provides search radar coverage by a means of a separate track-while-scan radar. A system is now aboard USS TALBOT (DEG-4) undergoing operational evaluation which will complete this summer. Along with demonstrating the ability to control the SM-1 missile, this sytem will also provide the means for test and evaluation of the 76mm gun, MK-75 MOD 0, also installed on TALBOT.

The last program that I would like to discuss in this category of programs is the Guided Projectile projects. Generally we have three programs: 5-inch rocket-boosted projectile to reach to (deleted); 8-inch unboosted (which has a range of 10 miles) which is a tri-service program; and 8-inch extended range (rocket boosted) new start which would give this 8-inch round a range of (deleted). The 5-inch program is associated with the Navy's 5-inch/54 caliber guns and is employing both infrared and semi-active laser guidance methods. Simultaneously, at Congressional direction we have been doing some tests with the Army wherein we sleeved the 5-inch projectile for firing from an Army 155mm howitzer. These sleeved 5-inch tests terminate in FY 1975 and are not further funded. The 5-inch/54 projectile tests will provide adequate data available in early FY 1976 to consider going into engineering development.

The 8-inch efforts are contained in the line item labeled Extended Range Projectile. However, we have continued with the un-boosted 8-inch tri-service testing. At the same time in early FY 1976 that the 5-inch program test data is available for DDR&E review, sufficient data from the 8-inch program will have been evaluated to decide whether to pursue the un-boosted tri-service projectile or start up the Extended Range concept. In short, the funding requirements for both the tri-service 8-inch and the series of tests directed for Army/Navy evaluation of the sleeved 5-inch have absorbed nearly all the Extended Range Projectile money for FY 1975 and will continue to absorb most of the FY 1976 request. We will not be able to do in-depth design work on the Extended Range Guided Projectile until FY 1977.

The 8-inch/55 Major Caliber Lightweight Gun (MCLWG) Program has developed a large bore offensive capability for destroyer-size ships and the gun mount MK-71 MOD 0 can achieve this objective. A major program milestone is being reached now with the MCLWG installed aboard the USS HULL (DD-945) as the test platform for the weapon prior to commencement of Technical Evaluation and Operational Evaluation in June of this year to complete in FY 1976. This weapon will have an IOC of 1981.

The Advanced Naval Gun System (ANGS) seeks to conceptualize an offensive, surface weapon system for destroyer and cruiser class ships for the [D] . By the end of FY 1975, we expect to establish a preliminary system baseline for conceptual study efforts for components of the system. We look to this system to be of equal or less weight than the present 5-inch systems and yet have 8-inch punch. We expect to apply the new technologies

[D]=Deleted

that are ready to move out of exploratory development, e.g. liquid propellants.

The final general category in gunnery that I want to address is the future lightweight, intermediate range area. In FY 1975 we have been pursuing a Lightweight Intermediate Caliber Gun System composed of three projects, i.e., ammunition, gun and fire control. We have now combined them and a program previously entitled Advanced Anti-Ship Missile Defense under one program element. This combination will insure the development of a fully integrated detection-to-kill weapon system that interrelates the role of guns and missiles to avoid unnecessary fire control development redundancy in our self-defense AAW programs. We are not now certain that the ultimate weapon will involve a gun or a missile; it might involve both, or it might find the ordnance being one and not the other. We call this combined program the Shipboard Intermediate Range Combat System.

The system we have been considering in concept development is to meet the requirement for a lightweight low-cost weapons system for platforms of the mid 1980s and beyond. The effort in FY 1975 has examined technology in hard and soft kill mechanisms to determine the optimum mix of weapons to effectively support independent ship operations in strike and self defense roles and to have a system that can give ships a fully integrated intermediate range capability. A test gun has been constructed at the Naval Surface Weapons Center, Dahlgren, Virginia, and will undergo firing tests analysis; similar studies are planned for missile, passive and active electronic warfare; and close-in weapon systems. These studies will be followed by a technology survey to assess hardware available to fulfill our objective.

When the capabilities, risks and costs of possible subsystems are determined, a tradeoff analysis will be conducted to ascertain the optimum mix. At the moment, the gun portion of the system is the most advanced and that project has been slowed to keep pace with the fire control and ammunition elements.

In the area of undersea warfare there are several developments underway which are designed to combat the increasing threat.

The lessened capability of the Navy's primary undersea surveillance system SOSUS (Sound Surveillance System) due to the evolving quieter Soviet submarine threat will be offset by system improvement efforts now being pursued. However, SOSUS is a fixed system (deleted) . The development of augmenting mobile and deployable surveillance systems is required to enhance our surveillance and tactical capabilities against the increased threat. Past and present operational and experimental towed passive hydrophone arrays have demonstrated a potential for the (deleted) passive detection, classification and localization of submarines in most operational modes under most environmental conditions. Six Towed Array Surveillance System (TASS) units are presently in fleet service. However, these systems necessarily include design compromises which limit performance capabilities, particularly with respect to the present and predicted quieter submarines and because of apparent (deleted)

These performance deficiencies have served to identify the specific research and developments being pursued in the Surveillance Towed Array Sensor (SURTASS) Program. SURTASS will function as a component of an integrated undersea surveillance system which will also include SOSUS and MSS (Moored Surveillance System).

Both SURTASS and MSS will be employed in areas of interest where (deleted) and where surveillance augmentation is required in response to a developing threat. SURTASS Initial Operational Capability is planned for (deleted). Present system concepts involve the use of (deleted). The integration of SURTASS detection information with that obtained from other undersea surveillance system elements will enable the dissemination of highly accurate, near-real-time, evaluated target data for follow-up action by tactical ASW forces.

Five-month contracts for the competitive development of SURTASS Engineering Development Model technical proposals and performance specifications were awarded in October 1974 to General Electric, Raytheon, Hughes Aircraft and Sperry Rand. Upon completion of these preliminary studies, a follow-on Engineering Development Model design and fabrication contract will be awarded to one of the present four contractors during the (deleted).

SURTASS Engineering Development Model hardware fabrication will be completed in the (deleted) and the EDM installed in an (deleted) for subsequent test and evaluation. Planning and preparation for Initial Operational Test and Evaluation (IOT&E) will commence [D]. It is planned that the IOT&E will be conducted during the first half of (deleted).

The MK-46 Torpedo is the primary ASW weapon for our air and surface ASW platforms. This torpedo is (deleted). It is necessary to examine ways to improve the weapon and to develop retrofit kits to upgrade our current inventory of over

[D]=Deleted

[deleted] torpedoes. We are seeking the most cost effective retrofit for the lightweight torpedo inventory.

Design effort has begun on the [deleted] group. To reduce torpedo [deleted], sea runs have begun. Submarine vulnerability studies have been initiated. In FY [D] we plan to complete prototype hardware, procure operational evaluation hardware and complete operational evaluation documentation. Also in [deleted] the Technical Evaluation will be initiated and the design will be frozen. In [deleted] technical evaluation hardware will be proof tested, Technical Evaluation will be continued and the proofing of operational evaluation hardware will commence.

These improvements in the MK-46 are, [deleted]. The Advanced Lightweight Torpedo will possess increased [deleted] other improved performance characteristics to achieve a high kill probability against the projected [D] submarine threat. Design-to-cost is a major factor from the program conceptual phase forward.

The program is now transitioning from exploratory development to the conceptual phase planning leading to DSARC I. The design and fabrication of advanced development components and subsystem models, and the test, evaluation and analysis of subsystem alternatives leading to a torpedo system configuration decision has commenced in FY 1975. The effort to design, fabricate and then validate technology alternatives will continue in FY 1976 and into FY 1977. The ultimate users of the Advanced Lightweight Torpedo will be the same platforms that use the current MK-46 - that is, all ASW aircraft (including P-3C, P-3X,

[D]=Deleted

S-3A and LAMPS MK III) and all ASW surface ships (including cruisers, destroyers and frigates).

An interesting mine warfare program which we are commencing in FY 1976 is the Propelled Ascent Mine (PRAM), an intermediate depth (deleted) moored mine using an (deleted) . The (deleted) is achieved. The (deleted) high explosive warhead assure a high kill probability against targets traveling at speeds up to (deleted).

In prior years under exploratory development, several thrust systems for mines have been investigated, and (deleted) . A feasibility study has been conducted for a detection system. During FY 1976, individual tests will be conducted on the (deleted) systems of the PRAM Advance Development Model. In (deleted) fabrication of the Advance Development Model will commence.

While the Navy has been developing advanced detection devices and weapons to combat the ever developing submarine threat we have not overlooked advancing the capability of our own submarine force.

In the Advanced Design Submarine Nuclear Propulsion Plant project, the Navy is developing a [D] shaft horsepower propulsion plant. This plant will have a power rating of [D] that of our existing highest powered submarine propulsion plant - the [D] shaft horsepower plant installed in the SSN 688 (Los Angeles) class high speed attack submarine.

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Development of the [D] shaft horsepower plant will provide the option of building various improved submarines incorporating new weapon systems, advanced sonars and other features [deleted] compared to our existing designs. In the past, new capabilities were added to existing attack submarines without also increasing their propulsion rating. This resulted in a (deleted) Soviet submarines with propulsion plant ratings greater than [D] shaft horsepower have been at sea since 1968. The lead ship of the [D] shaft horsepower Los Angeles class goes to sea in 1975. Experience has demonstrated that the development of an improved submarine nuclear power plant requires 10 years or more from the start of development to operation of the lead ship. Accordingly, the Soviets have a significant leadtime over the U.S. in developing higher powered submarine propulsion plants. Development of the [D] shaft horsepower propulsion plant is essential if we are to prevent this leadtime from growing.

Considering the long leadtime required, development of an improved propulsion plant must proceed before the submarine characteristics are finally settled. For example, development of the propulsion plant for the Los Angeles class of high speed attack submarines started several years before the lead ship was authorized. Twenty-six of these submarines have now been authorized. If development of the propulsion plant had been delayed until the submarine characteristics were settled, construction of these urgently required ships would have been delayed several years.

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The Soviets have placed a very high priority on the development of improved submarines. During the last six years, they have put to sea nine new design, significantly improved, second generation versions of their attack, cruise missile and ballistic missile submarines. Considering the resources devoted to the Soviet submarine program, we must assume that their engineers and scientists are now directing their efforts toward the next generation of advanced submarine designs. If we are to be in a position to counter the continuing Soviet development of nuclear submarines with improved characteristics, development of the [D] shaft horsepower propulsion plant is essential.

Research and development efforts have established the feasibility of providing a [D] shaft horsepower nuclear propulsion plant using a single advanced design [deleted]. Preliminary design of the overall plant has been completed. In FY 1976 detailed design and development of propulsion plant systems and components will continue. The [D] shaft horsepower plant is the only plant under development which will provide the option of constructing submarines with [deleted]

Before leaving the sea-oriented programs, it might be wise at this point to tell you something of a program which impacts on all our missions. The Navy conducts a comprehensive program in Ocean Research and Development in order to gain better understanding of its operational environment. In order to have effective seapower, we must have excellent knowledge of the sea. The Navy operates at-sea every day of the year and we must have a variety of daily reports and predictions on the conditions of

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the environment in which we operate. Our operational requirements include information about the total ocean environment - from the upper atmosphere right down to the sea floor and its foundations.

As mentioned earlier, a sizeable effort is devoted to support of investigations in ocean science to improve our knowledge of sea chemistry, marine biology, the mechanism of heat exchange between the atmosphere and the sea, ice formation and movement, water dynamics, geology and geophysics of the sea floor and other natural phenomena of the ocean environment. A major effort in ocean science is devoted to the study of underwater acoustics because of our dependence upon underwater sound for transmitting and receiving information in our undersea operations.

Ocean engineering and development represents a capability in which the United States still leads all other nations, including the Soviet Union - we believe. Our achievements are unique in the world but, spurred by the promise of economic gain from the sea, other nations are beginning to find their way in this difficult field of engineering. The Navy conducts a program in ocean engineering and development to achieve the capability for operating at any depth, location and time in the oceans of the world. The program consists of major research and development work in undersea search, rescue, salvage, diving, construction, medicine, and oceanographic instrumentation. Prototype components and systems for manned submersibles, remote unmanned vehicles, structures on the bottom and in the water column, and diving are demonstrated in the environment.

The requirements for developing useful, dependable deep ocean technology are so different from those for technology to be used at the surface - or in space - that almost everything must be specially developed. Hardware must be made to withstand pressures, corrosion, and ocean dynamics so extreme that entirely new concepts for materials, mechanics, hydraulics, and electronics are needed. Even the most basic items like power hammers, wrenches, drills, electrical connectors and welding tools have to be specially designed for use in the undersea environment. Developments of these kinds take place under the broad effort of deep ocean technology development which is intended to give the Navy more and better options for responding to defense needs.

At the same time, the ocean engineering program has made significant progress in areas of salvage, rescue, diving and oceanographic instrumentation, in the development of hardware systems that presently serve the fleet or have broadened our foundation of knowledge about how to proceed in the development of required hardware.

Most of the program effort in ocean research and development is directed to the solution of specific operational problems and serves the continuing task of supporting our Navy's efforts to sustain a modern capability for seaborne defense.

The Marine Corps research and development effort emphasizes technological advance in equipment and procedures related to the accomplishment of the amphibious mission. In addition, the Marine Corps relies primarily upon other service weapon and system developments where commonality of requirements may be identified.

A continuing and significant unilateral mission essential Marine Corps development is the Landing Vehicle Assault (LVA). The LVA, now slated to become fully operational in 1986, will use the latest technology to provide high speed, over-the-horizon amphibious assault capability, replacing the current LVTP7 assault amphibian and complementing the previously mentioned air cushion vehicle, the Amphibious Assault Craft. The LVTP7 will be 15 years old in 1986 - three years over its expected service life.

Another program underway which typifies the Marine Corps' R&D effort is the Landing Vehicle, Tracked, Personnel (LVTP7). Mission capability of this craft is being enhanced through initiation of a service life extension program to prolong the useful and maintainable life of LVTP7 and developing a modified M125C line-charge pallet for use on board the vehicle. This latter action will provide a capability lost with the phaseout of the LVTE1 mine clearance assault amphibian.

The Marine Corps Expeditionary Shelter Program started as a unilateral effort to reduce shelter proliferation and affect standardization. As directed by DDR&E, an all-services ad hoc committee, chaired by the Army, was formed to review all ongoing shelters development. A committee report is being forwarded to DDR&E with a recommendation for a DoD-structured joint developmental effort on shelters with the Army as lead service. A DDR&E decision is anticipated during the third quarter of FY 1975.

A joint program to improve the combat capability of the Fleet Marine Forces is the Radar Course Directing Central, AN/TPQ-27, or all-weather close-air-support bombing system.

The IOC is early 1978 with the Marine Corps as the lead service and USAF participation.

Tactical Air Control Systems/Tactical Air Defense Systems (TACS/TADS) is a joint program involving all services and NSA directed by JCS with the Navy as Executive Agent. It is currently on schedule, with operational effectiveness to be demonstrated in FY 1976.

Other service programs in which the Marine Corps has expressed official interest include U.S. Army 105 and 155 howitzer developments and the Navy 8-inch Guided Projectile Program.

The Marine Corps long-range research and development plans anticipate continued direction of effort toward force modernization and mission readiness.

IV

CONCLUSION

The Soviet Union is continuing an intensive effort to improve both the quality and quantity of their naval forces. The Soviet Navy is routinely operating on a worldwide basis today, thereby increasing their influence through a naval presence. Continuation of their growth into the 1980s could result in Soviet domination of all sea lanes. Conversely, the U.S. Navy is reducing the number of both ships and personnel. The U.S. effort to confront the USSR buildup is in the area of advanced technology. In order to maintain its relative naval strength, the U.S. must lead the Soviets in the technology battle.

The program I have outlined and which we offer to you today is carefully planned to provide us with the optimum product for

the funds requested. I believe it is a reasonable program and most certainly a necessary one if the Navy is to remain a viable force in the world today, and in the future.

While I have only recently come aboard as the Assistant Secretary of the Navy for Research and Development, it is evident to me that the counsel and support of the Congress has significantly contributed to the Navy's success and progress. The Navy has not always agreed with the actions of the Congress. However, in the long term, our relationship has been harmonious and friendly. I will do my best to see that it remains so.

Thus, Mr. Chairman, with your support for the FY 1976 through FY 1977 programs presented here today, RDT&EN will continue to permit our fleet to carry out its responsibilities on the world's oceans. Thank you.

APPENDIX I

R&D FINANCIAL MANAGEMENT

APPENDIX I.A. PRICING POLICY

(U) The normal pricing procedures upon which the Navy's budget is based require that the cost of all programs except for major programs be based upon current prices. This policy results in the systematic understatement of the costs of Navy programs; payments scheduled to be made in FY 1976/FY1977 in support of FY 1975 program requirements are included in the FY 1976 budget on the basis of current prices (November 1974). Past experience indicates that RDT&EN will have to absorb the additional costs associated with price increases subsequent to November 1974 except for major programs. The sole exception to this practice is increased classified pay costs which may be covered by supple-

mental appropriations. Increases in the cost of goods and services and ungraded personnel must be absorbed. The accelerated rates of inflation experienced during the past year will result in estimated additional costs for non-major programs and ungraded pay totalling $100 million in FY 1975 and $304.0 million in FY 1976. Barring the approval of supplemental appropriations, the Navy will have to absorb these costs. Avoidance of further occurrences of this kind requires that budget estimates reflect a more realistic pricing policy. The early authorization procedure which will commence this year gives additional urgency to the need to change our pricing policy since those estimates now lack any provision for two years of inflation in the non-major programs.

APPENDIX I.B.

FOREIGN MILITARY SALES

(U) In previous years the surcharges levied on the Navy's Foreign Military Sales (FMS) were relatively small and were used for the administrative costs of operating the FMS program. However, with the recent increase in foreign sales, the surcharge has become significant and DoD policy directs that in most cases a portion of the surcharge be specified for the non-recurring costs of R&D. This R&D surcharge, usually four percent, can then be used to finance part of the Navy's RDT&E program as approved by Congress.

The Senate Armed Services Committee Report on the FY 1975 Defense budget request recommended financing of $27.7 million of the Navy's RDT&E program from receipts from Foreign Military Sales. The Authorization Act and Appropriation Act for the DoD for FY

1975 effected this recommendation, and our FY 1975 approved program is now dependent upon collecting $27.7 million from FMS.

In FY 1976 we anticipate receipts from R&D surcharges on FMS totalling $50.0 million and our budget request reflects the application of this amount in financing the Navy's total RDT&E program. It should be recognized that the anticipated collection is based on signed sales agreements and payment schedules in effect on 30 September 1974, and that if these schedules should not be met, the collections would not be realized and reductions would have to be made in the Navy's RDT&E program.

APPENDIX I.C. COMPARATIVE TRANSFER ANALYSIS

(U) Congressional action on the FY 1974 DoD appropriation request, along with the implementation of the Uniform DoD Test and Evaluation (T&E) funding policy and the redesignation of NAS, Lakehurst, as an RDT&EN facility and other functional transfers resulted in a number of Inter-Appropriation Transfers in FYs 1974, 1975 and 1976.

(U) The House Appropriations Committee in its report on the FY 1974 DoD appropriation directed the Secretary of Defense to insure that further instances of premature and improper procurement funding do not occur and that all product and component improvement effort is to be funded in RDT&E until thoroughly designed, engineered and tested. On the other hand, the Senate Armed Services Committee in its report on the FY 1975 Authorization Act expressed fear that the continued trend toward RDT&E funding would distort the historical relationship between RDT&E funding and the overall defense program.

(U) In order to respond to these criticisms, the Assistant Secretary of Defense (Comptroller) issued a revision to Chapter 251 of the DoD Budget Manual containing new definitions, policies and criteria for determining RDT&E, Procurement, and Operations and Maintenance funding responsibilities. Significant policy changes resulted in the transfer of the following types of costs from Procurement and Operations and Maintenance to Research, Development, Test and Evaluation:

A. Costs for establishing initial pilot production lines and the cost of producing the quantity of test items (not approved for service use) required to satisfy IOT&E requirements. (All subsequent costs for retaining initial pilot line capability and for follow-on production will be a responsibility of the applicable procurement appropriation.)

B. "Special Support Costs", represented by investment costs for hardware other than the item being tested, in some cases may have been funded by procurement appropriations in support of IOT&E.

C. "Command Support Costs", represented by special "out-of-pocket" expenses of operating units, such as travel and and per diem, in support of a test. It would exclude normal operating cost of fleet units which incidentally support the test, i.e., a carrier standing by, etc. In some cases these costs may have been funded by procurement or operations appropriations in support of IOT&E.

D. Component Improvement "...the point of initial production suitability, for the purposes of this definition, is the point in time when (1) there has been a Government acceptance of the first procurement-funded aircraft..." RDT&E funds to the point of initial production suitability. These costs in some cases may have been funded with procurement funds prior to "initial production suitability".

(U) As a result of the application of the revised guidance, a number of additional adjustments were identified for FY 1976. The following list includes all transfers which have occurred in FY 1974/1975 as well as those planned for FY 1976.

RDT&E, NAVY
COMPARATIVE TRANSFER ANALYSIS

FY 1974

PROGRAM	APPROPRIATION FROM	APPROPRIATION TO	($--M) AMOUNT	EXPLANATION
24304N CAPTOR	WPN	RDT&EN	6.7	Conference Committee Report #93-467 directed transfer
25660N MK-48 Torpedo	WPN	RDT&EN	5.3	House Appropriations Committee (HAC Report #93-662) recommended that studies and engineering efforts be funded from RDT&EN
64358N Close-In Weapon System (PHALANX)	WPN	RDT&EN	23.2	HAC (Report #93-662) directed transfer to fund alternative prototypes for complete testing prior to procurement and installation.
64364N Anti-Ship Weaponry (HARPOON)	WPN	RDT&EN	14.1	The Senate restored House reduction of advance procurement funding. Conference committee transferred it to RDT&EN (HAC Report #93-741)
64703N Training Device Prototype Development	OPN	RDT&EN	2.8	HAC recommended transfer of $1.6M for Warfare Analysis and Research System, and $1.2M for prototype devices
65852N Atlantic Undersea Test and Evaluation Center (AUTEC)	RDT&EN	O&MN	10.6	OSD decision to provide funding from user appropriation
65863N RDT&E Ship and Aircraft Support (Aerial Targets)	WPN	RDT&EN	3.4	HAC (Report #93-662) recommended that development and test of various Aerial Targets be funded in RDT&EN
NET CHANGE TO RDT&EN			+44.9	

FY 1975

PROGRAM	APPROPRIATION FROM	APPROPRIATION TO	($--M) AMOUNT	EXPLANATION
65864N Test and Evaluation Support	VARIOUS	RDT&EN	23.5	Funding realignment due to implementation of DoD Uniform Test and Evaluation (T&E) Funding Policy
65861N RDT&E Laboratory and Facilities Management Support	O&MN	RDT&EN	4.8	Transfer of Naval Air Station, Lakehurst, support personnel from O&MN to RDT&EN funding due to redesignation as an RDT&EN activity.
63609N Surface-Launched Munitions (Projectile Mods)	OPN	RDT&EN	2.5	Improves performance of various projectiles and associated GFCS. Transfer effected for proper alignment with OSD funding policy.

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FY 1975

PROGRAM	APPROPRIATION FROM	APPROPRIATION TO	($--M) AMOUNT	EXPLANATION
64203N Avionics Development (A4M Attack Delivery System)	OPN	RDT&EN	.6	Developmental testing of prototype Angle Rate Bombing Systems transferred to provide proper alignment with OSD funding policy
64366N Surface Missile Guidance (SM-2)	WPN	RDT&EN	17.0	Improves guidance and ECCM of Standard Missile. Transfer effected for proper alignment with OSD funding policy
64567N Ship Development (Contract Design)	SCN	RDT&EN	29.4	New ship contract design efforts for non-strategic ships transferred for alignment with OSD funding policy
64765M Other Marine Corps Development (MAGIS)	PMC	RDT&EN	1.5	System integration and IOT&E of Marine Air Ground Intelligence System transferred for alignment with OSD funding policy
65863N RDT&E Ship and Aircraft Support	O&MN	RDT&EN	1.4	Alteration costs for RDT&E Project Ships transferred to provide proper alignment with OSD funding policy
NET CHANGE TO RDT&EN			+80.7	

FY 1976

PROGRAM	APPROPRIATION FROM	APPROPRIATION TO	($--M) AMOUNT	EXPLANATION
65852N Atlantic Undersea Test and Evaluation Center (AUTEC)	O&MN	RDT&EN	12.4	Funding realignment due to implementation of DoD Uniform T&E Funding Policy
65864N Test and Evaluation Support (National Parachute Test Range)	O&MN	RDT&EN	.6	Additional FY 1976 adjustment required for funding at National Parachute Test Range due to DoD Uniform T&E Funding Policy (inadvertently omitted from FY 1975 Budget)
65864N Test and Evaluation Support (Pacific Missile Range)	RDT&EN	O&MN	.3	Adjustment to properly align funding for aircraft flight support and maintenance required by the Naval Air Reserve Training Unit at the Naval Missile Center, Point Mugu
65853N Management and Technical Support (ASW Systems Support)	RDT&EN	O&MN	.8	Funding adjustment stemming from consolidation of the ASW Systems Analysis Office with the ASW Project Office (PM-2)
11221N FBM System (SSBN FCS Modernization)	OPN	RDT&EN	.2	Design effort leading to Fire Control System modernization program to expand performance capabilities.

PROGRAM	FY 1976 APPROPRIATION FROM	TO	($--M) AMOUNT	EXPLANATION
25623N Surface Shipborne Sonar Modernization (Surface Fire Control Improvements)	OPN	RDT&EN	.2	Expand performance capabilities of MK-119 and other surface ASW fire control systems to extend their service life.
25630N Torpedo Support Equipment (ASROC Support)	O&MN	RDT&EN	.5	Initial Operational Test and Evaluation (IOT&E) of ignition separation assemblies and applicable support. Two prototype ASROC Missile bench test sets and applicable testing
25661N SUBROC Improvements	WPN	RDT&EN	.5	Expand performance capabilities through modifications including developmental hardware for a new stable platform (guidance system)
33109N Satellite Communications (FLTSATCOM)	APN	RDT&EN	3.9	Procure six prototype systems and engineering services required for IOT&E to integrate FLTSATCOM system in the P3 aircraft
64207N Airborne Night Observation System (OV-10)	APN	RDT&EN	9.9	IOT&E of prototype articles
64304N Combat Systems Engineering Development Test Site (CSEDS)	SCN	RDT&EN	45.0	Land based CSEDS to test AEGIS developmental software and eventually serve as a training platform
65864N Test and Evaluation Support (PMR)	RDT&EN RDT&EN	O&MN OPN	5.0 2.5	The Barking Sands Tactical Underwater Range (BARSTUR) segment of PMR was redesignated as an O&MN activity and the institutional funding was transferred accordingly. Funding for the planned BARSTUR expansion was transferred to OPN
NET CHANGE TO RDT&EN			+64.6	

APPENDIX II

PROGRAM ACCOMPLISHMENTS AND NEW STARTS

As an indication of progress and as a measure of "what your money is buying", some recent or soon anticipated accomplishments are set forth.

R&D will be completed during the period of FY 1975/1976/197T:

1. S-3A carrier-based ASW jet aircraft delivered to first squadron December 1974 and will deploy to the Mediterranean in [deleted] 1975.

2. The CV Tactical Support Center will complete R&D funding in FY 1976. Full capability will follow IOC of the S-3A.

3. Command Activated Sonobuoy (CASS) was service approved in FY 1975.

4. Directional CASS final R&D funding in FY 1976 with IOC in [deleted].

5. CAPTOR encapsulated torpedo ASW mine will enter production; however, R&D support will continue.

6. Encapsulated HARPOON will be completed in FY 1976.

7. The AIMS/ATCRBS/MK-XIII IFF system will complete R&D.

8. The AN/SLQ-17 Threat Reactive Countermeasure Set including antenna and direction finding capability will be completed.

9. Development of the CH-53E helicopter will be completed and transition to production initiated.

During the FY 1976/1977 period we expect to initiate programs as follows:

1. Improved Magnetic Anomoly Detector to develop new processor and software for ASQ-81 MAD to improve range.

2. Digital Acoustic Simulator System (DASS) will develop hardware/software to provide realistic acoustic signal input to trainers.

3. ASW Pods will develop wing pods to give CV attack aircraft capability to augment air ASW effort.

4. Submarine/Surface Ship Self Protection System will provide high value, deep draft surface ships and submarines with a system for [deleted]

5. ASW Sensors/Advanced Ship will develop ASW sensors which will exploit the peculiar capabilities of advanced ship types such as SES and hydrofoils.

6. PRAM - an intermediate-depth moored mine with a (deleted)

7. External Weapons Stowage/Launch will develop the technology and system designs necessary to stow weapons and countermeasures external to the submarine pressure hull and to launch them.

8. Shipboard Intermediate Range Combat System will provide for development of an integrated detection-to-kill weapons system that interrelates the role of guns and missiles in both offensive and defensive missions.

9. Task Force Anti-Air Warfare Coordination will provide concepts leading to developments which will provide a real time coordination capability to task force commanders in anti-air warfare.

APPENDIX III

SUMMARY OF INCREASES BY BUDGET ACTIVITY

BUDGET ACTIVITY 1, Military Sciences - +$14.9M (+11%)

Defense Research Sciences increased $11.8M (11%) over the FY 1975 amount authorized, while Studies and Analysis Support, Navy increased by 20% or $1.8M. The increase in Defense Research Sciences will provide for a real growth in program effort of about three percent over FY 1975.

BUDGET ACTIVITY 2, Aircraft and Related Equipment - +$122.5M (+43%)

New starts account for an increase of $17.9M which is comprised of Aircraft Systems (Adv) ($4.9M); Aircraft Survivability and Vulnerability ($2.0M); All Weather Attack ($1.1M); and Airborne Night Observation System ($9.9M). Major increases in current programs are Navy Combat Fighter ($90.1M); VCX ($3.0M); Air ASW ($18.6M); and Airborne Electronic Warfare Equipment ($18.5M). The above increases were partially offset by funding decreases in A-6 Squadrons ($6.3M); F-401 Engine ($2.6M); and CH-53E ($36.3M). Program completion resulted in a further decrease of $13.0M, spread between S-3 Squadrons ($1.0M) and F-14A ($12.0M).

BUDGET ACTIVITY 3, Missiles and Related Equipment - +$244.6M (+23%)

New starts include Advanced Surface-to-Air Weapon System ($11.9M); Advanced S/R AAM Technology ($6.0M); A/A Missile Technology Demonstration ($2.0M); A/L S/L Anti-Ship Missile ($3.0M); AAM Systems Engineering ($6.9M). The new start of $45.0M in CSEDS is the result of a transfer of the program from the SCN appropriation. Increased funding was experienced in FBM System ($27.1M); SANGUINE ($9.7M); Cruise Missile ($63.8M); CIWS (PHALANX) ($17.1M); and the TRIDENT Missile System ($95.3M). Program termination in SPARROW AIM-7F and CONDOR resulted in a decline of $11.7M and major decreases occurred in SIDEWINDER AIM-9L ($9.6M) and Anti-Ship Weaponry ($46.7M).

BUDGET ACTIVITY 4, Military Astronautics and Related Equipment - -$10.5M (-20%)

The major decrease occurred in Satellite Communications ($13.3M) while NAVSTAR GPS increased $3.6M.

BUDGET ACTIVITY 5, Ships and Small Craft - -$1.0M (less than 1%)

Significant increases occurred in Technical Sensor Collection ($24.2M); Surface ASW ($16.2M); Ship Development (Adv) ($11.6M); Test Bed Development and Demonstration (deleted); and Acoustic Communication ($5.9M). These increases were more than offset by reductions in Special Activities ($66.2M); Surface Effect Ship ($7.8M); and TRIDENT Submarine System ($23.9M).

BUDGET ACTIVITY 6, Ordnance, Combat Vehicles and Related Equip. +$10.2M (+11%)

The only major significant decrease was in Mines and Mine Support (-$11.8M) while the major increases were reflected in Mine Development ($12.8M) and Unguided Conventional Air-Launched Weapons ($5.2M). The only new start is B/W-C/W Weapons ($1.6M).

BUDGET ACTIVITY 7, Other Equipment - +$34.9M (+7%)

New starts accounted for an increase of $38.2M distributed among Special Systems ($4.4M); WWMCCS Architecture Support ($4.7M); Fleet Command Support ($10.1M); and Surveillance Towed Array System ($11.1M). Program increases were also experienced in TRITAC-Marine Corps ($5.9M); TRITAC-Navy ($3.9M); Logistics ($5.9M); High Energy Laser (deleted); and SEMI ($3.4M). Decreases result from transfer to another program of ASW Force Command and Control System ($6.9M). Other major reductions occurred in Undersea Surveillance System ($7.0M); Escort Towed Array System ($5.0M); and Special Processes ($16.5M).

BUDGET ACTIVITY 8, Programwide Management and Support - +$50.4M (+18%)

Most of the increase can be identified with four programs: Instrumentation and Material Support ($7.2M); Ship and Aircraft Support ($10.8M); Test and Evaluation Support ($10.8M); and AUTEC ($13.0M). The increase in AUTEC is due to funding realignment to facilitate implementation of DoD Uniform T&E Funding Policy. A new start in Laboratory Fleet Support accounts for an additional increase of $3.0M.

ISSUES ON R. & D. PROGRAMS

Mr. MARCY. Rather than summarize the statement, what I thought I would do here is to deal with some of the research and development programs where we have issues that we believe that you would wish to know about—to put them on the table, so to speak, so we can discuss those in more detail than we would find in the statement itself.

I have four topics that I thought I would like to develop more completely than you would find in my statement. The four topics that I would like to address are the AEGIS radar and its test site, CSEDS; the vertical and short takeoff/landing airplane program; the extremely low-frequency communication system; and finally the two high performance ships that we are now dealing with, the surface effects ship and the PHM. These four topics, as I said, are of particular importance and there are issues and questions about them that I thought we should discuss with you, what the issues are and what our recommendations are.

Senator INOUYE. Would you also discuss the F–16 and F–17?

Mr. MARCY. We will be glad to do that. Would you like me to do that first.

Senator INOUYE. Whenever you wish.

AEGIS

Mr. MARCY. The AEGIS radar the first topic, is a powerful new radar under development at the present time. RCA and Raytheon are the principal contractors. It has reached a point where it is installed aboard a test and evaluation ship, and as a matter of fact we have a filmstrip here which shows it, and a number of other things of interest in the Navy's research and development area during the last year. It is a 12-minute filmstrip. You may or may not wish to see it.

The AEGIS system is an electronically controlled radar and fire control system for Navy surface ships. It is designed to be able to guide the Navy weapons systems in the presence of a very active enemy radar and electromagnetic counter measures environment. The radar is pointed not by a dish, as we used to see them in the early radars but it is pointed electronically by elements in a flat face. There are four plane faces, of course, to cover the entire geometry around the ship.

The beam is formed by the electronic addition of signals to a number of different elements on the face, and so the beam can be thought of as being designed in any particular direction—a very sharp pencil beam—at microsecond speeds to be able to look at will at any one particular spot.

The system is further designed so that it can, before it transmits a beam, aim its receiving antennas in the direction it wants to send its transmitting beam and [deleted] would be most likely to be useful—that is to say [deleted] in being able to get the best look at that particular area.

So the beam can be looked upon as appearing to dance haphazardly over the entire volume that is covered and [deleted] that are done to other radars.

Furthermore, the whole system is managed by modern computer technology in such a way that its performance is automatic. It can

track and store data on some [deleted] simultaneous targets around the ship. Obviously, we are interested in being able to handle a saturation attack on the ship. Experience now with the system, in concert with other ships in the fleet, shows that it can essentially keep track of total activity around a group of ships—even if it happens to be the only one of these radars that is available in the area.

Senator INOUYE. What is the effective range of this radar?

RANGE OF RADAR

Mr. MARCY. This radar has about [deleted] and its range is—depending on weather conditions—but in the order of [deleted]. Its line of sight is as far as you can see in the ocean.

I believe that is about the right figure. I can give you a more exact figure but that is my estimate.

[The information follows:]

The SPY-1 radar is designed to detect a [deleted] nautical miles. As indicated in the 31 Dec. 1974 selected acquisition report, at-sea testing to date confirms that this design specification will be met.

AWACS PROGRAM

Senator INOUYE. It is not as powerful as the Air Force AWACS?

Mr. MARCY. The AWACS Air Force radar is, of course, at height in an airplane. This radar is more powerful than any other military fire control radar and certainly more powerful than you can put in an airplane. The power consumed is something like [deleted] that it consumes.

Its peak power is [deleted] when it bursts out its energy so it is designed as being a very highly powered radar. This is one of the reasons I believe it has the capability to [deleted].

Senator INOUYE. Can it discriminate between friendly and hostile forces?

Mr. MARCY. Not by itself, except with the aids of such information as IFF, types of transmission from the target, and other types of things. There is development type of work being done [deleted] but that is a separate topic that is more advanced and I do not believe we would want to, in a simple way, say yes to your question. We would hope that we could develop that capability.

NAVY UTILIZATION OF AWACS

Senator YOUNG. Under certain conditions in the Mediterranean, the AWACS system would be working with the Navy?

Mr. MARCY. Yes.

Senator YOUNG. They have been very helpful.

Mr. MARCY. The AWACS radar, looking in a most favorable altitude, has a line-of-sight coverage which, of course, is different from that that you would have with a surface combatant whose principal interest here is both air and surface ships. The circumference of the Earth affects the ability of the radar to track over the horizon at surface targets.

Senator YOUNG. Your system would be able to detect any enemy vessel on the surface?

Mr. MARCY. No, but what it does is give immediate information about the range, speed, relative threat of the things that we are looking at, and it immediately engages the associated parts of the fire control system so as to be able to take threats under attack in an [deleted] response time if necessary.

This system is designed to be able to respond to a cruise missile suddenly appearing on the horizon, [deleted] as well as to aircraft.

The admiral would like to speak to that.

Admiral MORAN. I would like to clear up one point which, I think, might have been misunderstood. The range of the radar against a target at some altitude is substantial. It is well in excess of [deleted] miles for a small aircraft and I would like to provide the precise number against a given size target for the record.

[The information follows:]

The maximum detection range for a [deleted] nautical miles. This is the maximum instrumented range for the radar.

CONTROL OF AIR WARFARE AREA

Admiral MORAN. The system is really not intended as a surface warfare system. It is intended to be able to survey and control the entire air warfare around that area it is operating in. This is what Secretary Marcy is saying, when it can track [deleted] targets.

These are friendly aircraft. Enemy aircraft, missiles—the system keeps track on those targets and decides which of them are the worst threat by computing which of this is closest to or aimed toward one of the ships you wish to protect and will engage with a very short response time, will engage that target with an appropriate weapon system, whether it is an airborne fighter with missiles at substantial ranges away or whether it is a ship-launched missile close.

Senator INOUYE. What do you mean by reaction timing seconds?

Mr. MARCY. What we mean by that is if we have only [deleted] to respond, to engage, and take under fire the target from the time it first appears on the scene, that this system is——

Senator INOUYE. If said cruise missile is coming toward you, it appears as a blip and within [deleted] you can have a——

Mr. MARCY. It must be shot at within [deleted].

Senator INOUYE. You must launch another missile within [deleted]?

Mr. MARCY. Yes, sir.

Senator INOUYE. So everything is connected?

Mr. MARCY. Yes, sir.

This is very automatic and I say necessarily a first class system for the type of surface fleet that we would like to have.

"AEGIS DEVELOPMENT"

Senator INOUYE. What stage of development is AEGIS now in?

Mr. MARCY. At the present time we are—the development has been underway for some time. We have a shipboard prototype, a model operating near Point Mugu in California. Just recently it engaged, fired a missile, and shot down another [deleted] aimed close by the target, about [deleted] as a demonstration of what it will do. It has had a number of different tests.

It is being operated by a Navy crew and it is giving us a reliable performance in accordance with expectations. In back of that we are involved in the engineering design leading towards the acquisition of production, prototype units.

"INSTALLATION OF AEGIS"

This brings to bear the problem that is of concern in that the Navy has not specified in a formal way where the first one of these systems will be installed, in what ships they will be installed. The Navy brought to the consideration of the Department of Defense several alternatives including an installation in the DD–963 destroyers, an installation in strike cruisers, DLGN–38 class frigates, and an installation in U.S.S. *Long Beach*. We favor the latter for the first installation of the production system since the *Long Beach* is coming to a stage where it should be upgraded.

There are obviously considerations for additional ship deployments at a later time.

Senator YOUNG. May I ask a question.

"PHASED ARRAY RADAR"

Did you learn anything from the research and development of the powerful radar system that the [deleted] uses? They have tremendous power. They did not have anything like it until now. Did you get anything from that research and development?

Mr. MARCY. Yes, we did, sir. What we have in this particular radar is what we call a phased array radar. It is an electronically managed radar. Instead of having turning antennas and elevation and that sort of thing, it is all electronically managed.

This type of radar has been under development in this country for 10 to 15 years, but it is only we believe, in the present time frame that the support and electronic capability, computer technology and solid state devices has made it possible, at reasonable cost, to have the sophistication which have always been sought. The [deleted] is, as I understand it, that general class of radar. This one is the most recent version of a phased array radar and we have been working hard to have that capability available.

There is some concern for the classic radars aboard our ships if they are able to manage in the presence of jamming capabilities from the enemy, and if the operators can in fact see, track, put on the command information center displays a sufficient percentage of the aircraft in the neighborhood so as to provide an adequate defense of a fleet area.

Our measurements indicate that [deleted].

Senator INOUYE. How many more years do you have for the research and development?

TIME SCHEDULE FOR AEGIS

Mr. MARCY. Well, let's see. The time schedule is that we would be through [deleted] before it would really begin to diminish significantly. The engineering design is completed. I believe, in about 1½ years. If you wish I will put the exact time schedule in the record for you.

Senator INOUYE. Please do.

[The information follows:]

The development schedule for AEGIS is:

Commence SM–2 at sea testing	[Deleted.]
Complete SM–2 at sea I.O.T. & E	
Complete CSEDS radar housing	
Complete CSEDS combat system equipment procurement	
Complete Aegis Cat. II tests in CSEDS	
Complete final computer programs	
Complete CSEDS combat systems tests	
Complete combat system I.O.T. & E. at CSEDS	

TOTAL COST OF SYSTEM

Admiral MORAN. We are proposing to have a combat ship at sea with this system fully installed in [deleted].

Senator INOUYE. What do you estimate to be the total cost?

Mr. MARCY. The total cost, $576 million by the time it is completed.

Senator YOUNG. How much has been spent to date?

Mr. MARCY. We have spent $365 million, fiscal 1974 and prior, so it has been a very substantial expenditure.

"AEGIS PRODUCTION SCHEDULE"

Senator INOUYE. Assuming everything moves along according to schedule, when do you expect the first one to come off the production lines?

Admiral MORAN. Mr. Chairman, partly in answer to your question, to have it installed on the ship and fully in operation in [deleted] means we are going to have to get production hardware in [deleted] to incorporate it into the ship construction.

Mr. MARCY. The first models of the production facility, production equipment, would be coming off in [deleted]. These first models have to be aggregated with other systems' components as a thorough system while additional models are being prepared in order to be able to install them on the ships. We will have both land-based and shipboard systems operating in mutual support of each other in initial production.

Senator INOUYE. How many units do you anticipate requesting?

Mr. MARCY. We are not requesting any number of units at the present time.

Senator INOUYE. I realize that, but I want to know how much of the cost will be for R.D.T. & E. I don't suppose this will be part of the inventory for sale to foreign countries, will it?

Mr. MARCY. Hardly. I am not sure it would not, but I don't know of any plans for foreign sales.

Senator INOUYE. So we will have to absorb all of the cost involved.

Mr. MARCY. Yes, sir.

Senator YOUNG. Let me ask a question.

Wouldn't computers play an important role in the operation?

Mr. MARCY. Yes, that is correct. That brings me to the second part of this.

"POSSIBLE SOVIET APPLICABILITY"

Senator YOUNG. The reason I asked that is the Russians are apparently not as far advanced as we are in computers so they would not be able to develop a system quite as good as this one for a while.

Mr. MARCY. We believe this rests on our greatest strengths without trying to say what the Russians can and cannot do in a specific way. The Russians, as you know, have had some significant computer developments in selected areas where they have devoted their efforts. We are generally thought to be ahead of them in the computer area generally.

Therefore, one of that capability is news to us. We would think we would have a chance to be ahead.

The second issue that is germane to this is given the equipments—and as you recognize it does contain a lot of computer hardware and therefore programing—to interconnect all of these systems and to make sure that the structures do all of the automatic things reliably. So it is very complicated and extensive.

"COMBAT SYSTEMS ENGINEERING DEVELOPMENT SITE"

There is what we call a land-based test site development, the Combat Systems Engineering Development Site (CSEDS), which is an item in our budget. This is an item that goes with this AEGIS system, and we are this year asking for substantial funds for the CSEDS deployment.

There has been some question that if a ship was not specifically identified, why would you want to start on a land-based test site. Our position on that might be explained by an analogy. In, say, a propulsion system, for a ship you want the land-based system pipe for pipe, bolt for bolt, exactly like you are going to have it in the ship because it is the physical matching of machine to the ship that is important to us.

In this instance, it is matching the computer programs of elements which are connected for total systems tests which are so important to us and the initial technical work. To be able to get that underway is important to us We will end up in the CSEDS facility with an ability to check not only this radar but also all the other equipment that are associated with the fire control systems and the total weapons system. The CSEDS will also be a training facility.

So we would want to do it well and it takes a lot of time to set it reliably onboard. Those are the two principal things I wanted to tell you about this system. And the questions that have been raised, while we have gotten great results from the development model we have not selected the initial ship in a firm way. We therefore have something of a shadow cast on the idea of the CSEDS land-based test site, but we, nevertheless, request that we be allowed to proceed because of the importance of the development and the necessity to keep the research and development going.

"COST OF CSEDS"

Senator INOUYE. Admiral Cooke, is this $576,889,000 a realistic estimate?

Admiral COOKE. Yes. That is the best estimate that we have. It has been reviewed by the Secretary of the Navy and again by the Secretary of Defense in our budget review. It is the best estimate available.

Senator INOUYE. All of the realistic factors and inflationary factors are being cranked in.

"CHOICE OF A SHIP PLATFORM"

Admiral MORAN. Mr. Chairman, this subject is worth just a point more on the ship platform that Secretary Marcy mentioned a number of times. Last year the Congress raised with some firmness the question of identifying a ship platform for this program to go on and, indeed, declared that further funding in this year would depend on such a choice.

As the Secretary says, we have not made that choice yet. It is our intention, our fondest hope to have such a choice identified before this appropriation bill is completed. The circumstance is worth just a moment or so.

We started out with a shipbuilding program for a DG, guided missile destroyer on which this system was to be installed. About the time we were well into the planning on that, the congressional language in title VIII encouraging us to make ships of this class larger, nuclear powered, came into hand and the new Chief of Naval Operations, Admiral Holloway, fully agrees with the spirit and intent of title VIII and he put aside the DG program and we went back into planning in the shipbuilding program and intended to put this system on a ship he called the strike cruiser.

It turned out the strike cruiser was not finally included in the fiscal 1976 budget although we are doing a modest amount of design work on that idea. We are at the moment engaged in quite an intensive review of our shipbuilding programs with the intention of identifying a ship or class of ships which we are going to put the Aegis system on as the combat direction system.

Senator INOUYE. At the present stage of the development, would it be unrealistic for the Congress to demand that a ship platform be identified?

Admiral MORAN. Mr. Chairman, I think it is reasonable for the Congress to demand an identified platform for a program that is well down the road as this one is, and already has a substantial R. & D. investment in it. I believe we would have arrived here this year with an identified program if it had not been for the fact that we have made a rather major change in our shipbuilding program to accommodate the desires of Congress as expressed in title VIII, I think, in response to the congressional request for platform, though we will have a platform identified before you gentlemen complete your work on this appropriation bill.

Senator INOUYE. Thank you very much.

May we call a short recess? We have a quorum.

[A brief recess was taken.]

Mr. MARCY. Would you like to watch the film clip at this point or would you like to go into the next topic?

Senator INOUYE. Next topic, please.

"VERTICAL AND SHORT-TAKE OFF AIRPLANE SYSTEM"

Mr. MARCY. The next topic that we wish to bring to your attention is what we call the V/STOL program, vertical and short-take off airplane system. The V/STOL airplane program has been active in the Navy for some time and we believe at this point we have a well de-

signed program satisfactory to both of the services in the Department of the Navy. Both the Marines and the Navy themselves have an interest in V/STOL airplane.

The Marines have in fact purchased a number of Harrier V/STOL airplanes from the British and they have been operationally and technically testing these planes. They have acquired somewhere around 80 of the planes and will acquire some 101, I believe, of the Harrier directly and an additional 8 or 9 of these trainer craft.

Senator INOUYE. Considering the availability of the Harrier, and also taking into consideration the expense involved in the development of our own V/STOL at our mission, is it worth the money?

Mr. MARCY. We believe that it is, sir. Let me say that the technical work we have done on the Harrier indicates a rather straightforward modification that would significantly increase its capability without a fantastic development. The Marines have done a very important piece of work there, which is a part of our story.

The other work that we have been doing in this country has been aimed more at the evolution of a supersonic V/STOL capability which would be more of the fighter airplane that the Navy might use in a classic carrier or shipboard operation.

Senator YOUNG. Could I ask a question?

"COMPANIES WORKING ON V/STOL"

Who is doing the research and development on the V/STOL aircraft?

Mr. MARCY. There are several companies that are involved, sir. The Harrier company is a British company and we have in this country McDonnell Douglas and Pratt Whitney who are teamed with the British and are jointly involved in improvements to that craft.

In the V/STOL supersonic work that we have, Rockwell International, in Columbus, is the company that has been our principal contractor. We have had a cooperative arrangement with NASA on a subsonic general-purpose V/STOL airplane which has involved both McDonnell Douglas and Boeing, and then there has been a brief study on what we call a lift-plus-lift cruise, on which we have not spent a great deal of money but has involved General Dynamics in San Diego.

Senator YOUNG. When will you reach the stage where you build the prototype?

Mr. MARCY. We consider that the Harrier is an experimental prototype at the present time of some significance in the subsonic area and we would like to build a prototype of the supersonic V/STOL, what we call TAW.

"THRUST AUGMENTED WING"

That is the thrust augmented wing, Rockwell International airplane, starting in the next year. That is what we would like to request money for, for prototyping of that plane so as to be able to determine by experiment whether or not the airplane has the performance that has been predicted for it.

Senator YOUNG. Do you have money in this bill for that purpose?

Mr. MARCY. Yes, we do, sir.

Senator INOUYE. For the prototype?

Mr. MARCY. For a prototype, and I suppose we should define that—Admiral Moran is an airplane man and is able to carry on from that point.

Admiral MORAN. You are correct, sir, the word "prototype" needs some definition here.

The thrust-augmented wing experiment which we are now engaged in was one of the prototype efforts that came out of Secretary Packard's initiative to do prototype developments in a number of areas like the F–16 and the F–17. They grew out of that prototype effort and at that time the Navy initiated a technology prototype or experimental prototype in the thrust-augmentation technique of lifting a vertically rising high-performance airplane. We want to complete the construction of that prototype indeed to see if we can bring the successful laboratory experiment in thrust augmentation out into an airplane in full size and make it really fly in real life.

Senator YOUNG. Who is building that?

"HARRIER AS AN OPERATING AIRCRAFT"

Admiral MORAN. North American Rockwell, at Columbus.

Another question you asked, Mr. Chairman, I think should be made clear is the Harrier as an operating aircraft and is, in fact, the aircraft we wish to spend the principal part of this money on. The major thrust of this V/STOL program is to improve the existing AV–8A Harrier of which the Marines have three squadrons operating now—and increase the speed, the useful load and range capacity of that airplane to be a little more useful, and it is a program that prices out at something reasonable for what you get in the way of improvement.

Senator INOUYE. Your mission calls for the development of a supersonic V/STOL?

Admiral MORAN. The AV–8A as improved would not be a supersonic V/STOL. The supersonic V/STOL is what we might get out of the thrust-augmented wing experiment if we can make that work as we hope it will, and if we can produce it at an economical price. We do not at the moment have a clear statement of a mission requirement for a supersonic V/STOL but I do not believe that it really should be expected that you would have a clear mission statement of a requirement for a new technology that really is not in hand yet.

Senator INOUYE. Is this a high-priority item?

Mr. MARCY. We believe it is a high-priority item for the operational capability of the Marines. They have a requirement for such aircraft, in the near years, the late 1970's, early 1980's, which this program answers. We believe that it is a high-priority research and development item for the Navy in that, be it successful, it supplies options for different types of surface vehicles and other things that are important to us.

Senator INOUYE. Please proceed.

"OPERATION SANGUINE/SEAFARER"

Mr. MARCY. The third item that I wanted to talk to you about is an item which has to do with communication with our submarine fleet. This is the extremely low frequency communication link which has

been called Sanguine in the past as a project. Now there are other names for variations which are being described for this.

But in reality, what we are looking for is a means to be able to communicate by radio technology to a submarine a number of hundreds of feet under the surface of the ocean. Most electromagnetic propagation will not pentrate water, normally a submarine cannot communicate or hear radio frequencies under water. They must trail an antenna or in some way get an antenna to the surface of the water to be able to listen to radio transmissions.

However, an extremely low-frequency radio transmission somewhere around 45 to 75 cycles per second, namely, around-your-house frequencies, can penetrate the water and allow the ships to receive at a very slow data rate, signals which tell them that they may stay operational there, that there is no condition of emergency. That signal can be connected through the entire national communications system, the WWMCCS system, to the command and control center.

Senator YOUNG. Could you tell me the difference between the Sanguine system and the Omega system? They are both communications?

"DIFFERENCES BETWEEN SANGUINE AND OMEGA SYSTEMS"

Mr. MARCY. The Omega system is not an extremely low-frequency system, sir, and its signals will not penetrate significantly into the water. The Omega system is a radio system which, if you are on the surface, you can receive those transmissions and can navigate from the signals from them.

Senator YOUNG. The difference is the Sanguine will penetrate the water?

Mr. MARCY. That is exactly it. That is a special requirement that we have.

Senator INOUYE. Is this system related to some controversy up north?

Mr. MARCY. Oh, yes. We have had a problem in that this is a system that is developed from installation of a very long wire system in the ground, that would be buried 6 feet in the ground on about a 55 by 55-mile square area. It is a very large area coverage and it has something like 3 to 5 miles between the wires that are put down into the ground. The power that one puts into this wire from the electrical system is like 4 to 5 megawatts which is enough power to run a small town. It goes into the ground and the energy transmits from the wires into the ground, and then radiates out of the ground.

There has been a great deal of concern on the part of environmentalists that this type of electromagnetic propagation might be harmful.

Senator INOUYE. This is a signal to the submarines?

Mr. MARCY. Yes; it is the signals that the submarines pick up. The signal emanates from the ground station.

Senator INOUYE. In Michigan?

"LOCATION OF TRANSMITTING SITE"

Mr. MARCY. It could be Michigan. A number of different sites have been studied by the Navy and in fact are semifinal sites at this point.

There is Government-owned land at Nellis, Nev., and White Sands in New Mexico, where we believe that it would be a problem.

The most economical installation of such a system would be on the Laurentian shield which would be in the Wisconsin-Michigan area. There the particular electrical conductivity characteristics of the Earth favor this type of system's effectiveness.

Senator INOUYE. This is a worldwide transmitter?

Mr. MARCY. Yes, sir, it is a worldwide transmitter, when fully installed, to be able to communicate to the submarines at depth so that they can be able to operate with a high degree of mobility at [deleted] feet at least. That is our expectation.

Senator YOUNG. Can I ask a question, Mr. Chairman?

On the Omega system all they have to do is make a receiver and they can use the same system?

Mr. MARCY. Yes, sir.

Senator YOUNG. Can they make receivers and use the Sanguine system?

Mr. MARCY. The Sanguine system, or what we will be calling the Seafarer system as our new name—because of something I will bring up in a second—but this new system is not a navagational system. It is a communication system which is transmitting encrypted messages to the submarines to alert them as to the operational readiness that they should be having in their routine patrols.

Senator YOUNG. The Russians would have to break the code?

Mr. MARCY. They would have a difficult time breaking the code.

"COMMUNICATIONS WITH SUBMERGED SUBMARINES"

Senator INOUYE. Now it is impossible to communicate with a submerged submarine without an antenna?

Mr. MARCY. Without an antenna, that is right—except in very isolated circumstances. That has been done in local areas, not worldwide, with light beams or it has been done by acoustic means, but none of these things have nearly the applicability of the radio transmission.

Admiral MORAN. I think we should make one thing clear. We do now have an ability to communicate with submarines that are submerged fairly near the surface and they must tow an antenna wire that floats just under the surface. One of the real important reasons for wanting to go to this extremely low frequency system is to allow that submarine to operate [deleted] feet and below.

Mr. MARCY. At speed.

Admiral MORAN. At speed without having to tow an antenna near the surface. Anytime you are near the surface you are that much more vulnerable to being searched out and located and if you are towing an antenna you are adding to your hazard, and then you have to go more slowly when you are towing an antenna.

Senator INOUYE. Do the Soviets have anything comparable to this?

Admiral MORAN. We know of nothing they have comparable to this, [Deleted.]

We would like to have that ability, where ever he might be in the world, at whatever depth, at whatever speed he is operating.

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"ALTERNATE TRANSMITTING SITES"

Senator YOUNG. Have you given up the Texas site? You gave up Wisconsin, didn't you?

Mr. MARCY. All of these sites involved private land. All of these sites involved a great deal of private discomforture with the system being present. Should the Governor and the other people of the State wish to have some of these sites considered during the time that we do our final site studies in the next year—in the design stage for site selection—we certainly would be willing to consider them. But, we have not aggressively sought to acquire land in Texas, or Michigan, or Wisconsin. Texas is a possible site, technically.

Senator YOUNG. We had a provision in a bill to stop them from doing it, but you mentioned New Mexico. Is that the kind of land that would lend itself to transmission?

Mr. MARCY. It is suitable, but it costs more because the conductivity of the ground is not as good. There are many sites we looked at where the conductivity is so bad they are impossible. But, of the number of the sites that we examined, we found that the two we mentioned to you, Nellis and White Sands, are suitable—although they cost more.

Senator YOUNG. Someone was shaking their head about the Texas site. You were looking at a site there and you got objections from the Texas delegation.

Admiral MORAN. I think, sir, it is true, to answer your question in the negative, we are looking in Texas.

Senator YOUNG. Not now but you did?

Admiral MORAN. We did at one time look. There was an area in Texas that had a suitable underground formation for the installation and operation.

Mr. MARCY. We think we have defined a technical capability for the system from the experimental work we have done. We want to finish the propagation validation which means build receivers and do more testing than we have done now. We have that work underway.

We want to do what we call the design validation which means do the engineering work on the transmitters and the basic groundwork which one would use. And in addition to that, we wish to proceed with the work which would allow us to finally get to a position about this time next year where we could be under contract to go to one particular site to make the installation.

POSSIBLE EFFECTS OF SYSTEM

Senator INOUYE. Is there any justification to the fear expressed by some that this frequency and this installation might cause sterility?

Mr. MARCY. Let me answer that question. We firmly believe that enough has been learned in the last 5 or 10 years about the ill effects which can accrue through new technology that we understand when anyone starts to do something different that it is necessary to really investigate and study that situation. We have had a number of different research studies made on biological and physiological effects from this system. We have not found anything which would, in the judgment of our researchers—which are university and other kinds of research facilities—not just our own—we have not found anything which leads

us to believe that there is anything that is at all detrimental to its use.

We have found one or two effects which we think are worthy of further research. None of those happen to be in the sterility area.

Senator INOUYE. Off the record.

[Discussion off the record.]

Senator INOUYE. My final question, what do you propose to do when an important element in the total picture is not available, the transmitting site?

Mr. MARCY. What do we propose to do when the transmitting site is not available?

"POSSIBLE COST INCREASES"

Senator INOUYE. Yes. At this stage Wisconsin does not want you, Michigan does not want you, Texas does not want you. If you go to Federal lands the cost will more than double.

Mr. MARCY. For what we propose to build, the cost will not more than double because we propose to build a lightly hardened system which is a surface version of the system. We do not try to develop a capability which will withstand nuclear onslaught and the first information that people have had about the doubling cost has to do with the cost of building one wherein the transmitters would have to be encapsulated and be able to withstand a fair attack.

The cost would be increased significantly and I do not wish to say that that is a minor factor because to me, as a taxpayer, too, it is very significant. It is, sir, an important consideration. What we propose to do is to do the design of the transmitter section, the design of the pieces that would have to be put into place. This you have to do in order to determine in the final sense production costs which you would then finally approve before we deployed the total system.

The cost of the total deployment includes the acquisition of a number of those transmitters, the digging of the ditches in which the wires go, and preparation of the site in its total consideration. We would not undertake that in this time frame.

"SIGNIFICANCE AS A NUCLEAR TARGET"

Senator INOUYE. In a nuclear conflict, I would assume that this would be a major target for the enemy and a 55-mile square corridor is a big one, isn't it?

Mr. MARCY. Yes, sir. Very considerable studies have been made of the significance of this as a target. They are a part of a larger consideration of the so-called WWMCCS worldwide military communications system that is under architectural systems design at the present time. That systems design is not due to be completed by the Department of Defense until a year from now. [Deleted.]

This Seafarer system that we are talking about would not be able to withstand very significant nuclear warhead attack before it would be damaged.

Senator INOUYE. When you have a grid of 55 square miles, lines drawn at each 5-mile interval, if one line is severed is the whole system out of operation?

Mr. MARCY. No, sir. It is not totally put out of operation with one antenna severed. On the other hand a Sanguine system would degrade slowly. The indication is that since the enemy has so many warheads, if he chooses to attack a Sanguine system by firing [deleted] missiles at the transmitter area, that undoubtedly he could damage it. Therefore it would be foolish for us to try to propose to you the Sanguine system could be built for a reasonable cost and could be completely survivable.

In fact, to be completely survivable a Shelf system would have to be built underground and this is being considered also from a point of view of conceptual design work, something like [deleted] feet underground with [deleted] tunnels, and that sort of thing.

Senator INOUYE. Thank you very much.

ESTIMATED COST OF SYSTEM

Senator YOUNG. One question: What is the estimated cost of this system? You can give it to me roughly and put the exact figures in the record if you want to.

Mr. MARCY. I think I would like to find that number and put it in the record. It is in the hundreds of millions of dollars.

Admiral MORAN. That number will vary depending on the site and what is put there.

Mr. MARCY. I will make a statement to you that is more descriptive than that.

[The information follows:]

Based on preliminary site surveys in Nevada and New Mexico, we estimate that a SEAFARER system would cost about 540 million dollars in Nevada and about 525 million dollars in New Mexico. Based on those same surveys we estimate the total investment costs for a SANGUINE system to be 1,100 million dollars in Nevada and 1,200 million dollars in New Mexico. By contrast we estimate the investment cost for a SEAFARER system in Wisconsin to be 230 million dollars. Those figures are total system investment costs including receivers. The 10 year operating and maintenance costs for SEAFARER we estimate to be 300 million dollars in Nevada and 284 million dollars in New Mexico. We estimate the 10 year operating costs for SANGUINE to be about 300 million dollars for both New Mexico and Nevada.

HIGH PRIORITY ITEM

Senator INOUYE. This is a high priority item?

Mr. MARCY. We consider this to be a very high priority item. The point I should close with is the submarine commanders feel that having this system available to them [deleted] that they need to do without surfacing at inconvenient times in order to keep in touch with their command post. They believe that the addition of this system provides a great deal to the strategic value of our forces at sea [deleted].

And I do not know that I made that very clear to you.

Admiral COOKE. If I may reach back a little before my comptroller duties where I really spent most of my time, Mr. Chairman.

METHOD OF TRANSMITTING SIGNALS

I go back to one with which you are familiar, Radio Honolulu which is a low frequency transmitter we operate in the Pacific. It

operates at about 100 kilohertz, I think. We would receive these transmissions on the submarines either with antennas sticking out of the water or very close to the surface. That is one method.

The next best thing beyond that for submarine communication was very low frequency, 30 kilohertz or below. A transmitter for the VLF station in the United States is in Cutler, Maine. We operate in the [deleted] and listen to these transmissions. That is the primary means of radio reception while running submerged in those areas.

We run submerged with a trailing wire antenna as Admiral Moran noted. We go at reasonably slow speed so that wire stays up. It is just a few feet below the surface or floating on the surface.

We also had on top of the submarine a fixed VLF antenna with this antenna [deleted] beneath the surface we get good VLF reception under most conditions. The advantage here is that everything is completely submerged; we do not have even the floating wire on the surface. [Deleted.]

[Deleted.] That is one of the basic concepts.

"ADEQUACY OF PRESENT SYSTEMS"

Now in the present day ASW capability of the Russian Navy we feel that we have adequate means of communication. The threat is not so great that we are in any hazard right now but we look forward to where they may grow in the ASW field. With the potential capabilities they will develop, we have to somehow get away from the surface. We have to get down to—Mr. Marcy mentioned [deleted] feet. Submariners want to be able to operate at [deleted]. We would like to operate down there and have a communication signal coming in all the time. In the future as the Russian ASW capability develops we must get below that surface layer and have good communications while we are down there.

"ELF COMMUNICATIONS"

That is what we are trying to do with ELF communications. It is a very high priority requirement within the strategic submarine force. For other purposes I guess it is equally important, for example our SSN's [deleted]. We have to be able to go deep and maintain communications.

Senator INOUYE. Do you have this advanced sonar system now? It is not in operation, is it—the one that was described 2 or 3 days ago?

Admiral COOKE. We have a much better sonar system on the [deleted] submarines.

Senator INOUYE. What is the effective range of this sonar system?

Admiral COOKE. The sonar system that will go on the SSBN submarine will reach out to [deleted]. That is the general answer. And there are other cases where you can [deleted]. The one installed on the SSBN now is a good sonar but it is considered of less capability than that.

Senator INOUYE. So, this is very high priority, the Sanguine?

Mr. MARCY. Yes, sir; very high priority.

We believe we have done the homework to say that the system is deployable in these areas and that it is viable and that we believe it is necessary and we ask permission to proceed.

Senator YOUNG. Is any of the information you have given today classified?

Admiral COOKE. It is all classified. All these things we have been talking about here are classified information.

Senator YOUNG. The reason I was asking is how are we going to defend it on the Senate floor?

"AVAILABILITY OF UNCLASSIFIED INFORMATION"

Mr. MARCY. There has been a newspaper release today on the material so there is an unclassified version of the information that is available to you. We will, in addition, on these matters that have been of some public interest, we will have in your hands an unclassified environmental statement brought up to date by the end of next week. It has been completely redone, updated and is in the typing and printing process, and will be available by the end of next week so that will supply documentary evidence that there is information available on all of these that some people are worried about relative to the system.

Senator YOUNG. I am not worried about that as a cut in money. That is our big problem in the Congress. They want to cut the budget.

Admiral COOKE. Senator Young, I will provide unclassified information. It won't be as complete as what we have been talking about today but it will be unclassified justification for the ELF system. I will provide that to you.

Senator INOUYE. Will you provide it for the other projects we have been discussing?

Mr. MARCY. Yes, sir. You have an unclassified version of my statement and I looked through it and I found my statement is only about 3 percent classified. They removed very little from it so there is material on almost everything I am talking about. The reason for my selecting these topics is I thought they required greater understanding on your part in the case you had to carry the debate further.

Senator INOUYE. That is very helpful, sir.

"SURFACE EFFECT SHIPS"

Mr. MARCY. A final area I wanted to bring to your attention has to do with two ships that we are working which have advanced ship capabilities; the first one I wanted to speak to is the most advanced ship conceptually, that is, the surface effect ship that the Navy has been working on. If we show the movie you will see some of the experimental boats that are now running on this program and we have them under test. We have two boats under test right now. They are 100-ton craft and they have each achieved between 75 and 80 knots. I have personally ridden on one.

Senator INOUYE. How long will that take?

Mr. MARCY. It is a 12-minute film. It has a few clips that we would want to show you.

Senator INOUYE. After you complete your statement, I would like to see it.

Mr. MARCY. The surface effect ship is one of the ships which is of interest to us because it apparently can provide the capability for

a 10,000-ton ship to achieve high speed on the open sea. And that means it could carry cargo and it could go very fast to where it must go to be able to do a job.

The classic naval ship is 30 knots, so considering something that could go 60 to 80 knots, that would add exceptional capability. Studies have been made of this in a military environment, preliminary studies, which indicate this as a companion to helicopters in running down supected submarine contacts acoustic contacts, running out to check them over carefully and then being able to quickly go to the next spot. With helicopters, these could work as a team. We have a very good antisubmarine warfare device in the making.

Senator INOUYE. It is not a combat ship?

"VERSATILITY OF MISSIONS"

Mr. MARCY. In the sense, one deployment would be for any surface warfare. We think in this instance it could be very well used to escort a convoy of ships. It could push the enemy away from the periphery by being able to respond quickly and keep the attacking submarine at quite a distance—relative to what we can do now with the submarines traveling as fast underwater as our ships do over water.

Senator INOUYE. I suppose at that speed the load would be very light, wouldn't it?

Mr. MARCY. Yes, sir, it would not be an armored ship in the sense that it would be a steel ship of some substance. It would be something which would be like an old battleship of yesteryear, but it would carry a suitable weapon system.

"REDUCED BUDGET REQUEST"

This is a very experimental ship in this case. We are in the process of working toward an engineering design of a 2,000-ton ship as the next step up. The reason I wanted to mention this to you is that because of budget priority problems in this year's presentation we have dropped the dollars that we wanted to put into his program for fiscal 1976 below that that have been projected in last year's time frame.

And that always signals, it seems, in this environment that one does not really want that program because one has dropped its priority. Well, it is a research and development type program and we think it can afford to slip one more year. We have taken a substantial amount of money out of the original working documents that we had earlier in the year.

We now still want to spend something like $38 million, which is a very large amount of money, but it is not as much money as we had originally intended.

So that we wanted to tell you simply that we really still believe this is an important ship for us to work on, that we would like to have support to keep it in the plan and we do not want to signal by this change in our dollar figures the fact that the Navy believes in it less.

Senator INOUYE. You are requesting $38 million for fiscal year 1976, and $17 million for the transition period—is that correct?

Mr. MARCY. Yes, sir, and then 70, because we would then use the 70 to accelerate the engineering, the completion of the engineering

design and fabrication, working toward the fabrication of the 2,000-ton ship.

Senator INOUYE. You have $302 million from fiscal 1977 to 1980. Why that sudden increase?

Mr. MARCY. We have to build it. We have to build the 2,000-ton ship. Building experimental ships with research and development funding is something that has evolved over the last few years and it is expensive, we have learned.

Senator INOUYE. Thank you.

"NATO PHM"

Mr. MARCY. The second ship I wanted to mention is the NATO Hydrofoil, the NATO PHM. There is also a short shot of this ship traveling in the last few days at [deleted] knots out in Puget Sound. This is a hydrofoil craft which will operate in the [deleted] knot range. It is a patrol boat. It is not intended to be as heavy a boat as the surface effect ship but it would be very useful for missions such as coastal patrols and as we need it. It would be important to our NATO allies. Patrol missions are important to us and we have a joint understanding with them that they would like to buy this craft too.

Senator YOUNG. Let me ask a question, Mr. Chairman.

What is the difference between a hydrofoil and surface effect ship?

"DISTINCTION BETWEEN HYDROFOIL AND SURFACE EFFECT SHIPS"

Mr. MARCY. In the surface effect ship you pump air down underneath the ship to make it ride on a bubble of air, and through some propulsive design like throwing water out backwards in water jets you make yourself go forward.

In the hydrofoil you actually lift the ship up and it rides on surfaces that look like wings underwater. The wings are planning but the hull of the boat is out of the water.

Senator INOUYE. Have you been to Hong Kong?

Senator YOUNG. Yes, sir.

Senator INOUYE. They have these ships running from Hong Kong to Macao.

Now, I believe the British are now using the same type of ship in the channel, aren't they? Commercially.

Mr. MARCY. No, they are using a hovercraft commercially, which is similar to the surface effect ship. That is not a hydrofoil.

Senator INOUYE. How fast does that go?

Mr. MARCY. I don't think I am enough of a seaman to know.

General WILKERSON. I have ridden on the British version of it. I have flown at 50 knots.

Senator INOUYE. And that is not sufficient for your use?

"ADEQUACY FOR THE NAVY MISSION"

Admiral MORAN. That kind of craft, Mr. Chairman, is similar to the surface effect ship that we are proposing to complete here, but different. It has an air cushion all the way around it in which the air bubble is entrapped, the bubble on which the ship rides.

It is indeed an amphibious device and goes along on top of the water. It can go up the beach and across the land.

Senator INOUYE. Doesn't the hovership do that now?

Admiral MORAN. The ship we are building has rigid sides that penetrate the water like the sides of any other ship with a cushion fore and aft that is something like the air bubble that goes clear round the hovercraft, and this will allow you to run it at sea as a ship and stay at sea as a ship, where you come down to slow speeds, and spends many days at sea, where the hovercraft is not able to do that. It is a device that you get in and travel wherever you are going to go to and get out of it. Something like an aircraft.

Mr. MARCY. The PHM, or hydrofoil, is we believe a very good investment program in the sense that we have a ship that works and we like it and we think we should build it. However, it is a case where there has been escalations of the costs. The cost of the ships have risen significantly. Because of the increased cost, the program is being subject to some considerable questioning. But there is fundamentally nothing that makes us think that we should drop this program.

We are very seriously still interested in finishing it and deploying it.

That concludes the remarks that I had.

You had some questions that you wanted to ask.

QUESTIONS SUBMITTED BY SENATOR INOUYE

Senator INOUYE. We will submit these questions to you for your consideration and response.

Without objection, the questions and answers will appear at this point in the record.

[The questions and answers follow:]

DEVELOPMENT OF F–401 ENGINE

Senator INOUYE. If the Navy selects a derivative of the F–16, will it be necessary to resume the development of the F–401 engine?

Mr. MARCY. The F–401 engine is one of three engines that have been proposed for Navy Air Combat Fighter derivatives of the F–16, the other engines being the F–100 and the F–101. Until the source selection process is complete, it would be unfair to address continued development of any NACF candidate engine.

Senator INOUYE. How much money will be required to complete the development of the F–401 engine?

Mr. MARCY. Assuming that no funding constraints are imposed it is estimated that $65M, in FY 1975 dollars, would be required over a period of 22 months to take the F–401 engine through Preliminary Flight Rating Test.

FOREIGN SALES POTENTIAL

Senator INOUYE. If the Navy selects a derivative of the F–17, what is the potential for foreign sales?

Mr. MARCY. Preliminary estimates indicate the potential market for a twin engine fighter in the NACF class to be substantial with a commensurate dollar value.

Senator INOUYE. Would there be a large enough buy of both aircraft to assure an economic run of both?

Mr. MARCY. An excess of 800 aircraft is needed to replace F–4s in the Navy and Marine Corps and eventually A–7s in the Navy. This quantity combined with potential foreign military sales are considered sufficient to assure an economical NACF production run.

Senator INOUYE. If the F–401 is selected for the NACF, how many engine developers will be left in the USA?

Mr. MARCY. This choice, if recommended by the Navy and approved by SECDEF and Congress, would result in United Aircraft (Pratt and Whitney) being the developer for both the F–100 (F–15 and F–16 engine) and the F–401 (possible NACF engine). Other major U.S. engine developers include General Electric, and General Motors (Allison). Lycoming, Garrett Air Research, and Teledyne are developers of smaller engines, under 8,000 pounds thrust, for use in drones, helicopters, and other utility uses.

ANTI-SUBMARINE HELICOPTER SYSTEM

Senator INOUYE. The Navy has been working for several years to develop an anti-submarine helicopter system to use off surface ships. Is point defense with helicopters a cost effective means of killing submarines? Would submarines be more effective against submarines?

Mr. MARCY. The Light Airborne Multi-Purpose System (LAMPS) has as one of its primary missions to provide High Value Units (HVU) with defense in depth by means of its extended ASW and ASMD capabilities using a helicopter beyond the ranges of the LAMPS ship and HVU sensors and/or weapons. LAMPS is a complementary system launched in response to detection by ship or force sensors. It provides the ASW weapon system for prosecution and attack throughout an engagement from within the immediate point defense zone out to as far as [deleted]. Such versatility and operational potential make LAMPS in point defense a cost effective means of killing submarines.

The assigned mission of Attack submarines (SSN/SS) is to destroy hostile submarines and surface forces in forward area and open ocean operations, to provide direct support for Naval task forces and other high value forces, [deleted]. Submarines are outstanding ASW platforms and are generally considered to provide the best single platform ASW capability extant in the world today. However, certain considerations concerning the employment of attack submarines in direct support must be considered. The number of attack submarines available for direct support of a force or unit is limited. Close support of units is being evaluated in operational scenarios and the problems of air, surface, and sub-surface coordination is being investigated. Submarine direct support usually involves a separation between the friendly submarine and the acoustic noise of the units being supported sufficient to avoid degradation of the submarine's passive detection sensors. Additional ASW protection is required to cover this separation area and the ASW helicopter is a most effective vehicle to do so. In any ASW tactical operation, the combined weapon and sensor capabilities of available air, surface and sub-surface platforms provide the most effective offensive in killing submarines.

Senator INOUYE. Is Navy R&D about to make any startling breakthroughs in anti-submarine warfare?

Mr. MARCY. The Navy's ASW development program is geared to providing the most cost-effective and affordable systems available within the state-of-the-art of sensors and platforms. No "breakthroughs" in the true sense of the term are assured at this time, although the Navy is looking at some candidate systems that show promise. Technologies currently under development are [deleted]. This posture could eventually weaken with the appearance of an advanced threat unless a "breakthrough" in non-acoustic technology is achieved, thereby lessening our dependency on acoustic sensors for large area search coverage.

REDUCTION IN NAVY R. & D. ORGANIZATION

Senator INOUYE. What is your plan concerning the streamlining of the Navy R&D laboratory system?

Mr. MARCY. The Navy is developing a long-range (10–15 year) plan for the in-house RDT&E complex, taking into account the broad spectrum of fleet problems, needs and requirements and the present and future roles and mission assignments of the laboratories necessary to satify these fleet needs. This plan will consider the in-house laboratories, test and evaluation activities and Federal Contract Research Centers. The plan will reflect the national priorities of the programs of the laboratories, and related factors which impact on the future adequacy of the Navy in-house RDT&E complex.

The Director of Navy Laboratories has been tasked to formulate and maintain a comprehensive long-range plan, designed to accommodate or respond to

the limiting factors and parameters I have cited and yet enable the development and/or retention of the viable in-house capability.

The plan will be designed to cover a broad scope of in-house RDT&E capability, while affording a selective, but potentially inclusive, approach to the overall problem. Segments of the plan will be staffed and designed in a sequential manner so as to enable the time phased attack on specific aspects of the total problem and progressive implementation of completed segments on a prioritized schedule.

The long-range plan will be reviewed and updated annually by designated personnel charged with keeping current with changing policies and priorities in the national defense environment. Tri-Service interaction must be an essential characteristic of the process to ensure total DOD capability to provide an adequate RDT&E base for the defense establishment.

Reduction of Civilian Personnel in R. & D. Organizations

Senator Inouye. Are you reflecting a savings in the budget from the reduction of 3,000 civilian personnel in the R&D organization?

Mr. Marcy. Even though the RDT&EN and R&D NIF civilian end strength will be reduced by 3,000 in FY 1976 below the FY 1974 end strength, planned programs will not be reduced. The civilian personnel reduction means that the work on these programs will be performed by the private sector, thus no savings will be generated as a result of the reduction in civilian personnel. Moreover, there will be one-time costs for severance pay and lump sum leave payments associated with the civilian personnel reductions. No additional funds have been budgeted for this purpose and program reductions may be necessary to absorb their costs.

Senator Inouye. Do you plan any new starts or increases in R&D effort during the transition period?

Mr. Marcy. No, sir, we do not.

Electronic Warfare

Senator Inouye. All three services and ARPA are doing research in missile seeker jamming and decoy devices. Describe the steps taken to eliminate duplication of such research.

Mr. Marcy. In respect to the surface forces, the unique character of the threat; i.e., the anti-ship missile, and the size of the intended target, essentially preclude a cooperative development effort between the Navy and the other Services. However, report documentation is exchanged and reviewed to insure that laboratory and other design personnel are kept aware of new developments in the field.

Research in missile seeker jamming and decoy devices as it applies to Tactical Air Countermeasures has experienced minimum duplication by the services. In those cases where it may appear duplication of effort is occurring, a close examination will reveal the efforts are in reality not duplicative in view of the services' different mission-requirements. To illustrate, the Army has assumed the lead in missile launch detection research for helicopters as their requirements pose the most difficult technical solutions. Their helicopters conduct extensive nape of the earth (below 300') flight and in order to achieve an acceptably low false alarm launch rate warning for deployment of decoys against IR seeking surface to air missiles considerable more refinement engineering development was necessary than to meet USN and USAF requirements. All development and testing in this area has been open to all services and utilized without duplication of the U.S. Army efforts.

The same is true in areas of effort by the U.S. Navy and the U.S. Air Force. Research tests and results are open to and distributed among the Services.

Our, the services, very early efforts in the RF seeking missile jammers may have been duplicative at times, but in those early efforts our learning curve and data base in this warfare support area were in its infancy.

Working level staff members of the Services and DDR&E meeting periodically on an Ad-Hoc basis contributes much to the reduction of duplication and proliferation of efforts. These meetings and discussions have resulted in cooperative development efforts among the services. The extent of the threat, the scope of the development necessary to counter it, and the individual assets available have made cooperation and joint efforts the only prudent course of action. The rates

of inflation and escalation are also stimulii which are bringing us closer together. This is not to say all services choose the same countermeasures techniques, but this difference in our operational equipment gives a potential enemy a more diversified countermeasures threat he must overcome.

High Speed Ships

Senator Inouye. The Navy has emphasized the development of high speed ships such as the Surface Effects Ship and hydro-foil ships. Do you consider the high cost of such developments worthwhile considering the marginal increases in speed attainable as compared to aircraft?

Mr. Marcy. The Navy feels just as strongly today of the great potential value of high speed high performance ships in ASW and other surface warfare roles as it did in 1967 when the Surface Effect Ships program was initiated. It does not consider that doubling or tripling the speed of the surface combatant is a "marginal" increase. Because of the limited payload and endurance capabilities of aircraft we can see no way of eliminating the surface combatant from Naval warfare. Both have their strengths and weaknesses. Superior command and control facilities, payload, and endurance make the surface ship naturally complementary to aircraft. Indeed, the combination of ships and aircraft embodied in the aircraft carrier is the ultimate demonstration of making the most of the best features of each. By increasing ships speed we are just trying to keep pace with advances being made in other weapon systems. We would like to regain the speed advantages the surface ships used to have over the submarines.

High Speed Ships

Senator Inouye. The advantage of ships over aircraft would appear to be their staying power and large load carrying ability. Why don't you concentrate on enhancing systems which take advantage of those capabilities?

Mr. Marcy. The advantage of ships over aircraft is indeed their superior staying power and large load carrying ability. We consider developing 80 knot ships a true breakthrough in maritime technology and a major enhancement of a surface ships capability. In recent analysis conducted by the Navy we learned that having a helicopter capable platform with the speed potential of the SES increases an ASW helicopter's range by 20% to 40% and increases time on station by as much as 100%. It's high speed makes it possible for the SES to arrive in a submarine probability area in minimum time, provide command and control base, and refueling and rearming services to the helos.

Sanguine Project

Senator Inouye. What is the status of site location for the Sanguine Project?

Mr. Marcy. The Department of Defense recently announced plans to proceed with Design Validation work on a new version of the Navy's extremely low frequency ELF communications system. The new version, named SEAFARER, is a largely surface deployed variation of the SANGUINE system and would be available in the pre-attack time period. The Department of Defense has selected Nellis Air Force Base/Nuclear Test Site complex in Nevada and the White Sands Army Missile Range/Fort Bliss complex in New Mexico as the semi-final candidate sites for the SEAFARER system. However, because it would be less expensive to build the system in the Laurentian Shield area adjacent to the Great Lakes, consideration will be given to those sites if the members of Congress or the Governors in that area make such a request within the next few months.

Senator Inouye. If you are having so much trouble finding a site, why do you continue to pursue this project?

Mr. Marcy. Both the Congressional delegations and the Governors in New Mexico and Nevada have issued press statements in support of the project in their respective areas. The ELF communications system is being pursued because it is important to our national security in conventional as well as potential nuclear operations. It is the only portion of the frequency spectrum which will penetrate sea water to great depths and which is virtually disruption free in a nuclear situation. All of our present communications systems require the submarine to place an antenna on or near the surface of the water, and to reduce speed. Because the enemy is rapidly developing more sophisticated anti-submarine warfare equipment and techniques, our immediate concern is to maintain subma-

rine survivability, not system survivability. If we are going to be able to maintain submarine survivability into the 1980's, we will have to eliminate the constraints now placed on them and permit them to fully utilize their depth and speed capabilities. SEAFARER will fill our urgent need to produce a system which will permit communications with both attack and missile-firing submarines submerged to hundreds of feet and [deleted].

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. Mr. Chairman, I also have some questions for Secretary Marcy.

Senator INOUYE. Without objection, those questions and the responses will be inserted at this point in the record.

[The questions and answers follow:]

OVERHEAD COSTS OF R&D

Senator YOUNG. Has the Navy reviewed its overhead costs for R&D to eliminate those costs that drain dollars from programs?

Mr. MARCY. R&D overhead costs have always been a major area of management concern in the Navy. In the past five years, most major R&D activities have been converted to Navy Industrial Fund (NIF) accounting procedures. Under NIF, overhead functions and rates are specifically identified—thus providing overhead cost visibility to the activity's management and customers. Since top-level management reviews the NIF financial statements, including overhead, and compares the several R&D NIF activities, there is considerable incentive to reduce overhead.

The organization and staffing of Naval R&D activities is a matter of continual review. As an example, effective 1 September 1974, the Navy consolidated the Naval Ordnance Laboratory (NOL) and the Naval Weapons Laboratory (NWL), and the personnel strength for the combined activity was reduced as a result of the consolidation of overhead-type functions.

LIGHTWEIGHT FIGHTER PROGRAM

Senator YOUNG. What are the major changes required to convert the Air Force version of the lightweight fighter into a Navy fighter?

Mr. MARCY. In order to sustain the stress of operating from ships at sea, the Navy fighter must have increased structural strength for catapult takeoffs and arrested landings, and a larger wing area to satisfy carrier approach speed requirements. To meet mission requirements it must have an all-weather medium range missile, which requires a larger radar dish to obtain that performance. It must also carry more fuel to satisfy a fighter escort mission radius of [Deleted] nautical miles. All of these requirements add weight to the aircraft and dictate an engine with additional thrust if performance specifications are to be met.

LIGHTWEIGHT FIGHTER DERIVATIVES

Senator YOUNG. How many light weight fighter derivatives is the Navy evaluating? Please describe each one and identify the contractor.

Mr. MARCY. We are evaluating four variants. Three of the four are F–16 variants submitted by Ling Temco Vought working with General Dynamics. The fourth entry is the YF–17 design submitted by McDonnell Douglas working with Northrop. The proposals submitted are undergoing source selection and specific details of each variant are not available until that source selection is completed. However, the F–16 variants are each powered by different engines; the Pratt & Whitney F–100, F–401, and the G.E. F–101 engine. The YF–17 is powered by a modified version of the GE J–101.

ENGINE DESIGN CHANGES

Senator YOUNG. Does it appear at this time that major changes in design and engines will be required to provide the characteristics required for the Navy mission?

Mr. MARCY. Certain airframe and engine changes will have to be made in order to meet the operational requirements of the Navy mission. For example, longer range radar requires a larger radar dish and may therefore require some design change in the nose area. Increasing the structural strength of the aircraft for carrier operations will perhaps require larger wing area and more thrust. However, the extent of these changes is not yet known and will not be available until the Navy's source selection process is complete.

V/STOL TECHNOLOGIES

Senator YOUNG. Is the Navy continuing the development of three V/STOL technologies or has a decision been made to pursue only one?

Mr. MARCY. The Navy is investigating several V/STOL technologies in order to determine which has the greatest potential for future development. In the supersonic arena, we are building two prototype Thrust Augmented Wing aircraft, both of which will fly in the middle of next year, and we're conducting technology studies and analysis of the Lift plus Lift/Cruise, and the Vectored Thrust V/STOL concepts. In the area of subsonic ASW and utility V/STOL, we are initiating a joint program with NASA to build two prototype aircraft using the Lift Fan concept. All of these are far-term programs and pointing to aircraft of the future. A decision has not yet been reached as to which of these V/STOL concepts we will pursue. For the near-term we are looking for development of a follow-on aircraft to the Marine Corps AV–8A V/STOL. It appears likely that we can develop an improved AV–8A that will out perform the AV–16 and be produced at considerable savings.

AV–16 V/STOL

Senator YOUNG. What is the status of AV–16 V/STOL aircraft with the Pegasus 15 engine?

Mr. NARCY. It now appears that we can develop an improved AV–8A that will outperform the AV–16. We are holding AV–16/Pegasus 15 in abeyance pending the engineering validation of this improved AV–8A. If the proposals are valid, we can provide a much improved V/STOL aircraft at considerable savings over the AV–16/Pegasus 15 costs.

Senator YOUNG. Can a vectored thrust V/STOL engine, such as the Pegasus 15, be equipped with an after burner for additional thrust?

Mr. MARCY. Yes. We are, in fact, conducting design studies and analysis of the possible use of vectored thrust in a supersonic fighter/attack aircraft of the future.

SANGUINE PROGRAM

Senator YOUNG. What is the Navy's plan for Sanguine in fiscal year 1976? Will it remain in development or has a decision been made for the deployment?

Mr. MARCY. Because it appears that our potential enemies are rapidly developing more sophisticated anti-submarine warfare equipment and techniques, the Department of Defense has decided that its first priority will be to develop a communications system which will ensure the survivability of submarines.

We are concerned that all of our present communications systems require the submarine to place an antenna on or near the surface of the water in order to receive radio communications. To do this, the submarine must travel at slow speeds and, in some cases, must be near the surface of the water—both of which may make it vulnerable to enemy detection in the future.

ELF (extremely low frequency) communications will not subject our submarines to these limitations. ELF is the only portion of the radio frequency band which will penetrate sea water to great depths and which is virtually free of disruption from natural or man-made interference.

The Navy is currently investigating three ELF candidate systems: SEAFARER, a soft system; SANGUINE, a buried, hardened, dispersed, more survivable system; and SHELF, a deep underground system.

SEAFARER will meet our urgent need to produce a system which will permit communications with both attack and strategic missile-firing submarines when they are submerged to hundreds of feet and traveling at high speeds.

During FY 1976, we plan to continue with design validation (DV) of SEAFARER. The DV contractor will design, develop and test system components such as the transmitters, receivers and message input equipment.

Also during FY 1976, the propagation validation system contractor for ELF communications will build and install experimental receivers on operational submarines which will gather data to be used in the final system design. Other efforts for FY 1976 include the continuation of environmental compatibility studies and site investigation.

There is no research and development for SANGUINE now planned in FY 1976. Research and development on SHELF as well as other alternative submarine technologies will be initiated in FY 1976.

With regard to a site for the operational system, the DOD has selected two semi-final candidates: the Nellis Air Force Range/Nevada Test Site complex in Nevada and the White Sands Army Missile Range/Fort Bliss complex in New Mexico.

However, because it would cost about ½ to build the system in the Laurentian Shied area adjacent to the Great Lakes, consideration will be given to those sites if the members of Congress or the Governors in that area make such a request.

A final site decision is expected during the first quarter of calendar year 1976.

The decision point for production, DSARC III, is currently scheduled in FY 1977.

SURFACE EFFECT SHIP PROGRAM

Senator YOUNG. What is the status of the Surface Effect Ship program?

Mr. MARCY. The SES program is continuing to progress in a highly successful manner as pertains to its technological goals. Due to funding constraints imposed by OSD the pace of the program has been slowed and further stretched out by nearly two years. It is still Navy's intent to build a large scale prototype vessel of a nominal 2,000 ton size and to commence testing of the vessel by 1980.

COMPLEXITIES OF R. & D. ACTIVITY

Mr. MARCY. Would you like us to show the film clip?

Senator INOUYE. Fine.

Senator YOUNG. Off the record.

[Discussion off the record.]

Mr. MARCY. The complexities of the Navy research and development activity have been very impressive to me as a new member of this team with activities concerned with submarines and with airplanes and with surface ships and communication satellites, and other things.

I think you will be impressed with this short film clip by the scope of things that we are dealing with. Of course, it is only a very miniscule sample of the type of things.

Senator INOUYE. Before proceeding I would like to commend you, sir, on your first appearance. You have done very well. I think it should be also noted that this is my first appearance here.

Mr. MARCY. Congratulations. You have done very well.

[Showing of film.]

LASER GUIDED MISSILE

Senator YOUNG. Would you expand upon the laser guided missile?

Mr. MARCY. The laser guided projectile—we would be glad to speak to you about that. This is from a person who has worked on some of the advances in fire control of the past years which were still used, in fact, in Vietnam days. The General may wish to speak to this. This system uses our ability to shine a laser beam of moderate intensity, like an optical light bulb, on a target, resulting in a spot on the target which can be seen by a very small detector carried on a bomb, or, as you see now, miniaturized in a cannon shell. That detection is used to guide the bomb or the projectile to the target.

This technology has made possible the precision bombardment of targets, so no longer is it necessary to attack a cave with hundreds of pounds of bombardment, but you can, with laser illumination, get almost pinpoint accuracy. Thus very few rounds do the kinds of damage that possibly otherwise could not be done.

Senator YOUNG. Is that in operation now? Do you have it, or is it in research and development?

Mr. MARCY. There are operational missiles which have been deployed and have been used militarily; the projectiles we have are 8-inch, and the Army is working on a 155-millimeter projectile. We also have a 5-inch and 5-inch sleeved projectile to fit into the 155-mm howitzer. These are in the development stage and are not deployed.

Senator YOUNG. The laser beam itself.

Mr. MARCY. It has been used in what we call SMART bombs.

Senator INOUYE. Then the target has to be illuminated.

Mr. MARCY. The target has to be illuminated by either a foot soldier, advanced scout or by an observing plane, and we have planes that carry the laser designator and a laser designator/rangefinder for the foot soldier.

Senator INOUYE. They have to be able to light them up.

General WILKERSON. Yes. That, Mr. Chairman, is really the object of what we hope to do. And the infantry spotting team, if you will, that spots for supporting arms, would be able to illuminate a target that he can see in front of him up to 4,000 meters, if he could see that far, and he can call airplanes to bomb with bombs that have seeking devices that will hit that target directly, guide it all the way to the target, or he could call a variety of 8-inch naval guns, 8-inch artillery, 155 artillery that would be common to all of the services, laser guided devices, once an artillery round is thrown through the window. In the sky we call it.

Senator INOUYE. In other words, instead of squeezing the trigger, you now press a button.

General WILKERSON. Except the technique of fire control is still there for the artillerymen. He must get the round through the window in the sky.

QUESTIONS SUBMITTED BY CHAIRMAN McCLELLAN

Senator INOUYE. Once again, gentlemen, thank you very much.

Chairman McClellan was unable to be here today. He has submitted a list of questions for you. Would you please respond to those for the record?

[The questions and answers follow:]

TRIDENT AND SSBN-X SYSTEMS

Chairman MCCLELLAN. Is there any emerging capability by an enemy to threaten our present SSBNs by using detection and tracking techniques?

Mr. MARCY. The Soviet Union continues to pursue various approaches to anti-submarine warfare, with emphasis on their anti-SSBN problem. Following are emerging Soviet capabilities that could be a threat to our SSBNS:

1. The Soviet [deleted] represents an emerging capability.

2. Soviets have built over 50 large ASW surface ships within the last 15 years. These are modern, well armed, and capable ships. Included are the MOSKVA and LENIN helicopter carriers with a primary role of ASW. The KIEV anti-

submarine aircraft carrier with V/STOL aircraft will be commissioned soon. All of these ships represent a potential threat to our SSBNs, particularly [deleted].

3. Soviet long range ASW aircraft have been observed using a variety of tactics and sensors that could be an emerging threat to our SSBNs. They are using [deleted].

4. The Soviets do not have a [deleted].

Chairman McCLELLAN. What is the status of Navy efforts to develop quantitative data for use in projecting SSBN useful life?

Mr. MARCY. In the case of the Poseidon submarines we have instituted a maintenance monitoring program. One of the purposes of this program is to develop monitoring and surveillance procedures to assess the material condition of vital SSBN ship systems and equipment. It is expected that information developed by this program will enable us to determine if the ships' lifetime can be extended beyond 20 years.

The useful life of our existing SSBNs cannot be explicitly stated. The specifications in effect at the time these ships were designed assumed a nominal ship life of 20 years. We are already experiencing increasing difficulty and costs in maintenance of these submarines even though the oldest is only 15 years old. It is not prudent at this time to base firm planning on a life far beyond that expectancy to which the ships were designed. The importance of deterrent forces demands performance and reliability. The credibility would be undermined if degraded frequently by the ills of maintenance and aging.

Chairman McCLELLAN. What are the reasons, although permitted by the Vladivostok accord, for deploying the Trident if not warranted by the emerging threat or condition of present SSBNs?

Mr. MARCY. There are many reasons for deploying the Trident System other than replacement for our aging Polaris/Poseidon force and the need to update the technological currency of our sea-based deterrent force in the face of vigorous Soviet efforts to develop a credible anti-SSBN capability.

As you know, the Trident submarine will have a significantly larger missile tube than we have in our current SSBNs. This growth room provides the ability to deploy future missiles with increased flexibility and capability when compared to the Trident I missile. The larger Trident II missile, currently under study by the Department of Defense, will provide an option to deploy a higher throw-weight, more accurate submarine launched ballistic missile in the late 1980's. Although the characteristics of this missile have not been determined, it's increased size will not only permit accuracy improvements which cannot be incorporated in our current missiles due to size and weight constraints, but will permit deployment of a larger payload at maximum range which can take the form of larger warheads or greater numbers of warheads. This ability to deploy a greater payload than is currently feasible increases the cost-effectiveness of the system since less missiles and therefore a smaller force level, will be required to accomplish any specified task.

Deployment of the Trident System will also permit coverage of potential targets immediately upon leaving port, thereby eliminating the need for long transits to the patrol area. Although this flexibility does exist, in part, through the use of foreign bases, the retention of such bases cannot be assured. Should our bases at Rota and Holy Loch become unavailable, some measures of targeting flexibility would be lost due to the requirement to base our entire Poseidon force in the Continental United States. The program to backfit the Trident I missile into a portion of our Poseidon force will help to alleviate this situation.

Finally, with deployment of the Trident System, we have the ability to base a significant portion of our sea-based deterrent force in the Continental United States without any mission degradation. This provides the advantages of elimination of missile and supply pipelines; improved personnel morale since the base and families will be located in the same geographic area; improved submarine and base security due to location on U.S. territory; and more efficient training and support of personnel.

Despite the above reasons we cannot fail to consider the critical aspects of Polaris/Poseidon aging and Soviet anti-submarine warfare capability when we discuss the need for TRIDENT. Our Polaris/Poseidon submarines, built with the technology of the 50's, are becoming obsolete in the face of the rapidly advancing Soviet efforts in anti-submarine warfare. Examples of the increasing threat include *Moskva* and *Kiev* Class carriers, [deleted] and the knowledge and experience gained through operating an SSBN system similar to ours. Although our

current SSBNs are invulnerable today, we cannot guarantee their invulnerability in the future. For this reason we require a technologically current system such as TRIDENT which is designed to blunt all known or postulated threats to our sea-based deterrent force. Finally, we must consider the fact that our current SSBNs were built to specifications which projected a 20 year life and, despite efforts to extend this life, cannot be assured of reliable, economic operation much beyond 20 years. A replacement system is required and TRIDENT has evolved as the most cost-effective, survivable replacement for these aging submarines.

Land Level Submarine Construction Facility

Chairman McClellan. Is Electric Boat making satisfactory progress in building a new facility for construction of Trident submarines and in procuring materials and components for the submarines?

Mr. Marcy. Electric Boat (EB) is making satisfactory progress with building the Land Level Submarine Construction Facility. The inboard erection facility has been delayed about six (6) months because of a delay in delivery of prefabricated structural steel required for the building. Steel is now being delivered to support a completion date of December 1975 with a beneficial occupancy date of June 1975. Work on the facility is progressing in a manner which will support Trident construction.

The shipbuilder (EB) is required to meet a contract delivery date of April, 1979 and use his best effort to achieve delivery in December 1977. Both the Navy and the Contractor are confident that the 1979 contract date can be achieved. Although some material and component delivery dates estimated by subcontractors will not support the "best effort" December 1977 delivery date, the 1979 contract delivery date is supported. The Navy and the Contractor are working to improve delivery of controlling items to better the submarine contract delivery date.

Standardization of Submarine Equipment

Chairman McClellan. What is the status of efforts to achieve standardization of submarine equipment at the least cost?

Mr. Marcy. The following is a status summary of Trident Submarine standardization effort:

(a) Extensive use is being made of mock-ups leading to optimum equipment and machinery arrangement.

(b) A Trident class preferred parts list is being employed to ensure use of components common to existing ships, where possible.

(c) A Configuration Management Program is being used to ensure no unnecessary deviations are made.

(d) Major equipment and component contracts are written with options for follow ship buys where possible.

(e) Trident component vendors incorporate designs which have received previous Navy approval and have resulted in successful operation aboard nuclear submarines. Use of uniquely different parts within components is being minimized.

(f) Non-deviation requirements for the Trident submarine construction are more extensive than those for prior ballistic missile submarines.

Chairman McClellan. Will the projected cost growth in contracts for the propulsion plant prototype test facility and reactor design have any effect on the Trident Program?

Mr. Marcy. No, sir.

Lockheed Technical Problems With Trident

Chairman McClellan. What steps are being taken to resolve Lockheed's technical problems in developing the Trident I missile propulsion and electronics systems?

Mr. Marcy. From the beginning of this program it has been fully recognized that the Trident missile propulsion system development objectives required technological advances and therefore development problems were not unexpected. Accordingly, schedule and cost contingencies were provided in our development plans to deal with problems as they were identified. Currently, our two major areas of concern in this subsystem are chamber development for the first and second stage motors and understanding the cause of a detonation which occurred during a second stage motor test firing in May 1974.

Specific steps being taken to resolve these concerns include:

(1) Assembly of an advisory panel of scientists and engineers from other government activities, agencies and departments, and from industry.

(2) Establishment of a previously unplanned study to explain the detonation which occurred and to develop as complete an understanding as practical of the general phenomena of transition from deflagration to detonation of solid propellants.

(3) Establishment of an experimental program to demonstrate that this detonation was sufficiently understood to correctly predict a repetition and to correctly predict that upon elimination of specific conditions detonation would not occur.

(4) Improvement of motor chambers stress analysis techniques.

(5) Selection of new chamber resins, and catalysts; development of new resin content process controls; and development of new winding process controls.

(6) Development by the fiber manufacturer (DuPont) of more stringent process controls than are needed for his principal market (automobile tire cords).

It should be noted that good progress is now being made in the chamber development area and that the motor detonation has been twice repeated at the 30 inch scale under conditions predicted to result in detonation.

To meet Trident missile range and reliability objectives, new electronic technology needed to be combined in previously unattempted ways. These micro electronic technologies and the objectives they serve include beam lead for reliability, medium scale integration (MSI) and transistor to transistor logic (TTL) for range and reliability, and hardened MSI [deleted] for powered flight survival. In recognition of the challenges inherent in these technologies, schedule and cost contingencies were provided. Partial hindsight tells us that the schedule contingencies were inadequate. Time will tell if cost contingencies were adequately protected.

The electronics system design for the Trident C4 missile contemplates use of thirteen types of radiation hardened medium scale integrated circuits each employing [deleted]. Two of these types have encountered manufacturing difficulties which have significantly reduced yields and increased costs but quantities available are adequate for early flight test vehicles and prospects for adequate yields are bright.

Four other types of these integrated circuits are experiencing extremely low manufacturing yields and the time when adequate yields may be expected is more uncertain. However, functionally equivalent and geometrically suitable unhardened medium scale integrated circuits can be available in time to manufacture components for the first flight test vehicles of a [deleted] test schedule. Adequate quantities of these unhardened circuits have been ordered for the first twelve flight tests and for tests to determine their inherent resistance to damage by nuclear radiation. Meanwhile efforts to solve the manufacturing problems of the hardened [deleted] circuits will continue.

Other steps being taken include a design review by appropriately qualified engineers from other parts of Lockheed Aircraft Corporation and from government, and an independent design review by a team of electronic experts. Also detailed provisions of electronic specifications effecting manufacturing processes are being reviewed to evaluate their contribution to missile performance goals in light of current manufacturing experience. Studies have been instituted to review powered flight radiation environment specifications to re-evaluate their operational realism and contribution to survival goals. Upon completion of these studies and design reviews and receipt of results of tests to determine the inherent radiation hardness of the four substitute integrated circuits, a decision will be taken as to whether or not to institute back-up development to harden these four circuits to protect against failure to solve the current manufacturing problems. Such a development program, would, of course, increase development costs and hence the value of such back-up protection will be most carefully considered.

Chairman McClellan. Will the delay in developing the TRIDENT I missile launcher affect the Trident Program?

Mr. Marcy. As of this point in time, the delay in development of the launcher is not expected to affect the Trident Program. Production delivery of the Launcher Control group is currently scheduled sixty weeks prior to December 1977 "best effort" lead TRIDENT submarine delivery date.

Chairman McCLELLAN. Will production approval for the TRIDENT I missile be delayed due to the slip in the missile operational availability date and development flight test schedule? The slip was caused by abnormal inflation and missile development problems.

Mr. MARCY. Yes. The Assistant Secretary of the Nevy (I&L) is recommending that the Assistant Secretary of Defense (I&L) approve a six month delay in production approval to August 1976. This recommended delay has been reflected in the FY 1976 budget requests for TRIDENT I missile R&D, WPN, OPN and O&MN.

OPERATIONAL TESTING OF TRIDENT I

Chairman McCLELLAN. Will enough operational testing be done to assure Trident I missile reliability before large quantities of missiles are produced?

Mr. MARCY. As in the Polaris and Poseidon programs, it is planned to conduct the Trident I operational testing using production missiles selected at random from those operationally deployed. Actions are being taken in the Trident I program, however to provide earlier bases for confidence in the reliability of the production missiles before large quantities of missiles have been deployed. For example, actions are being taken in the Trident I missile development and initial production to reduce our dependence on flight test of production missiles to discover very low frequency of occurrence (1%—3%) faults. Taking advantage of previously unavailable technology, assemblies (particularly electronic) are being designed to withstand considerably higher stresses induced by temperature, acceleration, shock and vibration than previously. Qualification and production assessment tests can therefore, and will be, run at stress levels considerably higher than predicted for, or measured in, flight. Also production acceptance tests of tactical missile packages can, and will, be tested at the stress levels expected in flight rather than at three-quarters of that level as was previous practice.

There are also plans for having the Trident I missile so designed that the configuration suitable for DASO can be as similar as possible to that suitable for Operational Test firings (OT).

Good progress has been made so that it now appears that these configurations may even be identical and very much nearer the tactical configuration than previously planned. It is too early to give firm assurance of Operational Test schedules, but it can be stated that currently programmed missile assets and range support planning would permit the start of a Trident I missile OT [deleted] earlier than the Poseidon OT and to test the first [deleted] earlier than that number of Posedion missiles. Assets are planned which would permit completing a [deleted] months after OAD. [Deleted].

It can also be stated that the planned rate of deployed assets for C4 is slower than for C3 such that corrections which may be required as a result of earlier reliability testing will need be made to fewer missiles already produced and deployed.

EVADER MANEUVERING REENTRY VEHICLE FLIGHT TEST

Chairman McCLELLAN. What are the results of the first evader maneuvering reentry vehicle flight tests?

Mr. MARCY. On March 6, 1975, the first Trident Evader MaRV (MK-500) was launched from Vandenberg Air Force Base on a Minuteman I booster. The test was conducted at an ICBM range with impact being observed by a variety of sensors at Kwajalein.

Detailed analysis of flight test data is in progress. Preliminary results indicate that the test met all of its objectives. These included demonstrating [deleted].

DEVELOPMENT OF TRIDENT II

Chairman McCLELLAN. What are DOD's plans for developing and deploying the Trident II missile?

Mr. MARCY. The Trident II missile is currently under study in order to provide an option to deploy a higher throw-weight, more accurate submarine launched ballistic missile in the late 1980's. Initial funding for the Trident II missile concept formulation is contained in the fiscal year 1976 budget. Current Department of Defense planning protects a fiscal year [deleted] option for deployment of this missile. This larger missile, with its increased capabilities and flexibility when compared to the Trident I missile, is made possible

through the growth room available in the larger missile tube aboard the Trident submarine.

Deployment of Aircraft From Reduced Carriers

Chairman McClellan. With aircraft carrier force levels being reduced, what is the total numbed of aircraft that will be deployed from the reduced carrier force level, and what are the inventory objectives for all carrier based aircraft systems?

Mr. Marcy. Sixty tactical combat aircraft (fighter and attack) are required per nominal Carrier Air Wing (CAW). In addition there is the requirement for varying numbers of special mission aircraft in each CAW, such as Early Warning, Reconnaissance, ASW, Tanker and utility aircraft. The summed requirements for the three active Marine Air Wings (MAW) include [deleted] squadrons of F–14 (12 EU each), [deleted] squadrons of F–4/NACF (12 UE each), [deleted] squadrons of A–6 (12 UE each), [deleted] squadrons of AV–8 (20 UE each), and [deleted] squadrons of A–4 (16 UE each) (To be replaced by V/STOL). In addition, the Marine Corps operates other special mission aircraft. The total inventory requirements for primary fighter and attack aircraft is approximately [deleted] aircraft. In addition to unit equipment (UE) for combat squadrons, about [deleted] of each aircraft type is required for training and another [deleted] is required for "pipeline" (those aircraft out-of-service for overhaul).

R.D.T. & E. for NACF

Chairman McClellan. Why does the Navy need 16 research and development aircraft, considering the NACF should benefit from ACF testing?

Mr. Marcy. The research, development, test and evaluation (RDT&E) plan for the NACF reflects the requirement for Navy integration and testing not accomplished in or not directly applicable from ACF development and test. As the required differences between the ACF and NACF are further defined in detail during the source selection process, it may be possible to reduce the number of NACF RDT&E aircraft and still insure adequate integration and testing, including carrier suitability, Naval Mission verification, effects of required modifications on strength and performance and integration with other Navy command and control systems.

Chairman McClellan. Why are the ACF and NACF planned with radars of different ranges even though both aircraft have a designated air superiority mission?

Mr. Marcy. The employment requirements of the ACF and NACF are different. The ACF will supplement the F–15 for close-in engagements to relieve the unfavorable numerical advantage of potential enemy fighters. The ACF will also supplement and eventually replace F–4 aircraft in air-to-surface missions. The NACF will compement F–14 fighters of the Navy and Marine Corps and must engage numerically superior enemy fighter forces in autonomous operations. The limitation of carrier deck space and Marine Corps SATS capability inhibits the use of supplemental NACF aircraft to relieve the numerical disadvantage. Therefore, the NACF must be capable of both medium range and close-in aerial combat which requires a larger search and track radar volume than is required for the close-in fighting ACF.

LWF and ACF Hardware

Chairman McClellan. Congress told the Navy to maximize use of Lightweight Fighter (LWF) and Air Combat Fighter (ACF) hardware and technology in the NACF. Has the Navy quantified the extent LWF and ACF hardware and technology transfer will be achieved in the NACF?

Mr. Marcy. The quantified value of hardware and technology transfer from the LWF and ACF programs is part of the Source Selection Evaluation criteria, to the degree that such transfer can be quantified. Certainly sub-component design efforts and state-of-the-art technology transfer is very high to the proposed NACF designs. NACF use of identical LWF or ACF parts will be limited substantially by the carrier suitability and employment requirements of the NACF as well as those sub-components that are used in common with other co-deployed Navy aircraft. The Source Selection Evaluation, however, is expected to make available to the degree possible a quantified comparison of technology and hardware transfer from the LWF and ACF designs to the NACF.

NACF Program Costs, Schedule and Performance Goals

Chairman McClellan. The NACF's total program cost estimates have not been completed, firm schedule milestones have not been established, and performance characteristics are still subject to change. What are the NACF's program cost, schedule and performance goals?

Mr. Marcy. The ongoing Service Selection Process is expected to provide trade-off parameters effecting cost schedules and performance. Those trade-off decisions cannot be made until completion of the technical Source Selection Evaluation anticipated in May 1975.

In broad terms, the NACF is expected to cost less than half the cost of the F–14 in production for the first 400 aircraft and be introduced into the fleet in 1981. The operational performance of the NACF is that required to replace overage F–4 aircraft not replaced by F–14's and eventually replace A–7 aircraft as they reach the end of useful service life, considering the projected threat and mission environments existing in the mid 1980's.

Chairman McClellan. What impact will the ACF program and the attendant potential of foreign military sales have on the NACF program's material and production requirements?

Mr. Marcy. The overall impact of ACF procurements on the NACF program is being assessed as part of the source selection process. If combined production facilities and material resources are possible for the ACF and NACF, the effect of co-production should be manifest in reduced production costs. If co-production is not feasible as evaluated during the source selection process, there may be reduced effect of ACF production on the NACF program.

Chairman McClellan. What effect would an increase procurement of F–14s have on NACF deployment and unit cost?

Mr. Marcy. Subsequent to the minimum force of 18 Department of the Navy F–14 Squadrons, the NACF and F–14 will provide a one-for-one replacement for F–4 aircraft. A–7 replacement requirements by NACF aircraft are not effected by F–14 procurement. The procurement unit cost of the NACF will be substantially less than the F–14. The production rate of NACF aircraft will have a normal effect on unit costs.

Chairman McClellan. Could the Marine Corps meet its mission requirements more effectively and with fewer aircraft if the NACF replaced both Marine Corps F–4's and A–4M's?

Mr. Marcy. The Marine Corps has a firm requirement for an all V/STOL light attack force. Current USMC A–4 aircraft as they reach the end of service life, will be replaced by improved V/STOL aircraft. NACF aircraft for the Marine Corps are required to replace [deleted] squadrons of overage F–4 aircraft. The combination of F–14 and NACF aircraft in the Marine Corps fighter force will improve effectiveness as compared to the current F–4 force but will not reduce the number of aircraft required since that requirement is based upon sortie commitments to defend a Marine Corps objective area.

Ordnance Use for NACF

Chairman McClellan. What ordnance does the Navy plan to use for the NACF? What is the rationale for ordnance carried versus ordnance not carried?

Mr. Marcy. The NACF is expected to employ all of the current and planned tactical air weapons except [deleted]. Trade-off issues regarding that goal will be evaluated during the source selection process. The [deleted] could be included in the weapons suit if it is deemed cost-effective to do so.

Chairman McClellan. What differences and additional costs result from optimizing an NACF to fighter or attack missions? Will optimization result in the Navy procuring two different aircraft?

Mr. Marcy. Configuration trade-off analyses are inherent in the ongoing source selection process. Presolicitation Notice responses from industry as well as Navy studies indicate that certain configuration options may produce substantial savings by optimizing individual NACF aircraft for primary missions. However, the basic airframe, engine and primary avionics of all NACF aircraft are expected to be common. Certain weapons system avionics equipments may be interchangeable to permit mission optimization at overall reduced costs.

HARPOON

Chairman MCCLELLAN. Has the program cost estimate for the Harpoon program now stabilized?

Mr. MARCY. The $1215.7M WPN estimate presented in the 31 December 1974 SAR is for one particular mix of missiles and launch platforms for which it is stabilized. Changes to missile and launch platform quantities or types, corresponding support and escalation indices, reflecting inflationary trends, will of course change the estimate. This is also true of the Development cost estimates.

Chairman MCCLELLAN. Describe current efforts if any aimed at cost reductions or performance/cost trade offs.

Mr. MARCY. A Harpoon Technical Review Team has been established with charter purpose as follows:

HARPOON TECHNICAL REVIEW TEAM CHARTER

The purpose of the Harpoon Technical Review Team is to review the Harpoon program to provide an impartial and objective assessment of the program in terms of production cost reduction. The team shall study the missile, its components (both CFE and GFE), missile tools and test equipment, support equipment, and associated data and documentation in terms of cost reduction, value engineering improvements, design modifications, etc. These recommendations may impact the design, drawings, specifications, data, facilities, or other areas pertaining to the Harpoon missile and its ancillary equipment.

An interim report will be provided on 2 March 1975 which will include a plan for the on-going value engineering study and will describe the major findings of the team to that date. A final report will be submitted to PMA–258 by 1 July 1975 which will include the team's complete findings, conclusions, and recommendations.

This Technical Review Team will report results to the Commander, Naval Air Systems Command prior to mid May 1975. In prosecuting their efforts in this study, the team has coordinated with a similarly constituted McDonnell-Douglas team which is additionally examining cost control areas.

Chairman MCCLELLAN. Will HARPOON testing against sophisticated countermeasures cover the projected operational environment if not, why not?

Mr. MARCY. The HARPOON seeker has been flown in captive flight against a complete range of electronic countermeasures and has exhibited satisfactory capability. Additionally, each development phase missile firing has been done against representative target conditions, including the same sophisticated countermeasures, where target expendability permits.

Chairman MCCLELLAN. What decisions if any have been made on the intended use of the production design data package?

Mr. MARCY. The production design data package has as its intended use the control of missile and associated hardware configuration and as a standard to measure the manufactured product. The data package does offer the potential for second source production of the missile or related hardware.

Chairman MCCLELLAN. Will HARPOON testing against sophisticated counter- objective for Harpoon? If so, what is the basis for the change?

Mr. MARCY. The Navy reviews the procurement objective of all weapons annually. As the influence of the threat and other factors, such as associated weapon capability changes, it is expected that Harpoon procurement quantity will change.

QUANTITY TRADEOFFS BETWEEN SYSTEMS

Chairman MCCLELLAN. Are any quantity tradeoffs being considered between the Harpoon, Walleye and Condor Missiles? Would increased Harpoon development effect the required inventory levels of the Walleye and the Condor?

Mr. MARCY. No quantity tradeoffs among these weapons is presently being considered. There are two different methodologies which are used to determine the requirements for these missiles. Walleye and Condor can be used against both ground and sea targets. The model used to compute these requirements is the Navmor model. All air to surface weapons are considered for use against every target and that weapon is chosen which has the best performance according to some criterion of effectiveness—the Navmor uses both least cost per kill

and maximum kills per sortie (the latter for the first 30 days only). A portion of the Soviet and Warsaw Pact combatant ships is considered as targets in Navmor, along with other ground targets. Condor and Walleye are chosen for use against a variety of targets; including ships. However, none of the weapons considered in Navmor have an all-weather capability. Because of this, and because of the importance of neutralizing the Soviet/Warsaw Pact naval threat, Harpoon is being developed as the Navy's primary anti-ship missile. It's all-weather multi-platform launched capability make it a unique anti-ship weapon. For this reason, the requirements for Harpoon are computed by a new methodology, which is now in use by OPNAV for all threat oriented items, including Harpoon, torpedoes, and anti-air missiles. This threat methodology considers the number of enemy targets, the number of our own Harpoon platforms (aircraft, submarines, and surface ships), and the effectiveness of the weapon. This new methodology has also been applied in a limited way to the Navy A–6 aircraft, against surface ships, since that aircraft is not presently designated for Harpoon. (It should also be borne in mind that although all of the above items are calculated separately, the total number of ship targets which are considered killed does not exceed the actual numbers available, so that there is no double counting when applying these methods). This, from the above discussion, it is evident that the derivations of Walleye, Condor, and Harpoon are done separately, and that these weapons are considered for use against those targets and in those situations which are most appropriate. For this reason, no quantity tradeoffs among these weapons is presently being considered.

Would increased Harpoon deployments affect the required inventory levels of the Walleye and the Condor?

Not necessarily. The new threat methodology which is used to compute Harpoon requirements is a function of the enemy targets, the Harpoon platform and the weapon effectiveness. Therefore, increasing the number of Harpoon launching vehicles would increase the total Harpoon requirements, even though the size of the threat may not change.

Sparrow III AIM–7F Missile

Chairman McClellan. Why haven't AIM–7F approved program characteristics been fully demonstrated? What is the plan for demonstrating these characteristics and the confidence level that they can be achieved?

Mr. Marcy. Two technical characteristics, maximum range and maximum launch/flight speed, have not been completely demonstrated because of launch aircraft speed or available weapons systems radar power limitations. We believe what has been demonstrated to date in these two areas are practical operational limits. The following are the technical versus demonstrated capabilities.

Characteristic	Technical requirement	Demonstrated (date)
Maximum launch/flight speed	[Deleted] mach	[Deleted] (June 20, 1974).
Maximum range	[Deleted]	[Deleted] (Oct. 27, 1971).

Two other operationally meaningful characteristics have not been totally demonstrated due to target limitations. These are: (1) very high altitude, high speed capability and (2) very low altitude capability. The former, high altitude, high speed [deleted] has been partially demonstrated several times with the most realistic being a [deleted] miss and good fuzing against a BOMARC B target at 71,000 ft. and Mach 2.70. All were fired from F–4 aircraft. We plan additional demonstrations using F–14's and F–15's in the near future against other BOMARC B targets.

Very low altitude target control is most difficult and to date we have been unable to shoot at a target lower than [deleted] ft with the lowest successful intercept at [deleted] feet. Future very low altitude tests are planned for the active fuze tests which are on going at this time. We have high confidence that we will demonstrate operationally meaningful capability in these areas.

Active Fuze and Monopulse Seeker Developments

Chairman McClellan. What is the current status of the active fuze and monopulse seeker developments? If these developments are not successful how will the capability of the AIM–7F compare with the AIM–7E?

Mr. MARCY. The active fuze development is well along and is presently in TECHEVAL with plans for OPEVAL this summer. The monopulse seeker effort has just commenced an 18 month, two contractor, competitive development from which we will choose a single design.

Concerning the effects if these developments are not successful—in the event the active fuze is not successfully developed, the fuze presently incorporated in the AI–7F is [deleted] than that incorporated in the AIM–7E series.

In the event the monopulse seeker is not successfully incorporated in the AIM–7F that missile [deleted] than AIM–7E series in the areas of guidance in heavy clutter and ECCM. However, the AIM–7F baseline seeker can [deleted] than the AIM–7E series. When the latter AIM–7F characteristics is compared in context the missile's new motor, fuze, warhead, and solid-state reliability, the AIM–7F [deleted] the AIM–7E series.

Chairman MCCLELLAN. To what extent will the active fuze and monopulse seeker be incorporated into AIM–7F's in production or inventory?

Mr. MARCY. These developments will only be incorporated as new production line changes. No retrofit is presently forseen.

Chairman MCCLELLAN. What are the technical areas which must be resolved on the active fuze and monopulse seeker and the degree of risk involved?

Mr. MARCY. The technical areas of major interest in the active fuze centers around its cutoff range, burst point control, effect of clutter in both guidance and fuze frequencies and ECM vulnerability. Tests results to date do not indicate high risk in any of these areas.

In the case of the monopulse seeker, technical areas of major interest are overall design reliability and producibility, clutter rejection, ECCM capability, and/or ECM vulnerability, and sensitivity. Since both competing contractors have significant experience in monopulse design and production, we believe that only a normal, moderate level of risk is associated with this program.

AIM–7F IMPROVEMENTS

Chairman MCCLELLAN. What other improvements are currently planned or being considered for the AIM–7F? Will these improvements have application to other missile development programs?

Mr. MARCY. There are no other improvements currently planned or being considered for the AIM–7F.

Chairman MCCLELLAN. What is the status of the development of these improvements and what is the potential impact on the AIM–7F program in terms of availability, increase in performance, and costs?

Mr. MARCY. Since there is no additional status to report, we will advise the committee in subsequent proceedings if additional improvements become warranted at a later date.

HIGH SPEED ANTI-RADIATION MISSILE (HARM)

Chairman MCCLELLAN. What will the total cost be for the HARM capability considering total HARM inventory requirements and costs to equip or modify aircraft for HARM missiles?

Mr. MARCY. Total RDT&E funding for development of the baseline HARM missile and avionics system, long term avionics and future missile expanded capabilities will cost $126,700,000. Total Navy and Air Force inventory requirements have not yet been determined. The Navy currently plans to procure 2935 missiles through Fiscal Year 1981 for a cost of $334,700,000. In addition, equipping 390 A–7E aircraft with HARM capability is being proposed for a cost of $53,200,000, including hardware kits, launcher modifications, and A–7E trainer retrofits. Thus, the cost of the total HARM development, current Navy production plan, and proposed aircraft installations will cost $514,600,000.

Chairman MCCLELLAN. Since engineering development has slipped about 17 months and the Initial Operating Capability date has not changed, how realistic is the Navy's planning for this program?

Mr. MARCY. The change of DSARC from October 1974 to March 1976 is merely a change in the milestone decision point and not a change in the program schedule for work to be accomplished. The delay in DSARC II will allow for validation of contractor hardware performance and pricing and for the development of a complete Air Force—Navy HARM program. No change in IOC is anticipated because of the change in DSARC II.

Chairman McCLELLAN. Why did the Navy commit itself to a total development and pre-production schedule before receiving approval to begin engineering development.

Mr. MARCY. The contract with the Weapons System Integration Contractor has a series of options, for the three program phases—development, prototype, and pilot production. Only the first option has been exercised and the contractor is proceeding on the first segment or Advanced Development portion of phase one. The DSARC II decision occurring during Phase one will have no contractual impact on the contractor (except if decision is made to cancel the program, at which point the contract would be terminated). The contract as presently set up has the flexibility to allow exercise of options without tightly constraining time limitations, thus helping to protect the Navy from exposure to renegotiation costs caused by DSARC delays. The Navy has not committed itself beyond Phase One, the Development Phase. There has been only one renegotiation which recognized extension of the original Baseline Coordination Phase from 4 months to 6 months and the Phase One program stretchout caused by the Congressional reduction of FY 1975 funds.

HARM TESTING AT EGLIN AIR FORCE BASE

Chairman McCLELLAN. Whether there would be any advantages in performing some of the HARM testing at the Air Force's missile testing range at Eglin Air Force Base?

Mr. MARCY. The Navy and Air Force are currently developing a joint Test and Evaluation Master Plan (TEMP) for coordinated HARM test requirements through completion of the HARM development. The plan includes use of Air Force aircraft for HARM firings to insure compatibility with Air Force aircraft and avionics. In addition, Air Force test facilities, including Eglin could be used if considered appropriate for more thorough evaluation.

Chairman McCLELLAN. How does HARM compare in flyaway cost with the STANDARD ARM missile?

Mr. MARCY. The relative STANDARD ARM and HARM missile unit flyaway costs expressed in constant Fiscal Year 1976 dollars are $120,900 and $63,600, respectively. These estimates are based on extrapolated costs for a procurement of 1250 STANDARD ARM and 5000 HARM missile. These quantities reflect realistic operational requirements. Larger quantity procurements of STANDARD ARM were not considered due to operational restrictions and inventory objectives.

Chairman McCLELLAN. How does Navy plan to overcome or compensate for enemy tactics such as shutting down the radar to confuse the HARM anti-radiation seeker?

Mr. MARCY. [Deleted.]

PHALANX

Chairman McCLELLAN. In the Phalanx Weapon Specifications Supplement, prepared by the Navy in 1972, four targets are listed as primary threat simulators. In addition, that document says many of these targets are available.

Why were none of these targets selected for Phalanx testing?

Are these targets still available?

Mr. MARCY. The potential targets in the Secret supplement of WS 12754 were evaluated and the following conclusions were made:

(1) MQM–42A (Roadrunner). This target was an Army development vehicle which was discontinued prior to the CIWS Engineering Development Contract. Both the Army and the contractor (Columbus Division North American Aviation) were contacted as to possible hardware availability with no success.

(2) BQM–34E. This drone was considered due to its M 0.95 capability at low altitudes. At the time of the basic CIWS Engineering Development test planning this target was in short supply and presentation costs were very high. This speed was not considered advantageous over its high presentation costs since a speed of M 0.75 could be obtained from a less costly drone, the BQM–34A.

(3) RIM–8A (TALOS LAST). TALOS was considered as a target. At the start of Engineering this target program was still in the paper stage. Since then there have been several Development Flights using TALOS, but due to the characteristics of its ram-jet propulsion, it is not presently projected as a target within the CIWS performance requirements.

(4) PQM 56A. Target was never developed.

REALISTIC TESTING OF PHALANX

Chairman MCCLELLAN. The Congress specifically instructed firings against realistic targets, but according to certain representatives of Navy activities involved in Phalanx testing unrealistic targets are planned for use.

Why is the Navy expending funds for tests which do not demonstrate system capabilities against the primary threat?

Will Phalanx be tested realistically?

If so, how?

Mr. MARCY. The Navy is thoroughly testing all the systems critical operational capabilities against realistic threat characteristic.

Yes, the Phalanx will be tested realistically.

First.—The target characteristics necessary to realistically represent the threat are:

1. Radar cross section;
2. Terminal speed;
3. Size.
4. Vulnerability.

The first two characteristics are represented to the system [deleted]. These are the characteristics which determine the system's capability to detect, acquire, and track prior to open fire range. The size needs to be realistically represented to demonstrate hit capability over the open fire period. Vulnerability can be determined in static ground tests by firing at the target in a fixed position and determining the number of hits necessary to destroy it. A high confidence of the system capability can therefore be determined in a step-by-step orderly and controlled test program which produces good engineering data.

Second.—Realistic testing was therefore conducted in a step-by-step program in which each successive step verified system critical performance parameters and provided valuable data inputs with which the system computer model was verified. The following testing has been performed:

(1) To determine system capability to detect, acquire, track and open fire at maximum performance range over 1,000 tests against manned aircraft, drones and tow targets have been conducted. In addition, an electronic target simulator [deleted]. Over 5,000 tests were conducted with the electronic target simulator.

(2) Realistic testing to determine hits predicted by the simulation model was accomplished by using a special designed tow target called LOFAT. To realistically test for hits, the target characteristic which had to be duplicated was size. [Deleted.] The test results in over 40 firings have been used to validate the computer performance result.

(3) To determine lethality, tests consisted of firing tests against [deleted]. The Phalanx round were fired at predetermined time intervals that correspond to demonstrated intercept range and with velocities representing the closing velocity of the round at target intercept. [Deleted.]

Third.—Present Tactical Missile Test (TMT) targets for dynamic flight testing were selected which are representative of the threat as follows:

(1) BQM–34A:

(a) Presents a radar signal return which is representative of expected threat radar return. Therefore, BQM–34A realistically tests the system's critical operational capability to detect, acquire, track and open fire at maximum open fire range.

(b) Presents a representative physical size. Therefore, the Phalanx system's capability to obtain the necessary number of hits, which in prior testing was sufficient to destroy the threat, is demonstrated.

(c) Presents a terminal speed representative [deleted].

(2) AQM–37A:

(a) Same as 1.a and 1.c above.

(b) Presents a physical area one-sixth the threat area. Therefore, the number of hits will be less than that against the real threat; however the number can be directly correlated to the hits obtained against the real threat. This target provides additional data with which to further validate the computer simulation.

(3) [Deleted]:

(a) Same as 2.a and 2.b above.

(b) Presents a warhead. Vulnerability was determined in static lethality tests conducted at 29 Palms, California, in 1974; the hits necessary to destroy [deleted]

were equivalent to the hits necessary to destroy [deleted]. Since targets with warheads are more vulnerable at higher velocity because of the higher kinetic energy delivered by the round, [deleted] and its small size, will provide an excellent assessment of debris damage for close-in kills.

Anti-Ship Missile Defense Systems

Chairman McClellan. Anti-ship missile defense systems have been around for at least five years.

Has the Navy attempted to develop targets which will realistically test these systems?

If so, how?

If not, why not?

Mr. Marcy. The Navy has recognized the "gap in our ability to simulate [deleted] anti-ship cruise missiles and is currently developing a plan which is intended to provide a target for use as a full scale representation [deleted]. This development is under the technical management of the Naval Air Systems Command and is referred to as the "Anti-Ship Missile Target" (ASMT).

No attempt will be made to duplicate threat characteristics such as warhead, warhead placement or physical structure strength as the Navy has concluded lethality testing of warhead/structural vulnerability are best determined under more controlled conditions and to do so would make the cost too high.

The ASMD Target Support Plan also points out that BQM–34A and AQM–37, properly modified, provide partial evaluation capability [deleted].

Phalanx 20-mm Gun

Chairman McClellan. Representatives from Navy activities have questioned whether the Phalanx 20 mm gun will be effective against the primary threat family of missiles. These representatives have also stated that the static warhead tests at Twenty-Nine Palms added very little to demonstrating gun lethality.

Why was the 20mm gun selected?

Why is the Navy conducting tests against sea-skimmer warheads which are softer than primary threat warheads, when sea-skimmer is not a threat at this time?

Why have lethality tests been limited to static firings against non-representative warheads?

Mr. Marcy. During the Phalanx feasibility program, 1969, an evaluation of potential gun systems was carried out. A variety of candidates were considered. The Vulcan M–61 gun was selected for several reasons.

(a) It had a high fire rate and low dispersion which were critical characteristics in the selection.

(b) It was a lightweight, small gun which could be readily adapted to an on-mount configuration which was also a key parameter.

(c) It was in production and had a proven high reliability.

(d) No higher caliber gun was available with the high "fire power" needed.

The static lethality tests against [deleted] missiles were conducted to obtain more data on lethality; the latter two missiles were determined to be [deleted]. These tests provided more data, over a larger cross-section, on vulnerability. The static tests against the missiles listed in question 50 above were determined to be *representative* of the expected threat vulnerability characteristics. They were readily obtainable where actual threat warheads were not. They complimented the 1971 firing tests against [deleted].

Chairman McClellan. Navy testing organizations in the Phalanx Program believe that lethality of the system should be determined early in the program and that dynamic sled tests are a good means to demonstrate lethality. Such tests were proposed to the Project Office in 1973.

Why were such tests not performed?

Are they planned to be performed?

If so, when?

If not, why not?

Mr. Marcy. The Navy agrees that the lethality of the system should be determined early in the program, that is the reason that firing tests [deleted] were run at Camp Roberts, California, in October 1971. The Navy has looked into the feasibility of running sled tests to determine the lethality of the system. This

was done even before the Camp Roberts tests but for the following reasons the tests were not done:

1. Detonation of a large explosive charge next to the sled rails would damage the track and result in excessive time periods for repair and increased program costs.

2. Realistic vulnerability evaluation under sled test environment was of concern due to ground effects, threat/sled mounting, track vibration, all of which must be determined, and add to program costs.

3. It was determined that reasonable aerodynamic loading could be simulated in static tests, and more important, the static tests would allow a more controllable environment in which to measure accurately the results.

The Navy has been attempting to get [deleted] if received, those that would be in flyable condition could be used for either static or sled tests. In the interim, the Navy has developed a plan to take [deleted] presently available and conduct a sled test at NWS China Lake. Work is progressing on a sled test with test-runs to commence in late June at the Naval Weapons Center, China Lake, California.

PROBLEM AREAS OF MAJOR SYSTEM

Chairman MCCLELLAN. In July 1974, the Deputy Commander of NAVSEA instructed the NAVSEA Chief Engineer to head a task force of representatives from various technical agencies to inquire into the major system problem areas.

What were the specific findings of that panel?

Why has little or no progress been made as to:

(a) Improved reliability?

(b) Correcting the clutter problem caused by large objects such as islands and ships?

(c) Increasing the projectile tracking range?

Mr. MARCY. On-site summary by the NAVSEA Chief Engineer was that the concept was sound and that the appreciation, by the designers, of the design related performance implications was impressive. Subsequent written reports recommended further testing of reliability and performance modifications (these have been accomplished, and are continuing to be accomplished, using Prototypes No. 1 and No. 2). It was further concluded to be mandatory to include seven specific items of design change for Reliability/Maintainability improvement in the Operational Suitability Model (OSM) configuration (this is currently being done).

(a) As recommended by the panel, specific items of design change for reliability upgrade are designed into the OSM configuration. By test on subsystem proofing models, it has been demonstrated that major improvements have been achieved. System level tests are underway, using Prototype No. 2, to demonstrate the aggregate improvement of all the specific items.

(b) In fact, considerable progress has been made. Tests on Prototype equipment have pin-pointed the cause of reduced performance in heavy land mass environment, and subsystem tests have verified the appropriateness of planned improvements. Computer software modifications, initiated while Phalanx was still in IOT&E on board the USS *King*, have been further refined. System level evaluation of the net effect of these composite changes will occur on board the ex-USS *Cunningham* during the present Tactical Test Program. OSM fabrication schedules are based upon incorporating these changes in all three OSM systems.

[Deleted.]

EFFECTIVENESS OF SYSTEM

Chairman MCCLELLAN. Individuals from several technically competent Navy organizations question the system's effectiveness.

Why hasn't this information been presented in prior testimony?

Shouldn't less sophisticated alternative systems be given a higher priority than they have now? List all systems currently under study which might be considered as alternatives to Phalanx. Provide a comparison of capabilities and costs of alternative systems and the Phalanx.

Mr. MARCY. The Navy has assessed and reported on the technical outputs from all the organizations involved in the Phalanx development. All minority views were thoroughly considered as in any development's test and evaluation. Comments from individuals not acquainted with all backup material and data from all organizations were evaluated as to technical worth. What was presented in testimony was the best technical judgment of the vast majority of experts.

Alternative systems would be a missile system. Conventional gun fire control systems have not demonstrated the continuous alert and hitting capability of Phalanx. An autonomous system is required to achieve the reaction time necessary to defeat the low level attack that gets past the tactical air and surface to air missile defense. [Deleted.] No other gun fire control system uses the Phalanx closed-loop spotting concept and integral threat-detection system for quick reaction. Both are required to achieve high probability of kill for defense against "leakage" targets.

No other terminal defense system is comparable in cost when one includes search radar, track radar, computing system, and mount. No other short-range point defense system exists that can fit into the broad spectrum of ship types that PHALANX can.

In consideration of capability, no other system in the country's arsenal or in development can demonstrate effectiveness [deleted], as PHALANX has done.

Exposure of System to Salt-Air

Chairman McClellan. Phalanx's above-deck electronics will be exposed to a salt-air environment.

How can we be sure that the present configuration is adequate to withstand such exposure?

Mr. Marcy. The Phalanx system is designed to be spray-tight and has been tested under controlled conditions for splashproofing in accordance with MIL–E–108. Built-in test features are provided to allow fault isolation to be performed without opening the equipment, limiting its exposure time to the salt air environment during corrective maintenance.

Other design features include conformal coating of electronic components (MIL–C–46057, MIL–I–46058), Heavy Nickel Plating or stainless steel connector shells, with Silicone Rubber Seals (MIL–C–83723). All fasteners, rivets and fraying surfaces are sealed with Polysulfide sealer (MIL–S–8802). All aluminum surfaces are anodized (MIL–8625) or Chem Film (MIL–C–5541). All metal surface finishes use Epoxy Primer (MIL–P–23377) and two coats of Polyurethane Enamel (MIL–C–81773).

Since 1970 over 30 months of test time have been accumulated at San Nicholas Island, the USS *King* and the destroyed hulk ex-USS *Cunningham*. The test results show that with normal preventive maintenance, the current design will satisfactorily withstand the environment.

Two times during Tactical Missile Tests the forward mooring of the Phalanx CIWS test platform yielded in heavy weather which resulted in the ship presenting its low fantail (stem) to the high seas. The Phalanx CIWS, being mounted on that low deck, was exposed both times for several days to seas washing across the fantail and inundating the systems as well as to continual salt spray driven by the high winds. In both cases the Phalanx CIWS survived these unintended but extremely vigorous exposures without any damage or malfunction.

Threat—Representative Targets

Chairman McClellan. The Navy testified in the FY 1975 hearings that threat-representative targets are not available, but in the September 30, 1974, Selected Acquisition Report, the Navy describes the Tactical Missile Tests as firings against targets representative of the threat.

How are these statements reconciled?

Mr. Marcy. A single threat-representative target is not available which realistically represents *all* the threat characteristics, e.g., radar signature return (radar cross section), full spectrum of terminal speed, physical size (area), and vulnerability.

Selected targets were chosen such that their composite characteristics do represent realistic threat characteristics as follows:

(a) BQM–34A:

1. Presents a radar signal return which is representative of expected threat radar return. Therefore, BQM–34A realistically tests the system's critical operational capability to detect, acquire, track and open fire range.

2. Presents a representative physical size. Therefore, BQM–34A demonstrates the system's capability to obtain the number of hits necessary to destroy the threat.

3. Presents a terminal speed [deleted].

(b) AQM–37A:

1. Same as a.1 and a.3 above.

2. Presents a physical area one-sixth the threat area. Therefore, the number of hits on AQM–37A will be less than that against the real threat; however, that number can be directly correlated to the hits obtained against the real threat. This test also provides additional data with which to further validate the computer simulation.

(c) [Deleted.]

1. Same as b.1 and b.2 above.

2. Presents a warhead. Vulnerability was determined in static lethality tests conducted at 29 Palms, California in 1974; the hits necessary to destroy [deleted] were equivalent to the hits necessary to destroy the [deleted] tested in 1971. Since targets with warheads are more vulnerable at higher velocity because of the higher kinetic energy delivered by the round, [deleted] and its small size will provide an excellent assessment of debris for close-in kills.

Chairman McClellan. Will the Navy provide a comparison of the target characteristics of terminal velocity, warhead hardness, and approach angle to the same characteristics for threat missiles?

Mr. Marcy. *Velocity.*—[Deleted.]

No higher speed targets are available. The Phalanx performance against these lower speed targets will validate the computer model and the model can be used to predict performance (Hit capability) against the higher speed targets.

Approach Angle.—[Deleted.] The targets to be used will represent a variety of radar cross sections expected of the threat family and therefore will be realistic to determine system performance.

Warhead Hardness.—Only the [deleted] target has a warhead.

1. [Deleted.] Besides making it far more difficult to hit, the damage range is reduced. The reduced damage range compensates for the smaller warhead in looking at ship's damage from debris.

2. The [deleted] warhead container is made from ¼ inch steel which is comparable to the [deleted] warhead container, except [deleted]. Static tests against each showed that as many hits are required to get a warhead reaction against [deleted]. The slower speed of [deleted] makes warhead reaction more difficult.

3. The small frontal area of [deleted] yields data relateable to a higher speed target. Fewer hits are expected on [deleted]. Fewer hits would be expected on the [deleted] with higher speed.

4. The radar homing system and associated forebody of the [deleted]. Hardness for penetration may be evaluated in terms of sectional density (weight per unit frontal area). The sectional density of [deleted].

Light Airborne Multi-Purpose System (LAMPS)

Chairman McClellan. Does the DOD intend to put LAMPS in the Selected Acquisition Reporting (SAR) System?

Admiral Moran. Yes. The Navy is prepared to comply.

Chairman McClellan. Why did the Navy change the LAMPS mission requirement from a short range mission to an extended range mission before assessing the cost and performance of alternatives for mixes or validating LAMPS worth against competing alternatives?

Admiral Moran. Time constraints precluded the total validation or comparison in alternative mixes. However, full validation will be completed prior to the initial request for procurement.

Chairman McClellan. Is the Navy giving any consideration to limited schedule stretchout so that preliminary test results will be available before commitment to the expenditure of procurement funds?

Admiral Moran. The Navy's current schedule (as presented in the material supporting the FY 1976 Budget Request) provides for completion of all testing of the LAMPS MK III prototype system including formal operational evaluation in October 1979, prior to seeking release for production from the Secretary of Defense in December 1979.

Chairman McClellan. Is consideration being given to soliciting proposals for both short and long range versions in the UTTAS size airframe?

Admiral Moran. The navy plans to request proposals only for the long range version of the LAMPS MK III.

Chairman McCLELLAN. What efforts are planned or being taken to assess LAMPS performance in a hostile countermeasures environment?

Admiral MORAN. The Applied Physics Laboratory of the John Hopkins University has been assigned to assess the electronics countermeasures vulnerability of the LAMPS MK III. In addition, testing will be conducted to ascertain the susceptibility to electronic countermeasures during the Navy's flight tests of the LAMPS MK III components and subsystems in 1975 and 1976.

Chairman McCLELLAN. Will current and future shipboard sensors be able to provide the relatively small, well defined submarine contact areas needed for LAMPS antisubmarine warfare prosecution?

Admiral MORAN. The analysis of fleet performance indicates that the LAMPS system can easily cooperate with our present and projected sensor systems. The basic findings of these efforts is that MK III has the ability to localize submarine contacts even in a poor case such as a single towed array line of bearing.

TORPEDOES CARRIED BY LAMPS HELICOPTERS

Chairman McCELLAN. What is the status of current effort and the planned future effort to insure that torpedoes to be carried by the LAMPS helicopter will be effective against current and advanced submarine threats?

Admiral MORAN. There are two programs underway concerning the lightweight torpedoes carried by the LAMPS helo. The MK–46 Torpedo Nearterm Improvement Program (NEARTIP) and the Advanced Lightweight Torpedo (ALWT). An improvement program for the MK–46 is developing retrofit packages that will permit the modernization of the torpedo. [Deleted.] The program will be completed and ready for production in [deleted]. With a view toward the introduction of increasingly sophisticated submarines and torpedo countermeasures in the future and advanced development program defining an advanced lightweight torpedo (ALWT) for use by Helos and other launch platforms commenced in FY 75. The ALWT is intended for use commencing in the [deleted].

Chairman McCLELLAN. What is the status of consideration being given to using the LAMPS helicopter in the HSX role? What impact would there be on the LAMPS helicopter if it were selected for the HSX role?

Admiral MORAN. UTTAS has been selected by the Navy as a candidate for the LAMPS MK III airframe and for the replacement of the SH–3 helicopter. The HSX requirements are still being reviewed. When the configuration of the HSX aircraft as to avionics and mission requirements are identified, a suitable airframe will be investigated. The impact on the LAMPS helicopter as an HSX candidate would be determined in the investigation.

PATROL HYDROFOIL GUIDED MISSILE SHIP (PHM)

Chairman McCLELLAN. The PHM is designed to operate offensively against major surface combatants and othtr surface craft. It may be deployed in areas where enemy submarines are a threat.

Will the PHM have any ASW capability?

How vulnerable is the PHM to submarines?

In what areas of the world will the PHM operate?

How was the quantity of 30 ships arrived at?

Mr. MARCY. Presently, there are no plans to provide an ASW capability for the PHMs.

On the hull, the PHM would be as vulnerable to submarine attack as a conventional ship of its equivalent size. A small, shallow draft ship is a very difficult target for submarine torpedo attack. On its foils, the PHM would be even less susceptible to torpedo attack due to its speed and the small structure actually in the water.

The PHM is as vulnerable to the anti-ship cruise missile as other surface platforms of equivalent size; however, its speed and maneuverability on the foils will provide an extra margin of protection.

It is envisioned that the PHM will operate worldwide in narrow seas, straits and contiguous waters. Its operations in the open ocean will be governed by crew endurance and the logistic support provided.

The decision to produce 30 PHMs was arrived at after a thorough review of Navy assets and tasks and a balancing of high and low mix ship requirements.

In the process of the development of the FY–76 budget, fiscal considerations caused a reduction in the total PHM program to 24 ships. Again this new total was arrived at after a review of assets and tasks.

Chairman McClellan. The lead ship contractor has experienced problems welding the aluminum in the PHM.

Why was aluminum chosen instead of thin gauge steel?

Mr. Marcy. At the time of PHM detail design and construction contract award, operational aluminum ships included PCH–1, PG–84 Class (15 ships), PGH–1 Class (2 ships), AGEH–1, PTF–23 Class (4 ships), SES–100 Class (2 craft), LCU 1637 and the later units of LCM–8 Class. Two of these ships (PCH–1 and PGH–2) had been built under U.S. Navy contract with Boeing, many of the PG–84 Class ships were built in Tacoma, Washington, and the AGEH–1 was built in Seattle, Washington. The Boeing Company had demonstrated performance in delivering two aluminum ships, and the construction site was geographically located where experienced aluminum welders could be hired from the existing labor force. "Aluminum as the hull material for combatant ships", NAVSEC Report 0911–003–0010 of July 1971 documents: Trade off studies between aluminum and steel as the primary hull structure; design criteria; fire protection; corrosion; underwater explosion resistance; electromagnetic shielding; ballistic protection; fabricability; and blast protection. These are the primary technical areas for hull structural material selection and substantiate NAVSEA's confidence in aluminum for this application. "Fabrication, welding and inspection of metal boat and craft hulls" NAVSHIPS 0900–060–4010 of January 1971 was invoked in the PHM construction contract in accordance with routine contractual practice. Considering the background data referenced above (shipbuilding experience, technical parameters, and available management procedures to control the work on the ship floor) aluminum had and still enjoys an advantage over steel for this application. The Project Manager reaffirms the selection of aluminum as the primary hull material.

Chairman McClellan. What advantages will the PHM have over the Patrol Frigate (PF)? Can the PF do the job of the PHM? Were these two ships compared in the cost effectiveness study?

Mr. Marcy. The primary advantages the PHM has over the PF are high speed (in excess of 40 knots) and the capability to operate effectively in high sea states.

The mission of the PF is to provide anti-air, anti-surface, and anti-submarine protection of underway replenishment groups, amphibious forces, small task groups, and military and mercantile shipping. Also, to conduct ASW operations and other naval missions in conjunction with other forces that are assigned to maintain our essential sea lines of communications.

The mission of the PHM is to operate offensively against major surface combatants and other surface forces. Also, to conduct surveillance, screening and special operations.

Yes, PHM and PF cost effectiveness are being compared in a study now in progress.

Surface Effect Ship (SES)

Chairman McClellan. The PHM is an experimental craft in the same area as the Surface Effect Ship (SES). Could a 250 ton SES be constructed for the same cost as a PHM? Could this 250 ton SES perform the mission of the PHM?

Mr. Marcy. A 250 ton SES could be constructed for about the same cost as a PHM.

The 250 ton SES could not perform the mission of the PHM in the open ocean. Although this size SES would be faster than the PHM in lower sea states, it would be speed limited as sea states increased. The Navy believes that the presently planned 2000 ton SES is the smallest feasible ocean-going size.

Cost Per Ship

Chairman McClellan. Expected cost per ship has more than doubled since the development estimate. What effect will this have on purchases by other NATO nations? What effect, if any, would substantial purchases by NATO countries have on our cost per ship?

Mr. Marcy. Decisions by Germany and Italy concerning the number of ships to be built in the U.S. will be reflected in the Production Supplement to the

Memorandum of Understanding. This is still being negotiated. The MOU states that each Participating Government intends to procure the first of its PHMs in the U.S. However, such procurement will become a commitment only upon approval and signature of the Production Stage Supplement.

No firm costs for PHMs have been provided to other NATO countries. There are no known intentions by NATO countries to procure PHMs except that the FRG has indicated a desire to buy up to ten ships.

Quantification of potential reduction to the U.S. per ship cost is dependent on agreements yet to be negotiated in the Production Supplement. The major influences on potential savings are the sharing of the non-recurring costs, the sharing of savings due to learning, and economies of scale which accrue from a quantity buy. Presently planned alternative procurements for the FRG are 1, 5 or 10 ships.

Estimated savings for the U.S. would range from $20 to $30 million for a 5 ship to 10 ship German procurement in addition to the U.S. program.

Additional purchases of the numbers cited would probably result in further substantial savings to the U.S. and other participating nations. However, meaningful estimates of the amount will not be possible until conclusion of the Production Supplement to the MOU and negotiations of a production contract.

Noise Level on Ships

Chairman McClellan. Indications are the ship will be too noisy for the crew to carry on normal voice communication. If true, how will this affect their ability to function effectively? Is there any danger to their health? What effect, if any, on equipment?

Mr. Marcy. In the PHM Technical Audit Report, Pages 3 and 11, concern on this score was restricted to *certain* compartments (EOs and CIC) rather than the entire ship. Airborne noise tests will be conducted to quantify the problem, if any, and remedial action if necessary will be taken to insure there is no danger to the ship, its personnel, or its equipment. The Project Manager has also taken action to provide for correcting and revising the construction procedures and acoustic insulation installation on the production PHM ships, once the matter has been evaluated.

Chairman McClellan. The Navy plans to award production contracts in late 1975. How much more cost growth can be expected if the contracts are not awarded at that time? What impact, if any, will these have on ship quantity?

Mr. Marcy. The current Navy policy is to estimate a one percent (1%) increase in program costs for each month of delay in a production program. This is mainly due to inflation.

Surface Effect Ship (SES)

Chairman McClellan. Public Law 93-365, Title VIII, Section 801, dated August 5, 1974, requires that all new major Naval combatant vessel be nuclear powered. What is the implication of this act on future large tonnage SES? What is the cross over point in tonnage at which nuclear power would be required for the SES? What planning is underway in this area?

Mr. Marcy. We estimate SES as large as 8,000 to 10,000 tons are feasible with gas turbine propulsion. Beyond that nuclear propulsion would be required. Such ships are far in the future. The weight of existing nuclear plants is too great for use in SES. Navy keeps informed on state-of-the-art. Presently, a light weight plant is not in development by Navy, but there are initiatives in industry which show potential to contribute to future Navy efforts in this area.

Lightweight Nuclear Power Plants

Chairman McClellan. Is research being done on lightweight nuclear power plants? If so, when did it start and how far has it proceeded?

Mr. Marcy. About a year ago Navy reviewed a Westinghouse/Lockheed/AEC proposal to study a low specific weight nuclear propulsion system suitable for the SES. After thorough evaluation by the Nuclear Power Directorate of the Naval Sea Systems Command and careful consideration by the Chief of Naval Operations, it was concluded last month, on the basis of the technical evaluation, that further study of this proposal was not warranted. Navy will continue to investigate any promising new advancements in nuclear technology which have potential naval propulsion applications.

FT-9 Gas Turbine Engine

Chairman McClellan. A fully loaded 2,200 ton SES will not reach the speed goal of 80 knots with the currently planned LM 2500 engines. Are more powerful, marine qualified, engines available for retrofit? Are they being developed? When will they be available?

Mr. Marcy. Navy has under development the more powerful FT-9 gas turbine. Delivery of the first three units for test is scheduled for December 1976. Approval for service use expected in October 1978. The 2,200-ton prototype has been designed to accommodate this engine when available.

Chairman McClellan. The Navy is developing or has in the fleet many ships and aircraft that might perform the same missions as the SES. These ships and aircraft include the PF, DD-963, DE-1052, S-3A, P-3, SH-3, LAMPS, and HSX. Has the Navy examined force mixes and investigated how these ships and aircraft tie together and relate to each other?

Mr. Marcy. Yes, Navy and other government organizations have conducted some 15 studies and produced 44 reports on SES. Contractors added 24 more. They vary in scope and depth. Some compared SES, PF, DD-963 and SSN. Another considered a force mix of SES and PF. War games examined SES, DE-1052, Sea Control Ship, SOSUS, and LAMPS interactions. More of this work is scheduled for June 1975. Until prototype T-E is done, force level decisions are premature.

Chairman McClellan. What is the effect on the SES program of the $6.5 million budgeted to be spent on studies concerning other advanced naval vehicles? Should this cost be part of the SES program?

Mr. Marcy. Were the $6.5 million budgeted for the advanced naval vehicles study to be spent for SES technology, one would expect further advances in the SES program. However, the SES program is structured to the allotted funds. It is planned to fund this study effort under the Ship Development (Advanced) program (PE 63564N) after FY 7T, as required.

AEGIS

Chairman McClellan. Has the need for AEGIS been fully examined? What assessments have been made of the threat versus U.S. capabilities?

Mr. Marcy. The need for AEGIS has been assessed in detail by many agencies over the last 10 years. Starting at the broadest level of analysis we have looked at our capabilities to carry out assigned naval missions against both the existing and projected threat in many geographically oriented campaign studies [deleted]. Secondly, through our analytic assessment program (AAP) we have looked at specific warfare areas to assessing our capabilities against the threat. Anti-ship missile defense has been and continues to be closely examined in the AAP. The following examinations are among others which can be listed:

"Withington Committee" on ASMS;
Commonality Study relative to SAM-D;
CNA FAAW-III Study;
"Skolnick Committee" for MAT-03;
CNA CAM-Study;
Op-96 Studies relative to DG;
APL Floats Scenario Studies;
GAO Reviews;
Presidents' Scientific Advisory Committee Review;
APL and RCA studies of Design Features Relative to Threat;
IDA study for DDR&E;
Several CEB's;
Several DSARC's, such supported by a DCP study.
Several studies of conceptual alternates to AEGIS:
[Deleted.]
The studies have consistently shown that:
[Deleted.]
The threat features that require AEGIS capabilities are:
Large coordinated attacks which require massive firepower.
Low altitude and high speed attacks which require fast reaction.
Attacks in countermeasures environments which require resistant sensors.
Multiple azimuth, mixed type attacks, which require accurate rapid target track sorting in high traffic density.
[Deleted.]

Chairman McCLELLAN. What is the estimated cost for an AEGIS System, Missiles and the number of ship platforms needed?

Mr. MARCY. (a). The contractor's estimated cost of an AEGIS Weapon System is $80.0M (FY 76$), based on a quantity buy of 8 systems. This estimate is based on prior CSED acquisition, and is less GFE, spares, Navy support and test and checkout in the combatant ship.

(b) Launcher costs run from $8.0—$10.0M each depending on the number and capacity chosen.

(c) The estimated cost for the SM–2 Missile is $177,000 (FY 76$) each for a production buy of 900. For a buy of 4500 missiles flyaway cost would be reduced to $124,000 (FY 76$).

(d) The estimated cost and number of ship platforms needed is not available at this time. This information is being reviewed by Navy and DOD and a decision on the numbers and types of ship platforms is expected on or before May 1975 in connection with the FY 77 budget submission. It is understood that this information will be forwarded to you as soon as available and in advance of the FY 77 submission if at all possible.

Chairman McCLELLAN. What technical and financial risks are being taken in continuing to develop the AEGIS and launcher while placing reliance on a missile that has not as yet met its critical performance requirements?

Mr. MARCY. As you know both the AEGIS weapon system and the MK 26 Guided Missile Launching System have been installed/proofed/tested in Norton Sound for over a year. The systems have been operated by a Navy crew. The Engineering Development Model has destroyed targets in ECM environments, including supersonic missile targets. The capability has been demonstrated.

AEGIS fires both SM–1 and SM–2. AEGIS tests with SM–1 have been successful. SM–2 propulsion, fuze, airframe and missile dynamics are common with SM–1 and well proven. The significant SM–2 changes are the [deleted] consisting of a [deleted] of SM–2 have already been successfully flight tested providing proof-of-principle. The remaining significant features to be flight proofed are [deleted] have been exhaustively proven in simulations, laboratory tests, and analysis. With the new features of SM–2 already tested in either flight or in engineering ground tests, risks to the AEGIS development are considered minimal.

SM–2 MISSILE

Chairman McCLELLAN. Regarding the missile, what is being done to ensure early flight tests of the SM–2 missile to determine whether it has the actual capability to intercept targets under conditions and against targets representative of the threat.

Mr. MARCY: (a). Early flight testing of SM–2 is underway. It is designed to determine the actual capability to intercept targets representative of the threat. This program consists of a series of 18 missile flights, 5 of which have already been flown from the White Sands Missile Range. This test program is scheduled to be completed by December 1975.

(b) To ensure flight success of the SM–2 there is also a comprehensive preflight environmental testing program. Environmental tests subject SM–2 to extensive vibration, temperature, shock, altitude, and electronic environments. In general, environments are 150% of specification values which greatly exceed flight norms. This testing assures that SM–2 will be a high quality, reliable product and that risks due to systematic and non-systematic missile component, plate and section failures will be minimized, prior to missile flight tests.

(c) Flight testing of SM–2 missiles is carried out against stringent threat representative targets to the maximum extent obtainable from the targets inventory [deleted]. Flight testing will also include [deleted].

SUBCOMMITTEE RECESS

Senator INOUYE. This subcommittee will stand in recess until Friday, March 7, at which time we will meet at 10 a.m. in room 1223 to hear testimony from Navy personnel, operations and maintenance, and naval petroleum service.

[Whereupon, at 3:25 p.m., Wednesday, March 5, the subcommittee was recessed, to reconvene at 10 a.m. Friday, March 7.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

FRIDAY, MARCH 7, 1975

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m. in room S–126, the Capitol, Hon. Milton R. Young presiding.

Present: Senator Young.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

MILITARY PERSONNEL, NAVY

STATEMENT OF VICE ADM. DAVID H. BAGLEY, U.S. NAVY, CHIEF OF NAVAL PERSONNEL

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

REAR ADM. E. J. CARROLL, U.S. NAVY, ASSISTANT CHIEF OF NAVAL PERSONNEL, PERSONNEL PLANNING AND PROGRAMING

REAR ADM. T. J. HUGHES, U.S. NAVY, ASSISTANT CHIEF OF NAVAL PERSONNEL FOR FINANCIAL MANAGEMENT AND MANAGEMENT INFORMATION

LCDR. D. A. STOUFER, U.S. NAVY, EXECUTIVE ASSISTANT, OFFICE OF THE ASSISTANT CHIEF OF NAVAL PERSONNEL

BUDGET REQUEST

Senator YOUNG. This morning the subcommittee will receive testimony in support of fiscal year 1976 budget request for Navy Personnel and Operation and Maintenance appropriation accounts. The witnesses will be:

Vice Adm. David H. Bagley, Chief of Naval Personnel and Deputy Chief of Naval Operations for Manpower; Vice Adm. Pierre N. Charbonnet, Jr., Director of Naval Reserve; Rear Adm. Stanley S. Fine, Director of Budgets and Reports and Director of Fiscal Management Division, and Capt. George G. Dowd, Director, Naval Petroleum and Oil Shale Reserves.

JUSTIFICATION

Senator YOUNG. I think it appropriate to include that material from the justifications that relates to this account.

[The justification follows:]

SUMMARY OF REQUIREMENTS BY SUBACTIVITY

(In Thousands of Dollars)

	FY 1974	FY 1975	FY 1976	FY 197T
1. PAY AND ALLOWANCES OF OFFICERS				
Basic Pay	$957,638	$990,022	$988,678	$245,731
Incentive Pay	48,534	50,385	50,344	12,502
Special Pay	25,789	42,446	40,941	24,200
Basic Allowance for Quarters	115,688	118,326	117,084	29,048
Basic Allowance for Subsistence	39,259	39,780	39,515	9,776
Station Allowances Overseas	7,833	7,946	7,946	1,987
Uniform Allowances	1,554	1,538	1,324	536
Family Separation Allowances	2,817	2,205	2,161	535
Separation Payments	29,540	28,837	24,757	4,813
Social Security Tax - Employer's Contribution	42,822	48,445	49,013	12,167
Missing-in-Action and Prisoners of War	(3,582)	(3,671)	-	-
Total Obligations	$1,271,474	$1,329,930	$1,321,763	$ 341,295
Less Reimbursements	3,926	5,326	7,939	3,051
Total Direct Obligations	$1,267,548	$1,324,604	$1,313,824	$ 338,244
2. PAY AND ALLOWANCES OF ENLISTED PERSONNEL				
Basic Pay	$2,768,784	$2,901,851	$2,873,839	$ 719,173
Incentive Pay	33,184	33,937	34,211	8,693
Special Pay	42,646	40,476	38,793	9,457
Proficiency Pay	37,388	34,906	18,367	3,735
Reenlistment Bonus	97,202	79,844	63,857	19,982
Enlistment Bonus	-	1,240	3,590	898
Basic Allowance for Quarters	342,277	360,723	361,479	90,143
Station Allowances Overseas	20,321	21,395	21,395	5,731
Clothing Allowances	64,086	71,871	71,679	20,164
Family Separation Allowances	9,202	8,864	8,305	2,079
Separation Payments	91,032	94,909	81,332	20,101
Social Security Tax - Employer's Contribution	161.437	169.727	168,120	42,072
Missing-in-Action and Prisoners of War	(43)	(45)		
Total Obligations	$3,667,559	$3,819,743	$3,744,967	$ 942,228
Less Reimbursements	7,547	9,525	12,694	3,462
Total Direct Obligations	$3,660,012	$3,810,218	$3,732,273	$ 938,766
3. PAY AND ALLOWANCES OF MIDSHIPMEN				
Midshipmen	$ 19,026	$20,702	$21,151	$5,323

SUMMARY OF REQUIREMENTS BY SUBACTIVITY

(In Thousands of Dollars)

	FY 1974	FY 1975	FY 1976	FY 197T
4. SUBSISTENCE OF ENLISTED PERSONNEL				
Basic Allowance for Subsistence	$160,732	$188,551	$185,795	$ 46,372
Subsistence in Kind	181,040	207,910	206,393	51,476
Total Obligations	$341,772	$396,461	$392,188	$ 97,848
Less Reimbursements	23,648	23,623	23,681	5,935
Total Direct Obligations	$318,124	$372,838	$368,507	$ 91,913
5. PERMANENT CHANGE OF STATION TRAVEL				
Accession Travel	$ 31,581	$ 41,885	$ 39,892	$ 12,332
Training Travel	34,164	26,094	29,607	7,988
Operational Travel	54,254	48,999	58,387	17,573
Rotational Travel	88,879	115,198	138,646	44,654
Separation Travel	61,715	67,348	62,884	15,188
Travel of Organized Units	21,597	20,682	17,582	4,738
Total Obligations	$292,190	$320,206	$346,998	$102,473
Less Reimbursements	6,566	6,086	1,086	750
Total Direct Obligations	$285,624	$314,120	$345,912	$101,723
6. OTHER MILITARY PERSONNEL COSTS				
Apprehension of Military Deserters, Absentees and Escaped Military Prisoners	$ 360	$ 360	$ 360	$ 90
Interest on Uniformed Services Savings Deposits	4,627	736	729	208
Death Gratuities	2,141	2,505	2,144	633
Servicemen's Group Life Insurance	3,316	1,897	-	-
Total Obligations	$ 10,444	$ 5,498	$ 3,233	$ 931
Less Reimbursements	3	-	-	-
Total Direct Obligations	$ 10,441	$ 5,498	$ 3,233	$ 931

MILITARY PERSONNEL, NAVY

For pay, allowances, individual clothing, subsistence, interest on deposits, gratuities, permanent change of station travel (including all expenses thereof for organizational movements), and expenses of temporary duty travel between permanent duty stations, for members of the Navy on active duty (except members of the Reserve provided for elsewhere), midshipmen, and aviation cadets; [$5,679,810,000] $5,784,900,000.

[MILITARY PERSONNEL, NAVY, 1969, 1971]

[(LIQUIDATION OF DEFICIENCIES)]

[For an additional amount for "Military personnel, Navy" for fiscal year 1969, $7,976,000; and fiscal year 1971, $35,380,000; for liquidation of obligations incurred and chargeable to those accounts: Provided, that the fiscal years 1971 and 1973 Military personnel, Navy accounts shall be adjusted to reflect all payments authorized by Public Law 92-570 on behalf of the fiscal year 1971 account.]

For "Military personnel, Navy" for the period July 1, 1976, through September 30, 1976, $1,476,900,000. (10 U.S.C. 600, 683-4, 701-4, 744, 1035, 1037, 1212, 1475-80, 2421, 2334, 5401, 5404, 5406-9, 5412-17, 5441-2, 5444-7, 5449-52, 5454-5, 5501, 5503, 5865, 6081-6, 6221, 6911-12, 6960, 6969; 26 U.S.C. 3121; chapters 3, 5, 7, 9, and 10 of title 37, U.S. Code; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed for fiscal year 1976 and for the period July 1, 1976, through September 30, 1976.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-05-1453-0-1-051		1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. STRATEGIC FORCES	174,860	188,650	193,046
	2. GENERAL PURPOSE FORCES	2,769,735	2,919,165	2,944,242
	3. INTELLIGENCE AND COMMUNICATIONS	238,670	249,448	244,999
	4. AIRLIFT AND SEALIFT	4,527	4,764	4,826
	5. GUARD AND RESERVE	177,376	187,751	184,759
	6. RESEARCH AND DEVELOPMENT	68,247	71,959	73,901
	7. CENTRAL SUPPLY AND MAINTENANCE	117,575	119,183	120,464
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	1,907,193	1,997,058	1,909,953
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	94,756	96,230	94,818
	10. SUPPORT OF OTHER NATIONS	12,831	13,773	13,872
	TOTAL DIRECT PROGRAM	5,560,775	5,847,980	5,784,900
	REIMBURSABLE (TOTAL)	41,690	44,560	45,400
10	TOTAL OBLIGATIONS	5,602,465	5,892,540	5,830,300
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-20,504	-23,170	-23,220
13	TRUST FUNDS	-788	-382	-1,980
14	NON-FEDERAL SOURCES	-20,398	-20,400	-20,280
25	UNOBLIGATED BALANCE LAPSING	25,324	.....	.....
	BUDGET AUTHORITY	5,586,100	5,847,980	5,784,900
	BUDGET AUTHORITY:			
40	APPROPRIATION	5,586,100	5,679,810	5,784,910
44.30	PROPOSED SUPPLEMENTAL FOR MILITARY PAY RAISES	.....	168,170	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	5,560,775	5,847,980	5,784,900
	OBLIGATED BALANCE, START OF YEAR			
72.40	APPROPRIATION	191,749	271,049	282,029
72.49	CONTRACT AUTHORITY	1,735	.....	.....
74	OBLIGATED BALANCE, END OF YEAR	-271,049	-282,029	-266,929
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	10,081	.....	.....
83	DEFICIENCY IN EXPIRED ACCOUNTS, START OF YEAR	-59,736	-43,345	.....
84	DEFIENCY IN EXPIRED ACCOUNTS, END OF YEAR	43,345	.....	.....
85	DEFICIENCY APPROPRIATION	9,900	43,356	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	5,483,292	5,677,239	5,791,591
91.30	OUTLAYS FROM MILITARY PAY RAISE SUPPLEMENTAL	.....	159,761	8,409

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-1453-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.7	MILITARY PERSONNEL	4,052,661	4,349,675	4,241,469
11.8	SPECIAL PERSONAL SERVICES PAYMENT	131	131	131
	TOTAL PERSONNEL COMPENSATION	4,052,792	4,349,806	4,241,600
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	4,043,154	4,337,337	4,254,280
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	1,077,217	1,019,185	1,002,827
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	80,068	88,026	97,411
22.0	TRANSPORTATION OF THINGS	186,185	204,775	222,700
25.0	OTHER SERVICES	9,966	10,963	12,472
26.0	SUPPLIES AND MATERIALS	157,429	184,440	192,337
42.0	INSURANCE CLAIMS AND INDEMNITIES	2,138	2,380	2,042
43.0	INTEREST AND DIVIDENDS	4,687	834	831
	TOTAL DIRECT OBLIGATIONS	5,560,775	5,847,980	5,784,900
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	9,638	12,473	17,320
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	2,754	3,299	4,060
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	1,835	1,701	304
22.0	TRANSPORTATION OF THINGS	4,289	3,967	707
25.0	OTHER SERVICES	239	217	38
26.0	SUPPLIES AND MATERIALS	22,951	22,914	22,971
42.0	INSURANCE CLAIMS AND INDEMNITIES	*	.....	.....
	TOTAL REIMBURSABLE OBLIGATIONS	41,690	44,560	45,400
99.0	TOTAL OBLIGATIONS	5,602,465	5,892,540	5,830,300

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-05-1453-0-1-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. STRATEGIC FORCES	50,086
	2. GENERAL PURPOSE FORCES	735,594
	3. INTELLIGENCE AND COMMUNICATIONS	59,425
	4. AIRLIFT AND SEALIFT	1,246
	5. GUARD AND RESERVE	46,215
	6. RESEARCH AND DEVELOPMENT	18,849
	7. CENTRAL SUPPLY AND MAINTENANCE	30,315
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	507,710
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	24,469
	10. SUPPORT OF OTHER NATIONS	2,991
	TOTAL DIRECT PROGRAM	1,476,900
	REIMBURSABLE (TOTAL)	13,198
10	TOTAL OBLIGATIONS	1,490,098
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-6,940
13	TRUST FUNDS	-233
14	NON-FEDERAL SOURCES	-6,025
	BUDGET AUTHORITY	1,476,900
	BUDGET AUTHORITY:	
40	APPROPRIATION	1,476,900
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	1,476,900
72	OBLIGATED BALANCE, START OF YEAR	266,929
74	OBLIGATED BALANCE, END OF YEAR	-321,829
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	1,422,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-1453-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.7	MILITARY PERSONNEL	1,041,260
11.8	SPECIAL PERSONAL SERVICES PAYMENT	33
	TOTAL PERSONNEL COMPENSATION	1,041,293
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	1,036,008
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	296,220
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	28,489
22.0	TRANSPORTATION OF THINGS	66,313
25.0	OTHER SERVICES	3,550
26.0	SUPPLIES AND MATERIALS	45,479
42.0	INSURANCE CLAIMS AND INDEMNITIES	633
43.0	INTEREST AND DIVIDENDS	208
	TOTAL DIRECT OBLIGATIONS	1,476,900
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	5,285
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	1,433
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	210
22.0	TRANSPORTATION OF THINGS	489
25.0	OTHER SERVICES	26
26.0	SUPPLIES AND MATERIALS	5,755
	TOTAL REIMBURSABLE OBLIGATIONS	13,198
99.0	TOTAL OBLIGATIONS	1,490,098

INTRODUCTORY STATEMENT

(In Thousands)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total obligations	$5,602,465	$5,892,540	$5,830,300	$1,490,098
Reimbursable program	-41,690	-44,560	-45,400	-13,198
Total direct obligations	$5,560,775	$5,847,980	$5,784,900	$1,476,900
Unobligated balance lapsing	25,324	-	-	-
October 1974 military pay act increase supplemental		-168,170		
Appropriation (adjusted)	$5,586,100	$5,679,810	$5,784,900	$1,476,900

This appropriation finances the costs of active military personnel of the Navy. The program and financing schedule for this appropriation reflects budget activity classifications which are identical to the ten major program classifications used for management purposes throughout the Department of Defense.

The remainder of this book contains material in the form that has been used for a number of years to present the requirements for the Military Personnel, Navy appropriation.

Navy military personnel are engaged in programs for Operation of the Navy, Operation of Defense Agencies, Research and Development, Navy and Research and Development, Defense Agencies. A number of military personnel are assigned to duties with Government agencies outside the Department of Defense. The costs of these personnel are included as a part of the reimbursable program for this appropriation, with reimbursements received from the agencies to which such personnel are assigned.

Obligations for military personnel are distributed to each of the major defense programs on the basis of average officer and enlisted rates. These rates are multiplied by the average strength for officer and enlisted personnel assigned in each defense program. Obligations for permanent change of station travel are excluded from these average rates and entered directly in the applicable defense program.

The justification of estimates for fiscal year 1975 reflects a decrease in end strength of 4,263 since the original submission of requirements, reflectin Congressional decisions during the fiscal year 1975 budget review process and other adjustments.

Permanent Change of Station (PCS) move requirements reflect a number of policy changes implemented to reduce numbers of moves and maintain forces in readiness. Navy is continuing to refine the PCS management and control system for most economical execution of the program.

The following highlights the significant changes by FYDP program between fiscal years 1975 and 1976:

Programs 4, 5, 6, 7, 9, and 10 vary only slightly from fiscal year 1975.

Program 1 increases over fiscal year 1975 primarily because of ship overhaul/conversion schedules and planned strategic force increases.

Program 2 decreases below 1975 primarily because of combat forces which had a net change of approximately 4,000. Other miscellaneous reductions occurred in the construction forces and Sea Control Air Base Operations.

Program 3 decreased below fiscal year 1975 because of the transfer of the cryptologic training activities to Program 8. Other decreases occurred in communication and weather service activities.

Program 8 declined in fiscal year 1976 because of a reduction in training which more than offset the transfer of the cryptologic training activities from Program 3 to Program 8.

Department of the Navy
Military Personnel, Navy

SUMMARY OF MILITARY PERSONNEL STRENGTH

	FY 1974 Actual		FY 1975 Planned		FY 1976 Planned		FY 1977 Planned		FY 1977 Planned
	Man-Years	End Strength 30 June 1974	Man-Years	End Strength 30 June 1975	Man-Years	End Strength 30 June 1976	Man-Years	End Strength 30 Sept 1977	End Strength 30 Sept 1977
DIRECT PROGRAM									
Officers	68,118	66,767	66,286	65,645	64,933	64,132	16,028	64,107	61,983
Enlisted	480,514	474,480	474,939	465,175	460,609	459,187	115,249	466,062	478,338
Midshipmen	4,171	3,197	4,171	4,243	4,150	4,243	1,045	4,350	4,350
Subtotal	552,803	544,444	545,396	535,063	529,692	527,562	132,322	534,519	544,671
REIMBURSABLE PROGRAM 1/									
Officers	210	225	205	209	248	248	98	394	388
Enlisted	1,004	999	817	845	841	841	237	947	946
Subtotal	1,214	1,224	1,022	1,054	1,089	1,089	335	1,341	1,334
TOTAL PROGRAM									
Officers	68,328	66,992	66,491	65,854	65,181	64,380	16,126	64,501	62,371
Enlisted	481,518	475,479	475,756	466,020	461,450	460,028	115,486	467,009	479,284
Midshipmen	4,171	3,197	4,171	4,243	4,150	4,243	1,045	4,350	4,350
TOTAL	554,017	545,668	546,418	536,117	530,781	528,651	132,657	535,860	546,005

1/ Military personnel assigned to agencies outside of Department of Defense on a reimbursable basis under the provisions of 10 U.S.C. 5416.

End Strengths by Grade 1/

Total Program

Commissioned Officers	30 June FY 1974	Reimbursables Included	30 June FY 1975	Reimbursables Included	30 June FY 1976	Reimbursables Included	30 Sept FY 1977	Reimbursables Included
O-10 Admiral	9		10		10		10	
O-9 Vice admiral	41	1	42		37		37	
O-8 Rear admiral (UH)	106	4	103	3	99	3	99	4
O-7 Rear admiral (LH)	138	1	129	1	129	1	129	4
O-6 Captain	3,797	19	3,805	19	3,786	18	3,770	45
O-5 Commander	7,834	31	7,575	31	7,548	39	7,542	95
O-4 Lieutenant commander	14,525	51	14,005	62	13,763	85	13,882	130
O-3 Lieutenant	15,690	53	15,635	71	16,421	81	17,883	93
O-2 Lieutenant (JG)	11,508	29	11,903	16	11,037	16	9,300	16
O-1 Ensign	9,497	26	9,141	-	8,454	-	8,655	-
Total	63,145	215	62,348	203	61,284	243	61,247	387
Warrant Officers								
W-4 Chief Warrant Officer	38		85	2	366	2	368	2
W-3 Chief Warrant Officer	1,641	2	1,434	2	1,657	1	1,628	1
W-2 Chief Warrant Officer	1,978	8	1,606	1	1,036	1	1,219	3
W-1 Warrant Officer	190		391	1	37	1	39	1
Total	3,847	10	3,506	6	3,096	5	3,254	7
Total Officer Personnel	66,992	225	65,854	209	64,380	248	64,501	394
Enlisted Personnel								
E-9 Master Chief Petty Officer	3,841	5	3,635	3	3,588	4	3,596	7
E-8 Senior Chief Petty Officer	8,968	18	8,435	21	8,326	25	8,313	34
E-7 Chief Petty Officer	33,918	87	32,249	90	31,006	108	31,009	163
E-6 Petty Officer 1st class	67,046	207	66,221	185	65,370	177	65,755	201
E-5 Petty Officer 2nd class	82,341	164	82,579	272	81,517	260	81,493	272
E-4 Petty Officer 3rd class	92,718	129	92,691	147	91,500	150	91,487	153
E-3 Seaman	79,489	81	83,364	106	100,077	102	103,933	102
E-2 Seaman-Apprentice	72,789	304	69,341	15	47,413	15	49,098	15
E-1 Seaman-Recruit	34,369	4	27,505	-	31,231	-	32,325	-
Total	475,479	999	466,040	845	460,028	841	467,009	947
Total Officer and Enlisted	542,471	1,224	531,874	1,054	524,408	1,089	531,510	1,341
Midshipmen	3,197		4,243		4,243		4,350	
Total End Strengths	545,668	1,224	536,117	1,054	528,651	1,089	535,860	1,341

1/ Includes Reimbursable active duty military pay strengths, but excludes active duty military personnel paid from Reserve Appropriations.

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Man-Years Strengths by Grade 1/

Total Program

Commissioned Officers	Man-years FY 1974	Reimbursables Included	Man-Years FY 1975	Reimbursables Included	Man-Years FY 1976	Reimbursables Included	Man-Years FY 1977	Reimbursables Included
O-10 Admiral	10	-	10		10		3	
O-9 Vice admiral	44	1	42		39		9	
O-8 Rear admiral (UH)	108	2	103	3	102	3	25	1
O-7 Rear admiral (LH)	141	1	133	1	133	1	32	1
O-6 Captain	3,842	18	3,778	16	3,795	18	944	11
O-5 Commander	7,984	29	7,596	30	7,596	39	1,885	24
O-4 Lieutenant commander	14,759	49	14,277	55	14,084	89	3,455	34
O-3 Lieutenant	16,169	47	16,403	61	17,451	81	4,536	23
O-2 Lieutenant (JG)	11,096	29	11,474	22	10,130	16	2,379	4
O-1 Ensign	10,115	28	9,005	13	8,536		2,068	
Total	64,268	200	62,820	201	61,816	243	15,336	98
Warrant Officers								
W-4 Chief Warrant Officer	50	-	69	-	180	2	92	-
W-3 Chief Warrant Officer	1,377	2	1,498	2	1,600	1	418	-
W-2 Chief Warrant Officer	2,077	7	1,838	1	1,296	1	273	-
W-1 Warrant Officer	556	1	266	1	289	1	13	-
Total	4,060	10	3,671	4	3,365	5	790	-
Total Officer Personnel	68,328	210	66,491	205	65,181	248	16,126	98
Enlisted Personnel								
E-9 Master Chief Petty Officer	3,816	4	3,696	4	3,704	4	910	1
E-8 Senior Chief Petty Officer	9,069	15	8,623	18	8,557	23	2,101	8
E-7 Chief Petty Officer	34,500	85	33,083	91	32,140	102	7,833	41
E-6 Petty Officer 1st class	68,499	207	67,351	190	66,765	180	16,553	51
E-5 Petty Officer 2nd class	83,738	171	82,010	215	84,280	269	20,649	68
E-4 Petty Officer 3rd class	88,090	140	85,622	135	94,496	148	23,209	38
E-3 Seaman	80,491	93	89,036	81	82,074	104	24,459	26
E-2 Seaman-apprentice	76,175	284	70,865	83	55,157	15	11,925	4
E-1 Seaman-recruit	38,180	5	35,470	-	34,277	-	7,851	-
Total	481,518	1,004	475,756	817	461,450	841	115,846	237
Total Officer and Enlisted	549,846		542,247		526,631			
Midshipmen	4,171		4,171		4,150		1,045	
Total Man-years	554,017	1,214	546,418	1,022	530,781	1,089	132,657	335

1/ Includes Reimbursable active duty military pay strengths, but excludes active duty military personnel paid from Reserve Appropriations.

Active Duty Strengths by Months 1/ 2/
(In Thousands)

	FY 1975				FY 1976				FY 1977			
	Officer	Enlisted	Midshipmen	Total 3/	Officer	Enlisted	Midshipmen	Total 3/	Officer	Enlisted	Midshipmen	Total 3/
June	67.0	475.5	3.2	545.7	65.9	466.0	4.2	536.1	64.4	460.0	4.2	528.6
July	66.9	475.2	4.4	546.6	65.4	465.0	4.4	534.9	64.2	460.3	4.2	528.7
August	66.0	476.5	4.4	546.9	65.3	463.5	4.4	533.2	64.1	462.0	4.1	530.1
September	65.6	476.2	4.3	546.1	65.2	463.1	4.3	532.6	64.5	467.0	4.4	535.9
October	65.6	480.5	4.3	550.4	64.8	462.3	4.2	531.3				
November	65.6	481.6	4.3	551.5	64.8	462.5	4.2	531.5				
December	65.8	478.7	4.2	548.8	65.0	469.4	4.1	538.5				
January	66.0	478.8	4.1	548.9	64.9	460.5	4.0	529.5				
February	66.1	476.5	4.1	546.7	64.9	460.0	4.0	528.8				
March	66.2	473.7	4.1	544.0	64.7	459.5	4.0	528.3				
April	66.2	471.6	4.1	541.9	64.6	459.8	4.0	528.4				
May	67.0	468.8	4.0	539.8	65.1	458.7	3.9	527.8				
June	65.9	466.0	4.2	536.1	64.4	460.0	4.2	528.6				
Average	66.5	475.8	4.2	546.4	65.2	461.4	4.2	530.8	16.1	115.5	1.0	132.6

1/ Includes reimbursable active duty Military pay strengths, but excludes active duty Military personnel paid from Reserve appropriations.

2/ Actual data through 30 November 1974.

3/ All monthly totals do not add due to rounding.

SUMMARY OF REQUIREMENTS BY BUDGET PROGRAM
(In Thousands of Dollars)

Title	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
DIRECT PROGRAM				
Pay and Allowances of Officers	1,267,548	1,324,604	1,313,824	338,244
Pay and Allowances of Enlisted	3,660,012	3,810,218	3,732,273	938,766
Pay and Allowances of Midshipmen	19,026	20,702	21,151	5,323
Subsistence of Enlisted Personnel	318,124	372,838	368,507	91,913
Permanent Change of Station Travel	285,624	314,120	345,912	101,723
Other Military Personnel Costs	10,441	5,498	3,233	931
Total Direct Program	5,560,775	5,847,980	5,784,900	1,476,900
REIMBURSABLE PROGRAM				
Pay and Allowances of Officers	3,926	5,326	7,939	3,051
Pay and Allowances of Enlisted	7,547	9,525	12,694	3,462
Subsistence of Enlisted Personnel	23,648	23,623	23,681	5,935
Permanent Change of Station Travel	6,566	6,086	1,086	750
Other Military Personnel Costs	3	-	-	
Total Reimbursable Program	41,690	44,560	45,400	13,198
TOTAL PROGRAM				
Pay and Allowances of Officers	1,271,474	1,329,930	1,321,763	341,295
Pay and Allowances of Enlisted	3,667,559	3,819,743	3,744,967	942,228
Pay and Allowances of Midshipmen	19,026	20,702	21,151	5,323
Subsistence of Enlisted Personnel	341,772	396,461	392,188	97,848
Permanent Change of Station Travel	292,190	320,206	346,998	102,473
Other Military Personnel Costs	10,444	5,498	3,233	931
Total Obligations	5,602,465	5,892,540	5,830,300	1,490,098

SCHEDULE OF INCREASES AND DECREASES
(In Thousands of Dollars)

		Amount
FY 1975 Direct Program		$5,847,980
Increases:		
Annualization of 1 October 1974 pay raise	$ 58,829	
PCS - number of Training, Operational, and Rotational moves	31,050	
PCS - rate/tariff changes	17,152	
Subsistence - revised consumption and preference patterns	3,261	
Enlistment bonus - full year implementation	2,350	
FICA base change from $13,200 to $14,100	2,259	
Officer separation payments - lump sum payments to Reservists	2,000	
Subsistence costs due to leap year	979	
Enlisted submarine duty and initial clothing rates	810	
Special pay for physicians and dentists	645	
Annualization of midshipmen commuted ration rate	336	
Total Increases		$ +119,671
Decreases:		
Strength reduction of 15,704 man years	$107,485	
Separation payments for officers and enlisted	19,759	
Adjustments in skill coverage in Proficiency Pay Program	16,539	
Reenlistment bonuses	16,287	
PCS - number of Accession, Separation, and Organized Unit moves	16,107	
Special pay - officers variable incentive pay	2,576	
Termination of Servicemen's Group Life Insurance	1,897	
Enlisted family separation allowance and Nuclear petty officer continuation pay	1,165	
Incentive pay and uniform allowance for officers and other military personnel cost adjustments	633	
PCS - adjustments in break bulk rate - Military Sealift Command (MSC)	303	
Total Decreases		$ -182,751
FY 1976 Direct Program		$5,784,900

SCHEDULE OF INCREASES AND DECREASES
(In Thousands of Dollars)

1. PAY AND ALLOWANCES OF OFFICERS

		Amount
FY 1975 Direct Program		$1,324,604
Increases:		
Annualization of 1 October 1974 pay raise	$13,564	
Special Pay - Physician's/Dentists	645	
Separation Payments - Lump Sum payments to Reservists - Increase in payments made	2,000	
FICA base change in accordance with P.L. 93-233	2,259	
Total Increases		$ +18,468
Decreases:		
Strength reduction of 1,353 manyears	$20,920	
Special Pay - Variable Incentive Pay	2,576	
Incentive Pay for Hazardous Duty	41	
Uniform Allowances - due to fewer gains	214	
Separation Payments:		
Lump Sum Terminal Leave - due to less losses	1,320	
Lump Sum Terminal Leave - arbitrary reduction in number of days paid	2,696	
Severance Pay Failure of Promotion - due to less payments	267	
Disability Severance Pay - due to fewer payments	114	
MIA Leave Payments	1,100	
Total Decreases		$ -29,248
FY 1976 Direct Program		$1,313,824

PREPARED STATEMENT

The first witness will be Admiral Bagley.
Do you have a statement you wish to make?
Admiral BAGLEY. Yes. If I may, I would like to address five slides to sort of highlight the major parts of my formal statement and submit my formal statement for the record.
Senator YOUNG. Your statement will be inserted at this point.
[The statement follows:]

Mr. Chairman and members of the Subcommittee:

I. Introduction. I am Vice Admiral David H. Bagley, Chief of Naval Personnel and Deputy Chief of Naval Operations for Manpower. I have the privilege of appearing and testifying in support of the FY 1976 and FY 197T Military Personnel, Navy, appropriation requests.

My statement will consist of an overview of the FY 1976 and FY 197T MPN budget request, including the manpower and personnel requirements provided for therein, and a review of major military management programs.

II. Navy Forces and Manpower Requirements

Before addressing the FY 1976 and FY 197T MPN budget submissions, and the manpower requirements upon which those budgets are based, it is most appropriate to review the basis for those requirements. That is, fundamentally, why do we need a Navy and what size should it be?

As the Chief of Naval Operations stated before the full Committee on 11 February, the Navy exists to provide a fleet which is ready to carry out its missions in support of our national strategy and foreign policy.

First among these missions and of highest national priority in manning and equipping, is our Fleet Ballistic Missile (FBM) submarine force. This force contributes an essential element to this country's strategic deterrent posture.

Second, and a fundamental mission of the U.S. Navy, is that of sea control. Control of the sea must be accomplished over

selected sea lines of communication and in selected sea areas if this nation is to prevail in war. Sea control is a prerequisite to the conduct of any sustained overseas military operations. Sea control is also a prerequisite for the third Navy mission of sea-based power projection against enemy shores. Moreover, a credible capability to control the essential sea lines of communication leading to our allies forms the basis of assurance to those allies that this nation not only will, but can, honor the commitments of our overseas security arrangements.

A fourth and very important Navy mission is that of "peacetime presence". For many years, we have deployed naval forces in key overseas areas in support of our nation's foreign policy objectives. Utilizing sea control and projection forces with varying degrees of capability, these forces have provided visible evidence of our nation's security commitments, have constituted a stabilizing influence in areas of political and military turbulence and have been available to respond to tasking by our national command authorities in times of crisis.

In short, naval forces must be ready to carry out their three wartime missions while at the same time maintaining capable, responsive forces in a forward deployed, peacetime presence role. Because of the global scope of Navy responsibilities and the wide variety of possible contingencies, there must be an adequately sized and properly balanced Navy. It is important to note here that the Navy's "forward deployed" posture which satisfies peacetime presence requirements and provides a capability for immediate military response anywhere in the world is a driving factor in determining force manning requirements. This relationship will be developed in detail later in the statement.

How big a Navy is required to perform these functions in support of national policy is a complex question. There is no

single force sizing criterion and no simple answer. Several possible approaches exist: sizing for peacetime forward deployment commitments; conformance with Defense Department planning guidance where forces are sized against a world-wide war scenario; "reasonably attainable" force levels established by the Joint Chiefs of Staff; and a minimal risk force based on the requirements developed by the unified commanders who have area responsibilities.

Peacetime deployment requirements form a force sizing "floor" under fleet size. We presently maintain 4-5 carrier task forces plus amphibious ready groups and required logistic support ships in potential trouble spots such as the Eastern Mediterranean, and in support of treaty commitments. Forces are deployed to these areas to deter conflict. The deterrent value of these forces requires that they be militarily credible. They must be powerful enough offensively to defeat the expected opposition; they must be strong enough defensively to survive a surprise attack; they must be mobile enough to shift arenas swiftly and to reinforce each other; they must be supported adequately to conduct sustained operations if required; and finally they must be backed up by forces able to surge deploy to reinforce them in the event of crisis or conflict.

All of these considerations form the basis for the "600 ship Navy" which the CNO referred to in his recent testimony before the full Committee.

Today we have roughly a 500 active ship Navy, down from a recent high of 976 in 1968. We are stretched thin. Lately our carriers and support ships have been underway or deployed about 65% of the time. Such a pace is particularly tough on our people over the long haul. A 600 ship Navy would ease the operating tempo, improve surge deployment capabilities and provide a better base from which to meet wartime requirements.

As we begin to rebuild a modernized fleet, the Navy will realize an active ship increase from 490 ships at end fiscal year 1976 to 509 ships by the end of fiscal year 1977. This net increase of 19 ships will be effected by the introduction of more complex and more capable ships, including the second of the NIMITZ Class nuclear carriers and the conversion of three more carriers to multi-purpose capabilities. Further, two nuclear guided missile cruisers (formerly guided missile frigates) of the VIRGINIA Class will be introduced to the fleet. We will also see the introduction of 13 SPRUANCE Class destroyers, six additional LOS ANGELES Class attack submarines, and the lead ship of the FFG-7 Class guided missile frigate (formerly called the Patrol Frigate). This same period will see the introduction of the third and fourth ships of the large LHA amphibious assault ships. Along with these increased capabilities comes the requirements for increased manning levels.

This growth trend continues into the 1980 time frame. Although subject to some uncertainties, the planned force will continue to see an increase. This will include 13 aircraft carriers, about 175 surface combatants, over 90 attack submarines, amphibious and mine warfare ships, and minor combatants. Also included will be an improved ballistic missile submarine force and underway replenishment and other support ships.

Even an active force 600 ship Navy cannot satisfy all strategic and general purpose force contingency requirements. Recognized shortfalls become the basis for determining Reserve force tasks and strength requirements. This relationship is under continuous review and program revisions are in progress to realize maximum capability from our available assets. We are increasing readiness of our naval reserve forces; relating them directly to our inventory of ships, aircraft, and support equipment; and integrating them into our force planning. These steps will make reserves full partners in Navy's total force;

give them roles which are militarily meaningful in all cases; and increase their contribution to our wartime and contingency capabilities.

All of the above strategic and tactical considerations which shape the size and capabilities of the U.S. Navy are carefully evaluated at the highest levels of the U.S. Government before final force level determinations are made. When this extensive deliberative and decision making process is completed, I develop detailed manpower requirements and personnel programs to provide the active military strength to man the operating forces and support structure. The details of this process and the significant elements of our active strength planning and MPN budget formulation are presented in paragraph III, FY 1976 and FY 197T MPN Budget Requests, which follows.

III. FY 1976 and FY 197T MPN Budget Requests

A. Revised Fiscal Year

While my review of military manpower and personnel programs in this statement will be in terms primarily of the normal twelve month time frame for fiscal years 1975 and 1976, the Congressional Budget and Impoundment Control Act of 1974 (Public Law 92-344), in part, revised the traditional July-June fiscal year to 1 October through 30 September, effective 1 October 1976. Accordingly, for the transition period identified as FY 197T, 1 July-30 September 1976, military end-strength, man years and funds are also requested during this Congressional authorization and appropriation cycle. The impact of the revised fiscal year on end-strength requirements for FY 1977, as well as subsequent fiscal years is readily apparent. The increased manpower authorization required for FY 197T over FY 1976 reflects the inescapable "front-loading" phenomenon inherent in military personnel procurement planning and recruiting. That is because the availability of high quality post high school young people is highest during the period June through September. Therefore, authorized September end-strength must be

adjusted accordingly, regardless of planned force changes. The FY 197T end-strength authorization request of 535,860 is 7,209 higher than the authorization requested for FY 1976.

B. Budget Summary

An MPN appropriation of $5,784,900,000 is requested to support 530,781 man-years and 528,651 officer, enlisted and midshipmen end-strength in FY 1976. This represents a reduction of 7,466 in end-strength from FY 1975, as currently planned, and 11,729 less than our FY 1975 authorization. Our funding request for FY 1976 is down $63,080,000. This overall reduction is primarily due to the 15,637 reduction from the planned FY 1975 man-year level and specific program decreases, offset by the annualization of the 1 October 1974 military pay raise, and various other authorized increases, as detailed on page 1-15 of the FY 1976 and FY 197T MPN budget submit. As may be expected, the FY 1976 estimate does not include a provision for the October 1975, projected pay increase. The FY 197T funding request is not directly relatable to previous fiscal years, but the magnitude of the requirement is indicated herein, as well as the planned man-years and end-strength. A summary of these data is provided:

MILITARY PERSONNEL, NAVY BUDGET SUMMARY

Differences - FY 75 vs FY 76

($000)

	FY 1974	FY 1975	FY 1976	Changes FY 75 vs FY 76	FY 197T
Man Years	554,017	546,418	530,781	- 15,637	132,657
End Strength	545,668	536,117	528,651	- 7,466	535,860
Dollars*	$5,560,775	$5,847,980	$5,784,900	-$63,080	1,476,900

*Excludes Reimbursables

The FY 1976 Military Personnel, Navy budget supporting our manpower and personnel programs is a most austere funding request. It has been thoroughly reviewed and approved within the Office of the Secretary of Defense and the Office of Management and Budget.

Both manpower and dollar requirements are down from FY 1975, and are considered the absolute minimum needed to carry out Navy mission.

I would like to stress that while the MPN appropriation involves over 500,000 people and nearly $6 billion, it is an account which cannot be subjected to rapid change. Dollar changes require program revisions which affect people. Personnel adjustments take time to implement and invariably have a negative impact on morale. I urge your understanding that indirect costs incurred in drastic program changes are often far higher than the dollars saved from the initial program action. I also ask your recognition of the fact that not only are drastic changes counter productive to good management, but also that large personnel numbers and large dollars do not mean that numerous small reductions can be made without significantly affecting programs. Additionally, it should be recognized that once a manpower level is approved, more than 95% of the dollars are committed as a matter of legal entitlement.

C. Navy Manpower Requirements

1. General. The FY 1976 and FY 197T MPN budget requests are based on approved Navy manpower requirements which are a function of required force levels and mix. These requirements reflect the need to be responsive during military contingencies anywhere in the world, the requirement to conduct sustained operations at sea, and the training and education of our officer and enlisted personnel. We must also provide a "pipeline" for non-structure manpower, or "Individuals", Transients, Patients, Prisoners, Recruits, Students and Midshipmen.

2. Determination of Manpower Requirements

A natural question arises as to how the Navy determines the military manpower level which it requests the Congress to authorize and fund.

It will not come as a surprise to most of you that military strength is determined in the Navy by hardware. The combat forces - ships, planes and other weapons systems - are manned, operated, maintained and repaired by military personnel. In the support structure, necessary functions are performed by a mixture of military and civilian personnel.

Hardware, or "force" levels, are determined by national policies, strategy and commitments, tempered by the availability of funds. There are many considerations weighed in evaluating the trade-offs of various weapons systems. Manpower costs are among them. Money spent on strategic systems may prevent nuclear war. However, that money is then not available for anti-submarine forces, increasing the risk in a conventional war. Of course, the considerations are never really this simple in reaching final force level determinations.

Given the force levels, how are these translated into manpower levels? By use of industrial engineering, work studies, and on site analyses, we can determine with precision how much manpower with what kinds of skills are necessary to operate a force unit of each kind. The quantity of manpower required is then the result of multiplying this per unit factor by the numbers of units planned of the same kind. This number is reduced if our personnel system is unable to produce the proper mix of trained, experienced people. That is why the manning level of many of our ships rises in FY 76-77. As retention improves and our training programs continue to turn out better trained individuals, these requirements can be filled. In the meantime, undermanning inevitably results in some reduction in maintenance, training, and fleet readiness.

Specifically, manpower for ship and aircraft types is determined through the Navy Manpower Documentation Program. Workload is measured, and manpower productivity criteria are applied in order to arrive at the manpower needed to permit a given class of ship or aircraft squadron to perform its mission. These manpower levels are reflected in Ship Manpower Documents (SMDs) and Squadron Manpower Documents (SQMDs) for each type of squadron or ship.

The SMD is designed to document the military manpower required for ships to accomplish all assigned missions and functions in a wartime environment. Accomplishments to date have been directed toward the development of documents for each ship class. The current effort, called SMD II, is dedicated to the development of a separate document tailored to the specific mission, weapon system and equipment of each individual ship in the Navy.

The SQMD program documents the military manpower requirements of aviation squadrons in a dynamic environment. Recent refinements provide improved forecasting based on flight hours per aircraft.

The following illustration is presented in order to demonstrate the manhour computations which are involved in developing Navy manpower documents.

Through the application of work sampling and other industrial engineering techniques, the standard Navy workweek aboard ship in the "at sea-at war" condition has been determined to include the following elements:

	Watchstander	Non-watchstander
Watch	56 hours	0
Training	2 hours	3 hours
Service Diversion	2.5 hours	3 hours
Scheduled Work	13.5 hours	40.5 hours
Unscheduled Work	0	19.5 hours
Total Workweek	74.0 hours	66.0 hours

The uniqueness of a naval ship at sea under wartime conditions defines the parameters of these elements. Space constraints which cause a ship to have a limited number of sleeping accommodations, a limited water supply, and limited food storage and refrigeration spaces, combine with the necessity to operate seven days a week, to rule out a simple industrial 40-hour week. Thus, the watchstanders who operate the propulsion equipment, steer the ship, and man the weapons systems rotate through eight hours each day of the week, for a total of 56 hours per watchstander.

In order for everyone in the Navy to prepare for a more responsible position, and to maintain the ship in a proper state of readiness, a two-hour allowance for watchstanders and a three-hour allowance for non-watchstanders are included for either formal or informal (on-the-job) training.

The "Service Diversion" allowance covers items which normally are accomplished during off-watch hours and, as a result, must be deducted from the individual's capacity to do productive work. It covers items required by regulations and by the nature of the shipboard routine, such as: inspections, time in the pay line, sick call, haircuts, and administrative requirements.

"Scheduled Work" is routine work which is to be accomplished during normal working hours. Non-watchstanders perform the bulk of their work during this period.

"Unscheduled Work" provides for personnel to be available for equipment repair and other items of an unpredictable nature.

Both the elements of scheduled and unscheduled work include the industrial engineering practice of providing allowances for delays arising due to fatigue, environmental effects, personal needs, and unavoidable interruptions (Productive Allowance Factor), and for drawing tools and publications, entering equipment, closing equipment, returning tools, etc. (Make-ready, put-away Factor).

Manpower requirements are determined by:

(1) Identifying all watch stations.

(2) Providing watchstander billets to cover all watch stations 24 hours a day, 7 days a week, at a rate of 56 hours per billet.

(3) Determining the number of hours of work required each week through work measurement techniques (including productive and make-ready, put-away factors), and designating it for accomplishment in either the scheduled or unscheduled work category.

(4) Dividing the identified work by the appropriate watch-stander (13.5 hours) or non-watchstander (40.5 or 19.5 hours) factor to determine the total number of billets.

(5) Stating the requirements in terms of Navy skill categories and paygrades.

But force manpower accounts for only about half of the Navy military strength. Support manpower is much harder to quantify in precise terms.

Some support manpower is related to the number of force units or to the number of people serving in those units. Naval stations, air stations, shipyards, magazines, etc., have manning requirements, some of which fluctuate with the sizing of the forces. Some of the manpower at a support activity is for its own support. This part does not vary with force sizing. Only closure of the activity can do that.

Not all of our support activities have a workload limited to support of active duty personnel. For instance, sizeable portions of medical support are used in peacetime for dependents and retirees. Reserve training centers train personnel for activation during military contingencies and mobilization.

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There are some activities whose manpower levels are independent of force sizing. These include intelligence, world-wide communications, research and development, and support to other nations. The manpower for these activities depends upon the priorities of the tasking which are established by the same national policies, strategy and commitments that determine force sizing.

The Navy mission provides for certain support of the Marine Corps, including, for example, all of their medical services, chaplains and other staff support. A total of 5,206 Navy billets are committed to these areas. In addition, there are many billets existent which support both the Navy and Marine Corps in such programs as education and training, R&D and materiel development and acquisition.

The precise determination of manpower levels at support activities is very difficult because they are so varied in mission, size, complexity and even geography. We have started a sophisticated approach to this problem, and we call it our Shore Requirements, Standards and Manpower Planning System (SHORSTAMPS). The SHORSTAMPS program is being designed to provide a means for rigorous determination and improved forecasting of both military and civilian manpower requirements for the Naval Shore Establishment. It is a long-range program which involves, as the first step, the development of functional staffing standards for work performed in the shore establishment. Through the application of industrial engineering techniques, workload will be measured, and then the minimum qualitative and quantitative manpower required will be determined.

While standards are being developed, the second aspect of the program, the Required Operational Capability (ROC), will be developed for each activity of the Shore Establishment. The ROCs will be statements of workload parameters and the actual capability expected

of each activity. A ROC will be based on the mission of the activity and have the approval of higher authority.

For manpower determination purposes, the workload parameters of the ROC will be measured against the staffing standards to provide the actual qualitative and quantitative manpower required by the activity.

SHORSTAMPS will provide a means of balancing resources with tasking. It will yield numbers, skills and costs associated with the performance of each function. It will be the prime decision-making tool when the workload parameters require staffing which is greater than the available resources.

In addition, we are developing our Navy Manpower Planning System (NAMPS), which will be an integrated Navy planning system designed to balance total military and civilian manpower requirements afloat and ashore with the available resources. Selected portions of the system are currently undergoing operational testing. As the programs are developed, NAMPS will include and build on the SHORSTAMPS, SMD and SQMD programs.

There is one more category of military manpower, Individuals. All of the previous categories are considered "structure" billets or positions with permanently assigned duties, responsibilities and authority. Individuals, as a term, represents the manpower flows necessary to keep both the forces and the support activities manned with trained, competent people.

There are two kinds of Individuals. Students, trainees, and midshipmen are people in training in order to become qualified to fill billets in the structure. Their number can be forecast with increasing precision because our estimates of skill requirements and skill inventories are becoming more sophisticated, accurate, and timely.

Transients, Patients, and Prisoners represent the other part of the Individuals category. We are able to estimate the man years to be

expended in this way. This is done by using sampling techniques to determine man year factors, such as the average time spent in transit for an overseas permanent change of station move. We are not yet able to estimate precisely the end-strength which will be required, so we use the average strength instead. Unfortunately, the end strength always exceeds the average strength, so that on the last day of the fiscal year there are always more "actuals" in transients, patients and prisoners than were planned.

Manpower requirements thus developed form the basis for our annual active duty military manpower requirements request. I believe Congressional recognition of the validity of our determination process and of the requested manpower level is essential. As Chief of Naval Personnel and Deputy Chief of Naval Operations, this request represents the minimum military manpower level required by the Navy to accomplish its assigned responsibilities. As stated to the Congress by the Chief of Naval Operations, the primary peacetime task of the Navy includes significant overseas deployment of forces. This generates the need to man those forces so that they are capable of quick and effective response to any contingency.

3. Fleet Modernization and Increased Petty Officer Requirements

Of course, our manpower determination process establishes skill and paygrade requirements as well as mere quantities. At the present time Navy manpower is at its lowest strength level in 25 years. This is a result of force level reductions during the past four years as part of the Navy's program of force modernization. Many older ships have been retired and are now being replaced by new, more capable weapons platforms. To operate and maintain this smaller but more modern force requires a higher ratio of skilled, better trained personnel. As an offset to this higher grade mix, we have and are using automation and human engineering techniques to reduce total manpower requirements.

Between 1970 and 1975, Navy petty officer requirements have increased from 62% to 66% of enlisted billets. For FY 76, the petty officer requirements will again constitute approximately 66%. Two programs which illustrate the need for this growth are the DD-963 class destroyer and the A-7 aircraft. A comparison of documented requirements for the DD-963 with the 1950's vintage DD-931 shows an increase in petty officers from 51.06% to 66.09% of the enlisted crew. Transition of an attack squadron from the A4F to the A7E resulted in an increase in documented petty officer requirements from 63.24% to 67.90%. Similar increases in petty officer requirements are occurring in the introduction of F-14 and S-3 aircraft and in new ship classes such as CVAN, LHA and PF, although documentation is still in progress.

4. Manpower Trade-Offs

As with almost everything else in the Defense Budget, manpower levels have trade-offs. There are three options which are weighed each year:

a. Use more civilians in support activities.

b. Use more civilians in support ships.

c. Reduce manning levels below requirements.

In recent years we have civilianized thousands of support billets. In some cases there are dollar savings by civilianizing, but there are other considerations. In many military tasks, there are no civilian skill equivalents. Civilians can quit at any time, not just at the end of an enlistment. Civilian overtime costs for urgent jobs can be prohibitive. Furthermore, the Navy has a unique problem among government agencies in that a large portion of our people are at sea and spend a great deal of time away from their homes and families. It is essential that these people get an opportunity for duty ashore. Too much civilianization, or

civilianization of certain skills, can destroy the sea-shore rotation patterns we feel are necessary to keep good men in the Navy.

What about civilians in support ships? As you are aware, we have conducted tests using mostly civilian crews on fleet oilers. By reducing the number of simultaneous fueling stations, by eliminating military and self defense tasks, by substantially (and expensively) upgrading living accommodations and by using a small, highly paid civilian crew, we are able to operate these ships in peacetime with longer on station times. In case of actual combat, salary costs for the civilians would increase sharply. Nevertheless, we believe that at least some of our support ships can be manned mainly by civilians. In FY 76 we will have the following ships civilian manned in an expanding program:

3 - TARC (Cable Layers)

2 - TAG (Oceanographic Survey Ships)

1 - TAF (Refrigerator Ships)

8 - TAO (Oilers)

4 - TATF (Fleet Tugs)

Finally, there is the option to reduce deliberately the manning levels of activities. For workload oriented support activities, this means reduced output and/or increased work hours and costs. For combat units, it means reduced capability, readiness, training, and effectiveness. Work hours cannot be increased over the existing 66-74 hour work week afloat.

We are experiencing some undermanning of the fleet. This is of two kinds, skills and quantities. Because of many factors, we do not have sufficient numbers of certain skills to go around. If we keep those too few people we do have at sea all of the time, retention falls. This is the basis for the proposed increase in sea pay. We are curing this kind of undermanning.

The Naval Reserve Force is a programmed kind of undermanning. Some of our crews are reduced by about 40%, with the rest provided by the Selected Reserve. These ships are available in contingencies, but otherwise are limited largely to Reserve training. Obviously, these forces must be in excess of our day to day fleet operational requirements.

In FY 76, we will begin a two year test of a different kind of undermanning. Five destroyer types will be manned at 80% of established requirements. The other 20% will come from the Selected Reserve, but the ships will not be part of the Naval Reserve Force. Their capabilities, and therefore their employment, will be reduced. It is hoped that the test will show that the ships can be maintained in a ready material condition, can safely conduct local training and fleet operations, and can keep the crew sufficiently trained so that upon augmentation from the Reserves, the ship will be able quickly to reach combat readiness. These ships will not be available for overseas deployments.

Now perhaps it is apparent why we give the replies we do when asked how we would absorb a 2%, 3% or 10% military end-strength reduction. It is not a manpower problem, it is a force problem. We must determine how much to reduce our forces, to modify our national defense policies, to degrade our capabilities, to undertrain our people, to decrease combat support; in short, what are relative risks of the various options which must be considered. Once decisions are made, manpower reductions follow as readily as they already have because of the lower force levels in the FY 1976 Budget Request.

Previous authorization requests have resulted in authorizations for procurement of new ships, aircraft, missiles, and other weapons systems. Manpower needs for new systems present a formidable challenge to us in planning and phasing. Since some of the implications may not be readily apparent, I would like to elaborate on

this important subject. The adoption of more sophisticated weapon systems with substantially improved capabilities requires very careful planning to provide trained personnel to man new systems as they become operational.

The intricate skills required as well as experienced leadership to operate new systems is a long-term evolutionary process. New hardware cannot be treated, however, in isolation from our current operational systems. Many new systems grow from and ultimately replace important existing programs that are in the fleet today. It is not always feasible to borrow manpower from existing systems in order to support new requirements. The old Polaris submarines, for example, must continue to operate until the Tridents are tested and evaluated at sea. Both need to be fully manned during the transition. Thus, a new system frequently generates additional manpower requirements during the transition period. Most of these pertain to training requirements that are necessary to man new systems with well-qualified people. Some of our enlisted ratings require at least two years to develop minimum qualifications in complex new programs. As you will surmise, their period of development does not contribute to immediate fleet readiness and yet the Navy must identify, allocate, and fund these training pipeline needs in preparation for future manning. The necessary end-strength for this purpose is essential to the Navy's improvement in combat force capability. From our low point in FY 76, ships are scheduled to rise about 20% in the next few years. In order to have trained personnel available to man these forces, we must start now. If FY 76 is reduced, we will be unable to operate, maintain and repair those new ships and aircraft as they enter the fleet. We cannot recruit sufficient additional personnel, nor provide them with training and fleet experience, in FY 77 or FY 78 to make up for any reductions in FY 76.

Thus, forced manpower reductions in FY 76 would result in future skill shortages, and undermanning with consequent reduced

readiness. As we invest the hundreds of millions in new forces, as authorized by the Congress, we must also invest in the trained, qualified and motivated people required to make those forces into an efficient, effective, fighting Navy.

5. Navy Manpower Requirements - Defense Programming & Planning Categories

The following table indicates Navy manpower requirements in terms of Defense Programming and Planning Categories (DPPC) and subcategories, formerly referred to as Manpower Categories:

	FY 74 (Actual)	FY 75	FY 76	FY 7T	FY 77
Strategic Forces	18.6	18.9	19.6	19.7	20.4
General Purpose Forces	236.8	245.1	241.1	241.3	249.2
Land Forces	2.5	2.8	2.8	2.8	2.9
Tactical Air Forces	61.4	68.6	65.9	65.7	64.1
Naval Forces	172.5	173.3	172.0	172.5	182.0
Mobility Forces	0.3	0.3	0.3	0.3	0.3
Auxiliary Forces	29.7	31.0	29.5	29.5	26.8
Intelligence & Security	11.3	10.9	9.7	9.6	9.4
Centrally Managed Communications	9.6	10.8	11.0	11.0	9.0
Research & Development	6.4	6.6	6.7	6.6	6.3
Support to Other Nations	0.3	0.3	0.3	0.3	0.2
Geophysical Activities	2.3	2.4	2.0	2.0	2.0
Mission Support Forces	67.1	70.4	69.5	69.5	69.5
Reserve Components Support	7.1	7.6	7.6	7.6	7.6
Base Operating Support	34.1	37.1	36.7	36.7	36.6
Crew & Unit Training	13.2	12.6	12.5	12.5	12.6
Command	12.8	13.1	12.8	12.8	12.7
Central Support Forces	87.2	86.1	86.2	86.6	85.8
Base Operating Support	2.8	2.8	2.8	2.8	2.8
Medical Support	20.0	19.7	19.7	19.7	19.6
Personnel Support	6.8	8.1	8.2	8.2	8.2
Individual Training	40.6	38.3	38.6	39.0	38.5
Command	8.5	8.1	8.0	8.0	7.8
Logistics	7.2	8.0	7.8	7.7	7.8
Federal Agency Support	1.2	1.1	1.1	1.1	1.1
Individuals	106.2	84.6	82.7	89.2	94.3
Transients	39.5	24.4	24.9	27.2	25.5
Patients & Prisoners	5.7	3.3	3.3	3.4	3.4
Trainees & Students	57.9	52.7	50.3	54.3	61.1
Cadets	3.1	4.2	4.2	4.4	4.4
Total Navy	545.7	536.1	528.7	535.9	546.0

Note: Details may not add to totals due to rounding.

Note: Significant manpower changes between fiscal years by DPPC are

explained in Navy portion of the Department of Defense Manpower Requirements Report recently submitted to the Congress.

6. Combat/Support Ratio

The key to any discussion of Navy's Combat to Support ratio is a complete understanding of how combat and support forces are defined. The DOD Defense Programming and Planning Categories are fully described in the FY 1976, 197T and 1977 Manpower Requirements Report (Part A, Chapter I and II; Part B, Chapters IV through IX; and Part C, Chapter XI). It is imperative that these descriptions be understood in order to analyze the combat to support ratio for Navy.

There is continuing attention to the ratio of manpower in the combat forces to that in the support forces. In recent years there has been some concern voiced that support manpower is unproductive overhead which diverts resources from combat forces. When one examines a modern, complex military force, it becomes clear that without adequate, effective support it would not be able to carry out its assigned missions. This fact is particularly significant in the Navy, since it is neither possible to build complete system support into combat ships and aircraft, nor to house all required support manpower aboard. The essential question is how much support is enough and in particular how much support manpower is required.

I believe the most descriptive and accurate definition of combat forces embraces the two DPPC Categories - Strategic and General Purpose Forces, as displayed in the current DOD Manpower Requirements Report. All ships and aircraft fall under this definition except those involved in training, research and development, transportation, and weather and oceanographic work. Certain tactical elements which operate as part of the combat forces are also included: Mobile Construction Battalions, Explosive Ordnance Disposal Units, and Amphibious Landing Beachmasters. The combat forces of the

Navy, thus defined equate to 49.3% of FY 76 military manpower.

The remaining 50.7% of Navy manpower can be divided into three categories: Direct Combat Support, Indirect Combat Support and "Individuals".

"Direct Support" manpower is in immediate support of combat forces and is found in a wide number of units and stations. The tactical staffs afloat actually direct combat operations of the force. Centrally Managed Communications exist primarily to provide command and control channels to the combat forces. Intelligence manpower collects, evaluates and disseminates information about the enemy, or potential enemy, without which the combat forces could not be employed effectively.

Most base operations manpower is also in direct support of combat forces. Naval stations, naval air stations, and fleet support activities whose mission is to berth, provision, fuel and otherwise support the combat units are in this category. Force support training is in the same category because it involves combat training for ships and aviation squadrons rather than skill training for "Individuals". Direct support requirements account for 16.0% of the military manpower requested in the FY 76 Authorization Request. Thus, <u>combat forces and direct support generate 65.3% of the manpower requirements for that year</u>.

Indirect support includes all other manpower (except "Individuals") not immediately involved in daily support of the operating forces. Research labs, hospitals and clinics, recruiting, departmental headquarters and staffs, individual training activities, shipyards, supply depots, and personnel assigned outside the Department of Defense are all included. Although these activities are not in direct support of the forces, they are necessary if the combat forces are to be able to carry out their missions. The most significant manpower investment in this category relates to individual training staffs. This includes not only instructors, but also all of the

personnel needed to command, administer, budget, guard, and maintain the stations where the training takes place. In addition to recruit training, which teaches military fundamentals, skill and specialized training facilities are required to provide people who are qualified to operate, maintain, and repair the increasingly complex equipment and weapons systems in our combat forces. Indirect support, as defined here, accounts for 19.1% of the military manpower requested for FY 1976.

The remaining category of manpower is titled "Individuals" and is not considered either combat or support forces. This category comprises transients, patients, prisoners, recruits, students and midshipmen, as previously discussed.

While the "Individuals" category, which comprises 15.6% of total Navy manpower for FY 1976, offers an attractive target for short term reductions, it must be understood that it is a hard requirement. In the main, "Individuals" can be reduced only by attaining a stable career force - by increasing retention, thereby reducing recruits and students - and through the resultant stability, thus significantly reducing transients.

Summarizing the foregoing, and comparing to selected prior years, the following breakdown of Navy military manpower results:

	Actual FY 63	FY 74	FY 75	FY 76	FY 7T	FY 77
Combat Forces	49.6%	46.8%	49.2%	49.3%	48.7%	49.4%
Direct Support	50.4%*	15.3%	16.2%	16.0%	15.8%	15.0%
Indirect Support	*	18.4%	18.8%	19.1%	18.9%	18.4%
Individuals	*	19.5%	15.8%	15.6%	16.6%**	17.3%

* Data prior to FY 67 cannot be equated with present sub-categories.

**Increases due to revised fiscal year.

If "Individuals" are dropped from this computation, as discussed above, the distribution of Navy manpower in structured spaces becomes:

FY 76 BUDGET

	FY 74	FY 75	FY 76	FY 7T	FY 77
Combat Forces	58.1%	58.5%	58.5%	58.4%	59.7%
Direct Support	18.9%	19.3%	18.9%	18.9%	18.2%
Indirect Support	23.0%	22.2%	22.6%	22.7%	22.1%

D. Navy Military Personnel Strength

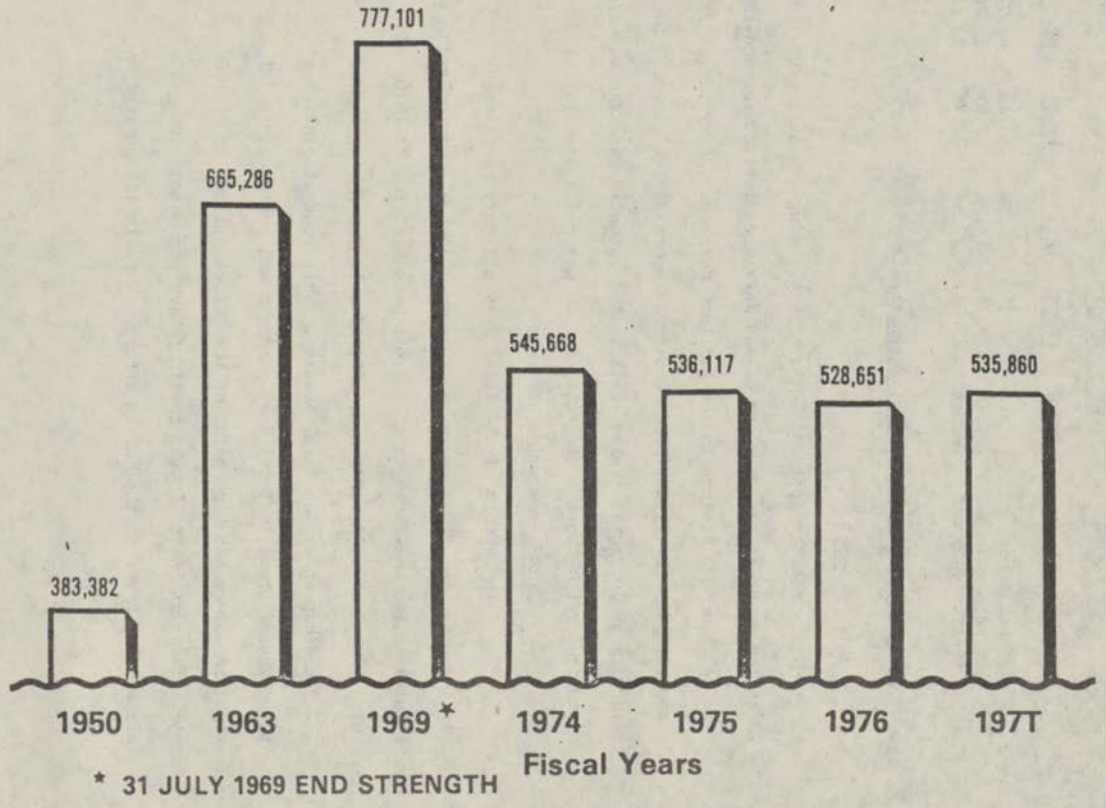
1. General

Military personnel strength planning is the process by which the manpower requirements of the Navy are provided for and the funding request contained in the Military Personnel, Navy budget is computed. Generally, the planned strengths are derived through the balancing of projected losses, anticipated retention and the necessary accessions, with appropriate attention to pay grade structures.

2. Total Strength

In support of the total Navy military manpower requirements, the MPN appropriation request for FY 1976 reflects a total active end-strength of 528,651 personnel for FY 1976, which includes 64,380 officers, 460,028 enlisted personnel and 4,243 midshipmen at the Naval Academy. This request continues the downward trend in total Navy strength and represents a 32% reduction since the high point of the SEASIA buildup in FY 1969. It will result in the lowest level of Navy personnel strength since 1950, prior to the Korean effort. This is illustrated on the following page:

ACTIVE NAVY MILITARY STRENGTH



* 31 JULY 1969 END STRENGTH

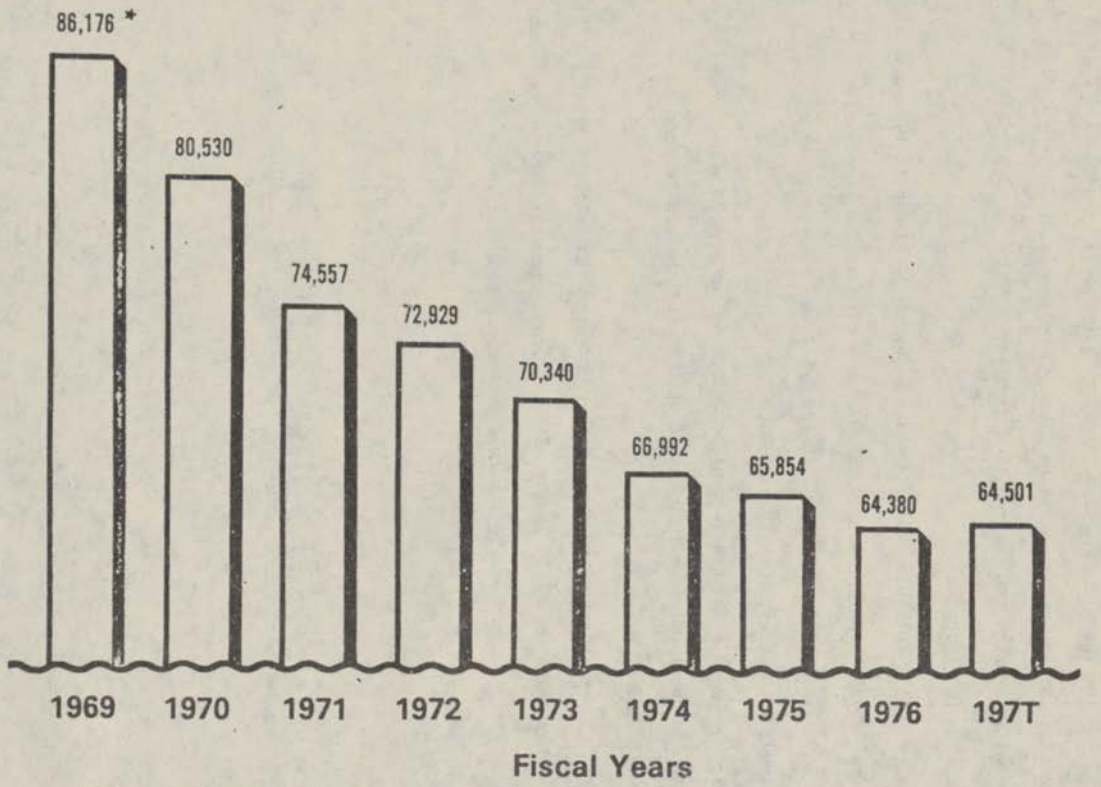
The chart on the preceding page graphically depicts in FY 197T the mandatory planning increases dictated by the heavy July-September recruiting period, as previously discussed.

3. Officers

Following the reduction associated with the withdrawal from SEASIA the Navy embarked in 1972 on a plan to reduce the size of the officer corps by 10,000 in the following five years from 73,000 to about 63,000 by end FY 77. The chart on the following page indicates that we have realized about 85% of the plan and are within about 1,400 of our objective with the planned FY 76 end-strength of 64,380.

It is noted that officer end-strength in FY 7T rises slightly above the FY 76 level. This reflects primarily the heavy input of medical officers during the July-September time frame.

NAVY OFFICER STRENGTH



* 31 JULY 1969 END-STRENGTH

The 10,000 reduction objective was established in 1972 in full recognition of the need to minimize personnel costs and to make the officer corps more efficient by tightening up the organization and eliminating marginal billets. The early phases of the plan were achieved through reduced accessions and normal attrition in 1972 and 1973. Achievement of the reductions is increasingly difficult in 1976 and 1977 because the small accession year groups are reaching the end of their obligated service and projected losses will restrict needed officer procurement. The FY 76 officer reduction of 1,474 officers necessitates a severly constrained officer accession program for the year. We will procure about 900 fewer officers for our warfare specialties alone in 1976 compared to 1975. This will be fewer new officers than for any year since 1950, and will create problems throughout the fleet in meeting first tour requirements as well as rotation of those officers completing first tours. Further officer reductions cannot be made without personnel actions which would greatly increase turbulence by forcing the early release of young officers before the completion of their full periods of obligated service, and severely impact on FY 1977 procurement which is already tightly constrained.

The Congress, in appropriating funds for the Department of Defense and the military services, imposed senior grade strength ceilings to be allocated by the Office of the Secretary of Defense to the respective military agencies. These ceilings are to be effective during the last quarter of FY 75. The Navy had recognized the need to reduce senior grade strength and had included such reduction in the initial 10,000 officer reduction. The officer end-strength by senior paygrade and in total since FY 72 follows:

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OFFICER-END STRENGTH BY FISCAL YEAR

Rank	FY 72	FY 73	FY 74	FY 75	FY 76	FY 7T
Flag	315	309	294	284	275	275
CAPT	4,230	3,952	3,797	3,805 1/	3,786	3,770
CDR	8,441	8,137	7,834	7,575	7,548	7,542
LCDR	15,791	15,424	14,525	14,005	13,763	13,882 2/
Total Sr Offs	28,777	27,822	26,450	25,669	25,372	25,469
LT LTJG ENS	39,329	38,289	36,695	36,679	35,912	35,778
Warrant	4,823	4,229	3,847	3,506	3,096	3,254
Total Officers	72,929	70,340	66,992	65,854	64,380	64,501

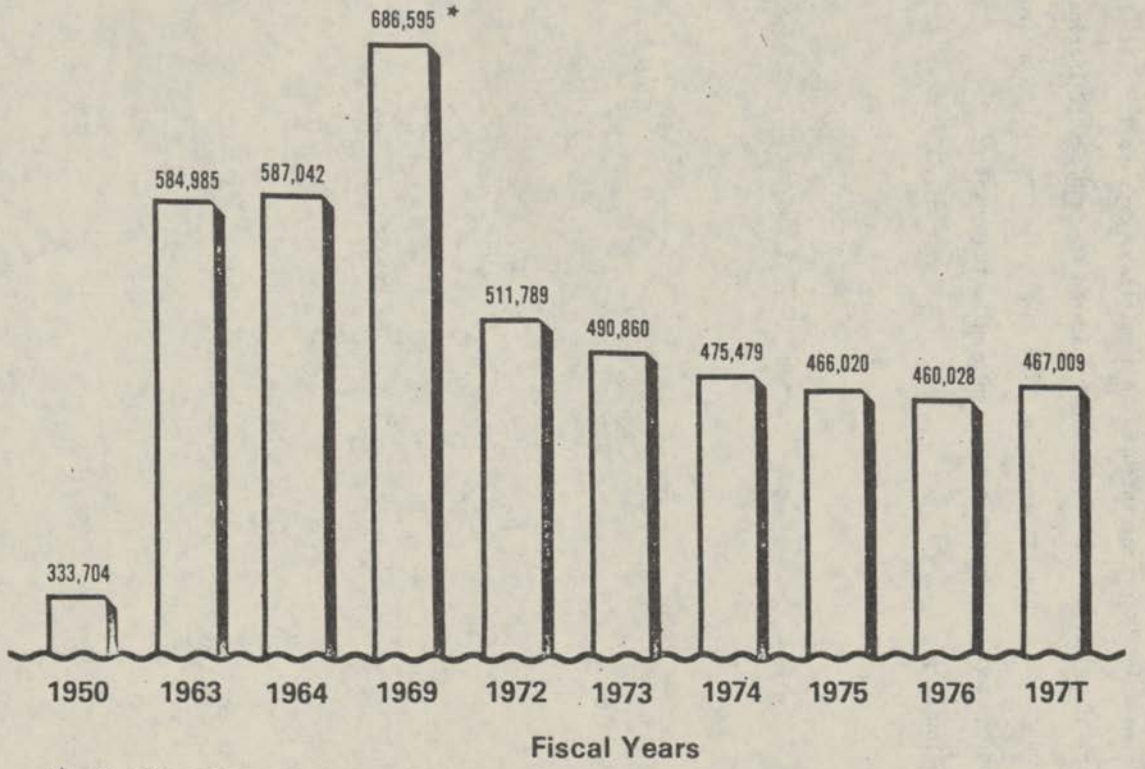
1/ Increase is due to Medical Corps captain increase.
2/ Increase is due primarily to procurement of Medical Corps officers in the grade of LCDR whose entry on active duty was deferred under the Berry Plan.

The Defense Officer Personnel Management Act (DOPMA), planned for resubmission to the 94th Congress, is a comprehensive revision and standardization of current laws governing the promotion and retirement of officers for all services and removes many legal prohibitions which constrain women officers' career development. The Navy strongly supports this legislation as a significant step forward in officer management. Enactment of the DOPMA will increase the control over senior grade strength by providing direct grade controls over a much larger portion of the officer corps, a tighter promotion mechanism and the authority to eliminate marginally performing officers in the senior grades of Lieutenant Commander through Captain.

4. Enlisted Personnel

As indicated in the chart on the following page the planned enlisted end-strength continues the declining trend previously described. The enlisted strength requested for FY 76 is 460,028, a reduction of about 227,000, or one-third, since the SEASIA peak attained in July of FY 69. The increase for FY 7T will accommodate the heavy recruiting occurring during those three months, as previously discussed.

ENLISTED END STRENGTH TREND



* 31 JULY 1969 END STRENGTH

The Congress, through its committees, expressed itself many times during the last several years on the subject of increasing proportions of higher paygrades. The Navy has shared this concern and has made some progress as displayed in the chart on the following page:

ENLISTED STRENGTH

	ACTUAL			PLANNED		
PAY GRADE	FY 63	FY 73	FY 74	FY 75	FY 76	FY 7T
E9	2,546	3,702	3,841	3,635	3,588	3,596
E8	7,269	9,001	8,968	8,435	8,326	8,313
E7	40,366	35,244	33,918	32,249	31,006	31,009
E6	69,612	71,913	67,046	66,221	65,370	65,755
E5	94,685	85,573	82,341	82,579	81,517	81,493
E4	114,790	97,573	92,718	92,691	91,500	91,487
TOP SIX	(329,268)	(303,006)	(288,832)	(285,810)	(281,307)	(281,653)
E3	143,145	75,081	79,489	83,364	100,077	103,933
E2	91,143	80,007	72,789	69,341	47,413	49,098
E1	21,429	32,766	34,369	27,505	31,231	32,325
TOTAL	584,985	490,860	475,479	466,020	460,028	467,009
TOP SIX RATIO	(56.29)	(61.72)	(60.75)	(61.33)	(61.15)	(60.31)

It will be noted that while we have not reflected a proportionate reduction in our paygrades E-4 through E-9, referred to as Top Six, when compared to FY 63, the ratio of petty officers to total enlisted personnel has been reduced from 61.72% in FY 73 to 61.15% in FY 76. The reduced percentage reflects the fact that 3/4 of the planned 6,000 reduction in total end-strength in FY 1976 will be in the Top Six paygrades. This will be accomplished even though the planned officer reduction will require senior petty officers to assume responsibilities previously exercised by junior officers, and in spite of the overall increasing requirement to 66% for petty officers to which I previously referred. In my view, we need to increase this ratio to satisfy higher requirements for petty officers, as previously discussed.

E. MPN Funding Requirements by Budget Activity

1. General. The FY 1976 MPN request is for an appropriation of $5,784,900,000 in new obligational authority. Additionally, $1,476,900,000 is requested for FY 197T. This subparagraph provides explanations on funding required for selected budget activities, and the chart on page 42 reflects funds requested for all six budget activities, as well as the percent of each to the total program.

2. Pay and Allowances of Officers. $1,313,824,000 is requested to support planned officer strength in FY 1976. This represents a net reduction of about $10.8M from the FY 1975 level. Details on cost increases and decreases are provided on page 1-16 of the MPN Budget Request. The funds required in this budget activity are primarily based on the monthly strength planning and resultant man-years indicated in the chart on page 39.

The budget man-years represented by the dotted line are 64 higher than a "straight line" computation between the end-strength of the current year and that of the budget year. The 64

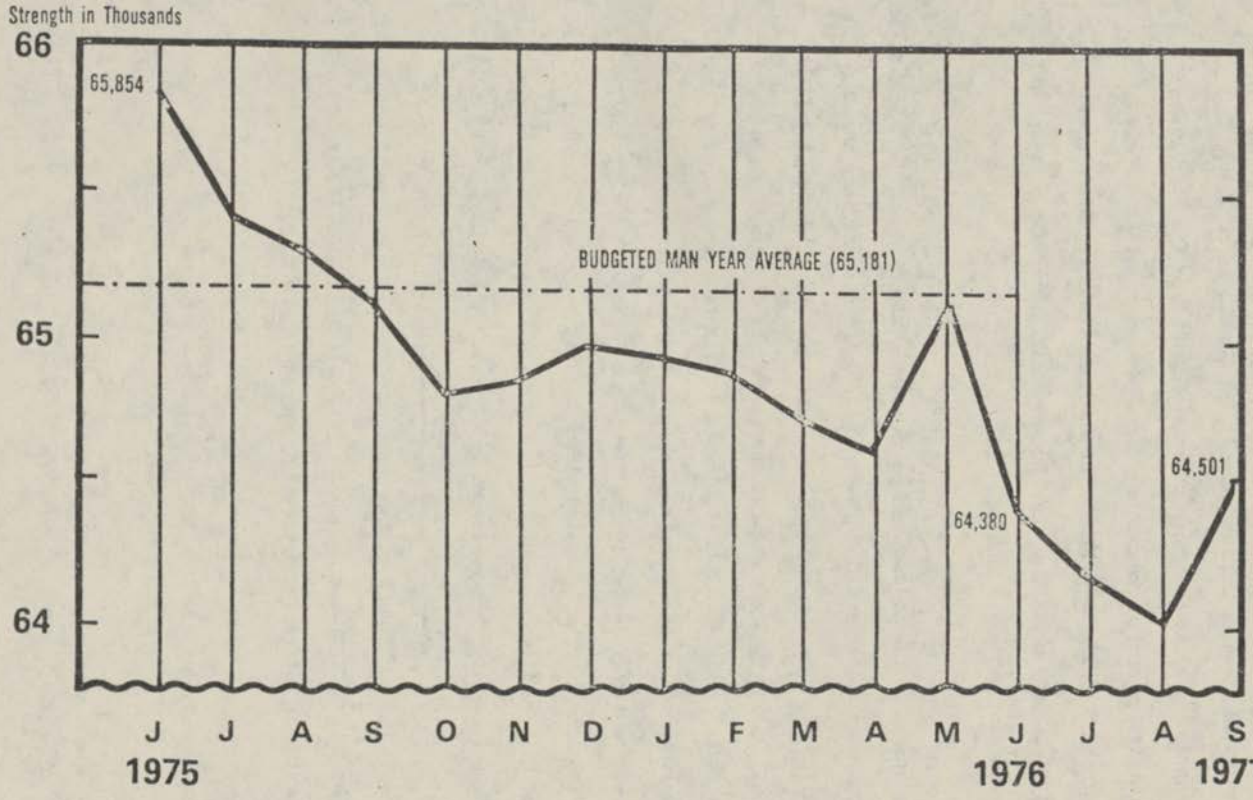
man-year difference is small compared to previous years, and is the mathematical result of fewer gains and losses compared to previous years, as well as the fact that the majority of our "healing arts" accessions necessarily are planned for July and August consistent with the school cycle. As in previous years, man-years are developed through a computerized process which recognizes that officer gains occur early in a month, while losses occur later. 16,126 man-years and $338,244,000 are required for FY 197T.

MILITARY PERSONNEL NAVY $ BY BUDGET ACTIVITY

$ (000)

BUDGET ACTIVITY	FY 1976	%	FY 197T	%
1. PAY & ALLOWANCES OFFICERS	$ 1,313,824	22.7	338,244	22.9
2. PAY & ALLOWANCES ENLISTED	3,732,273	64.5	938,766	63.6
3. PAY & ALLOWANCES MIDSHIPMEN	21,151	.4	5,323	.3
4. SUBSISTENCE OF ENLISTED	368,507	6.4	91,913	6.2
5. PERMANENT CHANGE OF STATION TRAVEL	345,912	5.9	101,723	6.9
6. OTHER MILITARY PERSONNEL COSTS	3,233	.1	931	.1
TOTAL DIRECT PROGRAM	$5,784,900	100%	$1,476,900	100%
REIMBURSABLES	45,400		13,198	
TOTAL FINANCIAL PROGRAM	$5,830,300		$1,490,098	

FY 1976 OFFICER STRENGTH PLAN



3. Pay and Allowances of Enlisted Personnel. Planned enlisted strength will require $3,732,273,000 in FY 1976. This represents a net reduction of about $80.0M from the FY 1975 level. Details on cost increases and decreases are provided on page 1-31 of the MPN Budget Request. The funds required in this budget activity are primarily based on the monthly strength planning and resultant man-years indicated in the chart on page 46.

Budgeted man-years are 461,450, a relatively low level compared to the 463,024 man-years which would represent "straight-line" computation between the end-strength of the current year and that of the budget year. This unusual situation results from the fact that losses during the first quarter of the fiscal year are abnormally high because we will be experiencing the end of obligated service of the first members who enlisted under the then new three year tour. Projected losses are planned to offset the cyclical "front loading" of enlisted strength plans because of the availability of high quality young people during the post high school July-September time frame. 115,486 man-years and $938,766,000 are required for FY 197T.

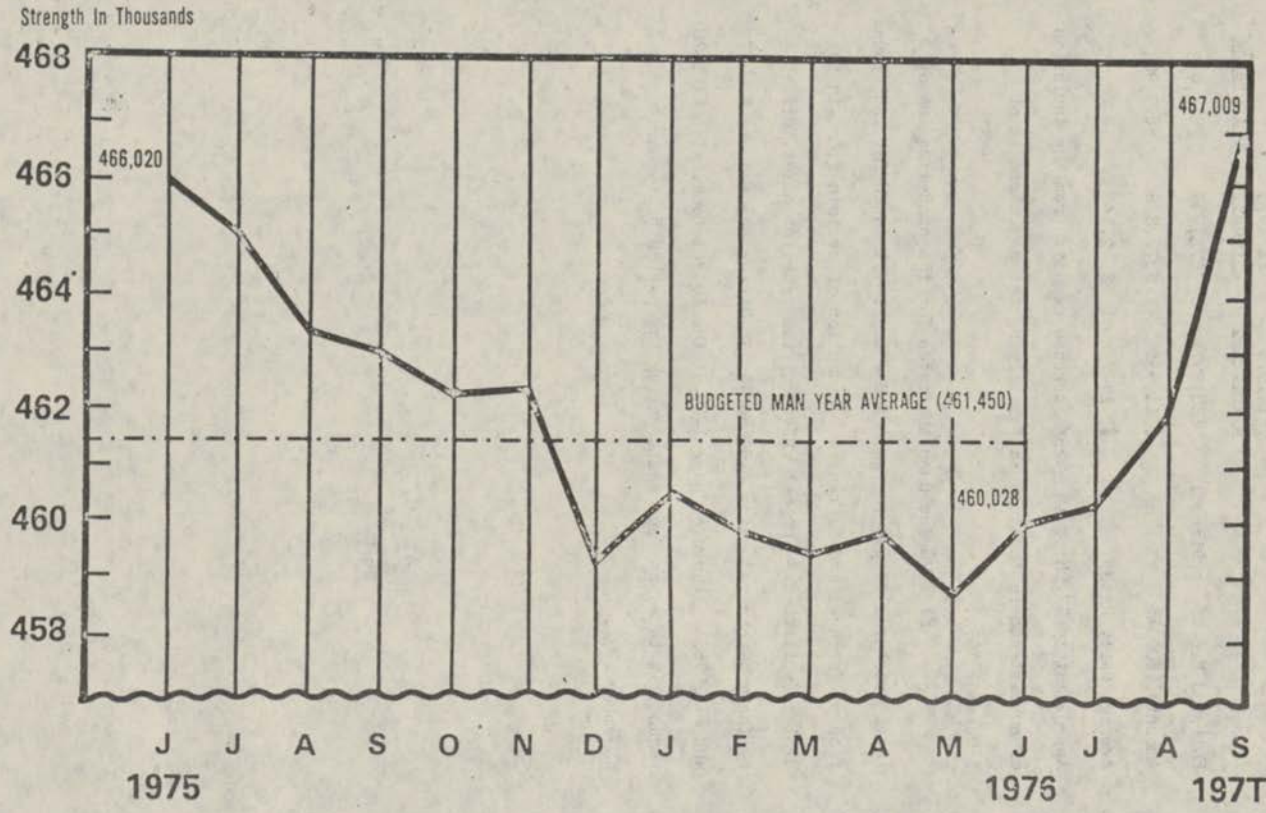
4. Subsistence of Enlisted Personnel. Subsistence costs have continued to increase despite enlisted man-year reductions. The impact of rising food costs on the FY 1975 program during the past year can be demonstrated as on the following page:

	FY 1975 a year ago	FY 1975 today	Difference
Enlisted Man-Years(Direct)	480,897	474,939	-5,958
Amounts ($000)	$344,934	$372,838	+$27,904
Average Daily Rate	$ 1.97	$ 2.15	

Approximately $7.6M of the $28M increase results from the inclusion of subsistence in the formula for pricing the pay increase of 1 October 1974.

FY 1976 includes the rates for the annualization of the 1 October 1974 pay increase and a small allowance for individual food preferences and increased consumption of certain items in the dining facilities. The net effect of the rate increases, offset by the man-year reduction, is the -$4.3M difference between FY 1975 and FY 1976, as shown on page 1-59 of the budget book. The FY 1976 request is based on food costs during the period September to November 1974.

FY 1976 ENLISTED STRENGTH PLAN



5. Permanent Change of Station Moves (PCS).

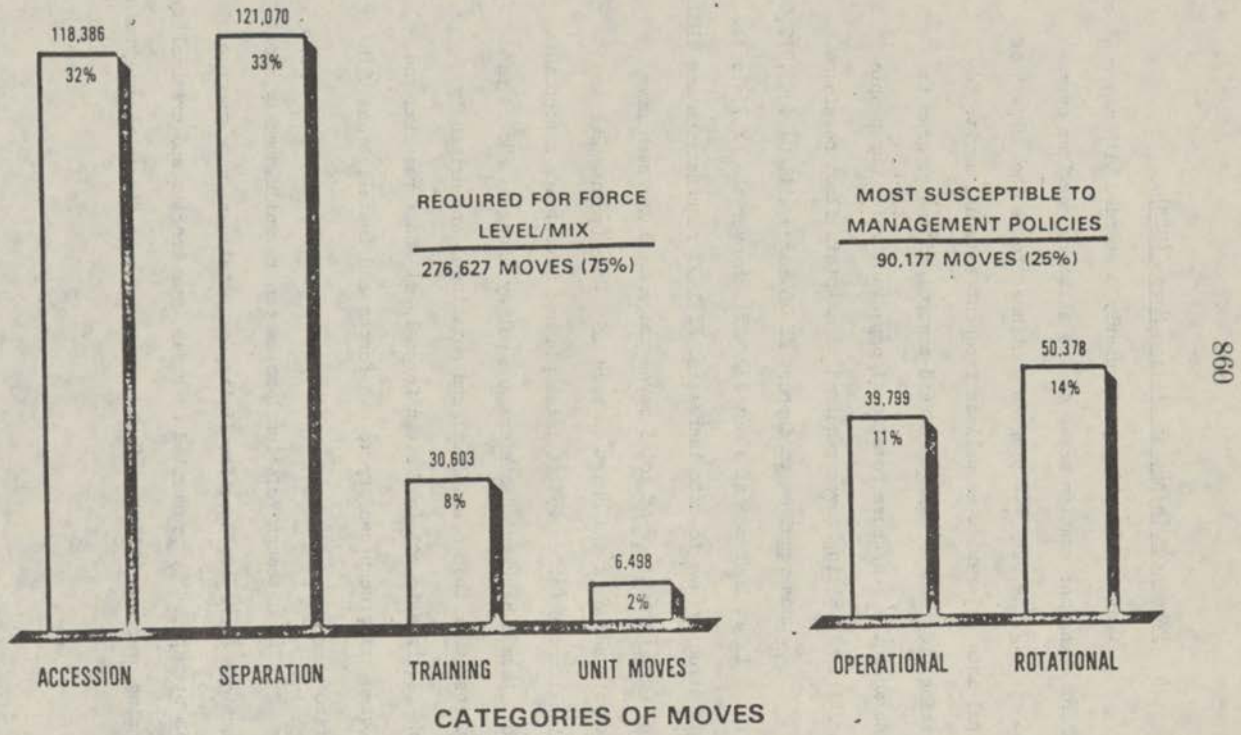
Congress has been particularly concerned with the cost of permanent change of station moves of the military services over recent years. The Navy PCS program continues to be the subject of critical internal review as well as frequent external audit. We are making progress in management and control of the program to provide adequate Sea/Shore rotational opportunity for our people while still minimizing moves required to maintain fleet readiness.

Funds required to support FY 76 moves will be $345,912,000 million which is an increase of about $32 million over the FY 75 level. $17 million is directly due to rate increases. FY 197T requirements are $101,723,000.

Percentage of total moves programmed for each move category is shown in the chart on page 48 Only Operational and Rotational moves (about 25% of total planned moves) are susceptable to short term management decisions and policy changes. Moves in categories other than operational and rotational are driven by actions required to attain a given force level and force mix, and to provide training necessary to man forces and installations with qualified personnel.

Even though rotational moves can be influenced by short term actions there are specific limits for rotational move program adjustment imposed by prescribed overseas tour lengths and criticality of manning overseas billets. Consequently, recent financial constraints

FY 1976 PCS MOVES



TOTAL MOVES 366,734 (100%)

have forced cuts to be levied in the training move category with a heavy impact on readiness.

Let us look at personnel moves by category, with associated average costs as depicted in the chart on page 50 Accession moves are down by about 3 percent with a similar reduction of 4½ percent in separation moves. The 4½ percent reduction in separation moves excludes the reduction caused by Congressional termination of constructive travel payments for immediate reenlistments as of 1 January 1975. Increases in Operational, Rotational and Training move programs are due to several factors including moves delayed from FY 75 until FY 76 by artificially imposed constraints on the FY 75 move program and normal variations in annual move requirements. The FY 75 Congressional budget submission for PCS was subjected to several program cuts which were taken as directed by Congress. An additional reduction of funds was levied because move cost rates appeared to be excessive. Although this particular adjustment was not intended as a move program reduction, the effect was to constrain the move program undesirably.

FY 1975 is the third consecutive year that Navy, because of funding constraints, has been required to operate the PCS program with a higher than normal number of no cost moves. This undesirable action distorts and understates our PCS data base for developing future move and funding requirements. The effect has been to

PERMANENT CHANGE OF STATION MOVES & AVERAGE COSTS BY TRAVEL CATEGORY

CATEGORY	FY 75 ESTIMATE MOVES	FY 75 ESTIMATE AVERAGE COST	FY 76 ESTIMATE MOVES	FY 76 ESTIMATE AVERAGE COST	DIFFERENCE MOVES	DIFFERENCE AVERAGE COST	7T ESTIMATE MOVES	7T ESTIMATE AVERAGE COST
ACCESSIONS	122,377	342	118,386	336	-3,991	-6	37,188	332
SEPARATIONS	151,547 ★	446	121,070	519	-30,477	+ 73	29,100	522
TRAINING	25,616	1,019	30,603	967	+ 4,987	-52	8,225	971
OPERATIONAL	40,727	1,203	50,378	1,158	+ 9,651	-45	14,328	1,226
ROTATIONAL	36,673	3,141	39,799	3,483	+ 3,126	+ 342	12,841	3,477
UNIT MOVES	7,081	2,920	6,498	2,705	-583	-215	1,450	3,268
TOTAL MOVES	384,021		366,734		-17,287		103,132	
COMPOSITE AVERAGE COSTS		$834		$946		+ $112		$994

★ INCLUDES 24,683 REENLISTMENT MOVES

require many of our people to move to billets in the same general geographical area when the best utilization of their talents and experience would dictate a cost move for training or operational purposes. We have found that within limits a greater use of no cost moves has been beneficial to the Navy and we are trying to utilize such moves wherever possible but they now exceed the number consistent with efficient use of scarce, skilled people.

The 8% reduction in organized unit moves represents the return to a lower level of unit move activity following the completion of the Shore Establishment Realignment (SER) program in FY 1975.

Navy has thoroughly examined short term cost avoidance policies designed to reduce numbers and costs of moves. Some have been implemented on a permanent basis. In spite of these efforts inflation-driven rate increases have raised the average cost of a PCS move by $112 from $834 to $946. No provisions have been made in this budget to accommodate expected future inflation in move rates because of present OMB budget rules.

The planned PCS program represents minimum move requirements and the required funding support is calculated at todays cost levels.

IV. Navy Military Personnel Programs

A. Introduction

I have, to this point, discussed various aspects of Navy military manpower and their reflection in personnel strength planning and MPN budget submissions. I now want to review the management of Navy military personnel, both officer and enlisted, and the status of our major personnel programs, such as recruiting, retention and human resource management.

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B. Personnel Management

Sound personnel management is the planning and execution of programs which result in the availability of highly motivated and skilled officers and enlisted personnel in sufficient numbers to satisfy the manpower requirement of the Navy. This definition sounds relatively simple, but it presents complex and continuing problems not only for the Navy, but, I am sure, for all the military services.

Our basic management objective is one which we share as partners with the Committee and the Congress. It is to have available the absolute minimum number of people sufficient to effectively accomplish the Navy's job at the least possible personnel cost. Inherent in the attainment of this objective is the continuing emphasis on improved management. I feel that the primary burden of good management is on me as the Navy personnel manager and we have made considerable progress. Our human goals program emphasizing leadership and individual dignity is well established and showing commendable results. We are actively engaged in revising our Enlisted Occupational Classification System to improve the management and control of enlisted personnel. The Operational/Technical/Managerial System has provided a quantum increase in our ability to manage officer professional development.

A major initiative in the area of personnel management is the collocation of personnel functions, officer and enlisted, reserve and regular into one organization. This is a long term, comprehensive effort which is already underway and will culminate in late 1978 when a major part of the Bureau of Naval Personnel, now in Washington, will move to New Orleans and form the Naval Personnel Center. The first step in this consolidation will be completed this year when the personnel ADP field activities and enlisted personnel distribution offices in San Diego and Norfolk, along with an officer records activity in Omaha and the Reserve Manpower Center in Bainbridge, MD, will be moved to New Orleans. Although these relocations will result

in a reduction in number of personnel devoted to administrative support, the primary reason for this consolidation is the improvement of our management of people. Consolidation of personnel distribution and fleet monitoring functions will result in a better understanding of fleet manning requirements and improved fleet readiness.

Closely allied to the collocation and reorganization effort is the development of a new management information system utilizing an on-line, interactive mode. We refer to this initiative as our "Futures" System. We have studied our information needs since 1972, and have visited the Air Force personnel center to study their efforts to improve the personnel management information system. We are exchanging two officers with the Air Force to benefit from their developmental efforts. The objective of our "Futures" System is to make all required personnel and manpower information readily available to distribution and planning personnel in order to enhance their ability to develop and assign the Navy's personnel resources in the most effective manner. Included in this effort is a program for improved data input and source data automation to improve timeliness and accuracy. We have other active on-going projects designed to find better ways of solving our personnel management and much remains to be done.

The decision two years ago to eliminate the draft in favor of an All-Volunteer Force is probably the most significant decision affecting military personnel which has been made by the American government in recent times. Certainly, it has created difficult and complex personnel management problems. To meet both quality and quantity requirements in this environment the Navy must not only compete with other services, but with industry in the civilian manpower market for youth. An equal if not greater challenge is the development of a career professional force which can only be achieved through the retention of quality people. The key to obtaining and

keeping quality people is to improve the attractiveness of the Navy as a career objective. Our efforts have ranged from Navy-wide people-oriented management to Congressional assistance in maintaining wage parity and funding support for various other incentives and people-oriented programs. While we have attained some initial success, continued management effort is required, particularly with respect to the quality of our career force.

A primary force militating against management initiatives designed to accomplish our personnel objectives is the very nature of the Navy as a sea-going force.

The certainty of sea duty generates challenges in both the recruiting and retention of people not encountered by the other services. The young man who wishes to make the Navy a career must be prepared to accept all or most of the following aspects of the rigors of Navy life:

- It is a career of repetitive sea duty assignments. A Navy sea-going careerist will still spend more than half of a 20 year career at sea under three year sea-three year shore rotation, and we have achieved this rotation in only a few ratings.
- Prolonged Family Separation - Navy men on sea duty spend only between 1/4 and 1/3 of a three year sea tour with their families because of overseas deployments and operations out of homeport.
- Marginal Living Conditions - After a normal 66-74 hour work week at sea, an enlisted man has little opportunity for privacy. A cramped locker and bunk within a three tier arrangement are the only things he can temporarily call his own. Crowded living spaces lead to frequently interrupted rest periods. Moreover, there is virtually no social life as his contemporaries enjoy ashore. On

most ships, the recreational area is the mess decks, often times cramped and available for only a portion of limited off-duty hours.

- Adverse Working Conditions - Much work is performed in cramped, hot and noisy spaces. Difficult tasks must frequently be performed on a pitching, rolling platform.

The achievement of sound personnel management objectives, particularly with the complicating effect of an All-Volunteer Force, is a formidable task, but not insurmountable. As Navy personnel manager, I feel I must have adequate management flexibility to solve existing problems and anticipate future developments. This has not been the case. I feel that the growing tendency of the Congress to provide detailed guidance concerning implementation or continuance of personnel management programs is counterproductive to our joint interests.

By way of example, the Congressionally directed requirement that Career Counselors can only be increased to the extent that recruiters are reduced has a profound effect on our recruiting and retention programs. Both programs are absolutely essential to our efforts. Manning needs to be increased in our career retention programs to restore Congressional cuts directed in FY 1974. However, this cannot be done at the cost of reducing recruiting effort when we face the necessity of increasing our accessions in FYs 1976 and 1977, as well as the years through FY 1980. We must be permitted to apply the necessary recruiting effort to be successful. We are particularly in need of increasing our Career Counselors to develop a professional career force. In ships and squadrons with Career Counselors, the reenlistment rate, on the average, is significantly higher. The Navy cannot operate under a career counselor/enlisted personnel ratio uniformly applied to the military services because of the many small units which would not have access to such counseling.

It seems to me that a careful look at our methodology for determining our manpower requirements would indicate that we are requesting the minimum number of people consistent with our approved force levels and necessary support structure. If you could accept our efforts as reasonable, then I believe our manpower request should be authorized and funded, and we should be permitted to manage our personnel programs under broad authority granted by the Congress.

I strongly urge the Congress to reconsider such restrictions and permit the necessary management flexibility in personnel matters.

Another Congressional action which will have profound impact on management efficiency is passage of the Congressional Budget and Impoundment Act. It should permit sufficient time for the Congress to review appropriation and authorization requests carefully and provide such authority prior to the beginning of a fiscal year. This will obviate a good deal of waste which has occurred in the past because program and budget levels were not approved until after the beginning of the fiscal year.

In spite of the great potential for useful changes contained in the Budget and Impoundment Act, I foresee many management problems generated by the three month transition period if considered as a separate fiscal entity for program execution and accounting and reporting for the Military Personnel, Navy appropriation. This will be true unless the FY 1976 appropriation will be available for use after 30 June 1976. Some examples of potential problem areas are:

a. Essentially no capability for absorbing dollar reductions or cost increases which may occur at the beginning or during FY 197T.

b. Little or no time exists for any possible program adjustment if, under the open allotment system of funds administration, funds expended during the first month of FY 197T exceed planned levels.

This fact would not be known until late in the second month, and even then the usual subsequent expenditure adjustments could be unfavorable.

c. Any available action taken during FY 197T to remain with the appropriated availability would bow wave additional unbudgeted costs into FY 1977. This is particularly true of subsistence, PCS moves and any deferrable personnel actions, such as promotions and advancements.

d. Since MPN must be closed out on a fiscal year basis, the administrative burden and cost will be increased by the overlap of accounting and reporting for FYs 1976 and 197T.

Therefore, I recommend that in appropriating MPN funds for FY 1976 and FY 197T, the Congress authorize the management of the two budgets as one fifteen month fiscal period. This would provide the management flexibility necessary to manage our military personnel programs and available funds effectively and efficiently.

C. Recruiting

1. General. With the advent of the All-Volunteer Force and the experience gained this past year recruiting "true volunteers", the challenge remains great to meet both quantity and quality requirements. The Navy must share the market with other Services, as well as private industry. Our efforts to meet these requirements have included upgrading the effectiveness of our recruiting force, and continuing improvement in recruiting stations, support, advertising, identifying the quality market, plus other initiatives.

2. Recruiting Force. Although we have faced many challenges in achieving our recruiting goals, no significant change in the size of the recruiting force took place in FY 1975. We counted upon increased experience and effectiveness to attain higher accession requirements. Similarly we are looking toward attaining higher FY 1976 accession needs without an increase in recruiting force size. The chart below shows recruiting force data and reflects the

costs in dollars and manpower needed to succeed in the draft-free environment. I would emphasize that these include most of the Naval Reserve recruiting costs also, including travel, training, vehicles, advertising, recruiting materials, and support.

RECRUITING PERSONNEL STATISTICS FY 73 - FY 7T

Military End-Strength	FY 73 (ACT)	FY 74 (ACT)	FY 75 (PROJ)	FY 76 (PROJ)	FY 7T (PROJ)
Officer	538	544	560	560	560
Enlisted	4,857	4,762	4,893	4,893	4,893
(Production)	(3,454)	(3,318)	(3,485)	(3,485)	(3,485)
(Supervisor)	(300)	(285)	(285)	(285)	(285)
(Support)	(1,103)	(1,159)	(1,123)	(1,123)	(1,123)
TOTAL	5,395	5,306	5,453	5,453	5,453
Civilian	423	521	592	590	590
GRAND TOTAL	5,818	5,827	6,045	6,043	6,043

RECRUITING COSTS ($000)

	FY 73 (ACT)	FY 74 (ACT)	FY 75 (PROJ)	FY 76 (PROJ)	FY 7T (PROJ)
Media	$23,017	$26,753	$25,789	$25,789	$ 5,543
Agency	(15,916)	(18,910)	(18,300)	(18,300)	(3,933)
In-House Printing and Pub. Prep.	(5,953)	(6,879)	(4,442)	(4,442)	(955)
Local Advertising	(1,148)	(964)	(3,047)	(3,047)	(655)
Vehicles	6,125	6,145	7,937	9,202	2,300
Civilian Personnel	3,906	5,001	6,496	6,577	1,669
All Other	12,841	15,838	19,405	22,603	5,776
TOTAL (O&MN)	$45,889	$53,737	$59,627	$64,171	$15,288
MP,N	$45,878	$49,759	$53,728	$54,925	$13,901
OP,N	1,004	1,458	1,253	1,133	753
TOTAL RECRUITING	$92,771	$104,954	$114,603	$120,229	$29,942

3. Quantity. The regular recruiting force is responsible for obtaining all enlisted and officer non-prior service personnel for the active Navy and Naval Reserve, as well as broken service reenlistees. Recruiting of prior service reserve personnel for inactive duty is a province of the Chief of Naval Reserve, though support and most other funding are provided from the Navy Recruiting Command's budget. Through the first six months of FY 1975, we attained 99% of our USN and USNR active duty enlisted quota as shown in the following table.

ENLISTED ACCESSIONS
(JUL 1974-DEC 1974)

	GOAL	ATTAINED	% OF GOAL
USN QUEBECS*	48,547	47,403	97.6%
WAVES	3,255	3,269	100.4%
REENLISTMENTS	3,725	4,495	120.7%
FILIPINOS	660	672	101.8%
TOTAL USN	56,187	55,839	99.4%
USNR 2X6/3X6 (ACDU)	7,407	7,308	98.7%
READY MARINER (4X10) (INACDU)	1,608	1,517	94.3%
TOTAL USNR	9,015	8,825	97.9%
TOTAL NAVY	65,202	64,664	99.2%

* Non-prior service males.

In addition to the preceding, approximately 33,000 annual USNR reaffiliations are partially supported financially by recruiting funds. Total USN, non-prior service male accession requirements for the active force have been increased from 74,537 in FY 1974 to 79,469 in FY 1975. Higher accession requirements have made the recruiting task difficult in FY 1975. FY 1976 will be even more difficult with a requirement of 80,901. The strenuous nature of life at sea, with its family separation and other personal hardships, presents Navy with a more difficult selling job. Of key importance is that the out-year petty officer requirements (which must be "grown" from current recruits) remain relatively constant and generate a need for a very high proportion of above average, quality recruits. With unemployment rising, the tendency is to conclude that recruiting is becoming easier. This is not necessarily true. The people walking into recruiting stations today tend to be older and of the lower mental group categories. Many of them have not been able to meet our minimum enlistment standards.

4. Quality. In spite of high FY 75 accession requirements, Navy is striving to maintain high standards. Through the first six months of FY 1975, 68.1% of total active duty accessions were high school graduates. For the same period, 76.2% of all recruits have been determined eligible to attend a Class "A" school. With lower accession requirements in the second half of FY 75, we expect to significantly improve our quality.

5. Officer Procurement

Procurement programs are generally providing an adequate number of officers to meet the Navy's needs, particularly in this period of declining strength. Although we are experiencing difficulties in obtaining medical personnel, as well as nuclear officer candidates, selectivity continues high for student inputs to the Naval Academy and the NROTC (Scholarship) Program, the primary sources for regular Navy officers. This year we anticipate processing about 7,000 qualified nominees to the Naval Academy to fill 1,350 seats. Additionally we anticipate approximately 21,000 NROTC applications, with 1,500 - 1,800 scholarships being awarded.

6. Recruiting Prognosis. The foregoing July through December 1974 attainment data notwithstanding, there are significant recruiting challenges facing us. We have not been able to attract sufficient numbers of high quality personnel to fill those sea-going ratings critically needed in the fleet which have been traditionally undermanned. Further, the cancelling of the two-year active duty and three-year regular enlistments will impact on the recruiting market and make our job more difficult. The personnel manning and funding requested for Navy Recruiting Command is less in terms of real dollars (due to inflation) than last year. We are counting on our improved skills, efficiency of operation and a more favorable market in order to do more with less and accomplish our goals in this critical area.

D. Retention

1. Enlisted. We are continuing to make progress in the retention of enlisted personnel. Our first term reenlistment rate for FY 1975 through December is approximately 40%, a figure considered unattainable just a few years ago. The career reenlistment rate has been approximately 81%. Caution should be exercised when using this index, as it does not reflect the entire picture of the health and welfare of the Navy Enlisted Force. Although the rates are relatively high in FY 1975, the numbers of reenlistments are only slightly above those planned. Retention statistics showing improvement in recent years follow:

ENLISTED RETENTION
(Fiscal Year-Basic Percentage)

	68	69	70	71	72	73	74	75*
First Term	17%	16%	10%	17%	23%	23%	33%	40%
Career	79%	78%	84%	90%	91%	92%	80%	81%
Overall	36%	34%	27%	39%	43%	45%	54%	60%

* Thru December 1974.

The above retention statistics are developed under a Department of Defense formula which excludes personnel who are not eligible to reenlist because of qualification failure, disciplinary experiences, deserters, etc. Therefore for example, if those personnel ineligible to reenlist were included in the DOD formula, the reenlistment rate would be 20.2% for the first half of FY 1975, rather than the 40% indicated.

Of greater concern to us, however, is the number of reenlistments by skill area. We have established goals for each rating and so far this fiscal year we are tracking at or ahead of the desired achievement in over half of our ratings. I cannot attribute our success this year to Navy efforts alone. The current status of the civilian job market is a significant contributing factor. The

assistance provided by the Congress in passing the Selective Reenlistment Bonus last year is most helpful in those ratings where applied.

We still have severe problems in 36 of 86 ratings in terms of overall manning, first term retention, and career manning. The majority of the 36 problem ratings are those which might be considered "dirty", such as Engineman and Boiler Technician, and other ratings having little or no utility in the civilian economy. Examples of the latter category are Gunners Mate and Ordnanceman. In those ratings where severe problems exist, we need to retain more senior personnel beyond the 20 year Fleet Reserve eligibility point. These senior petty officer shortages are reflected in the marginal combat-readiness of approximately 42% of our ships and squadrons.

I must note that over the past year the piecemeal loss of a number of items which have been considered by our people as benefits of career service has had a negative impact on the perceptions of these senior personnel. Although the objective of trimming personnel costs is valid, and perhaps the loss of one or two isolated programs or benefits is not catastrophic, the cumulative effect is creating disenchantment because of lost benefits and uneasiness about what the future holds in store in spite of annual pay raises.

Nevertheless, we are making progress in our retention efforts. The major emphasis at all echelons within the Navy has been the growth and improvement in the career counseling and motivation program to insure that all personnel are made aware of the programs and benefits available to them with career Navy service. In order to continue progress and to be prepared for a national economic upswing, we need additional full time career counselors, particularly in our smaller sea-going units. I have discussed this point previously with respect to the Conference Report on the FY 1975 DOD Appropriation which permits an increase only by an offsetting reduction in the number of recruiters.

2. Officer

Our progress in officer retention since FY 1970 has generally been encouraging. Recent officer retention experience is as follows:

	FY 73	FY 74	FY 75*
Pilots	43%	44%	46%
Submariners	47%	**	49%#
Surface	14%	14%	34%##
Physicians	10%	9%	13%
Dentists	6%	9%	15%

\# Two year average will be 40-45%.

Commencing FY 75 this number refers to 111X officers only, previous years included 110X and 111X.

* Through 31 December 1974. Anticipate lower annual levels.

** FY 1974 submarine retention statistics are invalid, inasmuch as ultimate retention of Naval Academy graduates commissioned in FY 1968 could not be determined because this was the first class reflecting the increase from four to five years of obligated service following graduation. This is particularly significant in the nuclear submarine community where over one-half of the officer accessions have been Academy graduates.

As the data above indicate, we are still encountering severe problems in the nuclear submarine, surface warfare and medical communities. I must point out that the apparent increase in surface officer retention is due to the use of new designators for surface warfare officers and not necessarily better results. We have a long way to go in meeting goals for each officer community. The Navy has not been retaining sufficient junior officers at the critical

career decision point in the three major warfare communities for the past few years, and this deficiency is reflected in middle grade officer shortages. The effect of previous shortfalls is most prevalent in the Nuclear Submarine community where long and continuous sea tours are common. This year over one-half of the resignations received indicated family separation as the primary reason for leaving the Navy.

I am very much concerned with our capability to retain our nuclear qualified officers. Expanding requirements for these officers, perennial accession shortfalls, declining retention of middle grade officers who have completed their bonus obligation and the increased availability of high paying jobs in civilian nuclear industry have changed the nature of the nuclear officer retention problem. Continuation pay was approved in FY 1969 by the Congress as a temporary expedient to stem an unacceptably high resignation rate in this community, and it succeeded in reversing the resignation trend. The authority for this special pay expires June 1975. In consideration of our current nuclear officer retention problem a new approach is required to reverse our present manning trend. Accordingly, a new legislative proposal has been prepared and is being staffed in OSD for submission to the Congress. The proposed Nuclear Career Incentive Pay would provide incentive pay based on length of commissioned service which would start at $100 per month and increase to $245 per month at the 5th year, remaining at that level to the 18th year. From that point it would decrease in two year intervals to zero for nuclear officers with over 25 years of commissioned service. The current continuation pay remains as a save-pay feature until 1980. This proposed legislation provides an accession incentive, provides a level of economic indifferences to civilian salary offers and provides a financial incentive over the full period of a nuclear officer career. I strongly recommend favorable consideration by the Congress.

In connection with other junior officers leaving the services soon after completion of obligated service, it is worthy of note that approximately one-fifth of the resignations received this fiscal year to date stated the primary reason for leaving the Navy was to obtain post-graduate education. I share the concern of the Congress that graduate education being provided at Navy expense should not exceed our requirements. The Navy's objective is to send only those officers to graduate school who are qualified academically, who have demonstrated the performance to rise to the senior grades and who will fill billets calling for graduate level education in subsequent duty assignments. This policy requires that all officers so educated will serve at least one tour, and most officers repeated tours in their acquired subspecialty.

We have offered increased incentive and responsibility to top performing officers by providing them command opportunity at the earliest feasible time. We have also implemented a strengthened policy of individual counseling of each junior officer in connection with his performance evaluation. This latter was in response to overwhelming opinion among both officers reported upon and the reporting seniors that officers benefit from seeing and discussing their performance evaluations. Many other programs have also been designed to improve the satisfaction and challenge of officer duties, enhance professional prestige, and improve quality control of officers. The effort to increase the individual counseling and improve the professional satisfaction of junior officers is continuously undergoing review and revision.

E. Fleet Manning.

1. Enlisted. The retention successes we are experiencing are encouraging; however, we are still facing a large skill deficit in critical ratings. In some cases excesses in other ratings are being converted to meet our shortages, but this is not always

possible. As a result, our enlisted personnel manning problems are described in terms of total shortages, petty officer shortages, skill mismatches, and how these matters relate to unit combat readiness.

At the end of December 1974, enlisted distributable fleet manning was at 96.7%, and total distributable manning stood at 96.1%, a shortfall of 15,183 personnel. Distributable manning is defined as those personnel available for assignment to force structure billets, and excludes students, transients, patients, and prisoners. Non-rated manning is presently 108.6% or 5,378 personnel in excess of normal requirements. Additionally, excesses in overmanned ratings number 9,265 with 31 ratings manned at 100% or better. However, to offset these overages in some skills, Navy has an existing deficit of 29,826 personnel in various skills. Presently there are 45 ratings with a distributable manning of less than 100% and 27 ratings of these are manned below 90%, 19 which are below 85% of requirements. While we have excess in some ratings and non-rated categories these excesses are inadequate to meet our skill shortages. Gross personnel deficiencies may be attributed to an inadequate first term retention over a 10-year period and career losses to the Fleet Reserve. Specific rating shortages are further exacerbated by inadequate Class "A" school seat utilization. The chart on the following page illustrates billet requirements, distributable manning and shortages of nine selected ratings that are among those critical to fleet unit readiness.

FLEET MANNING SHORTAGES - EXAMPLES

AS OF 31 DECEMBER 1974

	ALLOWANCE	ON BOARD	SHORTFALL	MANNING %
MACHINIST MATE (MM)	20,273	19,417	856	95.8
BOILER TECHNICIAN (BT)	11,184	10,100	1,084	90.3
ELECTRONICS WARFARE TECHNICIAN (EW)	2,070	1,162	908	56.1
OPERATIONS SPECIALIST (OS)	7,829	5,976	1,853	76.3
GUNNER'S MATE (TECHNICAL) (GMT)	1,912	1,191	721	62.3
FIRE CONTROL TECHNICIAN (GUNS) (FTG)	3,868	2,839	1,029	73.4
FIRE CONTROL TECHNICIAN (MISSLE) (FTM)	3,035	2,137	898	70.4
AVIATION ORDNANCEMAN (AO)	5,368	4,166	1,202	77.6
OCEAN SYSTEMS TECHNICIAN (OT)	1,194	902	292	75.5

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Navy petty officers are our supervisors and technicians, and their availability in appropriate ratings and in sufficient numbers is critical to the effectiveness of Navy efforts. The following chart depicts some of our petty officer shortages for December, 1974:

PETTY OFFICER SHORTFALL
December 1974

RATE	% DIST MANNING E4-E9	MANNING DEFICIT E4-E9
Aviation Electrician's Mate (AE) (E8)	83.7	977
Aviation Ordnanceman (AO)	82.2	707
Aviation Electronics Technician (AT) (E8)	90.9	727
Aviation Antisubmarine Warfare Operator (AW)	80.6	375
Aviation ASW Technician (AX) (E8)	69.3	406
Boilermaker (BR) (E6-E9)	52.5	126
Boiler Technician (BT)	69.5	2744
Commissaryman (CS)	73.9	2164
Electronics Warfare Technician (EW)	61.7	692
Fire Control Technician (Guns) (FTG) (E7)	76.4	781
Fire Control Technician (Missile) (FTM) (E7)	67.3	918
Gunner's Mate (Guns) (GMG) (E7)	78.1	867
Gunner's Mate (Technician) (GMT)	83.1	631
Operations Specialist (OS)	73.5	1582
Ocean Systems Technician (OT)	66.1	354
Radioman (RM)	83.5	2223
Ship's Serviceman (SH)	77.0	945
Signalman (SM)	71.0	825
Torpedoman's Mate (TM)	82.0	663
Electrician's Mate (EM)	88.3	1132
Engineman (EN)	97.8	139
Hull Technician (HT)	71.3	2739
Interior Communications Electrician (IC) (E8)	84.3	715
Machinist's Mate (MM)	83.6	3150
Gunner's Mate (Missile) (GMM) (E7)	63.5	394
Sonar Technician Submarine (STS) (E5)	79.2	235
Data Systems Technician (DS)	96.1	59
Air Controlman (AC)	90.[illegible]	221
Communications Technician Administration (CTA)	92.1	58

The goal in solving the distributable skill deficit is to reduce the deficit by 5% per year while maintaining fleet balance. Various steps are being taken to achieve this goal: (1) a revised program of rating management of members in overmanned ratings;

(2) more advancement of seamen, firemen, airmen, and constructionmen to third class petty officer based on on-the-job training; (3) vigorous first term and career retention efforts; and (4) increased input of fleet experienced personnel into critical rating schools within travel restraints.

Because fleet ships and squadrons must perform as self-contained units, even a small shortage of skilled petty officers can have critical implications. A key element in a unit's overall readiness is its personnel readiness, so much so that in some instances loss of one or two petty officers can render a ship not ready for combat. The Navy is the only service which includes qualitative shortages of E5 through E9 personnel in measuring personnel readiness. Moreover, it requires reports of these deficiencies from the individual unit rather than from a higher organizational level as in the other services. Though reporting shortages of a few key petty officers at the unit level can make our comparative position a poor one, it gives us the precise measurement we need in our effort to determine our total readiness. As of the end of December 1974, approximately 42% of our fleet units were marginally ready or unready for combat in terms of personnel. This was a two percentage point increase in the number of such units over January 1974. It illustrates a continued degradation of personnel readiness which must be corrected. Though we anticipate an improvement in manning through increased first term retention and selective career retention efforts, meeting the skill level shortages incurred through a history of poor results will be a long-term process.

It is readily apparent that increased personnel experience levels at sea and improved combat readiness can only be attained by alleviating the critical fleet manning problems I have addressed. To this end, the Navy is staffing within the military services a legislative proposal to provide additional compensation for extended

or repeated tours at sea, thus offsetting financial disincentives for our people to want to go to sea. Essentially, this proposal would increase the current maximum sea duty pay from approximately $22 per month, based on pay grade, to $25 or $100 per month based on continuous and/or cumulative time spent at sea. Past experience has proven that people do accept repeated sea duty if compensated for such assignment. Special pay for nuclear submariners is a classic example.

This program, if approved, is planned not only to reduce the current budget cost of sea duty pay after a three-year phasing-in period, but would provide additional benefits through increased fleet readiness. As a fall-out from the primary manning objective, benefits would also accrue in terms of increased reenlistments. We are hopeful that this proposal will be presented to and approved by the 94th Congress.

2. Officers

Officer manning has not presented the critical problems we are experiencing with enlisted personnel. Overall officer manning, as of 30 November 1974, was at 100%. Even so, we are experiencing grade imbalance in several areas. For example, there is an inventory deficiency in the grade of LT in all warfare communities. The net effect of this imbalance is the continued necessity of filling billets for such officers with more junior officers and Limited Duty (LDO) and Warrant Officers.

E. All Volunteer Force Evaluation

Before leaving the subjects of recruiting, retention, and fleet manning, the overall aspect of the All Volunteer Force (AVF) environment must be addressed. While our success during the initial phase-in of the AVF has been most gratifying and the projections for the future look satisfactory, care must be taken to examine closely the base from which these projections are made.

The general economy during the period of transition has demonstrated significant weakness and a recessionary trend coupled with high inflationary rates and growing unemployment. These factors have had a significant short-term impact on our capability to recruit and retain high quality personnel in the military service.

Reviewing each category of improved retention and recruiting, success outlined above must be carefully assessed with the current economic environment and future tends before any decision is made to reduce or curtail our efforts in any area. We must be critically aware of the ability of the national economy to demonstrate its resiliency and grow in the future. When the recovery which is predicted occurs, military service will again compete in a scarce market and must present a viable alternative.

When evaluating whether or not the All Volunteer Force is a success, attention cannot be focused on the accomplishments of the past year. Rather, we must delay the response to this inquiry until all the statistics are available over the next four or five years when an accurate assessment may be made. In the interim the programs which have been developed to compete in a scarce labor market must be continued in order to attract and retain high quality personnel. New programs must be assessed in the light of long-term trends and not short-run accomplishments due to external economic factors.

We now have the opportunity to improve significantly the quality mix of military personnel if current programs are continued at the same level and new proposals are supported and approved.

F. Human Resource Management. In my statement before the subcommittee last year, I made the point that highly motivated sailors are essential to an effective fighting Navy, and that in the face of rising personnel costs and reduced manpower levels, we must improve not only the retention of our trained personnel, but also the overall effectiveness of all our personnel. I also stated that we could achieve these objectives by improving leadership and management

through implementation of a coordinated, Navy-wide human resource management program. The progress we have made in implementing this program to improve command effectiveness is worthy of discussion.

Over the past two years we have institutionalized a Human Resource Management System approach to improving organizational efficiency which concentrates on leadership development and the human resources aspects of an organization. Since 1 January 1974, programs in human resource management and leadership directly supporting commanding officers in the optimization of mission effectiveness have been an integral part of the naval establishment. The principal thrust is leadership and management training and the application of organizational development and management techniques within a given command. Equal Opportunity, Race Relations, and drug and alcohol abuse education and rehabilitation are subset management issues which leaders are trained to effectively manage within the context of their organizations.

Our Human Resource Management program bears directly on traditional officer and petty officer responsibilities to keep informed of the needs and capabilities of their people, to promote sound leadership, to develop the professional competence of their subordinates, and to effectively use that competence to achieve Navy objectives. It is a systems approach to building good order, discipline, responsibility, motivation, and teamwork to improve command effectiveness.

The necessity to deal with highly emotional human resource oriented societal issues within a military framework - equal opportunity, drugs, alcohol - is a fact of life. The connotation of a social reform program is untrue and obscures the benefit of being able to effectively manage organizational problems in these controversial areas.

The HRM system was developed with an eye to the real world constraints of rising costs, reduced force and manpower levels, a smaller share of the federal budget, and no decrease in Navy commitments.

It is cognizant of the fact that the Navy as an institution shares the problems of the seventies--drug and alcohol abuse, the thrust for equal opportunity, racial unrest, personnel turbulence, and changing values, to name a few. It also recognizes the challenge presented by these problems and the necessity to take our input from society and convert it to the order, discipline, and teamwork of the Navy.

The implementation of this integrated human resource management effort is accomplished through chain of command action to improve personnel productivity, develop better organizational practices, foster individual commitment, provide affirmative action toward equal opportunity, and improve the quality of professionalism.

Specifically, we have established leadership and management training for officers and petty officers within our Navy schools system and have introduced improved course material on discipline, responsibility and authority, equal opportunity, etc. Simultaneously, we have established Human Resource Management Centers and Detachments under the Fleet Commanders in Chief to work with individual commands in strengthening their chain of command to improve personnel utilization and combat readiness. And, when feasible, we are assisting those people who have become ineffective performers through drug or alcohol usage to be rehabilitated and restored to full, effective duty.

The success of this coordinated human resource management approach, even though it is in its infancy, proves the wisdom of its continuation. For example, the objective of our Human Resource Management Centers and Detachments is to provide commanding officers the assistance they require to develop an efficient and stable force of career personnel through improved personnel effectiveness, leadership, and management in the areas of equal opportunity and race relations, drug and alcohol education and organizational development throughout the fleet and shore establishment.

This large scale effort is providing our commanding officers with a practical approach to improving the utilization of their resources that is tailored to the needs of their commands. As of 1 January 1975, over 225 commands had availed themselves of this training. Reports have been received at all levels indicating that this program is contributing significantly to improved performance, morale, discipline, motivation, and retention while improving the functioning of the chain of command. Admittedly, such feedback is subjective, and efforts to objectively evaluate the effectiveness of the Human Resource Management Programs have been implemented.

The effectiveness of our Alcohol Rehabilitation and Drug Abuse Control Programs is more easily quantified. During FY 1974, 3,050 active duty personnel received inpatient treatment for alcoholism at Navy rehabilitation facilities. By 31 December 1974, a total of almost 8,000 members had been treated since inception of the Navy program. Bureau of Naval Personnel studies continue to show that 70% of those treated are restored to effective duty, demonstrating performance and conduct equal to or better than their peers. Of those remaining on active duty two years after treatment, 80% incurred no post treatment disciplinary problems of any kind, and 82% were recommended for advancement. As the average alcoholic patient is a career-designated officer or petty officer with more than 10 years service, the success of the alcohol program makes a significant contribution to retention of career personnel and to the operational readiness of the fleet and shore establishment.

Our Drug Abuse Control Program continues to be effective in that the return to duty rate of people identified as former drug abusers has been doubled from 35% in 1971 to 73% in 1974. During FY 1974, 9,235 drug abusers were identified with 1,304 being evaluated as drug dependent and receiving treatment at a Navy rehabilitation facility. Return to duty rates of rehabilitees

has increased to 36%, up from 25% in 1973 and 12% in 1972. Follow-up data on those individuals returned to duty indicates 86% are still on active duty or have successfully completed their enlistments, with 80% demonstrating conduct and performance equal to that of their peers.

The basic goal of the Equal Opportunity/Race Relations component of our Human Resource Management System remains the same--one Navy, a Navy that places no artificial barriers on race, color, sex, or creed. We are moving firmly and steadily toward making that a reality by implementing changes within the framework of disciplined, efficient, and orderly programs.

The primary objective of the first phase of this program has been the elimination of racism by increasing racial awareness through race relations education seminars. All flag officers, 95% of our second class petty officers and above, and over 53% of the total Navy population have completed this training. There is considerable evidence that we have been effective in creating increased awareness among both majority and minority personnel, as well as stimulating improvement in the area of affirmative action. For example, over a one-year period in one of our Type commands, the number of personnel receiving race relations education training increased from 37% to 76%. During that same period the number of racially oriented incidents reported declined from a peak of 26 per month to a low of 6 per month.

Our success thus far has not lulled us into thinking that the Navy has fully achieved equal opportunity. We officially embarked on the second phase of our Equal Opportunity/Race Relations Program last fall. Phase II is designed to build on the heightened racial awareness and affirmative action generated in the initial phase of training. The major thrust of Phase II is on command responsibility for affirmative action to counter the effects of discriminatory practices. It is

designed to create an environment wherein individuals may advance to their maximum potential and in which their talents may be fully realized and utilized. It should be emphasized again, however, that it is not our intention to remodel the Navy into some type of social action organization. Our program is not oriented toward one race or culture, but rather toward one Navy. It remains our conviction that the source of our strength and potential for continued services rests as much, if not more, with our people as it does with our technology.

In developing our human resource management programs, we have made a conscientious effort to determine minimum manpower requirements while considering the needs of our people and the probable employment of our Navy in the years ahead. We have implemented a broad spectrum human resource management system for developing the full potential of our people which will help build an affordable and effective Navy that will be strong, flexible, and efficient. I feel confident that we are moving in the right direction at the institutional level to improve the capability of our leadership and management. As we continue these programs, we will continue to benefit through improved effectiveness and improved retention of our experienced people.

Our Human Resource Management System is a cost effective, vital part of overall strategy in the achievement of Navy excellence. I ask for your continued support in this area.

V. Conclusion

Mr. Chairman, that concludes my prepared statement. Now, I would be pleased to try and answer any questions you may have.

BUDGET OVERVIEW

Admiral BAGLEY. Mr. Chairman, I will address the charts that you have in your hand. The first chart is an overview of the Military Personnel Navy budget request.

MILITARY PERSONNEL, NAVY BUDGET SUMMARY

[Fiscal years]

	Fiscal year 1974	Fiscal year 1975	Fiscal year 1976	Changes, Fiscal year 1975 versus Fiscal year 1976	Fiscal year 197T
Man-years	554, 017	546, 418	530, 781	−15, 637	132, 657
End strength	545, 668	536, 117	528, 651	−7, 466	535, 860
Dollars [1] (thousands)	5, 560, 775	5, 847, 980	5, 784, 900	−63, 080	1, 476, 900

[1] Includes Oct. 1, 1974 pay raise.

DIRECT COSTS

We would like to point out that the MPN appropriation supports the pay and allowances, subsistence, permanent change of station moves, and miscellaneous personnel costs such as death gratuities and apprehension of prisoners of active Navy military personnel. These are direct costs only.

Senator YOUNG. What do you mean by direct costs?

Admiral BAGLEY. These are costs directly related to military personnel and include pay and allowances, subsistence, moving and miscellaneous direct costs. But no indirect costs, such as housing or other personnel-related programs are included.

The annual MPN funding requirements are based directly on the planned strength of the Navy. The total fiscal year 1976 MPN request is down about $63 million from the fiscal year 1975 budget. Overall, this net reduction is due to 15,637 less man years and a 7,466 reduction in end strength partially offset by the annual cost of the October 1, 1974, pay raise and other program increases.

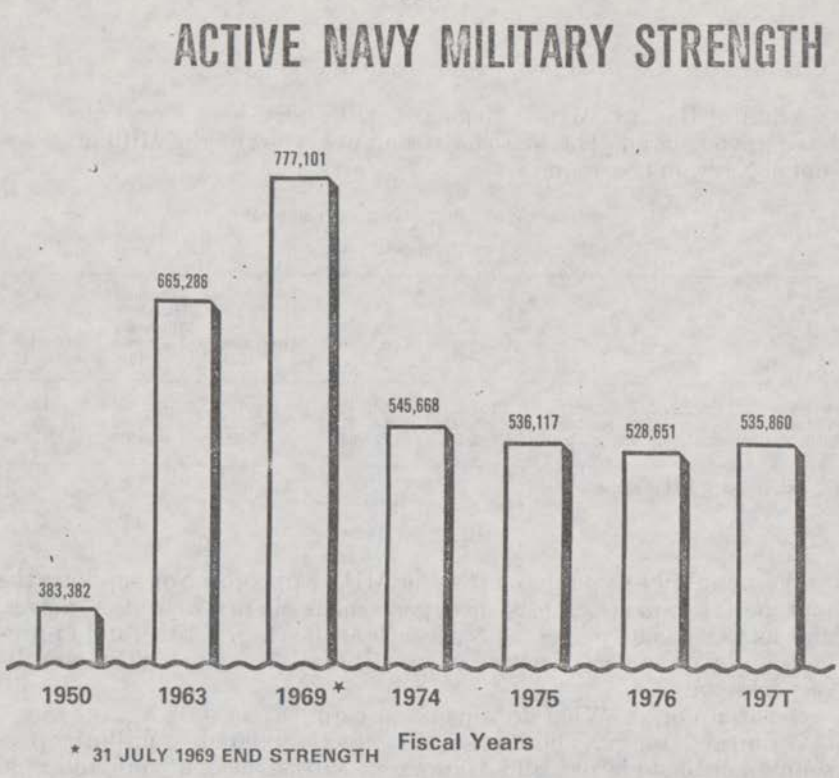
Fiscal year 197T, or the transition period which covers the first 3 months after the end of fiscal year 1976 is not comparable to either fiscal year 1976 or 1977, but it does show strength increases due to our front loading phenomenon which is caused by the need to enlist a large number of enlisted personnel in the prime recruiting months of the summer following the high school graduation.

Senator YOUNG. The Navy has done well to reduce the total overall personnel cost at a time when you have a voluntary service and increased salaries.

Admiral BAGLEY. Yes, sir, and I am going to discuss later how our strength has come down, and the trends for the future.

Senator YOUNG. I think that is something we should use in the debate on the Senate floor.

Admiral BAGLEY. I agree.



OVERVIEW OF ACTIVE NAVY MILITARY STRENGTH

Now if we could turn to chart 2, Mr. Chairman. This chart shows the overview of the active Navy military strength for selected years. It shows a downward trend continuing through fiscal year 1976. This represents a 32 percent reduction since the high point of the Vietnam war in 1969, as you see on the chart.

Now, these personnel strengths are going to level off in fiscal year 1976 and as new ships begin to come into the Navy the requirements will increase in fiscal years 197T and 1977.

I know there is much concern about the cost of manpower and the effects on budget reductions in the military personnel area. That is, we can reduce our manpower, we can reduce our budget request, but such actions will have one or both of the following consequences, depending on the size of the cut.

One is a deliberate undermanning of our forces and particularly the fleet units; and the other would be to reduce support and depending again on the size of the cut, to tie up some of our ships. Either of these actions would reduce the capability of the Navy to perform its assigned missions and I think this increased risk to the national defense should be known and consciously accepted.

PAY COST

Senator YOUNG. Is this a pay cost tied to the President's 5-percent pay increase ceiling?

Admiral BAGLEY. The law, as you know, requires an increase tied to cost of living. Our budget does not reflect a pay raise in 1976.

Senator YOUNG. None at all?

Admiral BAGLEY. No, sir, it does not. As I mentioned to you, the savings between 1975 and 1976 are due to reductions in manpower and the associated savings were partially offset by the fiscal year 1975 pay raise which was passed last October.

Senator YOUNG. Isn't there a pay raise scheduled for 1976 on a cost-of-living increase?

Admiral BAGLEY. Yes, sir. There normally would be one on October 1. The point at issue is whether there will be a 5-percent ceiling on that raise or whether it will be a normal raise due to cost of living increases.

SUPPLEMENTAL

Admiral COOKE. For fiscal year 1975, the year we are in now, we have a supplemental request coming to Congress which will provide us the additional money required in fiscal year 1975 for the pay raise that occurred October 1, 1974.

Senator YOUNG. That was based on the full cost of living?

Admiral COOKE. There is provision in the President's budget for a pay increase.

The pay raise is in there for all the Department of Defense at the 5 percent that the President prescribed. The amount of the increase—and I am sorry I did not make this clear and that is my fault—is not within the individual Navy appropriation. It is in the total Department of Defense request and it is in the contingency line at the 5-percent level for the pay raise that will take place this next October.

COST OF LIVING BASE

Senator YOUNG. The reason I am asking is, I think Congress will vote a regular pay raise based on the cost of living. I think we should get the figures from all the services.

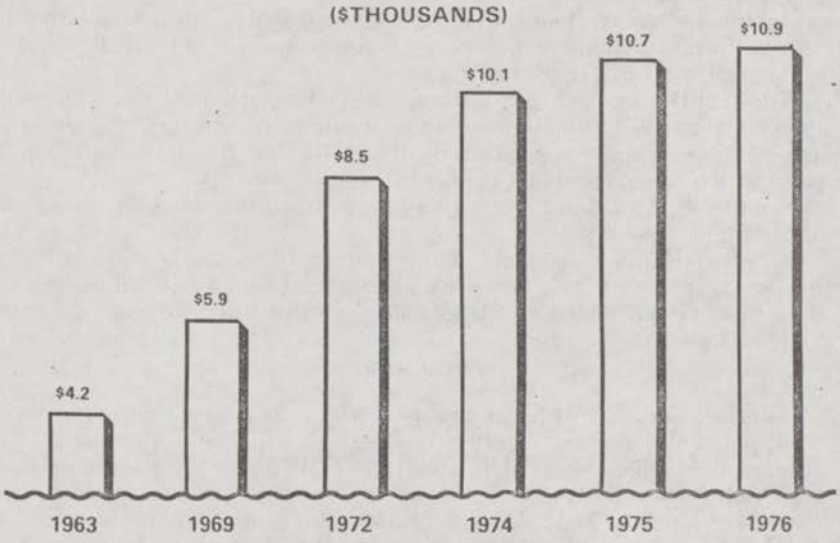
Admiral BAGLEY. I do want to make clear, Mr. Chairman, our 1976 request in the manpower Navy appropriation does not include a pay raise for 1976, sir.

Senator YOUNG. Not even the 5 percent?

Admiral BAGLEY. No, sir.

Then, if I may, in my final comment in addressing chart No. 2, sir, talk about the possibility of reducing the manpower authorization and appropriation for 1976, the serious effects which would result with respect to our ability to meet future needs. Reduced manpower would inhibit our preparations for manning the additional ships which are scheduled to come into our inventory in 197T, as well as the fiscal year 1977. Therefore, we must start now recognizing those ships are coming into the active forces and prepare to train people to man the new ships. Forced manpower reductions in fiscal year 1976 would result in further future skill shortfalls and an inability to man properly our fleet units.

AVERAGE ANNUAL COST PER MAN



COST PER MAN

Now, sir, if I may turn to chart No. 3 and discuss the average cost per man, because this graphically indicates how the costs of our people have risen over the years.

Now I know there is considerable concern about the cost of people in the services, as well as in other segments of the Government, but I would point out that manpower costs can be reduced only by two general means: One is to eliminate people, and I have pointed out the consequences of that, or by cutting back on the financial entitlements of the members.

The people we are asking for in this budget and upon which the requested funds are based are the minimum, certainly the minimum that we can determine as required to man the fleet and the support establishment.

It is also of interest to note that 95 percent of the funds requested in the MPN appropriation are legal entitlements over which I have no management control. I think this is significant from the personnel management point of view, sir.

Then, finally, with respect to the average cost of the man, rising as it is, I still would urge that as long as we are competing for quality young people, both men and women, to come into the Navy, and more importantly to keep them in the Navy, we are going to have to pay the going rate and the pay raises are going to have to follow the inflationary economy as it lasts, sir.

VOLUNTEER-UNEMPLOYMENT RELATIONSHIPS

Senator YOUNG. Do you have problems recruiting volunteers?

Admiral BAGLEY. No, sir.

Mr. Chairman, particularly in the last several months, as the unemployment rate has risen, we have not had the problem as we have had in the past in getting the kind of people that we need. Now we have never had a problem getting numbers. That is not the real problem. The real problem is getting the quality people, the people with basic intelligence and education who can successfully undertake our Navy technical training courses and become useful petty officers in the fleet.

Senator YOUNG. Do you have enough doctors?

Admiral BAGLEY. Not at the present time. We expect to meet our fiscal year 1975 requirements by the end of this year.

Senator YOUNG. You have a special training program for them, you help the student through medical school?

Admiral BAGLEY. Yes, sir, that is under H.R. 2 program, our medical scholarship program.

ALL-VOLUNTEER FORCE

Successful to date, but not without problems.
Recruiting meeting total enlistment quota.
Quality is improving, but still short in sea going ratings.
Retention percentage improving, but— not keeping enough petty officers in critical ratings.
SRB helpful—but need to improve career attractiveness of Navy.
Existing programs must be continued and improved.

ACCOMPLISHMENTS OF ALL-VOLUNTEER FORCE

Mr. Chairman, the next slide has several points on the all volunteer force and it sort of summarizes my view as to how we have been in the all volunteer force in the last 2 years, but particularly in the recent past.

We have had reasonable success to date, but not without problems. Our recruiting is meeting quantity goals, but I must say that the end of the 2-year reserve enlistment and the 3-year regular enlistment for the Navy which have recently been announced, is going to make recruiting tougher. It does not make it impossible, but there is a perception on the part of many young people in the Nation today that they do not want to opt initially for long periods of service and would rather come in for shorter periods and take a look and see if they like it and then decide if they want to make it a career.

By going to four-year enlistments, it is going to put a greater premium on the ability and capabilities of our recruiting force.

We still encounter problems in getting people to come into the skill areas, or as we call it in the Navy-ratings, which are primarily seagoing ratings. And there seems to be two reasons for this.

One, many of those skills do not have a comparable or relatable occupation in the civilian society, in industry, so people coming into the Navy are looking for ways, if they decide to leave it, that they can get a job using the Navy training. Many of our ratings do not offer that.

VOLUNTEER PROBLEM AREAS

Furthermore, we have a number of what we call dirty ratings, the engineers, the people that work in the boiler and the fire rooms, the

engineering spaces. They work under very hot, dirty conditions and that is not too attractive.

These are the types of areas that we are still having problems inducing the volunteers to come into.

Our retention statistics are improving but we still are not retaining enough middle-grade petty officers, and I am talking of the E–5 to E–6 range in many of our important ratings. And, of course, in some of the critical ratings, again going back to the engineering as an example, we are not retaining enough personnel to get well and to build up our necessary career force.

The selective reenlistment bonus has been helpful. But we must enhance our efforts—and I am talking about the Navy, the Navy's efforts as well as others—to make the Navy career more attractive.

REENLISTMENT BONUSES

Senator YOUNG. How much money is involved in reenlistment bonuses? What is the range that you pay in bonuses for reenlistment?

Admiral BAGLEY. The maximum SRB bonus payable is $15,000 for nuclear trained enlisted personnel and $12,000 for all other eligible ratings. The amount of the bonus received by an individual depends on the criticality (shortages) of rating, training cost, length of the reenlistment and pay grade of the individual. The average cost of a 6-year reenlistment for a nuclear trained petty officer is $11,000. For eligible nonnuclear trained personnel, the bonus ranges from $2,500 to $10,000, with the average at about $8,000. The bonus is paid in equal annual installments for the term of the enlistment.

Now, from that top the amount that other personnel get for reenlisting varies according to the criticality of the ratings, and it is pretty well pegged to the law of supply and demand.

Senator YOUNG. I saw Admiral Rickover and he was bragging about the new carrier, the *Nimitz*.

Admiral BAGLEY. Yes, sir, that is a beautiful ship.

Senator YOUNG. What percentage of your enlistees are black? I think the Marines testified their recent enlistments were up about 24 percent.

Admiral BAGLEY. Our reenlistments have been averaging, other than the last several months, about 10 to 12 percent black.

Senator YOUNG. Enlistments or reenlistments?

Admiral BAGLEY. Enlistments.

In the last several months that percentage has been going down, and between 5 and 6 percent of our recent enlistments were black.

I would like to just include one point on the all-volunteer force; that these programs that we have developed over the years to compete in this labor market must be continued if we are going to attract and to retain the kind of people we want in our armed forces.

GREEK SHORE STATION

Senator YOUNG. Let me ask a question about that new base in Greece. That is primarily for R. & R.

Admiral BAGLEY. No, sir, we do not have a base in Greece, as you might envision it. We have some facilities there to support a destroyer squadron of six ships which are over there on an extended deployment basis for a number of years.

Senator YOUNG. Families can go over there?

Admiral BAGLEY. Yes, sir.

Now, for example, to show you that it is not a base, it does not entail anything such as family housing. We have the dependents living right in the Greek economy in Athens and the surrounding communities.

Senator YOUNG. I always thought that was a good idea. The families do not have to be separated for such a long period of time that way.

Admiral BAGLEY. No, sir, that is correct. And the men on those ships spend approximately 50 percent of their time in Athens. As you know, the people who take their families overseas to bases such as Athens also have a much easier time visiting other countries in Europe. So it is a very attractive opportunity for those that do enjoy seeing different people and different lands.

CRUISE LENGTHS

Senator YOUNG. Which Navy personnel would be at sea the longest? The submarine crew?

Admiral BAGLEY. Yes, sir. Well, it is not the submarines as such—I think the best way to answer your question, sir, would be to put it into percentage of time out of home port.

In other words, the home port, whether it is in the United States or overseas, is where the family is located. The people, the ships that are out of home port most of the time are the carriers and in this last fiscal year they averaged 70 percent of the time out of home port.

Senator YOUNG. How about the 6th Fleet? How often do these men see their families?

Admiral BAGLEY. The 6th Fleet primarily is composed of ships that are rotating and deploying to the Mediterranean from the east coast.

Senator YOUNG. I meant the 7th Fleet.

Admiral BAGLEY. The 7th Fleet is very similar. It is composed of ships that are based normally in Hawaii or predominantly on the west coast. We do have some ships that are home ported for extended deployment.

In Japan, for example, we have a carrier there and some destroyers, but there are two things about overseas home porting. One is that there is more family togetherness for those that are living overseas, and more importantly, where we have people based overseas, it reduces the deployment rate of other ships that are based on the east and west coast ports so they, too, can get more time with their families.

CONCLUSION

CONGRESSIONAL ASSISTANCE TO NAVY PERSONNEL MANAGEMENT

1. Approve the FY 1976 MPN budget.
2. Favorably consider legislative proposal for sea duty pay.
3. Extend FY 1976 availability to 15 months.
4. Provide management flexibility.
5. Improve public image of military service.

I would like to conclude, Mr. Chairman, by going to the last chart and I would like to first express my appreciation. This is my fourth time up here for appropriations and I think my last, and I want to

express my appreciation for the support the committee and the Congress have given us over the years.

Senator YOUNG. Admiral, you have always been a great credit to the Navy and we are going to miss you.

Admiral BAGLEY. Thank you, sir.

Senator YOUNG. You have a lot of credibility.

Admiral BAGLEY. But I would like to, if I may, just leave a few thoughts as to perhaps how the subcommittee and the Congress can help us in our joint efforts to make a very viable and effective armed forces.

APPROVAL OF BUDGET REQUEST

I think, first, that I would urge that the 1976 MPN budget as requested be approved. That is not a blanket request for a certain amount of money or certain amount of people. But we have had—as you saw on an earlier chart, where the personnel strengths have been coming down drastically since 1969—we have had a very high amount of turbulence in the Navy, and I suspect even in other forces. And this turbulence makes it difficult to manage efficiently the force and makes it also very difficult to evaluate the effectiveness of the programs that we have instituted to make a Navy career more attractive.

So I would strongly urge that we try to get a level amount of money so that we can restore stability, which is a very important consideration to the members of the Navy staying in the Navy.

SEA PAY PROPOSAL

I would ask that the subcommittee give favorable consideration to the sea pay proposal which is a legislative proposal for submission to this Congress. It is designed to provide compensation for the hardships of sea duty and the extended and frequent family separations which I just mentioned.

I might say, parenthetically, that I gave you the worst case when you asked: "How often are ships out of home port?" You might be interested in some of the other statistics, but almost all of our ships spend more than 50 percent of their time out of home port. The surface combatants are 56 percent out of home port based on the fiscal year 1974 data. Submarines which you particularly were expressing an interest in, 54 percent of the time out of home port.

You know that even in the Navy, even when you are in home port, it does not mean that everybody on a ship gets home to his family that night. This is because we have duty sections which vary. From one-third to one-sixth of the crew must be on board for security, for maintenance and other tasks, and also to be responsive in the event of a sudden demand for a larger crew, a storm or another disaster, to protect and preserve the integrity of the ship.

So these figures are not reflective of the percentage away from family, just reflective of percentage of time away from home port.

Senator YOUNG. I marveled at how the Navy could do it, especially when you have to depend on volunteers—you have to separate the families for such long periods of time. They must really be dedicated to the service.

Admiral BAGLEY. Most of them love their wives.

Senator YOUNG. Their wives must love them.

Admiral BAGLEY. Mr. Chairman, times have changed a lot since you and I were young, where that was accepted as a way of life. Today many of the young people just will reject a career opportunity which entails that such family separation. Just to hit the last two or three points here, I would urge also the continuation of the availability of the fiscal year 1976 appropriation through the fiscal year 197T period. This 15-month period would eliminate the problems that I have cited in my formal statement submitted for the record.

PERSONNEL PROGRAM RESTRICTIONS

Finally, I would urge that we try to reverse what I would view as a growing tendency on the part of the Congress in the authorizations and the appropriations processes to provide too detailed direction with respect to our personnel programs. I say that because as I pointed out earlier, 95 percent of this total, a large amount of money, is not susceptible to management by the personnel manager.

I understand completely and I agree with the need to control defense with ceilings of various sorts. But, if we could receive broader guidance in terms of how many people we have to reduce or how many dollars we have to cut, and hopefully not in detail, we could do a better job of balancing and managing our personnel programs.

I would like to give one example of the recent past. We needed very sorely, to improve our retention program by adding a certain number of career counselors. Those were denied to us. To show you what the alternative could have been, it would have been better to tell us to cut end strength by 297, which was the number of counselors involved, and let us determine where we would take those cuts.

I think we are closer to the position of being able to react to problems on short notice and I would ask for that kind of flexibility within the guidance provided by Congress.

Senator YOUNG. That makes sense, what you are proposing here.

Admiral BAGLEY. I think it does. We all have the same objective and that is to utilize the moneys that are given to us by the Congress in the most efficient way possible, and some of the close control does not permit the most efficient use of the money.

Senator YOUNG. Which committee imposed the most restrictions, the Armed Services or the Appropriations?

Admiral BAGLEY. I think in the past several years the Appropriation process has exercised tighter control than in the authorization process.

That concluded my statement, Mr. Chairman.

Senator YOUNG. This will be your last appearance?

Admiral BAGLEY. Yes, sir, Mr. Chairman.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. We have some questions which ordinarily I would ask you but we may have votes any time so if you will answer these for the record.

Admiral BAGLEY. I will be pleased to do so, sir.

[The questions and answers follow:]

Pipeline Strength

Senator Young. Approximately how many military personnel out of the total Navy strength are in the pipeline? Please provide the Committee with the total figure and a breakdown by category—such as transients, patients, prisoners, recruits, etc.

Admiral Bagley. The following non-structure, or pipeline, manpower is planned for FY 1976:

	Thousands
Transients	24.9
Patients	2.1
Prisoners	1.2
Students/trainees*	50.3
Midshipmen	4.2
Total	82.7

*Includes 16.3 recruits.

Retention Rates

Senator Young. What is the Navy's retention rate for first enlistment personnel? Are certain skills, geographical locations or assignments more conducive to reenlistment than others?

Admiral Bagley. Cumulative data processed through the first seven months of FY 75 reveals that of 29,100 First Term personnel eligible to reenlist, 11,605 (including 3,276 extensions counted as reenlistments) have reenlisted for a reenlistment rate of 39.9%

Among the occupation/skill areas of the Navy; many variables affect the reenlistment decision of personnel serving on their first enlistment such as:

(1) Counseling prior to expiration of enlistment as to the benefits of a Navy career.
(2) Advancement opportunities.
(3) Selective reenlistment bonus.
(4) Working environment.
(5) Living conditions.
(6) Excessive working hours.
(7) Sea/shore rotation.
(8) Family separation.
(9) Availability of family quarters.

These, plus many other variables along with an individual's personal preference make it impossible to assume that any one particular reason can be more conducive to reenlistment than another.

Reenlistment Rates

Senator Young. What is the reenlistment rate for second and subsequent enlistment personnel? Is there a pattern to such reenlistments?

Admiral Bagley. Reenlistment rates (percentages) can be very misleading; and therefore absolute numbers should be emphasized. To illustrate this point, the following cumulative numbers of reenlistments for second and subsequent term personnel for FY 72 through January of FY 75, along with the reenlistment rate, is provided:

[Fiscal years]

	1972	1973	1974	Through January 1975
2d term reenlistments	9,185	9,794	9,363	6,062
Reenlistment rate (percent)	79.2	79.0	55.6	57.7
Subsequent term reenlistments	19,166	25,630	27,741	15,959
Reenlistment rate (percent)	97.9	97.7	94.5	95.3
Total career reenlistments	28,351	35,424	37,104	22,021
Career reenlistment rate (percent)	91.0	91.7	80.3	80.8

It has been observed that since the Vietnam conflict a steady increase in the number of career reenlistments has occurred. However, the career reenlistment rate dropped in FY 74 due to implementation of a new enlisted computer accounting system which provided a better means of identifying 6YO personnel serving on extensions which counted as reenlistments (i.e., they are now in their second term) causing a drop in the second term reenlistment rate.

PERSONNEL BREAKDOWN

Senator YOUNG. What is the breakdown of personnel assigned to the Naval operating forces, support forces, training, pipeline, etc.?

Admiral BAGLEY. FY 1976 Navy active military manpower requirements, structured in terms of the Defense Programming and Planning Categories (DPPC), and described in the FY 1976 Department of Defense Manpower Requirements Report, are as follows:

Navy military manpower requirements

(Active duty end strengths in thousands)

Strategic forces	19.6
General purpose forces	241.1
Land forces	2.8
Tactical air forces	65.9
Naval forces	172.0
Mobility forces	.3
Auxiliary forces	29.5
Intelligence and security	9.7
Centrally managed communication	11.0
Research and development	6.7
Support to other nations	.3
Geophysical activities	2.0
Mission support forces	69.5
Reserve components support	7.6
Base operating support	36.7
Force support training	12.5
Command	12.8
Central support forces	86.2
Base operating support	2.8
Medical support	19.7
Personnel support	8.2
Individual training	38.6
Command	8.0
Logistics	7.8
Federal agency support	1.1
Individuals	82.7
Transients	24.9
Patients and prisoners	3.3
Trainees and students	50.3
Midshipmen	4.2
Total Navy	528.7

NOTE.—Totals may not add due to rounding.

GRADE CORRELATION

Senator YOUNG. How does the strength in the top six enlisted pay grades compare with the total enlisted strength?

Admiral BAGLEY. The relationship of Top Six enlisted personnel to total enlisted personnel planned for FY 1976 is 61.15%.

MEDICAL OFFICER POPULATION

Senator YOUNG. What effect does the Medical Officer population have on the senior officer structure? Are there other officer specialties that enhance their promotion in the Navy by virtue of their schooling or education similar to doctors?

Admiral BAGLEY. The effect of increased Medical and Dental Corps strengths on the senior grade structure is to cause reductions in other officer communities to offset the Medical/Dental Corps senior officer growth. For several years the Navy has been reducing the total size of its senior grade (05/06) structure. During this period, Medical and Dental Corps strengths have steadily risen. The FY 75 DOD Appropriation Act set limits on the number of officers who could serve in grades 0-4/0-5/0-6 during the last quarter of FY 75. Medical and Dental Corps officers were included in these limits. This is demonstrated by the following data:

OFFICER GRADE STRENGTH

[Fiscal years]

	1972	1973	1974	1975	1976	(1972-76)
			Captains			
Excluding MC/DC	3,575	3,291	3,089	3,066	3,022	−553 (15.47%)
MC/DC	655	661	708	739	764	+109 (16.64%)
Total	4,230	3,952	3,797	3,805	3,786	−444 (10.50%)
			Commanders			
Excluding MC/DC	7,753	7,477	7,078	6,813	6,810	−943 (12.16%)
MC/DC	688	660	756	762	738	+50 (7.28%)
Total	8,441	8,137	7,834	7,575	7,548	−893 (10.58%)
			Total			
Excluding MC/DC	11,328	10,768	10,167	9,879	9,832	−1,496 (13.21%)
MC/DC	1,343	1,321	1,464	1,501	1,502	+159 (11.84%)
Total	12,671	12,089	11,631	11,380	11,334	−1,337 (10.55%)

Medical and Dental Corps promotions are centrally administered by OSD to keep promotion opportunity and timing consistent between health professionals in all services. Under this system, Medical and Dental Corps officers receive a promotion opportunity of 90% to the grades of 0-5 and 0-6 plus an additional 10% below the zones. The timing of these promotions is also earlier than for a comparable line officer.

Other officer categories that enjoy a promotion advantage due primarily to their preparatory education are: Medical Service Corps, Judge Advocate General's Corps, Nurse Corps and Chaplain Corps. By law, these officers are promoted on an "all qualified" basis through the grade of lieutenant commander.

In addition to increased promotion opportunity these officers are given "constructive service credit" based upon their education when determining their grade upon initial appointment. The authority for granting this credit is based on 10 USC 5600. Medical and Dental officers must be credited with no less than four years of active service; Judge Advocate General's and Chaplain Corps receive at least three years. The remaining categories receive less.

PAY BY SPECIALTY

Senator YOUNG. What are the average pay and allowances for senior officer and enlisted personnel in selected specialties?

Admiral BAGLEY. The following average pay and allowances by pay grade and specialty are provided:

OFFICERS

Pay grade	Aviator	Submariner	Physician	Average VIP payment [1]	Line
O-8	$40,773	$40,773	$42,993	.....	$38,793
O-7	36,391	36,331	38,611	.....	34,411
O-6	32,584	33,372	34,633	$11,302	30,433
O-5	27,593	27,837	29,119	11,916	24,941
O-4	23,558	23,307	23,730	10,419	20,670

[1] Average amount of Variable Incentive Pay per eligible physician.

ENLISTED

Pay grade	Flight	Submariner	Technical	Other
E-9	$18,336	$18,336	$18,876	$17,076
E-8	15,880	15,880	16,420	14,620
E-7	14,018	14,018	14,560	12,760
E-6	12,071	12,071	12,715	10,915
E-5	9,826	9,826	10,663	8,863
E-4	8,113	8,113	9,130	7,330

Notes

Other: Base for all rates—includes items of pay which all members entitled to: Basic pay, BAQ, clothing maintenance, subsistence, and Government contribution to FICA.
Technical: Includes maximum pro-pay ($1,800).

DAILY RATION COST

Senator YOUNG. What is the average daily ration cost in the Navy today? How does this compare with the last five years?

Admiral BAGLEY. The information follows:

AVERAGE DAILY RATION COST

	March 1975	March 1974	March 1973	March 1972	March 1971
United States	$2.53	$2.31	$2.04	$1.70	$1.49
Overseas/afloat	[1] 2.58	.....	.....	.....	.....

[1] The separate break-out of ration rates commenced July 1, 1974.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator YOUNG. Chairman McClellan was unable to be with us today. However, he has asked that you respond to a series of questions which he has submitted.

Admiral BAGLEY. We would be pleased to do so, sir.

[The questions and answers follow:]

REIMBURSABLE PROGRAM

Chairman MCCLELLAN. In its report on the FY 1975 Budget, the House Appropriations Committee noted the need to verify requirements for non-Service missions and indicated that steps must be taken to ensure full reimbursement for such services. What has the Navy done in this regard? What is the basis for strength changes shown in the FY 1976 Budget? Explain TAFT support.

Admiral BAGLEY. The FY 75 MPN budget was reduced by $10M by Congress in view of their concern about free use of military personnel by other government agencies and foreign governments. Accordingly, Navy was required to make man-year adjustments in the FY 75 manpower program to accommodate the reduction. An overall reduction of 10% in reimbursable support for other federal agencies by DOD personnel was directed by OSD. A total of 52 military billets was deleted in the FY 76 budget in this category. An intensive effort has been made to collect for military personnel services performed solely for the benefit of foreign governments and non-DOD agencies.

The reimbursable strength changes between FY 75 and FY 76 reflect a reduction of the above mentioned 52 military billets with agencies outside DOD and an offsetting increase of 87 billets for support of the Iranian Navy.

Navy personnel assigned to TAFTs perform as advisors to assist in matters of training center operations, assist and advise in facility construction, and conduct recruit and related training. The U.S. is fully reimbursed for their assistance by the Iranian government.

Chairman McCLELLAN. Are military members assigned to commissary functions reimbursed from sales or are they part of the direct program?

Admiral BAGLEY. Military personnel assigned to commissary functions are part of the direct program.

RECRUITING AND RETENTION

Chairman McCLELLAN. Considering recent successes of the recruiting program, are all quotas being met or are there imbalances in skill areas?

Admiral BAGLEY. Navy's relatively low monthly recruiting quotas for February to May of FY 75 permit us to forecast attainment of most numerical and qualitative goals (for the remainder of FY 75). While the recruiting climate has greatly improved, we are still experiencing an accession shortfall in a number of skill areas. For instance, to date we have attained only 73 percent of Operation Specialist (OS), 83 percent of Gunner's Mate Missiles (GMM) and 87 percent of Fire Control Technician Guns and Missiles (FTG/M) goals.

Chairman McCLELLAN. Does the Navy have a "delayed entry" program wherein personnel are recruited for induction against future-months' quotas? If so, how large a pool exists and for how far in the future?

Admiral BAGLEY. Yes, sir. Navy has a "delayed entry" program caller CACHE whereby entrance on active duty may be deferred up to one year. Enlistees in six year obligor programs, primarily Nuclear Field and Advanced Electronic Field, may be delayed up to one year, while delays of up to 270 days may occur for many school programs. Up to an 80 day wait may be involved for other programs. As of 31 March 1975 a total of 19,000 individuals were in CACHE.

VOLUNTARY DISCHARGE PROGRAMS

Chairman McCLELLAN. Other Services have special programs for the voluntary discharge of enlistees at an early point in their basic or individual training phases. This essentially permits release, by agreement, of personnel unfit for service before large sums have been expended for their training and support. Does the Navy have such a program(s)? If so, how many enlistees are being discharged under it/them annually. If not, what would be the major objections to instituting such procedures?

Admiral BAGLEY. Navy does not currently have a program for voluntary release of enlistees. A proposal is currently in staffing, however, which, inter alia, would create a mutual decision point at the conclusion of recruit training and prior to school assignment. At this point an enlistee would be afforded the opportunity to "voluntarily" leave the Navy with an honorable discharge. Implementation of this proposal will probably require a change to Section 505, Title 10 of the U.S. Code which currently limits enlistments to 2, 3, 4, 5 or 6 years only.

NON-PRIOR SERVICE ENLISTMENTS

Chairman McCLELLAN. Although non-prior-service enlistments are projected to increase in FY 1976, both prior-service enlistments and reenlistments drop, the latter, significantly. It would appear that inducements are attractive for recruiting but insufficient for retention. Why the disparity?

Admiral BAGLEY. The strength plans in support of the budget call for the following numbers of non-prior service accessions:

	1975	1976
USN men	79,469	80,901
USN women	6,653	5,000
USNR men and women	15,000	15,000
Total	101,122	100,901

So, while it is true that USN Male non-prior service accessions increase in FY 76, overall non-prior service accessions actually decrease.

USN and USNR prior service accessions are currently planned to a floor of 9700 per year. Experience shows that this is a feasible goal. FY 75 results to date which are reflected in the supporting FY 75 strength plan project 11,171 prior service accessions. Prior service accessions in excess of the 9700 floor are debited against non-prior service requirements as the year progrese. Therefore, in FY 76 a in FY 75, non-prior service accessions might further be reduced below the 100,901 currently projected.

The number of reenlistments in 1976 decreases from the 1975 number because there are fewer careerists reaching expiration of obligated service in FY 76 and therefore fewer people to be considered for reenlistment.

Elimination of Two Year Enlistments

Chairman McClellan. What will be the impact on projected gains resulting from the elimination of two-year enlistment programs (i.e., 2×6)?

Admiral Bagley. In the present recruiting climate, we expect to meet our projected gain requirements despite the elimination of two year enlistment programs. There will be no change in numerical requirements projected for FY 76 as a result of eliminating the two year enlistment program, but numerical gain requirements will be somewhat reduced in future years due to increased length of service.

Reserve Officer Training Corps

Chairman McClellan. Has any consideration been given towards establishing a single, centrally-administered ROTC program for all services? What would be the major objections to such an approach?

Admiral Bagley. The establishment of a centrally administered ROTC program for all services would be within the cognizance of the Secretary of Defense. I believe it has been given some consideration but I don't know if any determination has been made. From the Navy point of view, such a consolidation would not be desirable. The primary reason is that the unique nature of the Navy as a sea-going service requires that its young officers receive a thorough indoctrination in Naval Science courses and specialized training, as well as a technical academic education. I do not believe generalized service training, as proposed, would produce the career oriented and technically qualified Naval Officer we currently get from our Navy program. Also, the Navy uses the NROTC program primarily as in input to the career force. This means that the Navy places great emphasis on the four year scholarship program. This priority is not necessarily the same for the other services.

We have published a tri-service scholarship kit containing brochures for each Service. This has been coordinated by Navy, with other Services reimbursing Navy annually.

Chairman McClellan. Has the ROTC program been terminated at any institutions in FY 1975? For what reasons?

Admiral Bagley. The NROTC program has not been terminated at any institution in FY 1975.

Selective Reenlistment Bonus

Chairman McClellan. In a 23 January letter to the Chairman, House Appropriations Committee, the Comptroller General expressed the opinion that legal entitlement to the full Selective Reenlistment Bonus accrues upon completion of reenlistment procedures, and that obligation should be so recorded even though payments may be made incrementally. What is the current status of this dialog, and what would be the FY 1976 dollar impact if this view prevails?

Admiral Bagley. Current regulations of the Office of the Secretary of Defense direct that obligations be made in the month when they become payable to the member. It is questionable whether an annual account can request appropriated dollars which knowingly will not be spent for five years. However, determinations on this subject are within the cognizance of the Office of the Secretary of Defense. The Chief of Naval Personnel does not favor the arrangement since accelerated payment provisions would confuse the obligation/expenditure rate, thus complicating expenditure forecasting at the budget activity level.

Following is an estimate of additional FY 76 dollar requirements if the above change is made. This estimate assumes that the Variable and Regular Reenlist-

ment Bonus Programs will remain unchanged and that FY 76 obligations will include new payments as well as remaining amounts for initial payments made during FY 74 and FY 75:

Total planned obligations	$156,427,000
Amount budgeted	−34,504,000
Amount of additional requirements	121,923,000

SPECIAL PAY AND ENTITLEMENTS

Chairman MCCLELLAN. What are the total FY 1974, 1975 and 1976 costs, by category, paid to families of servicemen who are missing-in-action? What steps are being taken to reduce these amounts? What is the legal status of these individuals, and what is the Department's intention regarding ultimate resolution of these cases?

Admiral BAGLEY. The following amounts indicate pay and allowances which have been paid and planned to be paid to the families of servicemen who are missing-in-action:

Fiscal year:

1974	$3,234,000
1975	2,543,000
1976	2,474,000

Additionally, the status of Uniformed Services Savings Deposit Accounts for USN servicemen in a Missing Status on 1 December 1974, is as follows:

Pay grade	Number in pay grade	Dollar total in all accounts	Annual interest (cost to U.S. Government)[1]
06	11	$833,275	$92,629
05	25	1,150,554	130,904
04	41	3,285,553	360,894
03	20	825,148	94,092
02	1	12,544	1,572
E–8	2	55,379	6,173
E–7	1	71,881	7,746
Total	101	6,234,334	694,014

[1] Annual Interest (cost to Government) is estimated for the period Oct. 1, 1974 through Oct. 1, 1975 based on Dec. 1974 deposits and projected monthly deposits to Oct. 1, 1975.

It is estimated that the figures mentioned above will approximate the amounts applicable to FY 1975 and FY 1976. As the number of servicemen remaining in a missing status decreases, promotions and raises in military pay becomes effective. If changes in status continue to be made at the current rate, the above figures approximate the amount for FY 1975 and FY 1976.

With respect to steps being taken to reduce these amounts, the Secretaries of the Military Departments acting under statutory authority, continue to credit full pay and allowances to the accounts of the servicemen who remain in a missing status. The amounts can be reduced only after a status change is conducted in accordance with Section 551–558, Title 37, United States Code. Since return of our POWs, the Navy has made 78 status changes to "presumed killed in action".

The legal status of these members is MIA, determined by the circumstances surrounding their loss. Ultimate resolution of the cases and changing of status are governed by Sections 551–558, Title 37, United States Code.

Under public law, the Service Secretaries are given responsibility for status changes. To assist him, each Secretary calls upon professionals within his organization who conduct an exhaustive study, based on all available information of each individual case. Their task is a painful one requiring countless hours of deliberation and calling ultimately for difficult decisions. The subject of status determinations is not a new one for the Services. Those involved in this often

unhappy part of the prisoner of war/missing in action issue are experienced and skilled and expert in upholding the public law and at the same time protecting, to the best of their ability, the ultimate interests of the missing men and their families.

In making status determinations, two options exist in addition to that of retaining the individual in a missing status. In those cases where information is received which conclusively establishes that the member is dead, then a report of death will be issued. A finding of death, commonly known as a "presumptive finding" is made when circumstances are such that the missing individual cannot reasonably be presumed to be living. An individual who was lost over water and who was not among those released or acknowledged by the other side in any way is one good example of a potential "presumptive finding".

Status changes are not unalterably tied to the inspection of combat sites or to the recovery of remains. Changes in status have been made from missing in action or prisoner of war to killed in action throughout the recent conflict, based on individual reviews of all available evidence. A number of changes both as findings and reports of death, have been made since the signing of the Agreement in Paris.

All of the reviews have been conducted in accordance with the law and with full consideration of all the facts, and the Services have administered the law with full regard for the missing member and his family. Procedures have been revised to comply with the decree which was entered on 11 March 1974 in McDonald vs McLucas. After the appeal of this decision by the counsel for the plaintiffs, the Supreme Court affirmed the decision of the lower court on 11 November 1974.

Specifically, the decree enjoined the defendants from conducting any such status reviews unless next of kin currently receiving governmental financial benefits that could be terminated by a status review are given notice of a status review, afforded a reasonable opportunity to attend a hearing, with a lawyer if they so choose, reasonable access to the information upon which the status review will be based, and permission to present any information which they consider relevant to the proceeding. Further, the decree states that these rights need only be afforded to those next of kin, currently receiving governmental financial benefits which could be terminated by a status review, who demand it after notice.

The Services promulgated regulations to implement these requirements and all reviews since March 11, 1974, have been conducted in full complance with those requirements. The service regulations require that reviews be preceded by the offer of the rights to the affected parties. When the case of a missing serviceman is to be considered for review, the specified next of kin are to be informed by a letter from the appropriate service. The letter also contains an explanation of their rights to a prior hearing, of counsel, of access to information and to present information. If a hearing is desired by the specified next of kin, additional liaison by the Service Casualty Office is to be conducted to ensure a time convenient to the family. In a number of instances, hearings have been rescheduled several times pursuant to family requests. A summary of the service case material to be utilized in the hearing is made available to the specified next of kin prior to its scheduled date. No information which has not been made available to the specified next of kin as a result of the hearing will be considered by the review board in the course of their deliberations.

The work of the Secretaries in implementing this law is complex and difficult. The law, for example, covers peacetime as well as combat losses. Although in some cases the facts surrounding the loss are clear and unambiguous, other cases provide few indications that reveal the complete story. This is true even in peacetime losses where initial circumstances indicate strong probability of survival and good chances for location and recovery.

The fact that a man's status has been changed by the military services regardless of circumstances or when such a change was made, does not mean that the government ceases its efforts to account for him. Some time ago a JCRC search team was ambushed and an officer killed while engaged in a field search operation. The individual who was the object of that operation had previously been classified as killed in action, remains not recovered. Our efforts in Southeast Asia will continue to address individuals in this category just as they do those who are missing.

On 9 August 1974 a petition was filed in the U.S. Court of Claims as a class action against the Secretaries of the Military Departments. Plaintiffs are eleven family members representing seven servicemen who were listed as deceased prior the Paris Agreement of 27 January 1973. Counsel for the plaintiffs is Dermot G. Foley, Esq., who is the brother of an Air Force officer listed as missing in action.

The thrust of this action is substantially the allegations that these seven determinations of death previously made were done so as a denial of due process under the Fifth Amendment to the U.S. Constitution, that they were made without authority and are, hence, null and void, and that the status of each MIA who has been the subject of such determination of death must be restored retroactively to missing status. A hearing date for the action has not been establishd. However, the matter is currently in active litigation.

Accrued Leave

Chairman McClellan. Significant improvements are forecast in FY 1976 regarding the number of unused leave days accrued at time of separation. What steps have been/are being taken which offer such dramatic improvements? Are these estimates realistic?

Admiral Bagley. The FY 76 estimate of $74M reflects an arbitrary reduction in the number of days leave for which lump sum terminal leave payments can be made. This may well be an optimistic estimate. Although Navy has taken positive action to encourage use of annual leave, there is no guarantee that personnel will respond as desired. Our enlisted people have, in the past years, looked upon the sale of leave at separation/re-enlistment as an earned bonus. It has been of particular significance to career enlisted personnel who have received all entitlements to re-enlistment bonuses during previous re-enlistments. Officers and enlisted men have been encouraged to use their leave via personal letters to commanding officers, ALNAVS, articles in various publications and notices. The legal entitlement for payment of up to 60 days lump sum leave to enlisted personnel upon re-enlistment remains, and it remains to be determined whether actions to encourage use rather than sale of leave have been effective. As of end of March 1975 there is no significant reduction trend noted.

Hazardous Duty Pay

Chairman McClellan. What procedures are in effect to guarantee that military members receiving various types of hazardous duty pay are, in fact, actually engaged in/occupying hazardous positions?

Admiral Bagley. Prior to receiving incentive pay for hazardous duty, a member must be ordered by competent authority to perform the hazardous duty. In addition, members receiving incentive pay for flying, parachute duty, and flight deck duty are required to perform the hazardous duty a specified number of hours or days each month. Members receiving incentive pay for duty involving submarines, demolition of explosives, and experimental stress must be assigned to specific commands (submarines) or billets where the hazardous duty is required to be performed.

Do-It-Yourself Moves

Chairman McClellan. Has a "do-it-yourself" move plan for military personnel been initiated? What are the basic groundrules of the program, and what has been its usage to date? Is the program available to members of all commands? Why cannot it be expanded further?

Admiral Bagley. Navy has a "do-it-yourself" move program. Participation of service members is on a voluntary basis. Any member serving at a naval activity who is eligible for a government paid shipment of more than 225 lbs, is eligible to move himself under this program provided it will be *more* economical to the service. The member is furnished with the right size rental truck and appropriate packing aids at government expense. Primary users have been in pay grades E4 to E7. Users totaled about 650 for FY 1974. The program is being expanded to include the use of trailers (for partial shipments) and to increase availability of "do-it-yourself" service to naval personnel serving in locals which require shipment via transportation offices of other services.

Accession Moves

Chairman McClellan. While accession moves decreased slightly from FY 1975 they are still over 8,000 higher than in FY 1974 when actual accessions were much higher. Why is this?

Admiral Bagley. Accession move plans are based on total gains less re-enlistments and returned deserters. Planned gains (other that re-enlistments and

returned deserters) from pages 1–96 and 1–97 of the FY 1976 congressional budget are shown in comparison with accession move plans.

	Fiscal year—		
	1974 (actual)	1975	1976
Gains	112,443	132,345	119,122
Total accession moves	110,156	122,377	118,386

[1] Planned accessions and accession moves are both higher in fiscal year 1976 than in fiscal year 1974.

Operational and Rotational Moves

Chairman McClellan. What is the basis for the large increase in operational and rotational moves in FY 1976, particularly in view of the generally smaller force being supported? Similarly, why the increase in training moves when both accessions and average strength are lower than in prior year?

Admiral Bagley. The FY 1974 PCS program was constrained by the late enactment of the Appropriations Act; we had to operate under a continuing resolution for over half of the fiscal year at a lesser move rate than our needs dictated, and were unable to overcome this dampening in the second half. FY 1975 PCS was restricted by a $27M cut which was levied because of excessive rates. The Navy accounting system indicated that such a reduction in rates would create an unacceptably high risk of over expending the account. Consequently, the cut was taken as an operational, rotational and training move program reduction. Constraining actions taken in FY 1974 and being executed in FY 1975 have deferred some moves until FY 1976. FY 1974/1975 move programs are therefore an invalid basis of comparison with FY 1976 move requirements.

The FY 76 move program represents the minimum number of moves necessary to distribute Naval personnel efficiently throughout the forces and to provide requisite training for officers and enlisted men. Training requirements are related to accession levels and average strength but vary from year to year as new ships and aircrafts are introduced into the forces.

Increased Capabilities of Ships and Increased Manning Levels

Chairman McClellan. Would you discuss generally the increased manning required for the ships included in the last three years' requests for Shipbuilding and Conversion, Navy, and how this compares with the ships these will be replacing. Would you provide for the record an analysis showing the manning levels for each class of ships purchased or introduced in the past five years and compare this with the ship it replaces.

Admiral Bagley. The fiscal 73–75 shipbuilding programs with planned manpower are displayed below together with the corresponding ship to be replaced with its associated manpower. No ship is a direct replacement for another. As the state of the art develops, innovations in design and capability are incorporated in the newer ships. Although some classes of newer ships require an increase in manning over the ships to be replaced, capabilities of the newer ships are significantly improved over those ships being replaced.

Shipbuilding program	Ship type to be replaced	Number	New ship manning	Old ship manning
Fiscal year 1973:				
SSN	SS	6	120	87
PF	DEG 1	1	164	259
AS	AS	1	1,072	974
Fiscal year 1974:				
SSBN (Trident)	SSBN (Polaris)	1	300	272
CVN	CVA	1	3,135	2,626
SSN	SS	5	120	87
DD 963	DD 931	7	262	302
Fiscal year 1975:				
SSBN (Trident)	SSBN (Polaris)	2	300	272
SSN 688	SS	3	127	87
DD 963	DD 931	7	262	302
CGN 41	CG	1	470	992
PHM	PG	4	21	29
PF	DEG 1	3	164	259
AD	AD	1	1,034	653

Other ships which have been introduced or purchased in the past five years include:

New class	Crew	Old class	Crew
LHA	727	LPH	604
AFS-6	432	AF-58	250
AOR-7	400	AO-51	361
AO-177	349	AO-105	385

A specific example of newer ships having far greater mission capabilities with relatively fewer people assigned is the nuclear powered cruiser. The newer USS CALIFORNIA requires some 450 fewer personnel than the 14-year-old USS LONG BEACH although both ships are designed and manned to perform essentially similar fleet roles. This reduction is attributable to improved automation, developments in electronic miniaturization and modularization, and more responsive shore maintenance capabilities.

An example of manpower reductions which are directly linked to technological advances is the new gas-turbine propelled SPRUANCE (DD 963) Class Destroyer compared to the 17-year-old conventionally powered DD 931 class destroyer. There are about 35 fewer engineering personnel assigned to each SPRUANCE Class Destroyer than to the DD 931 class, a reduction directly attributable to an improved propulsion system.

Additionally, an example of a newer, more capable ship with a larger crew is the LHA when compared to the LPH which it will replace. The LHA is programmed to be manned at 727 while the LPH is manned with a crew of 604. The LHA possesses a greatly expanded amphibious mission role including a mount-out capability, providing boat haven facilities and serving as control ship in ship-to-shore movement. Additionally, the LHA is designed to have a secondary capability in anti-war warfare. Specifically, the LHA can detect, identify and track air targets, control combat air patrol, engage air targets in cooperation with other forces, engage air targets using surface-to-air armament, and conduct electronic warfare against air targets. Furthermore, the amphibious lift capability of the LHA with a displacement of 39,000 tons is vastly superior to that of the 18,000 ton LPH. While both ships are capable of a roughly similar maximum speed, the LPH has only one engine, while the LHA has two, thereby increasing flexibility.

New Ship Capability

Chairman McClellan. In connection with this analysis, what measures of ship capabilities can be cited? Can you compare the capabilities in some quantifiable way of the new ships with those being replaced?

Admiral Bagley. Some specific examples of new ship capability increases:

The nuclear powered CV replacing the older CVA provides an increased range capability requiring less dependence on logistics availability. Its improved sensors (radar and NTDS) and missile systems (SAM and SSM) provide greater self-protection and less reliance on escort ships. Its multi ASW/AAW capabilities expand the scope of its sea control missions.

The DD-963 and FFG-7 have highly responsive gas turbine propulsion systems. Their sensors (radars, sonars and NTDS) extend their role in the at sea-at war environment and newer weapons systems such as Harpoon, LAMPS, 77 mm gun, etc. provide a greater striking power than their predecessors.

The SSN-688 class is quieter, deeper diving and has improved sensors and weapons systems.

The LHA is a faster, all purpose amphibious assault ship with its own command center negating the requirement for a separate command ship.

The AORs, AFS, and AO-177 class ships have increased speed enabling their operation with a combat task force. Their use of mechanized resupply innovations and multi-product capacities make them superior to the older AFs and AOs.

Transition Request

Chairman McClellan. Discuss the transition request. Are any new programs being requested in the transition request?

Admiral Bagley. No new programs are included in the transition request.

Higher Indirect Costs

Chairman McClellan. What specific examples can you cite of higher indirect costs that resulted because of "drastic" program changes? Use reductions made in FY 1975 in your discussion.

Admiral Bagley. The indirect costs referred to in the statement were not necessarily directed specifically at any single action in FY 1975; rather, the indirect costs were primarily meant to be those costs incurred when we break a commitment with a member, or otherwise quickly change our plans. The following are more specific examples:

(1) Drastic PCS program cuts in any fiscal year result in an immediate change to PCS plans. Since PCS orders are written up to six months in advance, it then becomes necessary to cancel or modify orders. This action, plus the effect on planning which takes place almost a year ahead of time, can have several costly effects such as stopping a member after his relief was enroute causing two members to occupy a billet; reversing household goods shipments at government expense which may have taken place prior to the member's detachment; and giving a member no cost orders to a local area billet even though he may not be best qualified for such an assignment. All of the foregoing are costly, and are additional to any indirect costs which may result for a negative impact on the member's morale or career motivation.

(2) Personnel program reductions such as termination of reenlistment mileage payments, and reduction of lump sum leave payments may cause the Navy to break a perceived commitment with a member and have such a morale impact that the member elects to separate from the Navy. This unanticipated loss of trained personnel can impact on fleet readiness, and cause additional recruiting and training costs.

Undermanning

Chairman McClellan. Discuss the areas where the Navy is unable to provide the proper mix of trained, experienced personnel. Relate this to the specific undermanning of ships.

Admiral Bagley. Gross Navy personnel deficiencies in trained, experienced personnel exist in personnel groups with between three and thirteen years of service. These shortages are the result of poor retention for the decade prior to 1974 and represent a deficit of skilled, career petty officers. Ratings with such career personnel shortfalls are those manned at less than 90% of E–5 through E–9 petty officer requirements established by the Chief of Naval Operations. These ratings can be grouped into five categories: Engineering, Weapons Technician, Aviation, Electronics Operations, and all Others. Ratings in each group are as follows:

Career Shortages

Engineering Ratings: HT, IC, BT, BR, MM, OM, IM, MR, PM, ML.
Aviation Skills: ABF, AE, AX, AW.
Other: QM, SM, PN.
Weapons Technicians: GM, GMM, GMT, GMG, FTG, FTM, MN.
Electronics Operations: OS, EW, DS, STS, OT.

During calendar year 1974 the Navy had 3,673 instances of units, Air, Surface and Subsurface, reporting themselves less than fully combat ready in terms of personnel, (that is, substantially ready, marginally ready, or unready). Of these reports, 1,548, 45%, were from shortages of E–5 through E–9 petty officers. Among units making these reports, such ship types were included as Aircraft Carriers, Guided Missile Destroyers, Destroyer Tenders, andAmphibious Assault Ships.

Methodology for Determining Manpower Requirements

Chairman McClellan. What kind of methodology is being developed to improve military and civilian manpower requirements determinations and forecasting at support activities? Was this methodology used at all in determining FY 1976 manpower requirements? Did it have any significant effect on requirements? How much, if any?

Admiral Bagley. The Shore Requirements, Standards, and Manpower Planning System (SHORSTAMPS) is the methodology currently being developed by Navy to improve military and civilian manpower requirements determination and forecasting at support activitives. It is comprised of two subsystems. The first is a subsystem of structured tasking information about each activity which trans-

lates operational requirements and mission profile into discrete task and workload statements. These tasking and workload data are combined with the subsystem of Navy-wide staffing standards which are produced using accepted industrial engineering work measurement techniques. The integration of tasking and staffing standards yields a statement of minimum manpower required to execute the approved mission of the command at the specified level of workload, and directly links each element of manpower to the corresponding operational requirement. The manpower implications of any known out-year changes in tasking or workload can similarly be evaluated.

This SHORSTAMPS methodology could not be applied in the determination of FY 1976 manpower requirements because both of the component subsystems have just achieved operational status. It is anticipated that the SHORSTAMPS will be used to adjust manpower resources in selected functional areas during FY 1976, and, as the development of staffing standards progresses, an increasing portion of the manpower requirements for Navy's support functions will be determined using this methodology.

Impact of Manpower Reductions

Chairman McClellan. Your statement indicates that some force units are already undermanned and that, furthermore, there is a certain amount of imprecision in estimating support requirements. Yet, you state the level requested is the minimum required by the Navy to accomplish its mission. Why couldn't a 5% reduction be made in military manpower, either by selectively undermanning some ships, or by reducing support personnel in areas where there is a question of the validity of manpower requirements? What would be the impact of such a reduction in Navy's capabilities?

Admiral Bagley. In formulating the Navy's programs and budget, a determined effort is made to define the minimum amount of military manpower required. The competition for dollars is extremely fierce during the program formulation phase. Money committed to one program is money not available for other priority programs. If we find non-essential manpower we try to move it where it is needed, or to shift the dollars to better use, or to reduce the total amount of the budget.

As to the imprecision of the support manpower process, that works in both directions. The major claimants, the people who are responsible for carrying out the operations of the Navy, believe that they have insufficient support manpower. In FY 1973 the major claimants, led by the Fleet Commanders in Chief, requested an increase of 22,000 in support manpower, little of which was ever approved or funded. When special manpower surveys are conducted at shore activities, increases as well as decreases are recommended. We are as likely to be underestimating true requirements as overestimating.

If forced to reduce manpower in the forces by 5%, a number of force units would have to be reduced in order to avoid further undermanning. Deliberate undermanning would seriously increase the work week beyond the 66–74 hours already used to calculate crew requirements. Overworking is just another form of underpaying and would drive many of our young men out to easier, more reasonable jobs, at home with their families.

On the other hand, a 5% end strength reduction taken only in the support areas would be impossible. Support manpower amounts to about half of Navy end strength. Thus, a 5% reduction of the total Navy would be doubled to 10% if taken only in support. This could be achieved only by massive closure of facilities. Such a 26,000 man reduction is equivalent to complete elimination of all Intelligence, Communications, and Research and Development functions of the Navy. Or it could be compared to closing over two thirds of the naval stations and air stations directly supporting the Combat Forces.

In terms of people, the reduction would be just as severe. It would severely disrupt the sea-shore rotation program which is so essential for retention. An early force out of people, trained at great expense, would be required prior to the amortization of these costs. Officers could be reduced only by virtually ending all inputs except those required by law, while forcing out young experienced officers, who are supposed to be our leaders of the future. This would result in extremely large numbers of mismatches between skills required and skills available.

A 5% end strength reduction would have to be taken across the spectrum of requirements, combat, as well as support. This would drive our combat forces further below the present post-Korean War low, and prevent us from properly

manning the new ships already authorized by Congress and on the building ways today. The risks we have accepted in the short term by reducing our force levels in order to build a more modern, combat ready Navy would be extended and magnified in the long term.

On-Station Times of Ships With Civilian Crews

Chairman McClellan. Compare the on-station times of, as well as the cost of operating a ship with a civilian crew (e.g., fleet oiler) and a military crew on the same class of ship.

Admiral Bagley. Costs of operating USS PASSUMPSIC (AO–107) during FY '75 under either alternative are shown as follows:

[In millions of dollars]

	USN	MSC
Wages/salaries	2.66	[1] 2.70
Indirect salary costs (retirement, etc.)	.51	[1] .35
Pipeline	.08	[2] .02
Fuel	1.43	1.9
M. & R. (RA/TA, OVHL, ALT/EQUIP)	2.99	[3] .9
OPN/O. & M.N	.46	.7
Total	8.85	6.57

[1] Includes Mildept.
[2] Mildept only.
[3] Does not include 1-time conversion cost of $8,400,000 (including administration/activation costs).

ANNUAL DAYS ON STATION

USN:	150
LANT	180
PAC	
MSC:	228
LANT	252
PAC	

Note: USN ships can surge to 280-day tempo. MSC ships can surge to 315-day tempo. USN manpower savings for 8 AO equals 2,475 (includes pipeline). This savings is reflected in our budget submit.

Sea-Shore Rotation Base

Chairman McClellan. In determining its shore establishment, how many shore positions are required to maintain the proper rotation base for each billet at sea? Is this true in the case of all skill areas? Would you discuss this by major skill area.

Admiral Bagley. In determining the number of shore positions required to maintain a proper rotation base, we make separate calculations for each rating and paygrade. Thus the number of shore billets required as rotation base for each billet at sea varies but is always less than a 1:1 ratio. Our current goal is to provide a maximum sea tour of 3 years followed by a shore tour of 3 years for career personnel, defined for this purpose as E5 and above. The number of billets required is based on a combination of retention and continuation rates over the length of the tour for each rating/paygrade. This is called the career factor. For 3:3 rotation, the calculation is simply the number of sea billets multiplied by the career factor.

This rate ranges from 99% to 30% depending on particular skill areas (ratings) and skill levels (paygrade). In general terms, the more senior paygrades have higher continuation rates. For E7's and E9's this ranges from 89–99%. For E6's it is 80–92% and for E5's the range is from 30% to 60%. For all paygrades, weighted for the number of billets in the paygrade, the average rate of 70% approximates our rotation requirements. Thus for each billet at sea, we need 0.7 billets ashore. This, of course, is greatly simplified and rotation base requirements vary considerably by skill area or rating and within certain communities such as submarines. In highly technical skill areas such as electronics ratings, certain ordnance ratings, and the more technical engineering and aviation ratings, continuation rates are generally lower and therefore fewer rotation billets are required. However, these ratings in many cases have large numbers of sea requirements and therefore required establishment of shore billets for improved rotation. In clerical, seamanship, administrative, medical and most aviation skill areas, the continuation rates are generally higher.

With a total of 100,488 sea billets for E5–E9 approximately 70,000 shore billets are required for the rotation base, apportioned approximately by rating and paygrade. It is emphasized that this addresses only billets required for rotation. Navy shore billets exist for reasons of combat readiness, training, and administration of naval personnel, security, and requirements for military background as well as for rotation. Of all Navy shore billets, only about 7,000 are clearly established as military billets for rotation purposes only. These billets also fill a necessary function which could be performed by civilians or contracted if the billets were not required for rotation.

Reserve Manning of Destroyers

Chairman McClellan. Selected reservists are to man 20% of five destroyer-type ships. How long will the reservists serve on these ships? How often will they be rotated? Do you believe this is really a cost-effective way of manning ships for the active force, since they cannot be deployed overseas?

Admiral Bagley. The present concept of 80/20 program provides for five active ASW ships to be manned by 80 percent active personnel with the remaining 20 percent personnel coming from the selected reserve only upon mobilization. The program commences with a two-year feasibility evaluation involving five ships and may be expanded in follow-on years. Ships in this program will not routinely deploy overseas, but will operate at the minimum tempo required to maintain a sufficient level of ASW proficiency to be responsive to the ASW requirements of a major conflict. A typical scenario would involve three weeks mobilization prior to D-Day except during Regular Overhaul (ROH) or periods of similar nonavailability. These ships will be intermixed with fully manned ships for squadron assignment and will be operated in basic training exercises by the 80 percent active personnel, limiting underway times and training as necessary due to personnel restrictions.

Ships of the 80/20 program are available if needed for employment during extended non-mobilization contingencies following augmentation with active personnel drawn from the shore establishment. Individual personnel of the selected reserve attached to surface reserve units (SRUs) in support of the program will be directly assigned to specific billets in their parent ship. These personnel will be trained to fill their specific mobilization billets. Training of the selected reserve personnel for their specific billets will be conducted through ACDUTRA in parent ships and regular training at local Naval Reserve Centers/facilities.

The answer to the question on whether or not the program is cost-effective must be deferred pending the results of the initial feasibility study.

Stabilized End Strength

Chairman McClellan. The Navy has been discussing a stabilized fleet of a minimum of about 600 ships. Does the Navy also seek to stabilize its end strength to man that 600 ship fleet? What end strength would be required? What are the Navy's plans for end strength over the next five years? The next ten years?

Admiral Bagley. Navy programs its military end strength in order to operate, train, and support its combat forces. Therefore, if the combat forces are stabilized, military manpower will automatically stabilize if two other conditions are also met:

1. The number of new accessions is the same each year, and
2. Skill mismatch and shortage problems have been solved. Ships are not the only combat force although they are the major factor (about 70% in FY76) as far as military manpower is concerned:

FY76 combat force end strength*

	Thousands
Ships (including CVA)	179.2
Naval air (excluding CVA)	51.3
SeaBees	5.0
Other tactical units (UDT, SEALS, etc)	25.2
Total combat forces	260.7

* Sum of Strategic Forces and General Purpose Forces DPPC.

A 600 ship Navy (including 63 Naval Reserve Ships) would require about 547,000 to 550,000 people. A 600 active ship Navy would naturally require more.

How much more would depend upon the kind and size of ships to be added. This is currently planned to happen beyond the reach of the Five Year Defense Plan which runs planned force levels only to FY 1983. Because of the limits which naturally result from the Congressional authorization process, military end strength is programmed for even fewer years, to FY 1980 at present. Using current average per hull manning factors, and assuming no changes in the other kinds of combat forces, a 600 active ship Navy would require about 590,000.

Navy's military end strength is currently estimated as shown. A change in one year's program would affect all subsequent years. FY 77–80 are currently under review.

FY75, 536.1; FY76, 528.7; FY7T, 535.9; FY77, 546.0; FY78, 540.6; FY79, 545.7; FY80, 543.1.

Military end strength has not yet been determined beyond FY80.

Offsetting Manpower With Technology

Chairman McClellan. One of the primary justifications for many of the new systems being developed and procured today is that they have lower maintenance requirements and reduced manning requirements. Yet your statement indicates the need for greater manpower requirements. Why can't you show reductions in manpower as new systems phase in? Would you discuss this point?

Admiral Bagley. The Navy will realize an active ship increase from 490 ships at end of fiscal year 1976 to 509 ships by the end of fiscal year 1977. This net increase of 19 ships will be effected by the introductions of more complex and more capable ships, including the second of the NIMITZ Class nuclear carriers, two nuclear guided missile cruisers, the introduction of 13 SPRUANCE Class destroyers, six additional LOS ANGELES Class attack submarines, and the lead ship of the FFG–7 Class guided missile frigate (formerly called the Patrol Frigate).

The increases required in FY–77 and beyond are directly related to our plans to rebuild and modernize the fleet. Intensive efforts to reduce the manpower costs associated with this rebuilding program are starting to pay off. For example, the planned manning for each of the 50 FFG–7 class ships planned for procurement over the next few years is 164. This compares with a manning figure for the DEGs laid down in the 1963–66 time period of 259.

The manning planned for the new DLGN–38, USS *Virginia*, is 453. This compares with manning of 540 on DLGN–36 and 37. The new DD–963 class is to be manned with 252 as compared with the DDG manning of 338. Each of these new ships has been design work studied to minimize manpower requirements.

The Navy Manning Reduction Technology Office is continuing studies to reduce the manpower requirements on ships of the future and has identified a number of areas where further significant reductions may be possible.

associated with this rebuilding probram to reduce the manpower costs associated

No Cost Moves

Chairman McClellan. How many "no cost" moves were made in FY 1975 and how many are planned for FY 1976?

Admiral Bagley [reading]:

No cost moves

Fiscal year:	
1974	44,957
1975 (through Jan. 31)	24,886
1976 (plan)	42,643

Establishment of Naval Personnel Center

Chairman McClellan. What is the total number of people who will have to move in order to create the Naval Personnel Center, and what will be the cost of these relocations? What will be the total personnel reductions associated with the consolidation into the Naval Personnel Center?

Admiral Bagley. The total moving (CY–75 and CY–78) is estimated at 1755 (385 Off, 910 Enl and 460 Civ). Of the approximately 2,800 who will be eligible by virtue of the transfer of billet positions, the 1755 estimate includes all the military and civilian moves actually to be performed in CY–75 plus all the military and 40% of civilian positions which will qualify in CY–78 (40% derived from DOD experience) to move.

Cost of Move—$13.4M—Funds are computed at maximum utilization of benefits and entitlements. The majority of moves are several years hence (CY–78). Judicious planning of military assignment tours will reduce the number of military moves; however, an estimate will not be available earlier than FY 76.

A total of 250 positions will be reduced as a result of the move to New Orleans.

Futures System

Chairman McClellan. What is the total cost of the "Futures" Management Information System? In what ways will implementation of this system improve Navy's management and save money?

Admiral Bagley. The total cost of the "Futures" Management Information System through 1985 is $40.5M, of which $10.2M are developmental costs and $8.8M in capital investment. The remaining $21.5M are increased operating costs.

The "Futures" Management Information System will make personnel information immediately available to distributors and planners and permit them to utilize personnel skills to best advantage. This will result in improved manning and fleet readiness, and enhance retention due to higher job satisfaction. The improved planning capability resulting from the more precise measurement of expenditures will result in more cost effective operations and actual savings.

Counselors

Chairman McClellan. Compare the reenlistment rates for ships and squadrons with career counselors with rates in those without such counselors.

Admiral Bagley. The following marginal productivity analysis is provided based on the best available data from a sampling of FY 74 first term reenlistments attained at 263 units/activities with full time career counselor billets.

	With career counselors		Without career counselors		Navy average	
	Number	Percent	Number	Percent	Number	Percent
Reen	7,482	41.5	10,721	28.7	18,203	32.9
Elig	18,027		37,344		55,371	

Activities with full time career counselors averaged 12.8 percentage points above the average of those commands not included in the sample.

Shortages in Sea-Going Ratings

Chairman McClellan. What specific ratings are experiencing shortages? What programs are available to help meet the manning requirements in these ratings?

Admiral Bagley.

ENLISTED MANNING SHORTAGE AREAS AS OF JAN. 31, 1975 (MANNING 90 PERCENT OR LESS)

Rating	Overall manning		Career manning		1st term	
	Percent	Deficit	Percent	Deficit	Percent	Deficit
Aviation boatswain's mate—fuel	80	299	70	202	80	97
Aviation electrician's mate	87	1,039	88	546	87	493
Aviation ordnanceman	80	1,203			80	957
Aviation antisubmarine warfare operator			84	279		
Aviation antisubmarine warfare technician			73	325		
Boilermaker	56	115	56	115		
Boiler technician			75	1,461		
Communication technician:						
Interpretive	81	179			57	116
Maintenance					79	112
Collection	80	429			30	770
Technical	78	419			50	396
Data systems technician			82	212		
Electronic warfare technician	62	872	70	411	50	461

ENLISTED MANNING SHORTAGE AREAS AS OF JAN. 31, 1975 (MANNING 90 PERCENT OR LESS)—Continued

Rating	Overall manning		Career manning		1st term	
	Percent	Deficit	Percent	Deficit	Percent	Defici
Fire control technician:						
Ballistic					50	107
Guns	80	785	76	575	87	210
Missiles	83	549	78	429		
Gunner's mate			84	36		
Guns	75	1,251	84	456	63	795
Missiles	64	459	81	149	35	310
Technician	66	664	75	311	50	353
Hull maintenance technician			75	1,686		
Interior communications electrician			81	632		
Instrumentman			87	37		
Molder			73	41		
Machinist's mate			79	2,842		
Mineman			88	42		
Machinery repairman			72	495		
Mess management specialist					45	5,603
Missile technician	81	263			33	382
Opticalman			77	53		
Operations specialist	78	1,830	66	1,453		
Ocean systems technician	77	303	68	252		
Patternmaker			82	22		
Personnelman			86	609		
Quartermaster			80	547		
Radioman					81	1,641
Ship's serviceman	78	1,193			63	993
Signalman	81	638	81	371		
Sonar technician:						
Surface	88	530			76	426
Submarine			67	195		
Torpedoman's mate					86	206

The following programs designed for career and first-term members are utilized to help improve manning:

Career Programs

The Career Reenlistment Objective System (CREO) is a personnel management system designed to provide current goals and direction for retention, conversion, and enlistment procurement programs. The basic objectives of the system are to decrease career shortages in undermanned ratings, correct career overages in overmanned ratings, and provide for more viable and attractive career patterns for all members of the naval service. Career strength (enlisted personnel on active duty with over 4 years service) is compared with career requirements (enlisted billet requirements for E–5 and above) to determine the career manning for each rating. Ratings are then categorized into five groups from A through E depending on the manning status. From this categorized grouping lists are published to provide guidance for the various retention, conversion, enlistment and reenlistment programs in effect.

Selective Reenlistment Bonus (SRB) is a retention incentive paid to enlisted members serving in ratings/skills with retention levels insufficient to adequately man the career force. The bonus is awarded to members in these designated ratings/skills who reenlist or extend enlistment for at least three years. Two zones have been established for eligibility. Zone A is applicable to members who have completed at least 21 months but not more than six years of total active service. Zone B applies to members who have completed at least six but not more than ten years of service. SRB award depends upon severity of rating/skill shortage, additional obligated service incurred and monthly basic pay of the individual.

Shortage Specialty Pay is an award paid to members in certain ratings/skills which experience shortages of specialized technically skilled members. This program is presently being terminated for most skills.

Guaranteed Assignment Retention Detailing (GUARD) program is to promote increased retention of reenlistment eligible personnel who are approaching their expiration of obligated service. Guaranteed duty assignments are offered to eligible members who choose to reenlist under this program.

First Term Programs

The Chief of Naval Personnel provides the Commander Naval Recruiting Command a prioritized listing of those ratings and occupational fields which have

the most critical firm term shortages. This priority listing is used by recruiters and classifiers in the field to assist them in assigning recruits to those ratings where most needed, consistent with qualifications and desires of the individual recruit. Additionally, many recruits not initially volunteering or selected for a particular rating are rescreened while in recruit training for selection to an "A" school for those ratings where most needed.

An Accelerated Advancement program offers early advancement to petty officer third class for eligible graduates of certain class "A" schools. Acceptance of accelerated advancement requires extending obligated service for one additional year.

The Schoolport program guarantees a recruit his choice of East/West Coast or certain foreign duty areas following graduation from selected class "A" schools. This program is offered as an incentive to attract recruits to those ratings where recruiting quotas are difficult to meet.

The Advanced Electronics Field Program offers extended electronics training and accelerated advancement to petty officer third class in return for six years obligated service.

The Enlistment Bonus is authorized by Section 308a, Title 37, U.S. Code. The bonus was effective during a portion of Fiscal Year 1975 and authorized payments up to $2500 to an enlistee who met certain eligibility requirements and who elected to enter a small selected list of ratings. An extra year of obligated service was required. This program is being terminated for Navy in March 1975.

Non-Rated Manning

Chairman McClellan. Explain what non-rated manning is and what these individuals can do.

Admiral Bagley. Non-rated manning represents all personnel in pay grades E–3 and below. "Rated" applies to personnel who have advanced to E–4. There are two non-rated categories: (1) those who have completed a class "A" school (or passed a servicewide examination) and achieved rating identification, and (2) those who hold only a general "rate" (Seaman, Fireman, Airman, or Constructionman), and are not yet identified with a specific rating (skill area). These latter non-rated, non-striker identified personnel (hereafter referred to as "Non-rated") are personnel enlisted in the Navy in non-school programs and includes personnel who fail to successfully complete a class "A" school. Since it is believed that the question relates only to the latter group, the following discussion will eliminate any reference to "identified strikers".

"Non-rated" provide approximately 21 percent of "in-service" gains to the apprenticeships. The "in-service" gains are further broken down into numbers required to support each apprenticeship, and within apprenticeships, into rating areas (skill areas). To identify the "in-service" individual with a rating (skill) to which he is a prospective gain, a code is assigned. The code identifies a group of ratings (skills) in nine occupational areas. The coding, occupational area titles, and ratings involved are set forth in detail in the chart on the following page.

OCCUPATIONAL AREA—DEFENSE GROUPING NEC'S

DG codes	Occupational area title	Ratings included in each area
DG–9700	Infantry, gun crews and seamanship specialists	Boatswain's mate, quartermaster.
DG–9710	Electronic equipment repairmen	Sonar technician, torpedoman's mate, fire control technician, missile technician, electronics technician, data system technician, aviation antisubmarine warfare technician, aviation electronics technician, tradesman, aviation fire control technician.
DG–9720	Communications and intelligence specialists	Operations specialist, signalman, radioman, communication technician, photographic intelligenceman, aviation antisubmarine warfare operator, ocean systems technician, electronic warfare technician, air controlman.
DG–9730	Medical and dental specialists	Hospital corpsman, dental technician.
DG–9740	Other technical and allied specialists	Illustrator-draftsman, musician, engineering aide, aerographer's mate, photographer's mate.
DG–9750	Administrative specialists and clerks	Postal clerk, yeoman, personnelman, data processing technician, storekeeper, disbursing clerk, journalist, aviation maintenance administrationman, aviation storekeeper, legalman, Navy counselor, information security specialist.

OCCUPATIONAL AREA—DEFENSE GROUPING NEC'S—Continued

DG codes	Occupational area title	Ratings included in each area
DG-9760	Electrical/mechanical equipment repairmen	Gunner's mate, mineman, instrumentman, opticalman, machinist's mate, enginemen, boiler technician, boilermaker, electrician's mate, interior communications electrician, construction mechanic, aviation ordanceman, aviation structural mechanic, aircrew survival equipmentman, aviation support equipment technician, aviation machinist's mate, aviation boatswain's mate, aviation electricians mate, gas turbine system technician.
DG-9770	Craftsmen	Lithographer, machinery repairman, hull maintenance technician, patternmaker, molder, construction electrician, equipment operator, builder, steelworker, utilitiesman.
DG-9780	Service and supply handlers	Ship's serviceman, master at arms, mess management specialist.

Coding is assigned based on a detailed breakdown on the requirement for "in-service" personnel to apprenticeships and to rating groups (occupational areas) as set forth in the chart on the following page.

FISCAL YEAR 1975 IN-SERVICE GAINS TO APPRENTICESHIPS

Apprenticeship	Number	Percent	Occupational area codes	Percent
Seaman	10,359	(62.7)	9700	41.9
			9710	3.9
			9720	4.3
			9740	.3
			9750	27.6
			9760	10.3
			9770	.8
			9780	10.9
Fireman	3,178	(19.2)	9760	51.3
			9770	48.7
Airman	2,691	(16.3)	9740	3.1
			9750	12.5
			9760	84.4
Constructionman	289	(1.8)	9740	4.8
			9760	32.4
			9770	62.8

Non-rated's receive two weeks of apprenticeship training and then serve where a lesser degree of knowledge is required and where they can perform under direct supervision of a petty officer.

Individuals may have their occupational area code or apprenticeship changed to a different area if it is determined that the individual's motivation and qualifications can be matched to a Navy need.

The Navy system of "non-rated" manning/management provides for the optimum utilization of lower pay grade personnel assets. It ensures that needs of the Navy, needs of the individual and numerous technical skill areas, and outyear petty officer bases are fulfilled to the maximum extent possible.

Inadequate School Utilization

Chairman McClellan. Explain why there is inadequate class A school seat utilization. Is this because of lack of individuals qualified for A schools in these fields or for lack of individuals wanting to attend A schools in such fields?

Admiral Bagley. The primary reason for inadequate class A school seat utilization is a lack of individuals desiring to attend A schools for unpopular ratings. Also, during the lean recruiting months in the winter there are fewer candidates than school seats. We attempt to alleviate these shortages by sending qualified candidates from the fleet, as permitted by budget constraints and operating schedules.

Sea Duty Pay

Chairman McClellan. Would you provide for the record the specific legislative proposal that will be made for increasing sea duty pay.

Admiral Bagley. The sea pay proposal is presently being staffed within the Department of Defense. It is not known at this time what final form that proposal may take, though the basic objective of providing adequate compensation for repeated, extended tours at sea, and thus encouraging such duty, must be preserved.

Educational Programs

Chairman McClellan. Describe the partially funded educational programs available to both officers and enlisted men. Explain what portion of tuition, fees or other costs are paid for from appropriated funds, and identify the amounts by appropriation for fiscal years 1974, 1975 and 1976. Indicate the number of personnel who will utilize such programs by fiscal year and the number of new entrants.

Admiral Bagley. The GI Bill and Predischarge Education Program (PREP) provide the vast majority of funding for partially funded educational programs to both officers and enlisted men. Within Navy appropriated funds, the Navy Tuition Assistance Program is the principal method for supporting voluntary education programs by partially funding educational efforts of both officers and enlisted men. The Navy Tuition Assistance Program provides up to 75% of tuition costs, with the individual paying the remaining tuition expenses, as well as books and fees. Courses may be taken from recognized vocational/technical or accredited civilian educational institutions. The Navy also conducts a program for afloat college education (PACE) onboard Navy ships at no expense to the individual, as a method to provide an educational opportunity to Navy personnel. In addition, a program of instructor hire provides qualified civilian instructors to conduct group study classes at high school, vocational/technical or college levels at shore activities.

Fiscal year 1976 estimated funding follows

Program:	O. & M.N. (thousands)
Tuition assistance	$2,671
Pace	1,900
Inst hire	33
Total	4,604

The Navy Tuition Assistance Program provides tuition funds, in the amount of up to 75% of tuition costs, for education and training taken by Navy personnel during off-duty hours. All tuition assistance and PACE funds are O. & M.N. Funding by Year:

Program	Fiscal year—			
	1974	1975	1976	197T
Tuition assistance	2,037,000	2,671,000	2,671,000	1,100,000
PACE	777,000	1,163,000	1,900,000	832,000
Inst. hire	32,000	33,000	33,000	19,000
Total	2,846,000	3,867,000	4,604,000	1,951,000
Participants:				
Tuition assistance	23,686	29,326	29,326	11,828
PACE	5,400	7,651	12,800	5,092
Inst. hire	1,100	1,100	1,100	642
Total	30,186	38,077	43,226	17,562

Note: Entrants must reapply each term.

Chairman McClellan. Explain what incentives are given to individuals to avail themselves of these partially funded or part time programs (such things as time off from the normal work week, administrative leave, etc.).

Admiral BAGLEY. The fact that the Navy pays up to 75% of tuition costs and provides an opportunity to continue one's education while otherwise earning full pay and allowances is the principal incentive. However, additional time off at the discretion of individual Commanding Officers (consistent with operational commitments) is granted participants.

GRADUATE AND UNDERGRADUATE PROGRAMS

Chairman MCCLELLAN. Describe the full time college, junior college, undergraduate and graduate programs for which funds are requested. Identify the total funding required for these programs by appropriations for FY 1974, FY 1975 and FY 1976. Also indicate the number of new entrants programmed for each fiscal year, split by officers and enlisted personnel.

Admiral BAGLEY. Full-time college, in this case the NESEP, description follows. Outstanding enlisted career petty officers who meet the requisite requirements may apply for this highly competitive program. Selection is by a duly constituted selection board. Those individuals selected may attend any of 22 participating universities for up to 4 years to earn a baccalaureate degree in a scientific or engineering field of study. They retain their enlisted status during the academic period and are commissioned in the Unrestricted Line upon successful completion. They have 5 years obligated service upon commissioning.

Full-time junior college, in this case ADCOP, description follows. Outstanding enlisted career petty officers who meet the requisite qualifications could apply for this highly competitive program. Selection was by a duly constituted selection board. Individuals who were selected could attend one of several junior colleges participating in the ADCOP for up to 2 years to earn an associate degree in a field related to their career rating or in a managerial field. Inputs to this program have not been allowed subsequent to 30 Oct 1974 at the direction of Congress during the FY 75 DOD Appropriations Act. All individuals currently enrolled will complete by 30 June 1976.

Full-time undergraduate program description follows. The undergraduate program (BS/BA) at the Naval Postgraduate School was designed to provide up to 2 years of study in pursuit of a baccalaureate degree for those commissioned officers who did not have an undergraduate degree. Congressional action on the FY 74 Appropriations bill directed the discontinuance of this program. The last inputs were in Dec 1973, with last output scheduled for June 1975. Officers in this program incur a 2 year obligation for each year in school.

The College Degree Completion Program provides up to 18 months of study at a civilian institution for the attainment of a baccalaureate degree. The student receives his normal pay and allowance and pays all school related expenses. Selection is by a duly constituted selection board. Officers in this program incur a 2 year obligation for each year in school.

The Law Education Program authorized by Congress in actions on the FY 74 DOD appropriations bill allows a funded law program for attainment of a first professional degree. Selection is by a duly constituted selection board. Officers in this program incur a 2 year obligation for each year in school.

Graduate Education program description. To provide an inventory of officers qualified to fill billets validated as requiring a certain level of graduate education, the Navy conducts this program. A comparison of the inventory of officers to validated billets is conducted, and based on projected shortages in educational skill fields a quota requirement for input to the graduate education pipeline is developed. Officers are selected for graduate education by a duly constituted selection board which considers professional performance and academic background. Selected officers are ordered to either the Naval Postgraduate School or an appropriate civilian institution to pursue their academic qualifications. Upon completion of the academic studies they incur an obligated service of 3 times the length of the course of instruction, not to exceed 4 years. They are assigned to a utilization tour as soon as practicable and in no case later than the second tour.

Scholarship program description. A program where those Navy personnel awarded a scholarship from an appropriate donor may be permitted to accept such an offer. Individual receives pay and allowances only. Program is available to both officers and enlisted. Students in this program incur a 3 year obligation for each year in school.

Funding required by appropriation and number of new entrants programmed for each fiscal year is shown in attached chart.

	Fiscal year 1974			Fiscal year 1975			Fiscal year 1976		
	Entrants	O. & M.N. (thousands)	MPN (thousands)	Entrants	O. & M.N. (thousands)	MPN (thousands)	Entrants	O. & M.N. (thousands)	MPN (thousands)
ADCOP	1,106	$1,382	$20,424	983	$1,282	$16,384	0	$642	$7,967
NESEP	390	1,911	9,295	270	1,746	8,680	300	1,908	9,002
GRAD ED	663	10,928	23,681	694	10,810	27,350	622	10,554	22,584
Under grad	120	1,426	3,928	100	841	2,436	0	0	0
College degree	20	0	690	25	0	983	60	0	2,348
Law ed	0	0	0	34	79	662	17	97	768
Scholarship	30	0	1,173	30	0	665	30	0	820
Total	2,329	15,647	59,191	2,136	14,758	57,160	1,029	13,201	43,489

Note: ADCOP and NESEP entrants are enlisted; scholarship program entrants are 18 OFF/12 ENL; all others are officers.

Chairman McClellan. What are the opportunities for enlisted personnel to attend college through an ROTC program? How does this program compare with the others? How many are programmed in fiscal years 1974, 1975, and 1976, and how much is requested in those years?

Admiral Bagley. Navy enlisted personnel may make application for NROTC in the same manner as civilian students. If selected, they are released from active duty upon enrollment in the program.

The only other programs offered enlisted Navy personnel which provides for college are the Navy Enlisted Scientific Education Program (NESEP), Navy Enlisted Dietetic Education Program (NEDEP), Navy Enlisted Nursing Education Program (NENEP) and the U.S. Naval Academy. NESEP students attend college in an active duty status. Selection for this program is made from career Navy personnel ranks. NENEP is a four year baccalaureate degree nursing program offered to male and female petty officers of the Navy Hospital Corps. Students receive full pay and allowances as well as all tuition payments. These students are commissioned as ensigns upon graduation. NEDEP is a three year baccalaureate degree dietetic program offered to male and female petty officers of the Navy Hospital Corps. Students receive full pay and allowances as well as all tuition payments. These students are commissioned as ensigns upon graduation.

Approximately 30 enlisted personnel enter the NROTC program each year. Minimum or maximum numbers of enlisted personnel are not programmed.

The cost of education of enlisted personnel in NROTC units is not specifically identified, and is included in overall NROTC program costs.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator Young. Senator Thurmond has submitted questions which he would like to have answered for the record.

Admiral Bagley. We will supply the answers, Senator.

[The questions and answers follow:]

All Volunteer Program

Senator Thurmond. Admiral Bagley, I note in your statement you warn against declaring the all-volunteer force a success in view of the economy-induced enlistments. As you conclude your tour as Chief of Personnel what are your personal views on the viability of the all-volunteer force as it exists in the today and what do you see as future problems?

Admiral Bagley. The Navy is fully committed to make the All Volunteer Force work and I am optimistic about the viability of the All Volunteer Force. It is true that the present economy is inducing enlistments and re-enlistments. Looking further into the future, with a predicted economic up-swing, I am uncertain as to our ability to attract and retain the high quality young men and women who are most employable in the civilian economy. We must approach the future cautiously and have the tools and flexibility to adjust our programs and management to be innovative and to meet the new challenges as we identify them. If the Navy is given adequate support in programs and dollars, we can meet our quality and quantity manpower goals over the long term.

Retention Increase Analysis

Senator Thurmond. Admiral, enlisted retention rates for first termers has increased sharply for the past two years. The advantages are obvious, but are there not disadvantages to this trend?

Admiral Bagley. The major disadvantage to the increasing trend lies in the possibility that it will be misinterpreted in terms of answering our retention problems. Another disadvantage is the possibility that personnel will reenlist beyond Navy's requirements by skill or rating, thus increasing our personnel cost unnecessarily. For the most part this is not a severe problem, and we are taking action to minimize or avoid the occurrence altogether.

For the record, it is important to clear up some points about reenlistment rates, as they can easily be deceiving. First, they are derived by dividing eligibles into reenlistments. Included in the eligibles and reenlistments are 24 months extensions of 6 year obligor (6YO) personnel executed as payback for extensive training provided by the Navy. These extensions are virtually automatic and cause an inflation of reenlistment rates as they represent approximately one-fourth of our first term reenlistments.

Commencing with FY 1974, the Navy improved its ability to identify the term status of 6YO personnel serving on extensions counted as reenlistments. Prior to that time a significant portion of 6YO personnel serving on their 24 month extension were again counted as first term losses upon completion of the extension, causing an apparent deflation of first term rates and inflation of career reenlistment rates. The improved ability to identify term status resulted in an increase in the first term rate and reduction in the career rate. The actual number of first term personnel reenlisting has increased; however, not as rapidly as would appear from looking at the percentage rates alone because the number of eligibles this year is less than in the last few years.

Congressional Control of Manpower Costs

Senator Thurmond. Admiral, would you provide for the Committee your views on manpower costs and how they may be better controlled by the Congress?

Admiral Bagley. I am very concerned about increasing manpower costs, and we are actively pursuing every opportunity to minimize such costs. With limited funds available to the Navy, every manpower dollar we can save is potentially available to procure new hardware and weapons systems. However, we can only reduce manpower costs either by eliminating people, or by restricting legal monetary entitlements of the individual members. I do not believe either course of action is feasible or reasonable. First, the Navy is planning and budgeting for the minimum number of people to man our operating units and shore installations. In fact, we have consciously limited our manpower request below our documented requirements in order to make funds available for modernizing the fleet and acquiring new weapons systems. Reductions to our manpower request would severely restrict our capability to perform assigned Navy missions now and in the future. With respect to restricting the cost of individual members, we must be in a position to pay the going rate in order to be competitive with the civilian economy in procuring and retaining sufficient numbers of high quality people. This is particularly important in the absence of draft pressure where young people have a real choice as to their chosen career.

There are numerous Navy efforts to keep manpower costs to a minimum consistent with requirements. Some specific examples are:

Increased numbers of no cost PCS moves.
Reductions in Headquarters Staffs.
Reductions in numbers of officers.
Reduction in officer grade levels.

I believe that in the area of manpower costs the Navy has in the past, and will continue in the future, to monitor manpower costs and make all reductions that can be made to keep manpower costs to a minimum. The Congress can be of great help by being supportive of our new programs which are intended to reduce manpower costs through increased stability in the career force. Timely action by Congress on military authorization and appropriation requests is also essential to permit efficient management of our personnel programs in order to produce maximum combat capabilities at minimum manpower costs.

Support to Combat Shift

Senator Thurmond. Admiral Bagley, the Navy appears to lag behind the other services in efforts to shift from support to combat. Would you comment on this point?

Admiral Bagley. Each service has a different proportion of military manpower in the combat forces. This results naturally from the different roles of the services. Even if a common definition is used, there are variations in FY 76:

Sum of Strategic Forces and General Purpose Forces

	Percent
Navy	49.3
Army	60.3
Air Force	32.9
Marine Corps	57.5

The Army and Marine Corps engage in direct combat with manpower as the primary combat force. The Navy has a higher percent in combat forces than the Air Force primarily because some of the Navy air bases are afloat, i.e., aircraft carriers, and their manpower is counted, while the Air Force bases are all in mission support.

When it comes to increasing combat force manning, the Navy can do this in two ways. The number of personnel assigned to ships on tactical air squadrons can be increased in the maximum level needed to carry out all missions, subject to space limitations. Or, the number of combat force units can be increased.

The latter method requires procurement and construction authorization by Congress three to six years in advance. Therefore, immediate increases in force levels are not feasible.

On the other hand, reprogramming of support personnel to existing combat forces has some limitations also. Most combatant ships (except amphibious ships) are programmed at or near full requirements. Navy had planned to increase the manning of the combat forces by 1,000 in FY 76 by reducing support activities, primarily headquarters and staffs. However, OSD used the support reductions to reduce the FY 76 Budget, so that the improvement in manning will not occur until FY 77.

Ships and air squadrons are not the only combat forces of the Navy. But these other combat forces are being reduced in the peacetime Navy: SeaBees have been cut from 10 to 8 Mobile Construction Battalions and amphibious tactical support and related units have been reduced. This has offset some of the support reductions in combat:support ratio.

Finally, Navy has very little if any surplus in support. As Vietnam combat operations phased down. Navy embarked on a major program to reduce support and headquarters strength. These efforts resulted in major reductions by FY–73, bringing support and forces into a very sensitive balance. We believe that the balanced force and support reductions taken by Navy in FY–74 and 75 reflect the fact that since 1969 Navy support reductions overall compare very favorably with the other services.

Ships by their nature require extensive shore based support. There is no "ideal" combat to support ratio. Support must be sufficient to keep the combat forces ready for combat. The material and readiness levels of the fleets are a better measure of support adequacy that is any arbitrary percentage of end strength. Despite the many actions reducing support over the years, combat force manpower has fluctuated only slightly at or near 50% of total end strength.

In summary, Navy cannot make rapid increases in combat forces, has made major support reductions since 1969, and has programmed support at the minimal levels necessary to support and train the fleet.

Reduced Level Manning

Senator Thurmond. Admiral, does the Navy have a policy which dictates ship manning at lower levels in peacetime or is this manning level an economic constraint?

Admiral Bagley. Wartime requirements are those total billets which are documented to meet all manpower needs in a combat scenario. Generally, all

major combatant ships and aviation units are funded for full manning in peacetime so that they can be in a high state of combat readiness at all times. In a few cases, notably in amphibious and auxiliary ships, Navy has made a conscious decision not to fund wartime manpower requirements, and to accept cost tradeoffs, in order to procure new hardware, ship designs and weapons systems. Also, certain ships have berthing constraints which preclude full manning in peacetime. Overall, Navy has funded more than 96% of the billets required to man the present fleet to meet wartime requirements.

Maintenance-Manning Relationships

Senator Thurmond. In view of the high maintenance requirement due to the age of our ships and the delays in overhauls, does this not require higher manning levels than the 80% you are proposing for the five destroyers? How long before these levels could deploy to a combat area in the event of an emergency?

Admiral Bagley. Ships of the 80/20 Program will be maintained in a high state of material readiness consistent with three weeks mobilization time. The reduced manning on these ships will be obtained at the expense of required operational capability of the ships. These ships will not routinely deploy overseas, but will operate at a minimum tempo consistent with the three weeks mobilization requirement. With maintenance an uppermost consideration, the reduced operations will allow the ships of the 80/20 Program to be maintained in an acceptable readiness posture.

Operation and Maintenance, Navy

STATEMENT OF REAR ADM. STANLEY S. FINE, U.S. NAVY, DIRECTOR OF FISCAL MANAGEMENT DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

ACCOMPANIED BY:

REAR ADM. C. R. BRYAN, U.S. NAVY, DIRECTOR OF SHIPS MATERIAL READINESS DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATONS

REAR ADM. C. J. SEIBERLICH, U.S. NAVY, DIRECTOR OF AVIATION PROGRAMS DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

COMDR. K. E. KRAUS, U.S. NAVY, FISCAL MANAGEMENT DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

JUSTIFICATION

Senator Young. Our next account is Operation and Maintenance. Admiral Fine, would you proceed as you see fit?

Before you make your presentation I want to insert the relevant material from the justification into the hearing record.

[The justification follows:]

Operation and Maintenance, Navy

For expenses, not otherwise provided for, necessary for the operation and maintenance of the Navy and the Marine Corps, as authorized by law; and not to exceed [$3,707,000] $4,239,000 can be used for emergencies and extraordinary expenses, as authorized by section 7202 of title 10, United States Code, to be expended on the approval or authority of the Secretary of the Navy, and payments may be made on his certificate of necessity for confidential military purposes; [$7,151,175,000] $8,320,000,000 of which not less than [$235,000,000] $200,000,000 shall be available only for the maintenance of real property [facilities: Provided, That of the total amount of this appropriation made available for the alteration, overhaul, and repair of naval vessels, not more than $1,130,000,000 shall be available for the performance of such work in Navy shipyards] facilities, and in addition $54,000,000 for "Operation and maintenance, Navy" for fiscal year 1972.

For "Operation and maintenance, Navy" for the period July 1, 1976, through September 30, 1976, $2,234,500,000 of which not to exceed $1,060,000 can be used for emergencies and extraordinary expenses. (5 U.S.C. 503, 3101, 3109, 5342, 5702–4, 5724, 5730, 5742, 5912, 5941, 5943–44, 7903; 10 U.S.C. 265, 276, 351, 951, 1037, 1071–85, 1125, 1481–88, 2110, 2127, 2602, 2632, 2674–75, 5012–13, 5031, 5151, 6022, 6028–9, 6153, 6201–3, 6951–2, 6968, 7041, 7043–44, 7085, 7202, 7205, 7207–9, 7212, 7214, 7229, 7293, 7297, 7303, 7361–2, 7391–2, 7394–6, 7421, 7432, 7571, 7580; 24 U.S.C. 14a, 16a, 21a, 37; 31 U.S.C. 22a, 104, 725h; 33 U.S.C. 367; 37 U.S.C. 404; 39 U.S.C. 406, 2601, 3208; 44 U.S.C. 1321; Department of Defense Appropriations Act, 1975.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1804-0-1-051		1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. STRATEGIC FORCES	353,539	490,230	598,565
	2. GENERAL PURPOSE FORCES	2,628,149	3,175,037	3,751,463
	3. INTELLIGENCE AND COMMUNICATIONS	312,710	347,235	400,562
	7. CENTRAL SUPPLY AND MAINTENANCE	2,159,701	2,287,314	2,494,186
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	833,645	753,887	817,378
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	247,485	231,012	256,767
	10. SUPPORT OF OTHER NATIONS	21,289	760	1,159
	TOTAL DIRECT PROGRAM	6,556,518	7,285,475	8,320,000
	REIMBURSABLE (TOTAL)	1,458,179	1,500,000	1,523,899
	SUBTOTAL	8,014,697	8,785,475	9,843,899
	INTRAFUND OBLIGATIONS	-811,001	-840,000	-840,000
10	TOTAL OBLIGATIONS	7,203,696	7,945,475	9,003,899
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-584,448	-603,000	-626,899
13	TRUST FUNDS	-27,470	-28,000	-28,000
14	NON-FEDERAL SOURCES	-19,399	-29,000	-29,000
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR	-16,251	.....	.....
25	UNOBLIGATED BALANCE LAPSING	39,967	.....	.....
	BUDGET AUTHORITY	6,594,096	7,285,475	8,320,000
	BUDGET AUTHORITY:			
40	APPROPRIATION	6,577,125	7,151,175	8,374,000
40	APPROPRIATION (INDEFINITE)	22,138	.....	.....
40	RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-27,500	.....
	PORTION APPLIED TO LIQUIDATE CONTRACT AUTHORITY	.....	.....	-54,000
41	TRANSFERRED TO OTHER ACCOUNTS	-5,167	.....	.....
43	APPROPRIATION (ADJUSTED)	6,594,096	7,123,675	8,320,000
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	100,800	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	61,000	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	6,572,379	7,285,475	8,320,000
	OBLIGATED BALANCE, START OF YEAR			
72.40	APPROPRIATION	981,388	1,591,409	1,848,884
72.49	CONTRACT AUTHORITY	64,859	52,676	54,000
	OBLIGATED BALANCE, END OF YEAR			
74.40	APPROPRIATION	-1,591,409	-1,848,884	-2,248,884
74.49	CONTRACT AUTHORITY	-52,676	-54,000	.....
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	-14,045	1,324	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	5,960,497	6,881,571	7,958,629
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	91,224	9,576
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL	.....	55,285	5,795

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1804-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	1,324,168	1,474,130	1,511,975
11.3	POSITIONS OTHER THAN PERMANENT	45,348	36,991	27,971
11.5	OTHER PERSONNEL COMPENSATION	65,105	63,325	69,658
	TOTAL PERSONNEL COMPENSATION	1,434,621	1,574,446	1,609,604
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	1,180,879	1,267,082	1,275,857
12.1	PERSONNEL BENEFITS: CIVILIAN	111,160	123,007	126,357
13.0	BENEFITS FOR FORMER PERSONNEL	1,164	1,272	813
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	97,985	81,890	95,000
22.0	TRANSPORTATION OF THINGS	193,522	203,745	216,439
23.0	RENT, COMMUNICATIONS, AND UTILITIES	277,020	378,310	426,680
24.0	PRINTING AND REPRODUCTION	26,069	28,960	34,570
25.0	OTHER SERVICES	3,669,815	3,788,590	4,630,643
26.0	SUPPLIES AND MATERIALS	966,385	1,370,956	1,472,627
31.0	EQUIPMENT	32,519	41,663	41,014
	TOTAL DIRECT OBLIGATIONS	6,556,518	7,285,475	8,320,000
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	253,742	307,364	333,747
12.1	PERSONNEL BENEFITS: CIVILIAN	23,886	29,839	33,053
13.0	BENEFITS FOR FORMER PERSONNEL	18	208	195
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	2,500	2,500	2,560
22.0	TRANSPORTATION OF THINGS	230	230	230
23.0	RENT, COMMUNICATIONS, AND UTILITIES	36,000	37,000	37,000
24.0	PRINTING AND REPRODUCTION	600	600	600
25.0	OTHER SERVICES	946,403	918,459	910,174
26.0	SUPPLIES AND MATERIALS	191,000	200,000	202,540
31.0	EQUIPMENT	3,800	3,800	3,800
	TOTAL REIMBURSABLE OBLIGATIONS	1,458,179	1,500,000	1,523,899
	SUBTOTAL	8,014,697	8,785,475	9,843,899
96.0	INTRAFUND OBLIGATIONS	-811,001	-840,000	-840,000
99.0	TOTAL OBLIGATIONS	7,203,696	7,945,475	9,003,899

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PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1804-0-1-051				TRANSITION
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. STRATEGIC FORCES			187,776
	2. GENERAL PURPOSE FORCES			1,038,993
	3. INTELLIGENCE AND COMMUNICATIONS			103,616
	7. CENTRAL SUPPLY AND MAINTENANCE			622,241
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES			216,228
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES			65,468
	10. SUPPORT OF OTHER NATIONS			178
	TOTAL DIRECT PROGRAM			2,234,500
	REIMBURSABLE (TOTAL)			383,094
	SUBTOTAL			2,617,594
	INTRAFUND OBLIGATIONS			-210,000
10	TOTAL OBLIGATIONS			2,407,594
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS			-158,844
13	TRUST FUNDS			-7,000
14	NON-FEDERAL SOURCES			-7,250
	BUDGET AUTHORITY			2,234,500
	BUDGET AUTHORITY:			
40	APPROPRIATION			2,234,500
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET			2,234,500
	OBLIGATED BALANCE, START OF YEAR			
72.40	APPROPRIATION			2,248,884
	OBLIGATED BALANCE, END OF YEAR			
74.40	APPROPRIATION			-1,898,384
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL			2,585,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1804-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	371,779
11.3	POSITIONS OTHER THAN PERMANENT	10,476
11.5	OTHER PERSONNEL COMPENSATION	15,779
	TOTAL PERSONNEL COMPENSATION	398,034
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	325,671
12.1	PERSONNEL BENEFITS: CIVILIAN	31,880
13.0	BENEFITS FOR FORMER PERSONNEL	390
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	22,078
22.0	TRANSPORTATION OF THINGS	54,110
23.0	RENT, COMMUNICATIONS, AND UTILITIES	107,304
24.0	PRINTING AND REPRODUCTION	8,712
25.0	OTHER SERVICES	1,304,279
26.0	SUPPLIES AND MATERIALS	370,138
31.0	EQUIPMENT	9,938
	TOTAL DIRECT OBLIGATIONS	2,234,500
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	72,363
12.1	PERSONNEL BENEFITS: CIVILIAN	7,084
13.0	BENEFITS FOR FORMER PERSONNEL	1
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	655
22.0	TRANSPORTATION OF THINGS	57
23.0	RENT, COMMUNICATIONS, AND UTILITIES	9,300
24.0	PRINTING AND REPRODUCTION	150
25.0	OTHER SERVICES	241,514
26.0	SUPPLIES AND MATERIALS	50,970
31.0	EQUIPMENT	1,000
	TOTAL REIMBURSABLE OBLIGATIONS	383,094
	SUBTOTAL	2,617,594
96.0	INTRAFUND OBLIGATIONS	-210,000
99.0	TOTAL OBLIGATIONS	2,407,594

PERSONNEL SUMMARY

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total number of permanent positions.....	123,524	124,385	126,072	126,418
Full-time equivalent of other positions..	4,973	3,809	2,612	2,532
Average paid employment.....	123,158	127,576	126,915	127,453
Average GS grade.....	7.3	7.3	7.3	7.3
Average GS salary.....	$13,048	$13,690	$13,939	$13,939
Average salary of ungraded positions.....	$10,014	$11,076	$11,621	$11,621

INTRODUCTORY STATEMENT

(In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total Direct Obligations	$6,556,518	$7,285,475	$8,320,000	$2,234,500
PL 93-305 Retroactive Salary Payments	- 22,138	-	-	-
Proposed Supplemental for Civilian Pay Increases	-	- 161,800	-	-
Proposed Transfer to Other Accounts	+ 5,167	-	-	-
Unobligated Balance	+ 39,967	-	-	-
Unobligated Balance Transferred from Other Accounts	- 2,389	-	-	-
Appropriation	$6,577,125	$7,123,675	$8,320,000	$2,234,500

The purpose of this appropriation is to operate, maintain, and support Naval Forces. These forces, consisting of men, ships and aircraft, represent the Navy's capability to project the national policy of the United States virtually anywhere in the world. In most locations, seapower is on the scene continuously, providing a range of choices for implementation of U.S. policy objectives.

Requested FY 1976 funding for the Operation and Maintenance, Navy account supports forces at approximately the same level as in FY 1975. Planned end fiscal year 1976 active fleet ship inventory is 490 or 12 fewer ships than currently planned for fiscal year 1975. Overall operating aircraft decline slightly from 5,594 in FY 1975 to 5,353 in FY 1976.

With respect to operating tempo, ship steaming remains at about 1.2 million hours in both years. The flying program, however, reflects an increase of 70 thousand hours in FY 1976, to a total of 2.09 million, which are the hours required to achieve minimum primary mission readiness levels. This is an increase over prior years in the sense that the impact of inflation, coupled with fiscal constraints, dictated reduction to the FY 1975 program, a situation which cannot be allowed to persist if readiness is not to be permanently degraded.

Provision is made for 85 regular ship overhauls including 2 fleet ballistic missile submarines, 12 nuclear attack submarines and 1 KITTY HAWK class attack carrier. Overall, the overhaul schedule increases by five overhauls in fiscal year 1976. With respect to aircraft maintenance, the FY 1976 budget supports the rework of 1,662 aircraft and 3,470 aircraft engines required to provide the operating forces with mission capable aircraft. Air and ship launched missiles, guns, bombs, and other ordnance will require maintenance, overhaul, test and check out to assure safe and reliable operation.

In addition to fleet operations, training is provided to Naval and other service personnel at shore based training activities. In fiscal year 1976, an average student load of approximately 66,000 officers, enlisted personnel and midshipmen will receive some form of specialized, technical or professional training, and an average of approximately 21,000 recruits will receive military training.

Funds to operate and maintain the Naval Shore Establishment are also included here. The latter's mission is to provide supply, overhaul, modernization, repair, training and other support services for Naval and Marine Corps air stations, Naval hospitals, supply centers and depots, Naval stations and support activities and communications.

The planned obligations contained in the appropriation request for fiscal year 1976, at 8,320.0 million, are 1,034.5 million above fiscal year 1975, although planned level of effort does not change drastically. To place this

increase in context, over 78 million represents the annualized impact of FY 1975 civilian pay raises and health benefits, and almost $230 million additional is required for stock fund price increases. $46 million is related to transfers of funding responsibility, and much of the remaining $680 million can be ascribed to inflationary cost growth.

To restate this dollar growth in program terms, the following pages will address required increases for aircraft reworks ($68.8 million), ship maintenance, including five additional overhauls ($418.8 million), flying and steaming programs ($178.2 million), satellite operations and classified intelligence programs ($47.8 million) and general increases across essentially all other programs ($343.5 million). A decrease of $22.6 million is also reflected as appropriated fund support to commissary stores is gradually eliminated over a two-year period.

In its report B-179343 of 21 October 1974 on "Substantial Understatement of Obligations for Separation Allowances for Foreign National Employees", the GAO recommended that the Secretary of Defense direct Military Departments to (1) record all unrecorded obligations for separation allowances, (2) record all future obligations when they are incurred, and (3) require that the amount of obligations recorded against current appropriations be equal to the total increase in the liability for separation allowance payments.

The Department of Defense has directed a uniform policy for obligating foreign national separation allowances beginning in FY 1976. DOD components will begin establishing obligations in the current year (FY 1976) to cover the prior year liability which result from current year (FY 1976) increases.

With regard to the Navy O&M account, obligations have been/are established at the time earned by the employees and adjusted subsequently for increased liability resulting from changes in pay and exchange rates. The application of the subsequent adjustments against appropriations made for each year during which the employee worked, while obviating the need for new obligational authority, does not satisfy the accrual policy recommendation of GAO. Accordingly, and pursuant to SECDEF guidance, Navy budget requests commencing in FY 1976 will include amounts for the current year liability plus amounts necessary to cover the increase applicable to prior years.

1. FY 1976 payments	$9300
2. FY 1976 liability due to FY 1976 increases	1644
3. FY 1975 and prior liability due to FY 1976 increases	2366

The impact of future FY 1976 master labor contract pay increase on prior year separation liabilities has not been addressed, and will be included in subsequent budget request.

The transition budget (FY 197T) request for $2,234.5 million represents a continuation of effort for the three month transition to FY 1977, and will provide essentially the same level of operations as requested in the FY 1976 budget.

Summary of Civilian Manpower Changes
Fiscal Year 1975 to Fiscal Year 1976
(Direct Hire)

Operation or Activity	Year End Changes
Transfer from Army: Military Assistance Command, Thailand Support Group	+1,840
TRIDENT facility	+ 69
Supervisors of Shipbuilding	+ 291
Criminal investigators	+ 93
Ship Repair Facilities, Pacific	+ 163
Naval Air Station supply support	+ 126
Civilianization of military positions at medical activities	+ 50
Automated Data Processing	- 215
Consolidated Telecommunications program	- 315
Transfer to Reserve account (O&M,NR): Reserve personnel records function	- 66
Disestablish Naval Training Center, Bainbridge, Md.	- 256
Project Management Office, NAVAIRSYSCOM	- 80
Net all other changes	- 36

Civilian Employment

(Dollars in thousands; strength in whole numbers)

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate			FY 1977 Estimate
	Average Strength	End Strength 6/30/74	Est. Oblig.	Average Strength	End Strength 6/30/75	Est. Oblig.	Average Strength	End Strength 6/30/76	Est. Oblig.	Average Strength	End Strength 9/30/76	Est. Oblig.	End Strength 9/30/77
Direct Hire Civilians													
Full-time permanent	118,185	122,301	1,519,490	123,767	123,053	1,687,087	124,303	124,825	1,738,408	124,921	125,168	435,296	125,626
Other	4,973	5,756	51,359	3,809	2,773	41,685	2,612	2,665	31,614	2,532	2,665	7,700	2,665
Total Direct Hire Civilians	123,158	128,057	1,570,849	127,576	125,826	1,728,772	126,915	127,490	1,770,022	127,453	127,833	442,996	128,291
Detail by Budget Activity													
Strategic Forces	1,287	1,335	24,515	1,371	1,371	28,575	1,411	1,459	30,501	1,492	1,509	7,927	1,830
General Purpose Forces	35,467	37,361	340,793	37,493	36,631	391,018	38,032	38,350	399,472	38,216	38,326	100,212	38,363
Intelligence and Communications	8,139	8,035	119,417	8,214	8,295	131,511	8,103	8,039	135,240	7,984	8,036	33,868	8,044
Central Supply and Maintenance	43,678	44,255	662,142	42,951	41,909	690,416	42,085	42,357	705,539	42,384	42,296	176,015	42,223
Training, Medical & Other General Personnel Activities	24,792	27,045	291,432	27,846	27,868	346,182	27,580	27,544	354,846	27,653	27,904	88,916	27,795
Administration & Associated Activities	9,083	9,272	122,971	8,792	8,801	126,188	8,758	8,804	128,630	8,776	8,800	32,129	9,074
Support of Other Nations	712	754	9,579	909	951	14,882	946	937	15,794	948	962	3,929	962
Total Direct Hire Civilians	123,158	128,057	1,570,849	127,576	125,826	1,728,772	126,915	127,490	1,770,022	127,453	127,833	442,996	128,291
Reimbursable Obligations Included Above			(277,646)			(337,411)			(366,995)			(94,048)	
Indirect Hire Civilians													
Detail by Budget Activity													
General Purpose Forces	6,934	6,877	59,209	6,777	6,910	68,260	6,695	6,595	68,494	6,595	6,595	16,822	6,595
Intelligence and Communications	629	631	3,418	935	930	5,419	932	927	6,350	927	927	1,588	927
Central Supply and Maintenance	1,409	1,410	12,671	1,580	1,580	16,893	1,580	1,580	16,904	1,580	1,580	4,226	1,580
Training, Medical & Other General Personnel Activities	137	133	803	196	196	1,890	196	196	1,897	196	196	474	196
Administration & Associated Activities	1	1	11	9	9	79	9	9	81	9	9	20	9
Support of Other Nations	-	-	-	3	3	3	8	8	121	3	3	3	3
Total Indirect Hire Civilians	9,110	9,052	76,112	9,500	9,628	92,544	9,420	9,315	93,847	9,310	9,310	23,133	9,310
Reimbursable Obligations Included Above			(32,640)			(41,410)			(42,253)			(10,618)	

Other Personnel Compensation
(Dollars in Thousands)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Overtime and holiday pay.....	41,132	40,587	44,505	10,906
Sunday and night differential.....	4,098	3,828	4,437	1,086
Post differential.....	4,639	4,800	4,950	1,200
Premium pay (includes firefighters)...	11,315	10,567	12,251	2,998
Other Compensation (includes payments made to foreign nationals).....	3,921	3,543	3,515	885
Total.....	65,105	63,325	69,658	17,075

SUMMARY OF OBLIGATIONS
(In Thousands)

Budget Activity No.	Budget Activity	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	Difference 1976 Compared with 1975
1	Strategic Forces	$ 353,539	$ 490,230	$ 598,565	$ 187,776	$+ 108,335
2	General Purpose Forces	2,628,149	3,175,037	3,751,463	1,038,993	+ 576,426
3	Intelligence and Communications	312,710	347,235	400,562	103,616	+ 53,327
7	Central Supply and Maintenance	2,159,701	2,287,314	2,494,106	622,241	+ 206,792
8	Training, Medical and Other General Personnel Activities	833,645	753,887	817,378	216,228	+ 63,491
9	Administration and Associated Activities	247,485	231,012	256,767	65,468	+ 25,755
10	Support of Other Nations	21,289	760	1,159	178	+ 399
	Total direct obligations in budget document	$6,556,518	$7,285,475	$8,320,000	$2,234,500	$+1,034,525

Summary of Special Analyses
Areas of Special Interest
(Dollars in Thousands: Strength in Whole Numbers)

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate		
	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.
1. Ship Operations - Costs	-	-	$412,319	-	-	$614,647	-	-	$721,961	-	-	$182,135
O&M,N	-	-	391,396	-	-	588,275	-	-	690,168	-	-	174,310
RDT&E,N	-	-	4,556	-	-	6,119	-	-	5,661	-	-	701
O&M,NR	-	-	16,367	-	-	20,353	-	-	26,132	-	-	7,124
2. Ship Operations - Ship Inventory (P. 5 - 7)												
3. Depot - Level Maintenance - Ships	-	-	$1,385,985	-	-	$1,569,916	-	-	$1,988,478	-	-	$626,445
O&M,N	-	-	1,303,777	-	-	1,463,729	-	-	1,882,615	-	-	579,919
RDT&E,N	-	-	32,913	-	-	28,218	-	-	10,050	-	-	4,375
O&M,NR	-	-	49,295	-	-	77,969	-	-	95,813	-	-	24,151
4. A/C Operations - Costs	-	-	$426,316	-	-	$598,623	-	-	$724,015	-	-	$184,593
O&M,N	-	-	382,144	-	-	546,388	-	-	647,176	-	-	162,821
RDT&E,N	-	-	10,616	-	-	4,068[a]	-	-	8,267	-	-	1,886
O&M,NR	-	-	33,556	-	-	48,167	-	-	68,572	-	-	19,886
5. A/C Operations - A/C Inventory (P. 5 - 10)												
6. Depot - Level Maintenance - A/C	-	-	$614,093	-	-	$626,855	-	-	$701,486	-	-	$178,162
O&M,N	-	-	557,678	-	-	573,393	-	-	642,144	-	-	163,413
O&M,NR	-	-	36,690	-	-	32,703	-	-	37,352	-	-	8,598
RDT&E,N	-	-	17,606	-	-	19,391	-	-	20,590	-	-	5,801
Other Defense Agencies	-	-	2,119	-	-	1,368	-	-	1,400	-	-	350

a/ Effective with FY 1975 - Indirect costs are included in T&E institutional funding costs.

Item	FY 1974 Actual Military End Strength	FY 1974 Actual Civilian End Strength	FY 1974 Actual Obligs. by Appn.	FY 1975 Estimate Military End Strength	FY 1975 Estimate Civilian End Strength	FY 1975 Estimate Obligs. by Appn.	FY 1976 Estimate Military End Strength	FY 1976 Estimate Civilian End Strength	FY 1976 Estimate Obligs. by Appn.	FY 197T Estimate Military End Strength	FY 197T Estimate Civilian End Strength	FY 197T Estimate Obligs. by Appn.
7. Automatic Data Processing	5,213	11,081	$336,830	4,613	11,410	$373,060	4,528	11,105	$413,003	4,511	11,105	$94,232
O&M,N	-	7,466	154,924	-	7,756	177,701	-	7,541	189,876	-	7,541	46,938
O&M,NR	-	55	862	-	60	1,097	-	60	1,239	-	60	310
RDT&E,N	-	225	9,076	-	243	11,878	-	245	11,660	-	245	2,801
MPN	3,479	-	35,858	3,056	-	35,297	2,971	-	34,058	2,954	-	8,529
RPN	-	-	-	-	-	-	-	-	-	-	-	-
OPN	-	-	8,621	-	-	8,553	-	-	34,535	-	-	-
APN	-	-	45	-	-	162	-	-	175	-	-	44
MCN	-	93	2,062	-	111	3,106	-	114	3,059	-	114	683
NIF	-	2,649	89,045	-	2,628	99,106	-	2,533	101,336	-	2,533	24,743
O&M,MC	-	590	14,986	-	608	15,082	-	608	16,459	-	608	4,055
O&M,MCR	-	-	73	-	-	72	-	-	94	-	-	26
MP,MC	1,734	-	17,247	1,557	-	16,318	1,557	-	16,323	1,557	-	4,080
P,MC	-	-	3,960	-	-	4,600	-	-	4,100	-	-	2,000
FHMA	-	3	71	-	4	88	-	4	89	-	4	23
8. Consolidated Telecommunications Program (CTP)	13,830	4,570	$587,557	15,228	4,552	$634,812	15,308	4,215	$750,458	15,389	4,213	$163,981
RDT&E,N	-	-	94,391	-	-	103,352	-	-	111,535	-	-	30,904
MCON	-	-	8,131	-	-	6,564	-	-	5,399	-	-	-
OPN	-	-	68,560	-	-	96,409	-	-	102,815	-	-	15,815
PMC	-	-	22,308	-	-	4,207	-	-	15,789	-	-	1,900
APN	-	-	23,822	-	-	4,200	-	-	35,450	-	-	8,200
WPN	-	-	36,600	-	-	38,000	-	-	60,500	-	-	3,000
O&M,N	-	4,408	202,529	-	4,350	229,584	-	4,035	253,978	-	4,033	63,975
O&M,MC	-	162	6,448	-	202	7,153	-	180	7,579	-	180	2,007
MPN	12,914	-	114,083	14,353	-	133,903	14,498	-	142,185	14,579	-	35,174
MP,MC	916	-	7,306	875	-	7,351	810	-	6,913	810	-	1,553
RDT&E,MC	-		3,379	-	-	2,430	-	-	8,315	-	-	1,235

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate		
	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.
9. Consolidated Defense Intelligence Program (CDIP)	11,834	1,704	$349,292	10,454	1,815	$347,616	9,208	1,729	$351,821	9,144	1,728	$92,032
RDT&E,N	-	-	$144,546	-	-	$140,547	-	-	$106,104	-	-	$31,966
MCON	-	-	2,320	-	-	2,798	-	-	5,902	-	-	-
OPN	-	-	25,428	-	-	29,019	-	-	36,329	-	-	9,076
O&M,N	-	1,704	62,309	-	1,815	67,564	-	1,729	97,328	-	1,728	26,990
O&M,MC	-	-	862	-	-	872	-	-	-	-	-	-
MPN	10,127	-	102,424	9,811	-	98,373	8,556	-	88,361	8,550	-	21,328
MP,MC	1,707	-	11,403	653	-	5,543	652	-	5,597	594	-	1,272
WPN	-	-	-	-	-	2,900	-	-	12,200	-	-	1,400
10. Public Affairs Activities	390	80	$6,048	391	78	$6,474	391	78	$6,699	390	78	$1,706
O&M,N		72	1,427		76	1,468		67	1,681		67	457
MPN	186		2,566	146		2,542	146		2,474	146		618
O&M,MC		8	178		11	184		11	188		11	43
MP,MC	204		1,862	245		2,190	245		2,261	244		564
O&M,NR			15			90			95			24
11. Legislative Affairs Activities	16		$ 348	16		$ 368	16		$ 388	16		$ 97
MPN	13		295	13		313	13		332	13		83
MP,MC	3		53	3		55	3		56	3		14
12. Headquarters Operation and Administration	14,490	13,955	$497,012	12,523	12,697	$500,746	12,487	14,431	$523,848	12,482	14,426	$136,965
MPN	11,173		158,650	9,825		151,458	9,791		153,986	9,786		39,704
MP,MC	3,317		37,138	2,698		36,599	2,696		34,255	2,696		8,561
O&M,N		10,767	238,349		9,747	244,388		11,468	269,163		11,463	67,572
(Direct) 1/		10,595	233,015		9,590	240,199		11,375	265,875		11,370	66,747
(Reimb.)		172	5,334		157	4,189		93	3,288		93	825
O&M,NR		99	1,413		85	1,535		89	1,618		89	406
O&M,MC		1,170	20,822		1,154	22,436		1,154	21,980		1,154	9,871
(Direct)		1,169	20,806		1,153	22,416		1,153	21,960		1,153	9,871
(Reimb.)		1	16		1	20		1	20		1	
RDT&E,N		395	9,071		390	9,852		390	10,200		390	2,642
MCON		286	7,550		187	8,627		187	7,083		187	1,771
(Direct)		284	7,511		187	8,607		187	7,083		187	1,771
(Reimb.)		2	39			20		-			-	-
MAE		102	2,534		102	2,758		102	2,845		102	758
NPR					19	535		28	697		28	174
NIF 1/		1,136	21,485		1,013	22,558		1,013	22,021		1,013	5,506
1/ Includes Indirect Hire as follows:												
O&M,N (Direct)		8	80		8	84		8	112		8	28
NIF		136	2,390		57	1,967		57	1,245		57	311

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate		
	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. by Appn.
13. Real Property Maintenance			$270,753			$282,897			$294,892			$82,782
O&M,N			200,682			222,065			222,785			61,500
O&M,MC			56,124			48,937			59,165			18,020
O&M,NR			12,944			11,395			12,442			3,137
O&M,MCR			1,003			500			500			125
14. Service Support Contracts			236,916			168,883			176,334			44,303
O&M,N			191,518			135,711			139,237			34,850
O&M,NR			1,352			1,651			1,746			436
APN			12,471			-			-			-
OPN			10.177			11,498			11,202			2,800
RDT&E,N			8,056			13,347 b/			16,673 c/			4,374
O&M,MC			9,446			5,650			6,996			1,742
PMC			2,830			680			75			-
O&M,MCR			346			346			405			101
15. Travel and Transportation of Persons			337,625			326,248			370,927			99,073
MPN			80,068			88,026			97,411			28,489
RPN			17,906			16,077			13,851			4,633
MP,MC			41,322			44,132			51,362			13,454
RP,MC			6,585			7,931			8,530			5,012
O&M,N			97,985			81,890			95,000			22,078
O&M,NR			2,426			2,335			2,812			753
O&M,MC			17,642			15,202			18,267			4,509
O&M,MCR			1,251			1,197			1,275			328
RDT&E,N			10,258			10,640			11,000			1,509
MCON			1,338			2,105			3,107			323
NIF			60,624			56,493			68,093			17,928
MCIF			142			142			142			36
NWF			77			-			-			-
LSNA			1			1			-			-
Navy Petroleum Res.			-			77			77			21

b/ Includes $3,235 transferred to RDT&EN from O&MN for Pacific Missile Range. (T&E funding policy adjustment for BARSTUR Range)
c/ Reflects adjustments at PMR and AUTEC as follows: PMR $5,000 transferred from RDT&EN to O&MN due to redesignation of BARSTUR Range segment of PMR as an O&MN activity; AUTEC, $6,720 increase in RDT&EN for funding of Andros Range Facilities (comprised of $4,989 transfer from O&MN for T&E Funding Policy and $1,731 RDT&EN funding increase).

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate		
	Military End Strength	Civilian End Strength	Obligs. by Appn.	Military End Strength	Civilian End Strength	Obligs. of Appn.	Military End Strength	Civilian End Strength	Obligs. of Appn.	Military End Strength	Civilian End Strength	Obligs. of Appn.
16. Personnel Assistance Program Transition/Referral			$ 1,436			-			-			-
MPN			529			-			-			-
O&M,N			665			-			-			-
MP,MC			-			-			-			-
O&M,MC			242			-			-			-
17. Olympic Sport Competition			36			37			43			9
O&M,MC									6			
O&M,N			36			37			37			9

BIOGRAPHY AND PREPARED STATEMENT

Senator YOUNG. Before we begin, Admiral Fine, your biography and prepared statement will be placed in the record at this point.
[The statement follows:]

BIOGRAPHY OF REAR ADMIRAL STANLEY S. FINE

Stanley Sidney Fine was born in New York, New York, on September 26, 1927. He attended New York University prior to his appointment to the U.S. Naval Academy in 1945. He was graduated and commissioned Ensign on June 3, 1949. He subsequently attended William and Mary College, Williamsburg, Virginia; the University of Virginia Extension, Northern Virginia; American University, Washington, D.C.; and the Graduate School of Business, Harvard University. He was selected to the rank of Rear Admiral on April 26, 1972, with a date of rank of July 1, 1973.

Following graduation from the Naval Academy in 1949, he joined the USS MANCHESTER (CL 83) as Division/Watch Officer, after which in 1952 he became Engineer Officer on board the USS BRADFORD (DD 545), both of which participated in action off Korea. In February 1954 he reported for instruction at the Mine Warfare Officer School, Yorktown, Virginia, and in April of that year assumed command of the USS HAWK (MSCO 17) on which he served until April 1956. He next served for three years with the Planning and Program Division, Special Projects (POLARIS Program).

He became Executive Officer on board the USS JOHNSTON (DD 821) in September 1959 and in October 1961 assumed command of the USS LOWE (DER 325) and Escort Division THIRTY-THREE. From September 1963 he attended Post Graduate School at Harvard.

RADM Fine reported in September 1965 as Commanding Officer of the USS INGRAHAM (DD 694). He had duty from November 1967 to July 1968 as Head of the Budget Branch, Fleet Resources Office, in the Naval Material Command, Navy Department, Washington D. C. In July 1968 he transferred

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to the Office of the Assistant Secretary of the Navy (Financial Management), where he was Executive Assistant and Naval Aide until June 1970. After a short tour at the Center of Naval Analysis, he served as Head of the Program Appraisal and Information Branch/Deputy Director of the Department of the Navy Program Information Center, Office of the Chief of Naval Operations, Navy Department, and as Special Assistant to the Director, Navy Program Planning. In August 1972 he reported as Deputy Commander for Plans, Programs, and Financial Management/Comptroller of the Naval Ship Systems Command, Washington, D.C. and in October 1973 reported as Director of the Fiscal Management Division, Office of the Chief of Naval Operations.

RADM Fine has the American Campaign Medal; World War II Victory Medal; Navy Occupation Service Medal; China Service Medal; National Defense Service Medal with bronze star; Korean Service Medal with eight stars; and the United Nations Service Medal. He also has the Republic of Korea Presidential Unit Citation Badge, the Navy Commendation Medal and the Legion of Merit with Gold Star. He was awarded the American Society of Military Comptroller "Management Analyst of the Year" award in 1971, and has had articles published in the Harvard Business Review, Naval Institute Proceedings, and Combat Readiness.

He was married to the late Eleanore Baker of Charleston, South Carolina, and has two children, Laren A. and Stephen S. Fine. His "home town" address is 6700 192nd Street, Fresh Meadows, New York, New York.

STATEMENT OF REAR ADMIRAL STANLEY S. FINE

Mr. Chairman and Members of the Committee: I appreciate the opportunity to present the Department of the Navy's FY 1976 and FY 197T budget request for the Operation and Maintenance (O&M,N) appropriation.

The FY 1976 O&M requirement is $8.320 billion. This is $1.034 billion more than the adjusted FY 1975 program of $7.286 billion. However, because of inflation I must emphasize that there is little significant program change.

The majority of this year to year change is attributable to the increased cost of doing business under a climate of double digit inflation. Further, this request is based on prices or rates generally in effect today and makes no provision for continuing price escalation which will no doubt occur before we execute the FY 1976 budget. In general, the FY 1976 and 7T budget increases also reflect a continuing effort to improve our fleet readiness and force modernization levels, to attain those goals we consider vital but have been frustrated from achieving due to inflationary pressures. Accordingly, the budget I am presenting today provides for an attempt to return to acceptable readiness levels.

Budget Summary

The FY 1975 column in the FY 1976 budget has been adjusted to include pending supplemental for civilian pay raise as follows:

	($ in Millions)
FY 1975 Congressional Appropriation	$7,151.2
Proposed Presidential MRP Recission	- 27.5
Supplemental - Civilian Pay Classified Employees (61.0) Wage Board Employees (100.8)	+ 161.8
Adjusted O&M FY 1975 Program	$7,285.5

The O&M funding requirements by major mission aggregation are furnished in Table 1.

Table 1
Major Mission Program Funding
($ in Millions)

Program	FY 1974	FY 1975	FY 1976	FY 197T
1. Strategic Forces	$ 353.6	$ 490.2	$ 598.6	$ 187.8
2. General Purpose Forces	2,628.1	3,175.0	3,751.5	1,039.0
3. Intelligence & Communications	312.7	347.2	400.6	103.6
7. Central Supply & Maintenance	2,159.7	2,287.3	2,494.1	622.2
8. Training, Medical & Other General Personnel Activities	833.6	753.9	817.4	216.2
9. Administration & Associated Activities	247.5	231.0	256.8	65.5
10. Support of Other Nations	21.3	.8	1.2	.2
Total	$6,556.5	$7,285.5	$8,320.0	$2,234.5

Appropriation Highlights

The major funding changes incorporated in the FY 1976 request are summarized in the following table:

Table 2
Operation and Maintenance, Navy
Significant Program Changes FY 75 to FY 76

	FY 1975	FY 1976	Δ
Direct Readiness:			
Aircraft Reworks	573.4	642.2	+ 68.8
Ship Maintenance/Alts	1,463.8	1,882.6	+ 418.8
Ship IMA	44.5	69.7	+ 25.2
Ship Operations	543.8	620.5	+ 76.7
Fleet Support	198.7	236.1	+ 37.4
Calibration	27.2	43.8	+ 16.6
Component Rework	62.3	98.0	+ 35.7
Air Operations	546.4	647.2	+ 100.8
Communications	172.4	192.8	+ 20.4
Torpedo Program	24.1	30.1	+ 6.0
Missile Readiness	89.0	96.2	+ 7.2
Sub-Total	3,745.6	4,559.2	+ 813.6
Other Items:			
Federal Building Fund (Fact of life)	30.2	44.6	+ 14.4
Intelligence	67.5	97.3	+ 29.8
Training (CNET less Air Ops)	322.7	340.7	+ 18.0
Medical	252.4	268.6	+ 16.2
Base Operations	567.3	597.1	+ 29.8
Commissary Stores	42.4	19.8	- 22.6
Other Changes	2,257.4	2,392.7	+ 135.3
Sub-Total	3,539.9	3,760.8	220.9
TOTAL	7,285.5	8,320.0	+1,034.5

The following additional amplification clearly shows the majority of these increases relate directly to readiness improvement/modernization.

Direct Readiness	FY 1975	FY 1976	Δ
Aircraft Rework	573.4	642.2	+ 68.8

An increase of $68.8M is provided in the Aircraft Rework Program for improved readiness. $58.7M is provided for the rework of aviation

components, which is anticipated to reduce the NORS (Not Operationally Ready Supply) from 21% in FY 1975 to approximately 17% in FY 1976. The balance of the increase ($10.1 million) is for aircraft and engines.

Ship Maintenance/Alterations 1,463.8 1,882.6 + 418.8

An increase of $418.8 million is requested in the ship maintenance/alterations program for improved ship readiness. $220.0 million of the increase provides for the more complete overhaul of 85 ships compared to the 80 scheduled for overhaul in 1975. The number of unfunded overhauls at end fiscal year 1976 will be 54 as opposed to 62 at the end of 1975. The 1976 overhaul program includes more complex ships being overhauled (for example, 7 nuclear submarine recores vice 3 in 1975), older ships requiring more extensive repairs (for example, 1200 PSI propulsion plant repairs), and already felt increases in labor rates and material escalation.

Continued modernization of the fleet through ship alterations requires an increase of $162.7 million. The 1976 modernization program provides funds for high priority ship alterations in pollution abatement, 1200 PSI propulsion plants, satellite communications, firefighting weapons, and anti-ship missile defense systems. Alterations being installed for the first time in 1976 include NATO SEASPARROW, improved SSN SONAR, and SSBN 627 class SUBSAFE.

The balance of the increase, $36.1 million, is for other ship repairs including restricted availabilities and emergent repairs.

Ship Intermediate Maintenance Activities 44.5 69.7 + 25.2

The increase of $25.2 million provides additional material for tender and shore based maintenance support of forces afloat. The increase is due to the increased emphasis on greater utilization of Navy's intermediate maintenance activities and includes funds for price escalation and the stock fund surcharge.

Ship Operations	543.8	620.5	+ 76.7

An increase of $76.7 million is requested in the ship operations program to achieve the needed readiness operational tempo of Navy's fleets. A net increase of $38.4 million is needed for ships fuel in 1976 for annualization of the fuel price increase effective in the fourth quarter of 1975. $22.1 million of the increase is required for the first year operations of the USS NIMITZ (CVAN 68), the extended deployments of the HANCOCK and ORISKANY (CVA 19 and CVA 34), and for a stock fund surcharge on material effective 1 July 1975. The balance of the increase ($16.2 million) reflects an increase in operating months, and generally increased material and support costs.

Fleet Support	198.7	236.1	+ 37.4

The additional resources are for three ships being transferred to MSC, Support of Construction Battalions and Aviation Allowance List Items (AVCAL).

Calibration	27.2	43.8	+ 16.6

An additional $16.6 million is provided in FY 1976 to improve readiness by reducing the backlog of uncalibrated test equipment. $7.7 million is in the aviation area, $1.9 million in the ship and ordnance area and $7.0 million is for electronic test equipment.

Components	62.3	98.0	+ 35.7

Increase reflects the attempt to reduce not-ready-for-issue (NRFI) assets to a desired level.

Aircraft Operations	546.4	647.2	+ 100.8

The changes FY 1976 over FY 1975 are related to increases in price of POL and announced stock fund prices effective 1 July 1975. Additionally, the state of Primary Mission Readiness is returned from the decremented FY 1975 program to the DON/OSD approved level of 88% PMR for TACAIR, 100% PMR for CRAW and 86% for Tactical Support.

Communications	172.4	192.8	+ 20.4

The Communications increase of $20.4 million is primarily for the lease of 2 satellites from COMSAT General corporation until Navy's Fleet

Satellite Communications System becomes operational in fiscal year 1979.

Torpedo Program	24.1	30.1	+ 6.0

The $6.0 million increase in the torpedo program is required to establish the in-house capability for torpedo and target support. $3.0 million is for the continuing introduction of the MK-48; $2.1 million is for MK-30 target support. The $.9 million balance is for torpedo tubes and other miscellaneous support.

Missile Readiness	89.0	96.2	+ 7.2

An increase of $7.2 million is to improve the serviceability position of air and surface launched missile inventories and for the introduction of the new HARPOON weapon system scheduled for introduction to the fleet in the second quarter of FY 1976. $1.1 million is for Air Launched Missiles; $3.6 million is for 3T (Terrier, Tartar, and Talos); $1.2 million is for ASMD (Anti-Ship Missile Defense); and $3.0 million is for HARPOON. This $8.9 million increase is partially offset by $1.7M in reductions to the Missile Launcher and Point Defense Programs.

Other Items	FY 1975	FY 1976	△
Federal Building Fund	30.2	44.6	+ 14.4

The Federal Building Fund increase of $14.4 million is a fact of life due to the GSA Standard Level User Charge (SLUC) rate increase, a redefinition by GSA of the quality ratings of occupied space, and the addition to the GSA leased buildings of the former Navy complex at Suitland.

Intelligence	67.5	97.3	+ 29.8

The Intelligence request for this appropriation increases $29.8 million primarily for classified activities ($25.8 million) appearing for the first time in this account. The balance is required for intensified effort in ocean surveillance, satellite systems, nuclear intelligence and assumption of Intelligence Activity, Pacific.

Training	322.7	340.7	+ 18.0

Increased resources relate to civilian pay increases, the NSF surcharge, New Training Systems, transfer of cryptologic training from B.A. 3 to

B.A. 8 ($2.4 million), and other program increases/decreases including reductions in full time degree seeking programs.

Medical 252.4 268.6 + 16.2

The increased resources are required for the NSF Surcharge, graded pay raise, security and janitorial services and other adjustments designed to improve overall health care delivery and provide needed assistance to medical officers.

Base Operations 567.3 597.1 + 29.8

The additional resources are required to pay for increased POL costs; graded and ungraded pay raises; increases in stock fund surcharge; increased cost of material; and other miscellaneous adjustments.

Commissary Stores 42.4 19.8 - 22.6

Reduction reflects the elimination of appropriated fund subsidy for commissary stores (except for overseas costs) over a two year period, beginning 1 October 1976. The commissary store surcharge will be increased to fund the costs currently subsidized by appropriation.

Other 2,257.4 2,392.7 + 135.3

Includes such things as pay raises, employee compensation fund, transportation rate increase, stock fund increases, and transfers from other appropriations.

The above provides increases by Navy Program. Cost growth throughout the appropriation includes the following escalation:

Annualization of FY 1975 pay raise	$ 78.8 million
Announced stock fund increase effective 1 July 75	229.6 million
Transfer of budget responsibility	46.5 million
Approximate general inflationary costs being experienced	600 + million

The FY 197T request of $2,234.5 million will basically maintain programs at the FY 1976 level.

Activity Indicators

Key indicators of activity requiring O&M funds are shown in Tables 3 through 8.

Table 3
Active Ship Program
($ in Millions)

	FY 1975	FY 1976	FY 197T
Active Ship Inventory	502	490	494
Ship Steaming Hours	1,138,085	1,193,385	309,029
Number of Ships Overhauled	80	85	22
Ship Operations Funding	$ 588.2	$ 690.2	$ 174.3
Ship Maintenance/Alterations Funding	$1,463.7	$1,882.6	$ 598.0

As summarized above, some 16 ships are expected to join the fleet from new construction or conversion, while 28 older ships will leave the active fleet.

The active aircraft inventory is shown by Table 4.

Table 4
Active Aircraft Inventory

	FY 1975	FY 1976	FY 197T
Total	6,247	6,125	6,133

The aircraft rework program is shown in Table 5. Components and Other Support is included in the funding.

Table 5
Aircraft Rework Program
($ in Millions)

	FY 1975	FY 1976	FY 197T
Number of aircraft reworked	1,610	1,662	359
Number of engines overhauled	3,799	3,470	920
Number of aircraft on extension	952	818	801
Total aircraft funding	$ 573.4	$ 642.1	$163.4

Table 6 shows the budgeted flying hour program by major mission program.

Table 6
Flying Hours

Major Mission Program	FY 1975	FY 1976	FY 197T
Strategic Forces	15,568	15,684	3,921
General Purpose Forces	1,375,568	1,485,422	364,253
Intelligence & Communications	9,364	4,996	1,249
Training, Medical & Other	590,286	555,333	143,178
Admin. & Associated Activities	33,688	33,097	8,276
Support of Other Nations	400	387	97
Total Hours	2,024,874	2,094,919	520,974
Total Funding ($ in Millions)	$546.4	$647.2	$162.8
Average Cost per Flight Hour	$ 270	$ 309	$ 313

Military Personnel

The number of military personnel to be supported is shown in Table 7.

Table 7
Military Personnel Strengths

	FY 1975	FY 1976	FY 197T
Direct	535,063	527,562	534,519
Reimbursable	1,054	1,089	1,341
Total	536,117	528,651	535,860

Civilian Personnel

Civilian personnel end strengths included in this request are summarized in Table 8.

Table 8
Civilian Personnel Strengths and Funding (Direct & Reimbursable)
($ in Millions)

	FY 1975	FY 1976	FY 197T
Direct Hire			
End Strength	125,826	127,490	127,833
Funding	$ 1,728.8	$ 1,770.0	$ 443.0

The FY 1976 increase over FY 1975 includes a transfer from the Army of 1,840 end strength pursuant to a SECDEF directive that the Navy assume budgeting and funding responsibility as Executive Agent for the Pacific, of the Military Assistance Command Support Group, Thailand. Without this transfer, the end strength would decrease by 176. New

requirements have been accommodated by reductions elsewhere in the account.

The FY 197T estimates for September 30 include 279 for the overseas dependents school staff who are not counted on June 30 as school is not in session. The FY 197T estimate also includes increases of 50 for the TRIDENT facility and 98 (including 49 not required by end FY 1977) for the Naval Home during its relocation to Gulfport, Mississippi. Therefore, the only permanent program increases are 50 for TRIDENT and 49 for the Naval Home. These increases are partially offset by net reductions of 84.

Major Mission Programs

The foregoing summarizes the major programs which determines our O&M requirements. I will now address in detail the seven individual budget activities that comprise the operations and maintenance appropriation.

Budget Activity - 1
STRATEGIC FORCES

This budget program finances the fleet operation, maintenance, alteration and support costs of forty-one Fleet Ballistic Missile submarines, five tenders and various other support ships. In addition, this program funds the support costs of the Strategic Systems Project Office, the SSBN Ship System Maintenance Monitoring System, the TRIDENT program and Strategic Command and Control. Funds also provide for the charter of Military Sealift Command support ships.

The program 1 request is summarized by Table 9 and 10.

Table 9
Strategic Force Funding
($ in Millions)

	FY 1975	FY 1976	FY 197T
Fleet Ballistic Missile System	$ 423.7	$ 496.5	$ 169.9
Support Ships	46.4	79.1	12.2
C&M Command & Control Communications	14.4	17.2	4.3
Missile and Space Defense	4.1	4.2	1.0
Command	1.6	1.5	.4
Total	$ 490.2	$ 598.6	$ 187.8

Table 10
Strategic Forces Manpower

	FY 1975	FY 1976	FY 197T
Military	19,104	19,841	19,899
Civilian	1,371	1,459	1,509

All overhaul and modernization funding for SSBNs is now included in the O&M appropriation. The last POSEIDON conversion was authorized in FY 1975. Subsequent to FY 1975, repair costs which were incident to conversion and were previously funded in Ship Construction, Navy appropriation must now be funded in the overhaul budget in Operation and Maintenance. An SSBN Extended Operating Cycle Program (EOC) has been implemented which lengthens the overhaul interval for the POSEIDON SSBN's. The EOC program can be accomplished at the SSBN deployed sites with the Intermediate Maintenance Activity (IMA) doing more maintenance. This maintenance was successfully accomplished on one ship during 1975 at the deployed site. Similar maintenance will be accomplished on other ships in 1975 and 1976.

The FY 1976 SSBN overhaul program includes 2 SSBNs and the overhaul of the first POSEIDON tender following conversion. The FY 197T program includes one SSBN overhaul.

The funding profile is shown in Table 11.

Table 11
SSBN/Tender O/H and Modernization
($ in Millions)

	FY 1975	FY 1976	FY 197T
SSBN's/Tender O/H Number	2	3	1
SSBN/Tender O/H Funding	$97.6	$125.6	$52.1
Non-Scheduled Repair Funding	17.3	30.7	8.0
Alterations Funding	53.5	72.8	29.8
	$168.4	$229.1	$89.9

Table 12
TRIDENT Funding

	FY 1975	FY 1976	FY 197T
TRIDENT	$17.9	$26.9	$11.6

For the TRIDENT System, $26.9 million in FY 1976 and $11.6 million in FY 197T is being requested primarily to support continuation of

efforts initiated in prior years. The $9.1 million increase in FY 1976 over the FY 1975 funding reflects the continued transition of the TRIDENT program from a development to operational status. The first TRIDENT submarine is now under contract, two more are planned for award in FY 1975 and one in FY 1976, the missile OSDP contract is awarded, and construction of the TRIDENT Support Site at Bangor, Washington has commenced. The majority of the increase in FY 1976 is for planning, procurement of collateral equipment, as well as operations and support incident to the build-up of the TRIDENT Support Site. The initiation of the submarine system training program which supplements similar efforts for the Strategic Weapons System training program initiated in prior years also contributes to the increase.

FY 197T funding represents continuation of efforts cited in FY 1976, increase in installation of equipment at the TRIDENT Training Facility, continued build-up of staffing at the TRIDENT Support Site, and commencement of efforts required to implement an operational capability for the Strategic Weapons System, designed to maintain system readiness and reliability. The effort is similar to that alredy in existence for the POLARIS/POSEIDON program.

	FY 1975	FY 1976	FY 197T
Strategic Systems Project Office	$ 224.1	$ 247.5	$ 61.9

This office supports the operational readiness of the strategic weapons sytems aboard the SSBNs. Fiscal year 1976 includes new or increased efforts in performance evaluation and reliability maintenance related to the additional system usage caused by the Extended Operating Cycle, logistics and training effort associated with the C-4 Backfit program and new surveillance concepts resulting from the POSEIDON Reliability Review.

Budget Activity - 2
GENERAL PURPOSE FORCES

These programs finance the support of forces and shore activities under the operating force commander, namely the Commanders in Chief,

U.S. Atlantic and U.S. Pacific Fleets, and U.S. Naval Forces Europe and support of the unified commands. The funding requirement for these forces is summarized in Table 13.

Table 13
General Purpose Force Funding
($ in Millions)

	FY 1975	FY 1976	FY 197T
Aircraft Forces	$ 419.5	$ 505.0	$ 126.5
Ship Forces	1,900.6	2,366.2	687.9
Base Operations	591.1	608.7	154.9
Special Combat Support Forces	38.3	42.9	12.0
Training	91.9	107.7	27.2
Unified and Operational Commands	85.2	108.1	27.2
Undersea Surveillance Systems	47.9	12.4	3.1
JCS Directed & Coordinated Exercises	.5	.5	.1
	$3,175.0	$3,751.5	$1,039.0

The FY 1975 manpower requirements for the General Purpose Forces are shown in Table 14.

Table 14
General Purpose Forces Manpower
(End Strengths)

	FY 1975	FY 1976	FY 197T
Military	299,477	294,681	294,905
Civilian	36,631	38,350	38,326
Total	336,108	333,031	333,231

	FY 1975	FY 1976	FY 197T
Aircraft Forces	$ 419.5	$ 505.0	$ 126.5

The aircraft forces program provides for aircraft POL, intermediate maintenance costs, repair parts, and related support costs for the Navy's Tactical Air Force. It should be noted the Navy's total current FY 1975 flying hour program is depressed 160,000 hours below our amended 1975 request due to a combination of fuel price increases, manpower, material and general fiscal constraints. As a result, our primary mission readiness for tactical air/anti-submarine warfare and fleet support has dropped to 82% and 74% respectively. The total FY 1976 request of 2,095,000 flying hours represents an increase of 70,000 hours over the degraded FY 1975 level and provides for a return to approved levels of primary mission readiness of 88% for TACAIR/ASW and 86% Fleet

Support Training. $44.2 million of the increase in the aircraft forces program is related to increased level of prices and the announced stock fund price increase effective 1 July 1975 and $31.4 million provides for the additional hours requested within this program. The remaining increases are for flight operations support costs, primarily, additional aviation calibration requirements and more complex CVA outfittings.

Ship Forces	FY 1975	FY 1976	FY 197T
	$1,900.6	$2,366.2	$ 687.9

These funds provide for active fleet ships fuel, utilities, repair parts, intermediate maintenance, scheduled overhauls, restricted availabilities, ship alterations, and related support. $644.4 million is requested in FY 1976 for ship operations, an increase of $93.0 million over FY 1975. This will enable the Navy fleets to return to satisfactory readiness operating standards which have been degraded due to fiscal constraints of absorbing inflation in FY 1975. $38.4 million of this increase is for annualization of the fuel price increase. Increased material requirements of $23.1 million reflect our emphasis on reducing deferred maintenance on operational ships. $9.4 million of the increase is a transfer of items previously purchased by procurement funds. The stock fund surcharge, addition of the USS NIMITZ (CVAN 68), extension of the HANCOCK and ORISKANY (CVA 19 and CVA 34) for FY 1976 deployments account for the remaining $22.1 million increase.

The fiscal year 1976 plan for charter of Military Sealift Command support is $59.9 million, an increase of $14.5 million over fiscal year 1975. Fleet support tasks that can be performed by ships of the Military Sealift Command (civil service manned ships) reduces military manpower requirements for support ships permitting essential manning of combatant ships. A mix of Navy and MSC manned ships provides peacetime efficiencies without unacceptably reducing wartime readiness. The fiscal year 1976 plan includes transfer of three additional oilers to MSC. By end fiscal year 1976, MSC will be operating eight oilers, four

fleet ocean tugs, one store ship, and two cable repair ships for the Navy which completes the majority of the transfers to MSC projected at this time.

The ship maintenance and modernization program within Budget Activity 2 is shown by Table 15.

Table 15
Ship Maintenance and Modernization (B.A. 2)
($ in Millions)

	FY 1975	FY 1976	FY 197T
Scheduled overhauls	78	82	21
Unfunded overhauls (bowwave)	62	54	55
Regular ship overhauls	$ 679.4	$ 871.3	$ 306.4
Non-scheduled ship repairs	$ 220.4	$ 241.1	$ 70.5
Ship alterations	$ 394.1	$ 536.8	$ 130.4
Total	$1,293.9	$1,649.2	$ 507.3

A significant portion of the increase in overhaul funds result from the scheduled overhaul of three additional nuclear submarines. FY 1976 has seven SSN's scheduled for nuclear recores as opposed to three in FY 1975. The non-scheduled ship repairs increase is primarily for restricted availabilities related to extending operating cycles of nuclear submarines between refuelings, a selected restricted availability for USS LONG BEACH (CGN 9), a nuclear guided missile cruiser; and overhaul requirements for large and medium auxiliary drydocks.

In ship alterations an increase of $142.7 million is primarily attributed to more complex alterations and installation of a greater number of improvements.

	FY 1975	FY 1976	FY 197T
Base Operations	$ 591.1	$ 608.7	$ 154.9

The base operations program provides for the operation and maintenance costs of fleet support activities. The $17.5 million increase is primarily due to annualization of pay raises offset by man year reductions, and increased cost of fuel, material, supplies and contracts.

	FY 1975	FY 1976	FY 197T
Special Combat Forces	$ 38.3	$ 42.9	$ 12.0

These forces consist of Construction Battalions, Special Warfare Groups, Underwater Demolition Teams, Sea-Air-Land (Seal Teams), Explosive Ordnance Disposal Groups, and Airborne Mine Countermeasures. The $4.6 million increase is primarily related to costs in support of construction battalion ($2.7 million) and airborne mine countermeasure deployments ($1.9 million). Any decrease related to the phasing out of 1.5 CB battalions by end of FY 1976 is more than offset by increases due to MAC and travel rate increases and cost of end-of-job equipment overhaul.

	FY 1975	FY 1976	FY 197T
Training	$ 91.9	$ 107.7	$ 27.2

This program supports Fleet Air, Surface and Sub-surface Training Activities. The majority of the increase is for aircraft operations and raises the Training Readiness from the current level to approved levels of readiness, $6.8 million, for 18,720 additional flight hours and $8.5 million to cover increased fuel costs.

	FY 1975	FY 1976	FY 197T
Unified and Operational Commands	$ 85.2	$ 108.1	$ 27.2

This request supports the Commanders in Chief, Atlantic and Pacific, Service and Force Commands, and Fleet Air Wings. A $25.8 million funding transfer of the Military Assistance Command, Thailand Support Group from the Army to the Navy as Executive Agent for the Pacific represents the major increase otherwise this program would show a decrease of $2.9 million.

	FY 1975	FY 1976	FY 197T
Undersea Surveillance System	$ 47.9	$ 12.4	$ 3.1

This program provides for operation and maintenance of 22 Naval Facilities involved in collection and processing of data associated with underwater surveillance.

The decrease of $35.5 million is primarily related to a funding transfer of electronic systems to Naval Electronic Systems Command in Budget Activity Seven.

	FY 1975	FY 1976	FY 197T
JCS Directed and Coordinated Exercises	$ .5	$ .5	$ .1

The fiscal year 1976 program includes incremental costs for Navy participation in eleven JCS exercises.

Budget Activity 3
Intelligence and Communications

This request finances operations of the Navy's Consolidated Cryptologic Program (CCP), General Defense Intelligence Program (GDIP), Naval Communications, Oceanography, Weather Service and Special Support Activities (SSA). The funding and manpower requirements for these activities are summarized in Tables 16 and 17.

Table 16
Intelligence and Communication Funding

	FY 1975	FY 1976	FY 197T
		($ in Millions)	
Consolidated Cyrptologic Program	$ 29.4	$ 28.2	$ 7.2
General Defense Intelligence Program	38.1	43.4	10.9
Other Intelligence	0	25.8	9.0
Communication	172.4	192.8	48.7
Oceanography	66.1	66.9	16.7
Weather Service	9.3	8.4	1.9
Special Support Activities	31.9	35.2	9.2
Total Funding	$ 347.2	$ 400.7	$ 103.6

Table 17
Intelligence and Communication Manpower

	FY 1975	FY 1976	FY 197T
Military	24,748	23,224	23,228
Civilian	8,295	8,039	8,036
Total	33,043	31,263	31,264

	FY 1975	FY 1976	FY 197T
Consolidated Cryptologic Program	$ 29.4	$ 28.2	$ 7.2

The Consolidated Cryptologic Program provides funds in direct support of the national cryptologic effort and the Fleet Commanders in Chief. A decrease of $1.2 million in FY 1976 primarily reflects a transfer of second destination transportation costs and cryptologic training to other budget activities.

	FY 1975	FY 1976	FY 197T
General Defense Intelligence Program	$ 38.1	$ 43.4	$ 10.9

The largest portion of the dollar increase is $2.3 million for the scientific and technical intelligence program. It represents intensified analytical efforts in ocean surveillance and satellite systems and in the nuclear intelligence program. Another $1.8 million represents direct funding for the Intelligence Center, Pacific, established last year through the consolidation of certain functions previously performed by separate Army, Navy, and Air Force units on the island of Oahu. The Navy is the executive agent for the newly consolidated facility. The rest of the increase represents expansion of the HUMINT effort in response to recent developments; full year maintenance of sophisticated digital image processing equipment acquired earlier by the Naval Intelligence Support Center; and increased analytical support in the electro-optics program. As was the case last year, Intelligence requirements for this budget request were developed to meet expanding Soviet naval capabilities which are of special concern to the United States Navy. In fiscal year 1976, in particular, we hope to achieve a more comprehensive appreciation for Soviet naval effectiveness overall, with special attention to anti-submarine warfare. $25.8 million for other intelligence appears for the first time in this account.

	FY 1975	FY 1976	FY 197T
Naval Communications Program	$ 172.4	$ 192.9	$ 48.7

The Naval Telecommunications Program provides for the operating costs of the Naval Telecommunications System, procurement of leased communications services, and the installation/automation of communication equipment at Naval shore activities worldwide. The request of $192.9 million in fiscal year 1976 will provide for the operation and maintenance of the Naval Shore Communications System. This system is the principal element of Naval Telecommunications and provides communications for the Command and Control of Naval operating forces. It includes terminals

for ship/shore, broadcast, air, and weapons systems communications, as well as Navy assigned components of the Defense Communications System.

In the station operations area, the fiscal year 1976 estimate reflects an increase of $4.5 million over fiscal year 1975. This will provide for announced Navy Stock Fund prices to be effective 1 July 1975, increased Naval Communications Stations satellite support, the communications system realignment and increased fuel and utilities costs.

Leased Communications are estimated to increase $15.8 million over fiscal year 1975. This increase consists of $16.3 million for the GAPFILLER satellite contract, $.5 million for increased AUTOVON costs and $.7 million for Improved Emergency Message Transmission System, and $2.4 million for various other leases. These increases are offset by a reduction in the AUTODIN program of $4.1 million as a result of procurement of automated communication processing equipments. These equipments were previously leased.

An explanation of the GAPFILLER contract is considered appropriate. GAPFILLER is a project to lease minimum essential satellite channels in the Atlantic and Pacific areas to operate with Tactical Satellite Communications and Fleet Satellite Communications terminal equipment. This will satisfy critical fleet requirements in the primary ocean areas. The Fleet Satellite Communications System is expected to achieve full operational capability in fiscal year 1979.

The requirement for the GAPFILLER arose due to the degradation or demise of R&D spacecraft which were providing modest but important operational service. The Pacific spacecraft failed on 1 December 1972; the Atlantic satellite, while still operational, is degraded. The Fleet was relying, and in the case of the Atlantic satellite is still relying, heavily on satellite communications in the primary ocean areas. The Navy's lease of a wideband and of a narrowband channel in each of two ocean areas (Atlantic and Pacific) will reduce the gap in satellite service until the Fleet Satellite Communications System

becomes operational. The contract for the lease was signed with Communications Satellite Corporation on 1 March 1973. The GAPFILLER satellites are scheduled for launch in May 1975 (Atlantic area) and July 1975 (Pacific area).

Funds are also required to continue installation of communications electronics equipment at twenty-seven communications activities.

	FY 1975	FY 1976	FY 197T
Oceanography Program	$ 66.1	$ 66.9	$ 16.7

This program provides for the collection, processing, analysis, and publication of acoustic, geophysical, and other oceanographic data to support U.S. Naval operating forces as well as civil, scientific and maritime needs. Also included is the Mapping, Charting and Geodesy funding to provide for the collection and reduction of hydrographic, bathymetric, gravimetric, magnetic, and navigational data taken through coastal and deep ocean surveys. The $.8 million increase over FY 1975 provides primarily for annualization of pay raises.

	FY 1975	FY 1976	FY 197T
Weather Service	$ 9.3	$ 8.4	$ 1.9

The Naval Weather Service program provides the operating forces with a complete environmental information service including a full range of weather and oceanographic forecasting services and climatological studies tailored to unique Naval operations. The fiscal year 1976 estimate reflects a decrease of $1.7 million for deactivation of Aerial Weather Reconnaissance Squadron Four (VW-4) offset by an increase of $.8 million for Satellite Processing Center for receipt and processing of satellite data at the Fleet Numberical Weather Control, Monterey, California, a new weather detachment at Diego Garcia, and annualization of civilian pay raise.

	FY 1975	FY 1976	FY 197T
Special Support Activities	$ 31.9	$ 35.2	$ 9.2

Special Support Activities support the Naval Investigative Service, Naval Command Systems Support Activity, Department of Defense Computer Institute, Strategic Analysis Support Group and Defense/Navy War Games. The incidence of crime in the Navy and Marine Corps continues to increase. $2.6 million of the increased request covers 83 additional man years for the investigation of these crimes.

Budget Activity 7
CENTRAL SUPPLY AND MAINTENANCE

This activity supports the operation of the Navy's Supply System, centrally managed maintenance, overhaul programs, technical and engineering assistance contributing to readiness of operating forces. Funds requested are administered by the Headquarters and five Systems Commands of the Navy Material Command. The funding and manpower requirements are listed in Tables 18 and 19.

Table 18
Central Supply and Maintenance Funding

($ in Millions)

	FY 1975	FY 1976	FY 197T
Air Systems Technical Support	$ 862.5	$ 943.6	$ 242.0
Sea Systems Technical Support	653.2	678.1	167.2
Electronic Systems Technical Support	82.7	175.0	49.1
Facilities Technical Support	129.8	123.8	32.6
Supply Support	504.0	508.6	125.3
Navy Material Command and Support	55.2	65.0	6.0
Total	$2,287.3	$2,494.1	$ 662.2

Table 19
Central Supply and Maintenance Manpower

	FY 1975	FY 1976	FY 197T
Military	9,326	9,011	9,006
Civilian	41,909	42,357	42,296
Total	51,235	51,368	51,302

The increase of $206.8 million is comprised of $29.8 million annualization of pay raise and health benefit increases, $50.5 million for announced stock fund prices to be effective beginning July 1, 1975,

transportation rate increases and increased occupational accident compensation to the Department of Labor, $59.7 million for net transfer of functional responsibilities to this Budget Activity and $66.8 million for net program adjustments. These program adjustments relate primarily to planned improvements in the material readiness condition of the fleet through ship and aviation component repair and test equipment calibration and repair. Partially offsetting decreases relate to completion of shipyard base closure action and a two year plan to substitute surcharge for appropriated funds in support of commissary stores except for overseas transportation.

	FY 1975	FY 1976	FY 197T
Air Systems Technical Support	$ 862.5	$ 943.6	$ 242.0

Table 20 shows the funding and workload profile.

Table 20
Aircraft Rework

	FY 1975	FY 1976	FY 197T
Airframe			
Funding	$ 217.2	$ 218.8	$ 56.2
Units	1610	1662	359
Engines			
Funding	$ 80.3	$ 89.4	$ 24.4
Units	3799	3470	920
Component Funding	$ 219.0	$ 277.7	$ 70.8
Rework Support Funding	$ 77.7	$ 78.2	$ 18.2
Less Reimbursements	-$ 20.8	-$ -72.0	-$ 6.2
Total	$ 573.4	$ 642.1	$ 163.4

The increase of $68.8 million is intended to improve the readiness position of Naval Aviation primarily through additional emphasis on component repair.

Aircraft are scheduled for rework based on the maintenance cycle interval for each particular model. The length of this cycle is continually being examined and revised to ensure the maximum time between reworks consistent with safety. In this regard, the FY 1976 budget request contains a significant change from previous submissions in that the Aircraft Conditional Evaluation (ACE) concept has been consolidated with the normal Standard Depot Level Maintenance Program

(SDLM) with the result that overall work content for depot rework has been reduced from previous maintenance concepts. SDLM does not eradicate the benefits derived from ACE. It provides for performance of only that maintenance actually required as does ACE. It also provides, however, for a deep look at the structural integrity of the aircraft and the installation of change kits necessary to update the aircraft.

The engine program is based on the number of overhauls and repairs required to support the flying hour program with sufficient operable engines plus a minimum reserve pool. Efforts are also underway to improve the effectiveness of engine maintenance through analysis aimed at eliminating marginal contributions to reliability and readiness.

The component repair program is based on aircraft flight operations. The increase of $58.7 million in this program is a part of the Navy's concerted effort to improve readiness through improved material availability. The Support program for aircraft rework includes modification kit installations, emergency aircraft repairs, technical services for fleet activities and preservation and salvage.

An increase of $12.4 million in other Naval Aviation Support is primarily for increased test equipment calibration and repair as well as engineering costs associated with the development of advanced aviation maintenance techniques.

	FY 1975	FY 1976	FY 197T
Sea Systems Technical Support	$ 653.2	$ 678.1	$ 167.2

This budget program reflects the combining of the Navy Ships and Ordnance Systems Commands into the Naval Sea Systems Command. This merger consolidated major parts of the Naval Material Command involving total ship and shipboard systems design, acquisition and support. This request supports shipboard rework, maintenance and support, field operations, anti-submarine warfare systems rework and maintenance. Table 21 depicts the funding for each of these areas:

Table 21
Sea Systems Technical Support

	($ in Millions) FY 1975	FY 1976	FY 197T
Shipboard Rework, Maintenance and Support	$ 399.7	$ 409.5	$ 98.8
Field Operations	112.7	117.4	30.2
ASW Systems Rework & Maintenance	68.6	73.2	18.3
Surface Missile System Rework and Maintenance	72.3	78.0	19.9
Total	$ 653.2	$ 678.1	$ 167.2

Shipboard rework maintenance and support through depot level repair, provides the fleet with ready-for-issue ammunition, shipboard components and ordnance, including guns and fire control equipment. The FY 1976 increase of $9.8 million results primarily from a major effort to improve fleet readiness by increasing the availability of on-board operational equipment.

Field Operations provides for Naval Sea Systems Command Headquarters, inspection and contract administration functions including supervisors of shipbuilding and project management. The $4.7 million increase provides for increased SUPSHIPS manpower requirements associated with contractual workload at commercial shipyards.

ASW Systems Rework and Technical Support, Maintenance funds are used to correct operational deficiencies on in-service ASW ordnance equipment and all in-service SONAR systems, set up of maintenance facilities for new weapons such as the MK-48 torpedo; turn-around and repair of a large inventory of torpedoes, fire control systems, missiles and launchers. The increase of $4.7 million reflects additional requirements to intermediate and depot level repair of the emerging MK-48 torpedo program and increased usage of the MK-30 mobile target.

Surface Missile System Rework and Maintenance provides for the rework of the medium and extended range standard missile, the TARTAR, TERRIER, and TALOS missiles and the Point Defense Missile, including their associated fire control, launcher and test equipment, as well as search radars. The $5.7 million increase is primarily related to

missile rework to improve Fleet readiness and to engineering support for the Harpoon missile.

	FY 1975	FY 1976	FY 197T
Electronics Technical Support	$ 82.7	$ 175.0	$ 49.1

The Naval Electronic Systems Command, through the Electronic Systems Technical Support Program, provides and supports integrated electronic systems within and between fleet units, shore stations, and the ocean basin for improved command and control, surveillance, navigation, and communications.

The material support provided by these funds include engineering and technical services, installation, and major repair for electronic equipments and components. $60.4 million of the increase is due to the transfer of funds into Budget Activity 7, in line with budgeting for similar type centrally managed efforts. The remainder of the increase is for pay raises, material costs, and the overhaul of complex test equipment and electronic modules to improve readiness of operational equipments.

	FY 1975	FY 1976	FY 197T
Facilities Technical Support	$ 129.8	$ 123.8	$ 32.6

These funds support centrally managed facilities programs, such as collateral equipment, pollution abatement and Naval Material Command major repair projects; Construction Battalion Centers, field engineering offices and the headquarters of the Naval Facilities Engineering Command. This request represents a decrease of $6.0 million from FY 75 primarily for centrally managed major repair programs.

	FY 1975	FY 1976	FY 197T
Supply Support	$ 504.0	$ 508.6	$ 125.3

This program finances operations of the Naval Supply Systems Command. This command has responsibility for eight stock points located in the United States engaged in the receipt, storage, and distribution of

military supply items to meet fleet operating and material repair demands. Also included is the operation of Navy Inventory Control Points engaged in the management of supply requirements and weapon systems support. Other responsibilities of the Naval Supply Systems Command include managing and financing the second destination transportation of material for the Navy (except for certain movements of household goods and fleet rotational deployments); Navy commissary store operations; supply departments of Naval shipyards; and, other supporting activities and services.

The transportation program reflects an increase of $20.4 million. Of this amount, $6.8 million is related to a funding transfer to continue last year's program to centralize second destination transportation under the management of the Naval Supply Systems Command. The remaining $13.6 million results from rate adjustments partially offset by program reductions.

The major decrease in this program is in the area of commissary operations where a reduction of $22.6 million is reflected as a result of the first phase of a two year Defense-wide plan which substitutes surcharge for appropriated funding of personnel and certain other costs in commissary store operations. Other changes aggregating to an increase of $6.8 million are primarily for pay raises/health insurance costs and maintenance and repair projects.

	FY 1975	FY 1976	FY 197T
Naval Material Command and Support	$ 55.2	$ 65.0	$ 6.0

The FY 1976 request includes $7.0 million to support the Chief of Naval Material Headquarters--a reduction of $500 thousand from last year due to reduced civilian end strength. The balance of the request ($58.0 million) is for field support projects and reflects an increase of $10.3 million over FY 75 primarily for reimbursement to the employee compensation fund of the Department of Labor for actual costs of occupational accident claims.

Budget Activity 8
TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL SUPPORT

Training and education programs for which we are requesting $279.4 million in fiscal year 1976 include a wide variety of programs such as recruit training; specialized skill training for officers and enlisted personnel necessary for weapon system operation and maintenance; flight training including operation of aircraft in support of our pilot training program; officer acquisition programs such as the Naval Reserve Officer Training Corps and the Naval Academy; and operation and maintenance costs of field activities under the command of the Naval Education and Training Command.

In fiscal year 1976, approximately 103,000 new Navy personnel, including Navy Reservists, will enter recruit training. A daily average of approximately 41,300 officers and enlisted men will receive specialized training in areas ranging from nuclear power and electronic warfare to signaling and seamanship. The Naval Academy will provide undergraduate education to an average of 4,150 midshipmen to prepare them for professional military careers. An average of 8,100 young men will participate in the Naval Reserve Officer Training Corps leading to careers as commissioned officers of the Navy and Marine Corps. In the field of aviation, our flight training program will produce 1,535 aviators and 644 flight officers capable of operating the most complex modern aircraft under all weather conditions.

Medical funds support 17 Naval hospitals, 18 medical centers, 3 regional medical clinics, 2 Naval dispensaries, 3 dental clinics, 12 regional dental centers, and other specialized activities. The request reflects continuation of medical regionalization and the expansion of dental regionalization. The Physicians Assistant Training Program will provide additional extenders to enable doctors to deliver more service to more beneficiaries, thus reducing reliance on the CHAMPUS Program and reduce waiting times in our busy clinics. The funding and manpower requirements are summarized in Tables 22 and 23.

Table 22
Training, Medical and Other General Personnel Activities

	($ in Millions) FY 1975	FY 1976	FY 197T
Training	$ 221.1	$ 247.5	$ 66.6
Naval Academy	30.6	31.8	8.1
Personnel Support	86.9	100.9	26.4
Base Operations	162.9	168.5	45.1
Medical Support	252.4	268.6	70.1
Total Funding	$ 753.9	$ 817.4	$ 216.2

Table 23
Training, Medical and Other General Personnel Activities, Manpower

	FY 1975	FY 1976	FY 197T
Military	149,060	147,709	154,633
Civilian	27,868	27,544	27,904
Total	176,928	175,253	182,537

The most significant increases include $20.6 million for announced stock fund prices to be effective beginning 1 July 1975; $10.1 million for annualization of price increases for utilities, printing, contractual, and other purchased services; $2.8 million for maintenance costs for the training carrier in flight training; $20.7 million for improvements in personnel support and management, new and improved training, and financial management systems and techniques; $7.3 million covers civilian pay increases; $11.9 million for expansion and full year costs of ongoing programs to improve medical facilities/services and provide assistance to doctors; and $4.8 million for other requirements including recruiting, base consolidation/relocation costs, contract civilian messmen and inter-appropriation transfers.

Major decreases include $9.9 million one-time shore establishment realignment costs and $4.8 million for the transfer of the Uniformed Services University at Health Sciences and the Overseas Champus program to the Secretary of Defense sponsorship.

Budget Activity 9
ADMINSTRATION AND ASSOCIATED ACTIVITIES

The FY 1976 requirement of $256.8 million for Administration and Associated Activities is an increase of $25.8 million from the FY 1975

amount. The funding and manpower requested for these activities are summarized in Table 24 and 25.

Table 24
Administration and Associated Activities Funding

($ in Millions)

	FY 1975	FY 1976	FY 197T
Departmental Administration	$ 32.5	$ 32.3	$ 8.2
Field Headquarters and Activities	34.8	38.2	9.8
Service-Wide Support	125.1	133.4	34.1
Other Support Activities	38.6	52.8	13.4
Total	$ 231.0	$ 256.7	$ 65.5

Table 25
Administration and Associated Activiites Manpower

	FY 1975	FY 1976	FY 197T
Military Personnel	6,559	6,616	6,614
Civilian Personnel	8,801	8,804	8,800
Total	15,360	15,420	15,414

	FY 1975	FY 1976	FY 197T
Departmental Administration	$ 32.5	$ 32.3	$ 8.2

These funds support the offices of the Secretary of the Navy and Chief of Naval Operations. The $.1 million decrease represents continued reduction in civilian employment and administrative support offset by civilian pay increases.

	FY 1975	FY 1976	FY 197T
Field Headquarters and Activities	$ 34.8	$ 38.2	$ 9.8

These funds support District Commandants, and other specific activities such as Naval Air Facility, Andrews AFB and the Naval Safety Center, Norfolk Virginia. The $3.4 million increase is mainly attributable to escalating costs of base support.

	FY 1975	FY 1976	FY 197T
Service Wide Support	$ 125.1	$ 133.4	$ 34.1

Service-Wide support funds finance the field activities which perform Navy-wide internal auditing, accounting and disbursing services, civilian manpower management functions including civilian training and legal services. The $8.3 million increase is primarily

due to transfer of funding of the Financial Management Improvement Program from Budget Activity 7, civilian pay increases, increases to the JUMPS system, Manpower planning and validation system, Naval Audit, Navy Legal Services Offices and Office of Civilian Manpower Management.

	FY 1975	FY 1976	FY 197T
Other Support Activities	$ 38.6	$ 52.8	$ 13.4

Funds are provided for world-wide public affairs and community relations activities including audio-visual activities. In fiscal year 1975, the Military Departments began budgeting for costs of GSA leased facilities for reimbursement to G.S.A. Navy presently occupies space, for which GSA has estimated costs of $44.6 million in FY 1976 an increase of $14.4 million. These costs reflect no increased in leased-space but do reflect a reclassification of space occupied by Navy from Navy control to GSA control and a GSA Standard Level User Charge rate increase. Funds ($.5 million) are also included here for Navy participation in national, state, local and international events supporting the American Revolution Bicentennial.

Budget Activity 10
SUPPORT OF OTHER NATIONS

	FY 1975	FY 1976	FY 197T
		($ in Millions)	
Support of Other Nations	$ .8	$ 1.2	$ .2

Support of Other Nations, Manpower

	FY 1975	FY 1976	FY 197T
Military	1,089	1,076	821
Civilian	951	937	962
Total	2,040	2,013	1,783

These funds support international military headquarters; Military Assistance Advisory Groups, Missions and Military Assistance Groups. The $.4 million increase results primarily from a one year transfer to the Navy of funding responsibility for support of Mutual Defense Assistance Office, Japan.

Areas of Special Interest

Mr. Chairman, in recognition of the Committee's continuing interest in several of our functional areas, I would like to take this opportunity to discuss those areas and where appropriate, actions we have taken to ensure compliance with your desires.

Civilian Personnel (Direct Hire)

Direct hire civilian end strength estimates included in the budget are:

	FY 1974	FY 1975	FY 1976	FY 197T
O&M,N	128,057	125,826	127,490	127,833
NIF	165,804	162,241	164,616	164,558
Other Navy	12,289	12,195	12,326	12,381
TOTAL	306,150	300,262	304,432	304,772
Change from prior year	-	- 5,888	+ 4,170	+ 340

The FY 1975 estimate is the statutory limit plus functional transfers of 245. The estimate includes requirements for conversion of contract personnel at Defense Attache Office, Saigon, additional foreign military sales, and slippage in the closing of NTC Bainbridge which were not in the President's budget last year.

The FY 1976 increase over FY 1975 of 4,170 includes a transfer of 1,840 from the Army for the Military Assistance Command Support Group, Thailand. Naval shipyards increase 3,743, and Supervisors of Shipbuilding increase 291 to support the FY 1976 fleet maintenance program. Public works centers increase 795 and civilians funded from the MILCON account increase 321. The Military Sealift Command increases by 426 due to the addition of four fleet support ships and the lay-up of 2 other ships. Research activities decrease 2,184 and industrial ordnance activities drop 662. All other changes net to a decrease of 400.

The FY 197T increase over FY 1976 of 340 is mostly due to 279 overseas dependents school employees who are not on the payroll on June 30. Other increases are: 50 for the new Trident facility, 50 for

military construction, and 98 for some dual staffing of the Naval Home during its relocation from Philadelphia, Pennsylvania to Gulfport, Mississippi. Minor reductions total 137.

FY 1975 is the first time that Congress has placed a legal limitation on civilian employment in the Department of Defense. We are concerned that the ceilings on civilian employment could be a costly and unnecessary constraint, especially at industrial fund activities. When the budget is formulated, end strengths are based on the available workload data. As in any operation, a number of significant changes can occur, which will impact on those numbers. Many of these changes do not involve any change in fund expenditures. For instance, delivery of components from private sources may occur before or behind schedule. Changes in project priorities or emergency needs can affect staffing levels as of a given date.

GAO report B-165959 of April 1971 states, "Personnel ceilings... do not provide the most effective management controls over civilian personnel resources, in our opinion." A joint GAO/OMB/CSC Study on Productivity of June 1973 states, "Personnel ceilings have major adverse impacts on the efficient management of human resources."

During parts of FY 1971-72 and again during FY 1973-74 the Navy was allowed to manage its civilians without externally-applied ceiling. Emphasis was placed on matching civilian employment with available funds rather than applying arbitrary ceilings. Employment targets were issued to manpower claimants, who were allowed a degree of flexibility. Major adjustments could also be made, but detailed justification was required.

With the removal of overall ceilings, civilian employment continued to decline, as funding restraints provided a more effective control mechanism. An important benefit of this approach was that manpower managers began to think in terms of program accomplishment, rather than

staffing levels of activities or functions. I believe this is the way we should manage our resources.

The Navy strongly recommends that employment be controlled by administrative and fiscal constraints rather than rigid ceilings.

Commissary Stores

Commissary store funding under the Operation and Maintenance, Navy appropriation provides for staffing requirements, utilities costs overseas, transportation costs to overseas areas, and certain supporting services furnished by host/and accounting activities and the Navy Resale System Office, Brooklyn, New York. Approximately four thousand civilian personnel are employed at commissary stores which number 89 worldwide. Commissary privileges are available to all active duty personnel of any Service and their dependents. Retired military personnel and their dependents may also use these stores.

In fiscal year 1976, the commissary stores budget request shows a sizeable reduction from the fiscal year 1976 funding level reflecting the first phase of a two-year plan that substitutes surcharge funds for appropriated fund support of civilian personnel costs for all stores and utility costs at overseas stores. Costs of overseas transportation supporting commissary operations and certain indirect support costs such as maintenance and administrative support continue to be financed from appropriated funds. The net reduction in fiscal year 1976 amounts to $22.6 million.

Real Property Maintenance

Commencing with fiscal year 1963 and each year thereafter, the Congress has provided in the Appropriation Act that a specified minimum amount be expended in each fiscal year for the maintenance and repair of real property. The Navy has complied with this directive and has exceeded the established amount usually because of the increasing costs of repair and maintenance. In addition, a continuous review is made of our facility requirements and

consolidation, closure, and excessing actions are taken wherever practicable. However, due to priority modernization and operational requirements of the fleet and the overall austere funding, the maintenance of the Shore Establishment has suffered as a matter of necessity and the deterioration of the Navy facilities plant has reached an unacceptable level. The Navy fiscal year 1976 Real Property Maintenance "O&M,N" budget is $48.5 million for major repair projects.

The amount requested under this category is a summation of requirements originated by the various commands that operate Navy facilities under the Operations and Maintenance Navy appropriation. Based on current plant inventory, the average age of the Navy plant is 27.3 years old, and 46.8% of the total Navy plant was constructed during World War II between the years of 1941-1945. Due to the age of the plant and the ever increasing cost factors, the rate of deterioration can be expected to increase further. Unfortunately, under the overall funding constraints of the past years, sufficient funds have not been available for Real Property Maintenance that would either hold the Backlog of Maintenance and Repair (BMAR) level or permit any reduction in its annual growth. Inflation has caused this condition to steadily worsen. The Navy FY 197T Real Property Maintenance "O&M,N" budget totals $61.5 million and includes a requirement of $14.8 million for major repair projects. This one-time budget is equal to 27.6% of the fiscal year 1976 request.

Human Goals

For fiscal year 1976 we are requesting $13.9 million for continued operation of the Navy's Human Goals Program in such areas as human resource management, drug abuse control, alcoholism prevention and equal opportunity. Essentially, this is a human resource management systems approach to improving leadership and management, improving the quality of professionalism, maintaining individual commitment to the Navy, initiating affirmative action toward equal opportunity, restoring individuals with personal problems such as drugs or alcohol abuse to

effective duty and developing better organizational practices to improve both organizational efficiency and individual productivity.

Specifically, we have implemented improved leadership and management training for officers and petty officers within our Navy schools system. Simultaneously we have established Human Resource Management Centers and Detachments under the Fleet Commanders in Chief to work with individual commands in strengthening their chain of command and overall leadership and management to improve organizational effectiveness, individual productivity and equal opportunity and, when feasible, we are assisting those people who have become ineffective performers through drug or alcohol usage to be rehabilitated in a Navy Drug or Alcohol Rehabilitation Center and restored to full, effective duty.

Implementation of this Navy-wide Human Resource Management Systems approach to improving leadership and management has been developed to maintain command and Navy effectiveness in the face of reduced force and manpower levels, inflation, increased personnel costs and austere financial and personnel realities. As of 1 January 1975, over 225 commands had participated in the training offered through our Human Resource Management Centers and Detachments. Indications are that this program contributes significantly to improved performance, morale, discipline, motivation and retention while improving unit efficiency and effectiveness.

The effectiveness and payoff of our Alcohol Rehabilitation and Drug Abuse Control Programs is more easily quantified. As of 31 December 1974, almost 8,000 Navy members had received inpatient treatment for alcoholism at a Navy rehabilitation facility. Bureau of Naval Personnel studies continue to show that 70% of those treated are restored to effective duty, demonstrating performance and conduct equal or better than their peers.

Since the establishment of the Navy's Drup Abuse Control Program in July 1971, 60% of the 38,908 Navy members identified as drug abusers have been counseled, rehabilitated and restored to full effective duty.

Prior to 1971, 65% of these would have been administratively discharged and their training and experience, and its cost, lost to the Navy.

In the area of Equal Opportunity and Race Relations one of our Type commands over a recent one-year period increased the number of personnel receiving race relations training from 37% to 76%. During the same period the number of racially oriented incidents reported, not to mention the associated administrative cost and deleterious effect on command efficiency, declined from a peak of 26 per month to a low of 6 per month.

In developing our Human Goals Program we have made a conscientious effort to determine minimum costs and manpower requirements while considering the needs of our people, the probable employment of the Navy in the years ahead, and the real world financial and personnel constraints within which we must function. As we continue this program, we will continue to benefit through improve effectiveness and improved retention of our experienced people.

Automatic Data Processing

The total fiscal year 1976 request for Automatic Data Processing is $143.0 million including all appropriations, Navy and Marine Corps. (This reflects the full year effect of the civilian pay raise approved October 1974). This includes $189.9 million in Operations and Maintenance, Navy funds. This represents a net increase of $12.2 million (or 6.9 percent) in Operations and Maintenance, Navy funds between fiscal year 1975 and fiscal year 1976. This increase is less than the overall price escalation being experienced throughout the Navy (including wages and vendors' price increases). Therefore, the fiscal year 1976 ADP budget request actually reflects a reduction in ADP support.

No new automated data systems will be introduced in fiscal year 1976; however, the Navy will undertake some increased innovative/ improvement efforts with respect to ongoing systems. These efforts were only approved after being subjected to a highly formalized and

exhaustive evaluation of the required benefits, analyses and identification of lower priority efforts whose resources could be shifted to ADP efforts with a higher payoff. The most significant increased operating costs are related to:

1. Additional rental equipment and associated costs in support of the second year of a five year major developmental effort for the "Future System" for MAPMIS (Navy Manpower/Personnel Management Information System). The objectives of this cost effective system are to reduce required PCS (Permanent Change of Station) moves by 1%; reduce mismatches between people and jobs by 1%; shorten reaction time required to detail immediately available personnel by 50%; and reduce labor intensive methods required to perform tasks such as order writing, accounting, maintaining case files and creating input for automated files.

2. Additional rental equipment for the expansion of CMI (Computer Managed Instruction) from 3 courses and 1,500 students on 30 June 1974 to 5 courses and 8,850 students at four locations on 30 June 1976. Also included is $400,000 in increased costs due to known inflationary increases in lease costs, maintenance, and supplies. Increases in this system also provide for the purchase of a mini-computer for the U.S. Naval Academy and expansion of existing communications networks throughout the Academy.

3. Development of system specifications, preparation of computer programs and testing associated with full scale development of NALCOMIS (Naval Aviation Logistic Command Management Information System). This is a standard Navy System for support of aviation organizational maintenance, aircraft intermediate maintenance, squadron operations, local aviation supply and related financial management aboard ship and ashore.

4. Contractual assistance for implementation of CRAB (Centralized Requisitioning, Accounting, and Billing) at the Inventory Control Points. CRAB is an OSD sponsored system designed to fully control and manage wholesale inventories, to be expanded to all categories of material.

This represents the Navy effort to achieve DOD goals for vertical supply management and the desire to see Navy receive the benefits of improved effectiveness and economy inherent in CRAB.

5. Increases in NAVMEDIS (Naval Medical Information System) primarily reflect full-year operation of clinical systems installed in fiscal year 1975; and, installation of the following systems in fiscal year 1976: LABIS (Laboratory Information System) at three locations; AMHT (Automatic Multiphasic Health Testing) at one location; CAPOC (Computer Assisted Practice of Cardiology) at three locations; and APAS (Automated Patient Appointment System) at one location. Included are contractual costs for installing turn-key systems in fiscal year 1976 and fiscal year 1977.

The most significant increases in Navy's fiscal year 1976 ADP Budget are for the procurement of ADP equipment. The largest single increase/procurement ($12.5 million) is for the purchase of LDMX/ NAVCOMPARS equipment by the Naval Electronics System Command, including both equipment that is currently installed and for the 7 new LDMX/ NAVCOMPARS sites planned for FY 1976. Decision was made to procure this equipment after a trial period at various sites had demonstrated the capability of the equipment and a site by site lease versus purchase analysis indicated that purchase was the most economical method of acquisition. Follow-on purchase of the remainder of the LDMX/NAVCOMPARS equipment will be accomplished in the outyears.

A major emphasis of the Navy Automatic Data Processing program during fiscal year 1976 will be compliance with the Privacy Act of 1974. While the act is not restricted to automated systems of records, it was motivated in large measure by the new opportunities for abuse created by large, automated data bases. The impact on automated data systems will be significant, and the Navy is planning carefully to assure full compliance with the Act.

Summary

Mr. Chairman, before I conclude my statement I would like to officially inform you that effective 1 February 1975, the separate budget offices under the Comptroller of the Navy were combined into a single budget office. This consolidation is in accordance with the desires of the Congress expressed in the Conference Report on the FY 1975 Appropriations Bill.

In summarizing, I would like to reiterate some of our conscientious management efforts undertaken to reduce program requirements. With the exception of increased personnel being devoted to our critical ship maintenance and modernization program, we have deliberately kept manpower needs at or below the levels projected for FY 1975. We have developed and adopted a new aircraft maintenance philosophy. This new approach referred to as Standard Depot Level Maintenance (SDLM) calls for the standardization of maintenance policy through engineering analysis and is an outgrowth of the earlier concept of Aircraft Conditional Evaluation (ACE). Under SDLM, it is expected that Navy will be able to fund an additional 50 aircraft reworks over that originally requested in FY 1975, even though funding has been reduced. The FY 1976 aircraft rework program reflects the savings resulting from SDLM. To further reduce funding requirements and with the idea in mind of generating fuel savings, our FY 1976 steaming and flying hour programs were developed on the basis that the consumption ratio would be improved by 5%. We have paid close attention to headquarters personnel requirements. Total headquarters personnel requirements have been reduced in FY 1976 by 139 if the functional transfer of 1,840 from the Army for USMACTHAI Support Group is discounted. We have been most careful in reviewing our requirements for automatic data processing and our budget reflects a reduction of 215 personnel devoted to this effort. No new automated data system will be introduced in FY 1976.

I would like to conclude my remarks by emphasizing the basic objective which this appropriation supports--the attainment of readiness goals while maintaining the level of support necessary to maintain the volunteer force. We feel these requirements are realistic and represent minimum needs to ensure mission accomplishment.

BUDGET REQUEST

Admiral FINE. My name is Rear Admiral Stanley S. Fine. This is my first day here as the confirmed budget officer as well as the appropriation sponsor. Not included in my statement, at least in my supplementary statement—it is included in my formal statement—is also the fact that I am the head of the newly merged Budget Office as directed by the House and Senate Appropriations Committee, last year's report indicated that since the Secretary and the CNO both had what they call budget offices, these offices should be merged.

We have in fact accomplished this. It is a larger office than either of the two originally were and for my purposes it has added 2 hours a day more of work to my job since I was in the CNO Office last year.

Senator YOUNG. And did it reduce personnel?

Admiral FINE. We did reduce about 16 personnel, sir, in the combined office. We took a look at the functions that had to be performed, what functions were needed to be responsive to the CNO and the Secretary of the Navy and the Commandant and the Office of the Secretary of Defense as well as to manage the appropriations which were being performed in the CNO Office.

We looked at the budget office of the other two services, the Air Force and the Army, and while all three of us are not symmetrical in function we feel that to accomplish the functions that we have to perform, we have come down to a relatively austere group. Compared to what the two offices were in the past, we think we have eliminated most of the overlap which is one of the reasons why we have been able to eliminate the 16 personnel.

Senator YOUNG. Did that impose any particular problems, this new procedure?

Admiral FINE. As I indicated, I work 2 hours a day longer. We are shaking it down, sir. It is an office that obviously has to be responsive to two masters. It is an office that is not just a budget review office as NAVCOMPT was, but also a budget execution office as the CNO office was so that the role is different. The personnel who were in their prior roles have to sort of adjust to doing different things.

I think it is shaking down, on the whole, pretty well. I think the personnel involved in it are getting adjusted.

I know the Senate Appropriations Committee is taking one of my best analysts out of this organization.

Senator YOUNG. That did not help?

Admiral FINE. Let me go into my short statement. I don't have any viewgraphs.

I start off with my biography which has nothing really distinguished in it.

FLEET READINESS

Mr. Chairman, members of the committee, I appreciate the opportunity to present the Department of Navy's fiscal year 1976 and fiscal year 197T budget request for the Operation and Maintenance—O. & M..N.—appropriation. This appropriation impacts most directly on our fleet readiness and as submitted represents a well-balanced program tailored to improving those key readiness areas which have suffered as a result of fiscal pressures due to inflation and limited resources

The fiscal year 1976 O. & M.,N. requirement is $8 billion 320 million. While the fiscal year 1976 request represents slightly over a $1 billion increase over the adjusted fiscal year 1975 program, I must emphasize that there is very little program change. $813.6 million of this increase is directly related to readiness improvement. Of the remaining $220.9 million all but $28.9 million is due to appropriation transfers and fact of life increases over which we have very little control.

The majority of this change is attributable to the increased cost of doing business under a climate of double-digit inflation. I must also add that this request is based on prices or rates generally in effect today and makes no provision for continuing price escalation which will no doubt occur before we execute the fiscal year 1976 budget.

Let me deviate from my statement to cover this paragraph in more detail. If we take a look at the $8,320 million increase—essentially the net real program increase is somewhere about $270 million to $280 million. In other words, if we look and say how much better are we in 1976 over what we think we would be able to execute in 1975, we are only talking to about a 2 percent or 3 percent increase in the program. And the great bulk of that is in the areas that we talked to as direct readiness, the ship maintenance program, the aircraft rework program, the ships steaming program.

In other words, the operating program of the fleets and the flying hour program.

Senator YOUNG. When you take into consideration inflation you really do not have an increase.

Admiral FINE. I would like to go into that a little more. This budget is put together under the regulations of the Office of Management and Budget. They do not allow us to predict inflation in the operating accounts.

In procurement appropriations, we are allowed to predict inflation. Now, we will get a supplemental next year which will allow us an increase in the civilian personnel side of the "Operations and maintenance" appropriation and the military personnel side of the MPN appropriation, but for all the inflation the economy will see, between when we put the budget together October 1 of 1974 and the time we finish executing this budget in September of 1976, that inflation is not included in this budget.

SHIP OVERHAUL PROGRAM

So in effect in the budget we have before you—for example, in the ship overhaul program we predict an overhaul program of 85 ships in 1976—I can, with great confidence, tell you we will not be able to execute that program because we have not included in that program the anticipated material increases which will probably occur during the next 15 to 18 months. We have not been able to anticipate the pay raises that will occur in the civilian shipyards which execute somewhere between 25 and 30 percent of our overhaul program.

So to that extent, this $8.3 billion budget, while we predict somewhat of a modest program increase, essentially before we finish executing the 1976 budget the 197T budget will show erosion in program due to the inability to budget for these increases.

Senator YOUNG. Especially if the Congress required that you make up this deficit for inflation by reprograming then you would be in trouble, wouldn't you?

Admiral FINE. Yes, sir.

If I may talk to fiscal year 1975 for the moment—in fiscal year 1975 we came to Congress with a 95-ship overhaul program. We will probably be able to execute about an 80-ship overhaul program. In other words, we had to reduce about 15 ships. Of that number about seven had to be reduced because of inflationary pressures, because of cost increases in the overhaul program the rest of the ships had to be funded out of the hide of the ships that we had to defer and put into the future.

Senator YOUNG. About what is your present rate of inflation? It varies with ship construction and the different services, doesn't it?

Admiral COOKE. Material price indexes from 1974 to 1975 are about 13 percent. That is what the DOD indexes are showing for general material cost.

SHIP CONSTRUCTION

Senator YOUNG. How about ship construction?

Admiral FINE. If I might, sir, I would like to introduce Rear Admiral Bryan, Russ Bryan. I brought him with me because I felt this program is one of the most important programs the Navy has and therefore the experts should be here for this.

Rear Admiral Bryan is the program sponsor of the maintenance program and I would like to have him give you a rundown on the question you ask.

Admiral BRYAN. Regarding, one, the inflationary cost of materials used in the ship repair business, in the last months we went to both our naval shipyards and our private shipyards and asked them to tell us, for the kinds of materials that they used in repairing ships, what has been and was their experience in the cost of those materials these last few months over a year ago. The increase averaged about 30 percent.

INCREASE IN STEEL PRICES

Senator YOUNG. We had testimony that steel was up 70 percent.

Admiral Bryan. Yes, sir. I would say 30 percent was sort of the average. Some things did not go up much. Some things, particularly alloy steel piping and that kind of thing went up astronomically, but overall when we averaged them together—and their information was pretty consistent from the private shipyards and the naval shipyards because they are both buying the same kind of material, steel plate, pipes, valves, pumps—it was about 30 percent.

Admiral BRYAN Yes, sir, cable copper, hard to get.

Senator YOUNG. This is something we are going to have to sell the public and the Congress. A lot of them do not realize inflation affects stability.

Admiral FINE. If I may continue with my statement.

The major increase of $418.8 million in the ship maintenance/alterations program provides for improved ship readiness. $220.0 million of the increase provides for the more complete overhaul of 85 ships com-

pared to the 80 scheduled for overhaul in 1975. The number of unfunded overhauls at the end of fiscal year 1976 will be 54 as opposed to 62 at the end of fiscal year 1975.

The 1976 overhaul program includes more complex ships being overhauled—for example, seven nuclear submarine recores vice three in 1975; older ships requiring more extensive repairs—for example, 1,200-pounds-per-square-inch propulsion plant repairs; and increased labor rates and material escalation.

Continued modernization of the fleet through ship alternations requires an increase of $162.7 million. The 1976 modernization program provides funds for high priority ships alternations in pollution abatement, 1,200-pounds-per-square-inch propulsion plants, satellite communications, firefighting weapons, and antiship missile defense systems. Alterations being installed for the first time in 1976 includes NATO Seasparow, improved SSN sonar, and SSBN 627 class *Subsafe*.

The balance of the increase, $36.1 million, is for other ship repairs including restricted availabilities and emergent repairs.

SATELLITE COMMUNICATIONS

Senator YOUNG. Let me go back to one item, Admiral. You spoke of satellite communications. Just what kind of operation do you have there? Did you share that with other services? Do you have your own satellites?

Admiral FINE. We are talking about satellite communications equipment going aboard ship. This is equipment for the shipboard side. The Navy has got a complete satellite communication program. However, we are planning to use leased satellites during the fiscal year 1976 period rather than a Navy satellite. This would be a leased satellite, leased from a commercial company.

Senator YOUNG. Would that be less costly?

Admiral FINE. Not especially, sir. It is just the Navy has not gotten their own satellites up in the air yet nor can we use other service satellites for this purpose.

Admiral COOKE. We do have a satellite program in our "Procurement" account. It would be much more capable in terms of worldwide communication than the lease system we are using now, so we will get to that.

In fiscal year 1975, I believe we procure one satellite—in fiscal year 1976 we are funding our second and third satellites. It will be sometime beyond that before we will actually have the Navy worldwide system working.

Now, that Navy worldwide system also has a requirement laid on to support the Air Force in communication requirements, too. So it is a defense system.

SATELLITE USE FOR RECREATION PURPOSES

Senator YOUNG. Can you get entertainment or sports or things like that for your crew members from the satellites?

Admiral COOKE. No, sir. That is not the purpose of this. This is a communications system for relay of essential traffic.

Now, I am not sure in terms of the satellites that are available now what kind of reception we get for recreation purposes. There probably is some but I am just not sure what it is right now.

Senator YOUNG. I think there would be some possibilities. It would be a good thing if the crewmembers could get the news by satellite. All you would have to have would be the receivers, wouldn't you?

Admiral COOKE. Yes, sir. I think we probably have that capability now and I think I better get the right answer and give it to you. But I don't know now.

Admiral FINE. May I go off the record for a moment?

[Discussion off the record.]

Admiral FINE. Ships operating in the active fleet decrease from 502 in fiscal year 1975 to 490 in fiscal year 1976 and increase to 494 in the transition period. Sixteen ships are expected to join the fleet from new construction or conversion, while 28 older ships will leave the active fleet.

SHIP REPAIR

Senator YOUNG. About how many of these ships are waiting repair?

Admiral FINE. As I indicated, sir, during this period of time, fiscal year 1976, we hope to put 85 ships into the overhaul program.

Senator YOUNG. You got behind in the Vietnam war?

Admiral FINE. You are talking about the backlog?

Senator YOUNG. Yes, sir.

Admiral FINE. We will have hopefully at the end of 1976 a backlog of 54 ships.

Senator YOUNG. Are you catching up?

Admiral FINE. We are trying to, however, my feelings are rather pessimistic because of the way we have to fund the overhaul program.

Senator YOUNG. Is your problem mostly funding?

Admiral FINE. I think it is funding, sir. I think the funding has been a restriction. The number of people we can have in Navy yards has been somewhat of a restriction on us, also, but essentially funding has been the key issue.

Do you have anything to add, Admiral Bryan?

Admiral BRYAN. No, sir. But I would like to point out this backlog which we call the "bow wave" of ships that should have been overhauled and are not, has increased this year, 1975, from 1974 significantly. It was 37 in 1974 and about 62 now.

As Admiral Fine said, in our budget here we are trying to reverse that trend, to start eating away at that backlog to get us down in 1976 to 54, but we have gotten so far behind that now both money and facilities will limit how fast we can recover.

MOTHBALL FLEET

Senator YOUNG. Are you putting ships in mothballs that go unrepaired?

Admiral BRYAN. We are retiring ships. Many years ago when they first started the mothball fleet the concept and procedure was you gave a ship a special overhaul before you put it in the mothball fleet. I do not know when they stopped doing that but that was stopped

several years ago because they simply could not afford to keep doing that.

So, when we now inactivate a ship, put it in the mothball fleet, we do not overhaul it before we put it in there.

Senator YOUNG. That kind of ship would not be as helpful to you in the case of need.

Admiral BRYAN. That kind of ship would take more repair work in the course of activating it; yes, sir.

Admiral FINE. We have done some studies, sir, that have indicated that the time it would take to repair and activate a ship that is in the mothball fleet would—I won't say take longer than to build a new one—but the time is almost comparable.

CARRIERS IN MOTHBALL FLEET

Senator YOUNG. How many carriers are you putting in the mothball fleet?

Admiral FINE. I believe we have 5 right now, and 2 more planned for fiscal year 1976.

Senator YOUNG. And those are ones that needed repairs?

Admiral FINE. Essentially they will be going in without any repairs.

Senator YOUNG. Carriers are more apt to be activated in case of trouble than other ships, wouldn't they?

Admiral FINE. I would suspect it depends on what the trouble is. We reactivated the battleship *New Jersey* for Vietnam. I don't think we reactivated any carriers for Vietnam.

Senator YOUNG. They were obsolete.

Admiral BRYAN. The needs did not warrant a carrier. They wanted some big guns for shore bombardment.

Admiral FINE. Let me go on.

The Navy must still cover the same broad ocean areas and simultaneously improve readiness through increased training. The number of steaming hours supported from operation and maintenance funds is 1.19 million hours compared to 1.14 million hours in fiscal year 1975. In terms of fuel consumption, both the ship and aircraft programs are based upon decreased rates of consumption per hour, a reflection of Navy's continuing energy conservation effort.

It should be noted that provision has not been made under the budgeted fuel program for the impact of higher tariffs on foreign oil as outlined by the President.

OIL TARIFFS

Senator YOUNG. Does the Navy have to pay this additional dollar tariff on a barrel of oil?

Admiral FINE. We will have to pay the tariff on the oil because it will be passed on to the people that we buy the oil from. In other words, a great deal of our oil is from commercial sources at the operating bases. However, the President does have a contingency in the budget that I frankly do not know how it will work, but it is a contingency in the budget to pay Government agencies back for having to pay this additional tariff.

I believe in the fiscal year 1975 budget he has indicated about a half

billion and in fiscal year 1976 budget about $7 billion. That is not in the Navy budget or the DOD budget.

Senator YOUNG. Would that be rebated out of another fund? Maybe the Treasury?

Admiral FINE. I would guess that is the way the mechanism would work, but I don't know. All I know is there are funds budgeted for that purpose.

Senator YOUNG. That becomes a rather complicated problem.

AIRCRAFT OPERATING FUNDS

Admiral FINE. Aircraft operating funds in this request will support approximately 2.09 million flying hours at a cost of $647.2 million compared to 2.02 million hours and $546.4 million in fiscal year 1975. The slight increase in flying hours is designed to return our primary mission readiness from the decremented fiscal year 1975 program to approved primary mission levels of 88 percent for tactical air, 100 percent for replacement training and 86 percent for tactical support. The majority of the cost increase is related to POL price increases and the stock fund increase announced for July 1, 1975.

To support this flying hour program $642.1 million, an increase of $68.8 million is provided in the aircraft rework program for improved readiness; $58.7 million is provided for the rework of aviation components, which is anticipated to reduce the NORS—not operationally ready supply—from 21 percent in fiscal year 1975 to approximately 17 percent in fiscal year 1976. The balance of the increase, $10.1 million, is for aircraft and engines, and provides for 1,662 aircraft reworks compared with 1,610 in fiscal year 1975.

If I may amplify that for a moment. Parallel to the ship overhaul program we have an aircraft maintenance program that is conducted at depots. We have Navy aircraft rework facilities that overhaul Navy aircraft. They also overhaul some Air Force aircraft and Army helicopters. In other words, we do take in other services' aircraft to overhaul. These are depot level.

It is again similar to the ship overhaul program, a fairly complex program. Much of it is done in the commercial world. We have made major strides in the last few years of trying to reduce the cost per airplane in this program and have been relatively successful. We are actually able to overhaul more aircraft in fiscal year 1975 than we had in the budget presented to you last year in the 1975 budget.

This is one program where we actually have been able to do better than originally budgeted. Most of it is because we changed our maintenance concept.

ENGINE OVERHAUL

Senator YOUNG. Do you overhaul your own engines or do you send them someplace under contract?

Admiral FINE. Let me introduce Admiral Seiberlich who is the aviation representative with me. He is the expert in this area.

Admiral SEIBERLICH. We have three ways of overhauling engines. We overhaul engines in-house in our naval air rework facilities. The Air Force overhauls some engines for us and some of the older engines

we put out on contract. Right now, quite a number of our reciprocating engines which are being phased out of the inventory are on contract.

The TF–41 engines which we use in the A–7's is overhauled by the Air Force at Tinker Air Force Base. We overhaul some Air Force engines at our facilities.

For instance, the new A–10 the Air Force is getting, that will be overhauled at NARF, Alameda. So we do whichever is the most effective.

Senator YOUNG. Can you overhaul engines on a carrier?

Admiral SEIBERLICH. Yes, sir, we have below the depot level what we call complete engine repair, CER, and basically what they do is disassemble the engine and replace a part. Say, the compressor which has to be repaired at a depot level because of the tooling required and then they reassemble the engines.

We try to avoid sending our engines to the depot as much as possible because of the added expense.

Senator YOUNG. Haven't you added more hours? You run the engine longer now without overhauling than in previous years?

Admiral SEIBERLICH. In some instances, we do. About a year and a half ago we took a look at our situation to revise our maintenance procedures and we went to the airlines because they are in a money-making business and we felt they might have better ways of doing things than we do. We have had contracts with United Airlines covering the P–3 aircraft, which is a former airline derivative the Electra. As a result of this program we have saved substantial money on P–3 maintenance.

We now have a contract with United Airlines on our F–4 aircraft to look at a carrier aircraft to effect the same savings. We are attempting to economize in every way we can.

Senator YOUNG. Are these new engines on the F–14 more difficult to overhaul than the older jet engines?

Admiral SEIBERLICH. They are higher-thrust engines and consequently anytime you push the technology you have a more difficult time of overhaul and adjustment. We get more for the size of that engine than we have in previous engines, but every engine goes through a cycle. When it is new you have certain problems which you correct, and then after the engine has been in the inventory for some time it runs very nicely.

Senator YOUNG. Thank you.

Admiral FINE. I would like to continue.

AREAS OF ADDITIONAL INCREASES

Intelligence and communications increases of $50.1 million are essentially related to operational support for Gapfiller satellites. This is the satellite we are leasing until our fleet satellite, our own fleet satellite comes in.

Senator YOUNG. Who do you lease that from?

Admiral FINE. Comsat.

Of this increase, $25.8 million represents programs supported under this appropriation for the first time in fiscal year 1976. Training and medical funding increases are primarily due to cost growth; however,

funds have been included for new training courses, expansion of ongoing programs to improve medical facilities services, to provide assistance to doctors, and to improve personnel support and management.

Civilian employment direct hire and strength increases from 125,826 in fiscal year 1975 to 127,490 in fiscal year 1976. However, this increase includes a transfer from the Army of 1,840 end strength for the Military Assistance Command Support Group, Thailand. Without this transfer our end strength would have decreased by 176.

The transition budget request of $2,234.5 million represents a continuation of effort for the 3-month transition to fiscal year 197T, and provides essentially the same level of operations as requested in fiscal year 1976.

SUMMARY

In summary, I would like to reiterate some of the efforts undertaken to reduce program requirements. With the exception of increased personnel being devoted to our critical ship maintenance and modernization program, we have deliberately kept manpower needs at or below the levels projected for fiscal year 1975. We have developed and adopted a new aircraft maintenance philosophy.

This new approach referred to as SDLM calls for the standardization of maintenance policy through engineering analysis and is an outgrowth of the earlier concept of Aircraft Conditional Evaluation, ACE. Under SDLM, it is expected that Navy will be able to fund an additional 50 aircraft reworks in fiscal year 1975. The fiscal year 1976 aircraft rework program reflects the savings resulting from SDLM.

To further reduce funding requirements and with the idea in mind of generating fuel savings, our fiscal year 1976 steaming and flying hour programs were developed on the basis that the consumption ratio would be improved by 5 percent. We have paid close attention to headquarters personnel requirements. Total headquarters personnel requirements have been reduced in fiscal year 1976 by 139 if the functional transfer of 1,840 from the Army for USMACTHAI Support Group is discounted.

We have been most careful in reviewing our requirements for automatic data processing and our budget reflects a reduction of 215 personnel devoted to this effort. No new automated data system will be introduced in fiscal year 1976.

In conclusion, Mr. Chairman, we are in the midst of modernizing our forces and improving our readiness to insure our ability to preserve the peace. The full support of the Congress is essential if we are to fulfill this responsibility.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF REAR ADM. E. W. COOKE

Senator YOUNG. Rear Adm. E. W. Cooke, the Deputy Comptroller of the Navy, has a prepared statement on the Navy and Marine Corps revolving and management funds which will appear in the record at this point.

[The statement follows:]

Mr. Chairman and members of the Committee: It is my pleasure to appear before you to provide information regarding the more significant revolving and management funds which are used to effect improved financial and supply management within the Navy and Marine Corps. These are the Navy Management Fund, Navy and Marine Corps Industrial Funds and Stock Funds.

Since the purposes and coverage of these funds remain essentially the same from year to year, I will outline them briefly, and indicate in the appropriate segment of my statement any changes which have taken place with respect to our administration of these working capital funds since last year.

Navy Management Fund

The Navy Management Fund was established in 1950 with a corpus of $1 million to facilitate the financing of operations, which are supported by two or more appropriations, when it is not practicable to make a direct distribution of charges at the time the expense is incurred.

The programs financed through this fund are reviewed and justified as part of their respective parent appropriations. Transfers are made from the parent appropriation to the Management Fund, which, in effect acts as a "clearing house" in the settlement of charges.

Our obligational authority plan for FY 1976 is $426.8 million, for financing transportation of materials and equipment. These transportation requirements are funded in various appropriations, principally Operation and Maintenance, Navy and Military Personnel, Navy.

Naval Working Fund

The Naval Working Fund was established in 1924 to account for advances received by the Navy for the cost of work or services to be furnished to other Government agencies, foreign Governments, private parties, and nonappropriated fund activities. The nature of the work or services performed is generally related to furnishing utilities, maintenance work, equipment control, sales of material, and other services which are chargeable under existing appropriations. Changes in

the Navy accounting system permitted the discontinuation of the fund in FY 1976.

Navy Industrial Fund

Navy Industrial Fund revenues are anticipated to exceed $5.5 billion in fiscal year 1976. Of this amount, $1.45 billion is projected for the Naval Shipyards and $1.52 billion for the Research and Development Laboratories. These two activity groups are planned for 54% of the total expected income from the various industrial activities operational under the fund in fiscal 1976.

On 1 January 1975, there were 91 industrial type facilities chartered under the Fund. Of these, five have been deactivated and are in process of liquidation. They consist of two shipyards, one ordnance plant, one public works center, and the Navy Strategic Systems Navigation Facility in Brooklyn, New York. These closures are directly related to restructuring shore establishment support to current fleet size and the achieving of optimum allocation of resources to workload requirements. In certain cases functions of the closed activities have been transferred to other facilities. In the San Francisco Bay area, a new public works center has been activated effective 1 July 1974 to improve efficiency through consolidating public works services to several local Government facilities, thus providing for a more effective operating arrangement.

Losses sustained in the industrial fund for fiscal year 1974 are attributable primarily to unfavorable financial trends in sealift operations as a result of oil price increases. These increases were not compensated for by sealift tariff rate adjustments in fiscal year 1974, thus causing losses in the Military Sealift Command account. Tariff increases were implemented 1 July 1974 designed to offset the increased cost and allow Military Sealift Command to recover fiscal year 1974 losses, thereby achieving a financial breakeven over the two year period

ending 30 June 1975. In addition, due to need within the customer appropriation accounts for long range adoption of a program of sealift rate stabilization, tariff rates projected in the President's Budget are anticipated to be maintained throughout fiscal year 1976 even though such tariffs may produce relatively small gains or losses for sealift operations in the budget year. These rates are in consonance with the applicable level of financing established within the customer accounts for fiscal year 1976, thus allowing for full implementation of a program for rate stabilization through 30 June 1976.

Exhibit I is a summary of gains and losses by activity group. On total sales of $4.9 billion, the net loss $78.7 million is approximately 1.6%. Exhibit II presents the activities under the Navy Industrial Fund on 1 January 1975 together with certain operating information.

Exhibit I
Navy Industrial Fund
Statement of Revenue & Expense by Activities
(In Thousands of Dollars)
FY 1974

	Revenue	Expense	Gain/Loss
Shipyards (10)	1,238,302	1,238,860	(558)
Military Sealift Command (1)	651,449	730,542	(79,093)
Aircraft Maintenance (6)	594,134	589,384	4,750
Ordnance Plants (13)	655,738	658,851	(3,113)
Research Activities (19)	1,401,862	1,402,008	(146)
Base Services (9)	242,918	244,040	(1,122)
Printing Plants (33)	72,165	71,539	626
TOTAL (91)	4,856,568	4,935,224	(78,656)

Exhibit II
Navy Industrial Fund Activities
AS OF 1 JAN 1975
($ in 000's)

	NIF Implemented	Cash Allocation	Estimated Sales FY 1976
Shipyards (10)		$82,000	$1,453,033
(Under NAVSHIPS Management)			
Philadelphia, Pennsylvania	Apr 1952	8,500	
Charleston, South Carolina	Jul 1953	5,500	
Norfolk, Virginia	Jul 1953	8,000	
Portsmouth, New Hampshire	Apr 1954	7,600	
1/ Boston, Massachusetts	Apr 1954	22,800	
Puget Sound, Washington	Jul 1954	6,500	
Long Beach, California	Aug 1954	4,600	
Mare Island California	Feb 1970	10,000	
1/ Hunters Point, California	Feb 1970	3,000	
Pearl Harbor, Hawaii	Dec 1954	5,500	
Military Sealift Command (1)	Jul 1951	44,000	985,509
(Under SecNav Management)			
Aircraft Maintenance (6)		37,400	639,691
(Under NAVAIR Management)			
Alameda, California	Mar 1962	8,300	
North Island, San Diego, California	Apr 1962	6,900	
Norfolk, Virginia	Jul 1962	10,700	
Cherry Point, North Carolina	Aug 1962	2,600	
Jacksonville, Florida	Oct 1962	2,400	
Pensacola, Florida	Nov 1962	6,500	
Ordnance Plants (13)		25,430	549,003
(Under NAVORD Management)			
Indian Head, Maryland	Oct 1953	4,450	
Louisville, Kentucky	Feb 1957	2,200	
Yorktown, Virginia	Apr 1959	2,850	
Keyport, Washington	Jan 1960	3,500	
Crane, Indiana	Jul 1967	850	
Earle, New Jersey	Jul 1967	900	
Hawthorne, Nevada	Jul 1967	600	
McAlester, Oklahoma	Jul 1967	2,650	
1/ Oahu, Hawaii	Jul 1967	750	
Charleston, South Carolina	Jul 1967	400	
Concord, California	Jul 1967	2,500	
Seal Beach, California	Jul 1967	2,180	
Port Hueneme, California	Jul 1969	1,600	
Polaris Missile Facilities (3)		2,155	
(Under Special Projects Office Management)			
Atlantic, Charleston, South Carolina	Jul 1967	675	
Pacific, Bangor, Washington	Jul 1967	280	
1/ Navy Strategic Systems Navigation Facility, Brooklyn, New York	Jul 1970	1,200	

($ in 000's)

	NIF Implemented	Cash Allocation	Estimated Sales FY 1976
Research Activities (16)		43,400	1,516,913
(Under SecNav Management)			
NRL, Washington, D.C.	Jan 1953	6,600	
(Under NAVAIR Management)			
NAFI, Indianapolis, Ind.	Jul 1955	3,300	
NAIPC, Trenton, New Jersey	Jul 1959	1,200	
NATC, Patuxent River, Maryland	Jul 1969	1,500	
NAEC, Lakehurst, New Jersey	Jul 1969	5,000	
NMC, Point Mugu, California	Jul 1971	4,000	
(Under DLP Management)			
NWC, China Lake, Calif.	Jan 1969	3,000	
NSRDC, Washington, D.C.	Jul 1957	2,000	
NCSL, Panama City, Fla.	Jul 1968	700	
NURDC, San Diego, Calif.	Jul 1969	1,700	
NELC, San Diego, Calif.	Jul 1969	1,000	
NADC, Warminster, Pa.	Jul 1969	2,900	
NOL, White Oak, Maryland	Jul 1969	4,000	
NWL, Dahlgren, Va.	Jul 1969	2,000	
NUWSC, Newport, Rhode Is.	Jul 1971	4.000	
(Under NAVFAC Management)			
NCEL, Port Hueneme, Calif.	Jan 1974	500	
Base Services (9)		15,950	300,117
(Under NAVFAC Management			
PWC, Norfolk, Virginia	Jul 1957	2,900	
PWC, Pearl Harbor, Hawaii	Nov 1958	1,800	
1/ PWC, Newport, R.I.	Jul 1959	300	
PWC, Guam, M.I.	Apr 1962	2,000	
PWC, Subic Bay, R.P.	Jul 1962	2,750	
PWC, San Diego, Calif.	Jul 1963	1,700	
PWC, Great Lakes, Ill.	Jul 1967	1,000	
PWC, Pensacola, Fla.	Jul 1967	1,000	
PWC, San Francisco	Jul 1974	2,500	
Printing Plants (33)		1,725	77,052
(Under NAVSUP Management)			
2/ Navy Publications and Printing Service		1,225	
Philadelphia, Pennsylvania (2)	Sep 1951		
Norfolk, Virginia	Sep 1951		
New Orleans, Louisiana	Nov 1951		
Pensacola, Florida	Sep 1952		
Charleston, South Carolina	Nov 1952		
Brooklyn, New York	Dec 1952		
Washington, D.C.	Dec 1952		
Great Lakes, Ill.	Feb 1953		
Bremerton, Wash.	Mar 1953		
San Diego, Calif	Apr 1953		

($ in 000's)

	NIF Implemented	Cash Allocation	Estimated Sales FY 1976
Research Activities (16) (continued)			
Vallejo, Calif.	May 1953		
Pearl, Harbor, Hawaii	Jun 1953		
Naples, Italy	Sep 1953		
Defense Printing Service		500	
Subtotal (91 Activities)		252,060	$5,521,318
Unallocated Cash		66,733	
Losses on closed activities		4,976	
		$323,769	$5,521,318

1/ In process of dissolution

2/ Includes 18 branch plants not listed.

Marine Corps Industrial Fund

The Marine Corps Industrial Fund consists of two Depot Maintenance activities. These two activities, located at Albany, Georgia, and Barstow, California had sales of $ 22.6 million in fiscal year 1974. Sales for fiscal years 1975 and 1976 are projected at $ 21.5 million and $ 24.2 million; respectively. Marine Corps Industrial Fund operations resulted in a net gain of $ .4 million in fiscal year 1974, a variation from the desired breakeven of one and nine-tenths percent.

STOCK FUNDS

The Navy and Marine Corps Stock Funds are revolving funds used to finance the purchase of consumable material which is held in inventory until issued for use. Upon issue of material the stock funds are reimbursed by the customer appropriations and these revenues are used to reinvest in inventories for future use. This statement will outline the financial status of these funds through the budget year. Navy and Marine Corps representatives responsible for the program, management and day-to-day operations are available for in depth discussion, if desired.

NAVY STOCK FUND

The Navy Stock Fund has existed since the beginning of the century and now procures much of the consumable materials used by the Navy. Item coverage extends

to such materials as fuel, clothing, general stores, medical supplies, provisions and repair parts for base equipment, ordnance, electronic, ships, submarine and aviation equipments.

The FY 1976 budget as submitted to Congress is based on the strategic-logistic guidance promulgated by the Secretary of Defense. Basically, the operational plan for the budget year is designed to provide funds to purchase material to meet the needs of the operating forces for stock funded items. Navy's goal is to provide the desired level of support with a minimum inventory investment.

The following table summarizes significant operational aspects of the fund. It also compares the actual FY 1974 operation results with those planned for FY 1975, FY 1976, and FY 197T.

NAVY STOCK FUND
($ in Millions)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Sales	1,833.9	2,190.4	2,482.5	609.6
Obligations	1,943.9	2,301.0	2,404.2	593.4
Collections	1,821.2	2,190.4	2,505.5	609.6
Expenditures	1,789.9	2,208.6	2,403.3	610.8
Inventory (On Hand End Of Year)	1,394.3	1,496.6	1,544.9	1,545.0
Ending Cash	79.5	41.3	158.5	157.3

Approximately 91% ($326.2 million) of the $357.1 million obligational increase in FY 1975 is related to three programs. These programs are ships and commissary stores, general retail commodities, and fuel. Spiralling prices, largely in foodstuffs and fuel which took place in the latter part of FY 1974 are responsible for the increase. For FY 1976, a growth in obligations stems mainly from increases in costs for material purchased by the stock fund and procurement of Prepositioned War Reserve Requirements. A cash augmentation of $42.0 million is being requested in FY 1976 to procure Prepositioned War Reserve Requirement deficiencies.

The cash position for FY 1975 reflects a drawdown of $38.2 million to an estimated 30 June 1975 cash position of $41.3 million.

The decrease in cash is result of the disparity which exists between buying and selling prices due to the timelag in publishing price changes. Due to the inflation rate which existed during the latter half of FY 1974 and the first half of FY 1975 a rapid drawdown of cash is anticipated. By adjustment of the standard price in FY 1976 and cash augmentation for Prepositioned War Reserve Requirements the cash balance will return to a normal level for the Fund.

MARINE CORPS STOCK FUND

The significant operating and financial status of the fund for FY 1974 and the current and budget years is outlined in the following table.

MARINE CORPS STOCK FUND
($ in Millions)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Sales	196.3	197.1	198.1	50.1
Obligations	190.5	190.3	206.2	51.4
Collections	196.3	197.1	201.9	49.1
Expenditures	191.7	205.5	190.4	50.5
Inventory (End of Year)	275.3	305.2	291.3	292.7
Ending Cash	39.8	16.4	36.6	35.2

Total Marine Corps Stock Fund Operations are expected to change very little from FY 1974 to FY 1975. Increases in the costs of commissary goods and fuel are offset by decreases in other commodities. The increase in obligational requirements in FY 1976 is due chiefly to increases in costs for material purchased by the Stock Fund and procurement of Prepositioned War Reserve Requirements. A cash augmentation of $8.7 million is being requested in FY 1976 to procure Prepositioned War Reserve Requirement.

A drawdown of cash is anticipated due to the level of inflation experienced in FY 1974 and FY 1975 and the time lag in publishing price changes. By adjustment of the standard price in FY 1976 and cash augmentation for Prespositioned War Reserve Requirements, it is expected that the cash balance will return to a normal level for the fund.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. Admiral Fine, we will ask you to supply the answers to these questions for the record.

[The questions and answers follow:]

READINESS IMPROVEMENT FUNDING

Senator YOUNG. What is the background for the $813.6 million increase for readiness improvement? Is this increase unusual in some way?

Admiral FINE. The high tempo of operations during Vietnam and absorption of inflation in subsequent years has caused an erosion of readiness, i.e. the ability of the Navy to respond to contingencies and physical deterioration of our ships and operating bases. The Chief of Naval Operations, in his FY 1976 posture statement indicated as his single most important concern the improvement of this degraded readiness state.

The $813.6 million is designed to improve the readiness of our ships, aircraft, bases and the training of the men who operate them. However, it should be noted that of this increase there is only approximately $278 million of real program change. The majority of the increase is attributable to the high cost of doing business in today's environment and is unusual only because the inflation we are experiencing is unusual.

UNFUNDED OVERHAULS

Senator YOUNG. What number of unfunded ship overhauls would be normal if funding were not constrained?

Admiral FINE. The normal number of unfunded ship overhauls would probably be about 10 if funding were not constrained. This is a fact-of-life estimate in view of complexity in adjusting ship overhaul schedules and dynamic fleet operational requirements.

AIRCRAFT REWORK BACKLOG

Senator YOUNG. What is the current backlog of aircraft reworks and aircraft engine reworks? What level of backlog would the Navy prefer in both categories?

Admiral FINE. Current backlog: As of 31 Oct 1974, Aircraft 848 units, 16.8% of operating inventory. Forecast to 30 June 1975, Aircraft 1054 units, 19.9% of operating inventory. As of 28 Feb 1975, Engines 1681 units, 8.5% of active inventory. Preferred backlog: Aircraft, 505 units, 10.0% of operating inventory. Engines, 1031 units, 5.5% of active inventory.

REAL PROPERTY BACKLOG

Senator YOUNG. How much of the $8.32 billion requested is for real property and equipment maintenance? What is the estimated base maintenance backlog at this time?

Admiral FINE. Of the $8.32 billion, $222.8 million is requested for maintenance of real property. Backlog is estimated to be approximately $400 million.

FUEL SOURCES

Senator YOUNG. How much of the Navy fuels are procured from domestic resources and how much from foreign sources?

Admiral FINE. Since DSA/DFSC procures fuel for all DOD, the information is applicable to total DOD. Available statistics do not provide service break-outs. The Defense Fuel Supply Center reports that as of 10 March 1975, 71% is domestic and 29% foreign.

Senator YOUNG. What is the cost difference in procurement of fuel between domestic and foreign sources.

Admiral FINE. The Navy does not have desired data. The question should be referred to DFSC. DFSC procures fuel for all services.

Senator YOUNG. What amount of fuel is delivered to the Navy by commercial tankers from the OPEC nations?

Admiral FINE. None, if referring to OPEC owned vessels.

If reference is to fuel from OPEC nations, MSC advises that approximately 38% of fuel delivery by surface vessels to DOD comes from OPEC nations.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator YOUNG. Chairman McClellan has submitted a list of questions to be answered for the record.

[The questions and answers follow:]

AIRCRAFT REWORKS

Chairman MCCLELLAN. Explain what "not operationally ready supply" means and what this rate has been over the past three years. What will the additional $10.1 million for aircraft and engines do for improving your readiness.

Admiral FINE. A. An aircraft is "not operationally ready supply" (NORS) when it cannot fly safely under all weather conditions and perform at least one of its primary missions because of a lack of necessary parts or components. The NORS rate is expressed as a percent of the operating inventory.

B. Average NORS rate for all Navy Aircraft Operating Inventory: FY 72, 12.3%; FY 73, 15.0%; FY 74, 18.1%; FY 75, 21.0%; FY 76, 17.0%.

C. The $10.1 million for aircraft and engines will reduce the aircraft backlog by 52 aircraft and will produce 165 additional engine reworks.

SUBSAFE PROGRAM

Chairman MCCLELLAN. Explain what the SUBSAFE Program is.

Admiral FINE. 1. The SUBSAFE Program is the body of design, engineering and quality control standards which assure the reliability of certain critical submarine systems, under possible casualty conditions when submerged to designated test depth, such that the ship can recover in a safe and controlled manner.

2. SUBSAFE reliability measures have been applied to the following systems or functions:

The hull envelope, including pipe penetrations.

High capacity air blow system for emergency deballasting of main ballast tanks.

Salt water piping systems normally open to sea pressure at deep depths.

Stern plane control system, which controls submarine attitude while submerged.

Remote closure of critical sea water valves with minimum operator action and not dependent on electrical circuitry.

Spray protection for electrical switchboards.

Redundant electrical power sources for vital sea water pumps.

3. SUBSAFE technology includes:

Material selection to assure reliable integrity in the high pressure salt water environment over a long term.

Best design for reliable operation of valves and piping systems.

Simplicity in design with redundancy where necessary for backup means of sustained operability.

Strict standards in fabrication methods: casting, welding, heat treatment; brazing, and installation of threaded fasteners and piping hangers.

Nondestructive test (NDT) methods to support the SUBSAFE program.

4. Implicit in the SUBSAFE program is an auditable trail of quality control inspections and material pedigree which ensures continuity of SUBSAFE measures. Every "entry" into a SUBSAFE system or component by shipyard, tender or ship's crew requires formal written record of closure and technical review for recertification.

5. Certification is mandatory for operation to design test depth throughout the life of the submarines.

RESTRICTED AVAILABILITIES

Chairman MCCLELLAN. Explain what is meant by the term "restricted availabilities" and "emergent repairs".

Admiral FINE. "Restricted availabilities" is the administrative nomenclature used for situations where work is to be accomplished that is of a lesser scope than that accomplished during a regular overhaul. These can be further sorted by the nautre of the work occasioning the asignment of the availability:

"Emergent" for the accompilshment of repairs resutling from an unforeseen material failure or casualty.

"Planned Availabilities" for work such as a periodic drydocking appropriate for certain types of ships during their operating cycle between regular overhauls.

Carrier Operations

Chairman McClellan. The number of Navy carriers is projected to decline during FY 1976. Why then do funds for carrier operations increase?

Admiral Fine. The Navy forces for FY 1975 include USS HANCOCK (CVA 19) and USS ORISKANY (CVA 34) and late delivery of USS NIMITZ (CVAN 68). The end force count for FY 1976 includes, of these three carriers, only USS NIMITZ (CVAN 68).

The increased costs reflect a full year operation of USS NIMITZ in FY 1976 as opposed to one quarter in FY 1975, and the increased cost to operate USS ORISKANY with more expensive distillate fuel following her conversion. USS HANCOCK and USS ORISKANY are currently planned for inactivation in late FY 1976.

Stock Fund

Chairman McClellan. What stock fund surcharge for material becomes effective on 1 July 1975?

Admiral Fine. The fiscal year 1976 budget includes $229.6 million to provide for announced stock fund price increases to become effective 1 July 1975. This price increase will effect such items as fuel, ship parts, aeronautical supplies and retail supplies at the Department of Defense wholesale level.

Aircraft Operations

Chairman McClellan. Explain what the FY 1975 program was for aircraft operations and compare it with the 1976 program. Also, explain what primary mission readiness has been over the past four years.

Admiral Fine. The FY 1975 program for aircraft operations was 2.227 million hours as originally submitted to the Congress. Due to energy conservation actions, fuel price increases and inflation, the FY 1975 program has been decremented to 2.025 million hours. The FY 1976 request is for 2.095 million hours.

The Primary Mission Readiness (PMR) goal for the past several years has been the OSD/DON approved level of 88% PMR. For the past four years the actual achieved and budgeted PMR is:

Fiscal year:	*Percent*	Fiscal year:	*Percent*
1971	89	1974	75
1972	87	1975	82
1973	84	1976	88

Degree Seeking Programs

Chairman McClellan. What reduction has taken place in the full-time degree seeking programs?

Admiral Fine. The average on-board loads for FY 74 and estimated average on-board loads for FY 75, FY 76, FY 7T and FY 77 for full-time degree seeking programs are as follows:

AVERAGE ON-BOARD LOADS

Program	Fiscal year—				
	1974	1975	1976	197T	1977
Graduate	1,285	1,243	1,058	1,058	970
BS/BA	205	104	0	0	
College degree [1]	36	46	110	98	110
ADCOP	2,472	1,831	885	0	0
NESEP	1,125	970	1,000	1,000	1,000
Law education	0	31	36	49	50
Scholarship [2]	80	41	50	50	50
Total	5,203	4,266	3,139	2,255	2,180

[1] College degree program students pay their own tuition/books/fees in an 18 mo. (maximum) program to obtain a BA/BS degree.

[2] Scholarship program students receive pay and allowances only. The program varies in length from 1 academic term to 3 years.

Commissary Stores

Chairman McClellan. What is the Navy Department's position on the Administration's proposal regarding commissary stores? Does the Navy consider commissary store prices as a fringe benefit or an element of personal compensation?

Admiral Fine. We appreciate the necessity to reduce overall government expenditures and understand this as one means to accomplish this goal.

Removal of appropriated fund support will obviously reduce the savings previously available to commissary store patrons. The degree to which these savings will be reduced is uncertain. However, we intend to maintain the commissary store systems and to make whatever changes are necessary to improve the efficiency and organizational and operating structure of the system under the new funding guidance.

Technically, commissary store savings are not part of compensation, just as employee discounts and stock options are not considered part of basic compensation in the private sector. On the other hand, surveys show that Navy patrons have come to believe that this benefit is part of the total compensation package, regardless of the technical definition.

Miscellaneous Increases

Chairman McClellan. Explain what the employee compensation fund is. Also explain the stock fund increases mentioned on page 8 of your statement, as well as the transfers from other appropriations. How much of the increase is accounted for by each of these three items?

Admiral Fine. The Employee Compensation and Medical Benefits Fund is the Navy's reimbursment to the Department of Labor for compensation and medical benefits resulting from occupational accidents.

The stock fund increase of $229.6 million reflects a price increase effective 1 July 1975 on items managed by DOD wholesale components. This action will stabilize the disparity which exists between buying and selling prices by reflecting current market costs which are not in the FY 1975 program because of the lag in price changes.

The transfers from other appropriations included the following:

	Dollars in thousands
1. MAP (Army) (B.A. 10)	+ 336
2. Logistic Thailand (Army) (B.A. 2)	+26, 504
3. APA to NSA (Migration of field level reparables) (OPN) 2+21.0, 7+ 4.2, 8+ .5	+25, 700
4. Autec (R.D.T. & E.,N) (B.A. 2)	—11, 000
5. Barking Sands (R.D.T. & E.,N) (B.A. 2)	+5, 000
6. Overseas Champus (Defense agencies) (B.A. 8)	—1, 500
7. University of Health Sciences (Defense agencies) (B.A. 8)	—3, 325
8. DANTES (Army) (B.A. 8)	+2, 800
9. Undersea warfare (OPN) (B.A. 3)	+373
10. Marine barracks (O. & M.,MC) (B.A. 2)	+1, 661
Total	46, 549

The increases account for funds as follows:

1. Employee compensation fund	15, 800
2. Stock fund increase	229, 600
3. Transfer net	46, 549
Total	291, 949

Transition Budget

Chairman McClellan. Are any funds requested for new programs in the transition budget?

Admiral Fine. No, sir. The transition budget represents a continuation of effort for three months and does not include any new programs.

Aircraft Reworks

Chairman McClellan. Discuss the general category of aircraft being reworked in FY 1976. Which engines are being overhauled—please describe by general category. What does "aircraft on extension" mean?

Admiral Fine. It is necessary to work some of each model aircraft in the inventory during each fiscal year. These are contained in the following classes of aircraft: VF Fighters, VA Attack, VS Anti-Submarine, fixed wing, VP Patrol, VW Early warning, VR Transports, VG Transport/Tanker, VO Observation, VU Utility, VT Trainer, H Helicopter, VK Drone launchers.

It is also necessary to overhaul some of each type engine in the inventory during each fiscal year. These include: reciprocating, jet, turbo-fan, turbo-prop and turbo-shaft.

"Aircraft on extension" defines those aircraft in the operating inventory which are overdue for depot rework. They form the backlog of aircraft not inducted for rework when due.

Flying Hours

Chairman McClellan. Explain the reason why 110,000 additional flying hours are requested for the General Purpose Forces.

Admiral Fine. The FY 76 request delineates a flying hour program which provides the OSD/DON standard readiness levels. The FY 75 General Purpose Forces program of 1.546 million hours submitted to Congress provided these standard readiness levels. The FY 75 program was subsequently decremented 167,000 hours due to unfunded fuel price increases which degraded these readiness levels. The 110,000 additional hours represent those hours required to achieve the standard readiness levels. The following chart delineates the breakdown of these hours and the Readiness levels provided:

Program	Fiscal year 1975, college (percent)	Additional hours	Fiscal year 1976, college (percent)	OSD/DON Std., (percent)
TACAIR/ASW	82	85,475	88	88
Readiness squadron training	93	18,720	100	100
Fleet tactical support squadrons	75	5,659	86	86
Total		109,854		

Personnel Support

Chairman McClellan. What is the average cost per military personnel supported? Compare the cost in FY 1976 with FY 1974 and FY 1975.

Admiral Fine. The FY 1976 cost is $629 per man, the FY 1975 cost is $625 and the FY 1974 cost is $705. The decrease from FY 1974 to FY 1975 is due to the transfer of CHAMPUS funding responsibility to the Office of Secretary of Defense.

Chairman McClellan. What are the average support costs per civilian and the average salary costs for each civilian? Provide the figures for FY 1974, 1975, and 1976.

Admiral Fine. Estimates of civilian support costs have not been made on an annual basis. The most recent estimate, published by DOD in March, 1974 is $218 per civilian for Operation and Maintenance support costs. This includes such items as welfare, recreational and educational activities.

Average salary costs for Navy civilians are provided as follows:

	Fiscal year 1974		Fiscal year 1975		Fiscal year 1976	
	Basic salary	Compensation and benefits	Basic salary	Compensation and benefits	Basic salary	Compensation and benefits
U.S. citizens direct hire	$12,477	$14,475	$13,412	$15,517	$13,775	$15,962
Foreign direct hire	2,359	3,151	2,646	3,431	2,658	3,431
Foreign indirect hire		8,124		9,723		9,847

Military Sealift Command Support Ships

Chairman McClellan. Please describe the program for the charter of Military Sealift Command Support ships.

Admiral Fine. In May 1972, USS TALUGA (AO 62) was transferred to Commander Military Sealift Command (COMSC) for a one year test program under the aegis of the Charger Log Program.

Based on the successful results obtained, a program was developed which would result in COMSC receiving 2 additional oilers (AO), 2 fleet ocean tugs (ATF) and 2 cable repairing ships (ARC) in FY 74; 2 additional oilers, 2 fleet ocean tugs and 1 store ship (AF) in FY 75 and in FY 76, the transfer of 3 oilers. Summarizing, by FY 1976, MSC will be operating 8 oilers, 4 fleet ocean tugs, 1 store ship and 2 cable repairing ships in dedicated fleet support roles.

To date, all transfers have occurred as programmed. It is also envisioned that those transfers scheduled in FY 1976 will occur as planned.

Poseidon Extended Operating Cycle

Chairman McClellan. Explain how the extended operating cycle program lengthens the overhaul interval for Poseidon SSBNs. How is this accomplished, and how long does it take compared to the normal overhaul interval?

Admiral Fine. The SSBN Extended Operating Cycle (EOC) lengthens the period between shipyard overhauls from 6 years to 9 years for selected SSBNs. EOC was made possible by two developments:

The advent of long lived reactor cores which reduces the number of refueling over the life of the ship.

A three-year monitoring effort of 3 Poseidon SSBNs at the Holy Loch site which determined that an intensified and sophisticated material condition monitoring program for all Poseidon SSBNs, and the upgraded maintenance plan resulting from this expanded data base, could feasibly support SSBN reliability over the longer term.

SSBN EOC is a time-phased program with individual ships entering the longer cycle when both prerequisites have been met:

Installation of a long-lived core.

Execution of the maintenance monitoring program.

Aircraft Forces Flying Hours

Chairman McClellan. Explain the statement that the FY 1975 flying hour program is 160,000 hours below the amended FY 1975 request. What were the original and amended requests?

Admiral Fine. The original FY 1975 flying hour program request was for 2,227 million hours. The amended request was for 2,185 million hours. The FY 1975 column of the FY 1976 Budget Request estimates 2.025 million hours; 160,000 hours below the amended FY–75 request.

Chairman McClellan. Explain how Primary Mission Readiness is measured, tell what it has been for the past three years and what is projected through 1977.

Admiral Fine. Primary Mission Readiness (PMR) is measured by dividing the number of hours budgeted (or flown) by the number of hours required to make a pilot fully combat ready. The resultant, expressed in percentage of Primary Mission Readiness (%PMR), is the yardstick used to indicate what portion of the required hours are funded or accomplished.

The term is applied only to Navy and Marine Corps Tactical Air (TACAIR) and Antisubmarine Warfare (ASW) units.

Through experience and continuous evaluation of objectives, Navy has derived an hourly figure, for the pilot of each type aircraft, which would provide him Combat Readiness; that is, current qualification to perform any mission which may be assigned to that aircraft. An example of that would be an F–4 pilot currently qualified to perform Air Combat Maneuvering, Intercepts, Missile launch, aerial refueling and conventional bombing. This pilot would be emergency deployable on a CVA without a requirement for refresher landing practice on the field.

For several years, the inability to achieve Full Combat Readiness due to fiscal constraints has forced the Navy to resort to budgeting for Primary Mission Readiness (PMR) which enables the average fleet pilot to perform safely only the primary mission assigned to his type aircraft.

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One yardstick for measurement of operational readiness is, therefore, Primary Mission Readiness. Measurement is an objective exercise; either the objective is attained or it is not. Establishment of the objective requires a certain amount of subjective evaluation. Navy believes fully that the established Primary Mission Readiness requirements are valid, minimal and consistent with current defense requirements and safe operations.

Primary Mission Readiness (PMR) achieved for the past three years and projected through 1977 is:

Year:	*Percent*
Fiscal year 1972	87
Fiscal year 1973	84
Fiscal year 1974	75
Fiscal year 1975	82
Fiscal year 1976	88
Fiscal year 1977	88

Carrier Outfittings

Chairman McClellan. What kinds of increased complexity outfittings are being requested?

Admiral Fine. The Navy is modifying its Attack Carrier Force to a multi-purpose force. Basically the modification will allow the carrier to be used in an attack or ASW mission as the situation warrants. This modification requires a more complex range of aircraft items to be stored aboard ships. In addition, the introduction of the F–14 and the S–3A to the fleet requires a greater inventory to maintain the complex systems in these aircraft.

Backlog of Ship Maintenance

Chairman McClellan. Please discuss the backlog of deferred maintenance on operational ships. Explain what it has been over the past few years, what is projected, and what the Navy considers optimum.

Admiral Fine. The backlog of deferred maintenance, based on Navy standard overhaul cycles, has contributed to the slow decline of fleet operational readiness that we have been experiencing. The active fleet backlog was 37 at the end of FY 1974, peaked to 62 in FY 1975, and is projected to be 54 in FY 1976. From a material condition viewpoint, it is optimum to have a zero backlog of deferred maintenance.

Chairman McClellan. What items previously purchased by procurement funds have been transferred to O&M,N funding?

Admiral Fine. Assistant Secretary of Defense (I&L) memo of 17 July 1974 directed the Navy to migrate field level repairables to the Navy Stock Fund in view of current DOD policy that field repairables be considered as expense items and stock funded. This realignment will be accomplished on 1 July 1975. For this reason we have reduced the applicable procurement accounts by $30.7 million. Of this amount, $26.7 million were placed in the O&M,N/O&M,NR budgets in recognition of the fact that field level repairables, upon funding through the Stock Fund, are reimbursable from the customers' funds. This was not a dollar-for-dollar transfer because of a projected reduction in demand due to customer restraint and greater emphasis on repair and care of items as well as increased management attention.

Military Sealift Command

Chairman McClellan. Explain what the Military Sealift Command is and where the civilians are included (i.e. are they in the Navy's civilian end strength)? What types of ships are suitable for MSC manning, and what types are not?

Admiral Fine. The Military Sealift Command is a major component of the operating forces of the United States Navy, engaged in providing world-wide Ocean Transportation services for agencies of the Department of Defense. In this capacity, Military Sealift Command has been designated as the Single Manager Operating Agency for sealift by the Department of Defense. The Military Sealift Command also operates scientific or project ships which serve as seagoing platforms for the military services and other government agencies in the fields of oceanographic studies, mapping, geodesy, anti-submarine warfare, cable

maintenance and other scientific endeavors. A Fleet Support Service provides civilian manned noncombatant support ships to the U.S. Navy in the fields of underway replenishment of fuel, towing and salvage operations.

Civilian end strength, representing civilian service marines (afloat) and civilian service employees (ashore) are under the Navy Industrial Fund and are included in the overall Navy end strength numbers. They are listed in the Manpower Requirements Report for FY 1976 as Mobility Forces under General Purpose Forces.

Any noncombatant vessel available which provides needed support in the performance of the MSC mission is suitable for MSC manning. MSC manning is not appropriate for combatant ships.

Ship Alterations

Chairman McClellan. What are non-scheduled ship repairs?

Admiral Fine. Non-scheduled ship repairs ("emergent ship repairs") are those non-planned repairs which are accomplished throughout the year on an individual equipment or system basis. In general, these availabilities are of relatively short duration though, on occasion, the availability may be lengthy such as when repairs to fire damage, voyage repairs, etc. are involved. The ship need not be present at an industrial activity, in some cases, the faulty equipment is transported for repair.

Overhaul-Alteration Comparison

Chairman McClellan. Differentiate between overhauls and alterations on ships.

Admiral Fine. The overhaul of a naval ship is a planned industrial availability of that ship for the accomplishment of general repairs to maintain designed ship capabilities. Such overhauls are accomplished at naval ship yards, private yards, or other shore-based repair activities, are normally scheduled in advance, and conform to an established cycle.

Alterations to naval ships are approved changes in hull, machinery, etc. to increase the ships designed capabilities or to enhance safety. Installation of such alterations are scheduled for accomplishment by ship yards during overhauls, by intermediate maintenance activities (repair ships and tenders), or by ship personnel depending on alteration complexity.

Readiness and Training Levels

Chairman McClellan. What is the current level of Training Readiness, and what is desirable?

Admiral Fine. The current level (FY 75) of Training Readiness is 93%. The desirable level of Training Readiness is 100%, as reflected in the FY 1976 request.

JCS Exercises

Chairman McClellan. What JCS exercises will the Navy participate in, and with what forces? Do the costs shown for these exercises include direct and indirect costs of the Navy's participation in these exercises?

Admiral Fine. The Navy will use aviation and ship forces to participate in exercises SOLID SHIELD, TEAM WORK, POINT BLANK, BOLD EAGLE, UNITAS, BRAVE SHIELD, NICKEL PLATE, and ALOUD Series A, B, C, and Z. The costs shown in this program are direct costs and cover only "above normal" operating expenses.

Aircraft Reworks

Chairman McClellan. Compare the difference between the Aircraft Conditional Evaluation concept and the Standard Depot Level Maintenance Program.

Admiral Fine. Aircraft Conditional Evaluation (ACE) was an experimental program designed to reduce depot rework cost by performing only that minimum maintenance necessary to guarantee safe operation for a specified number of months, not necessarily a full service tour. It was composed of a "look" phase to evaluate the condition of an aircraft to determine if it could be returned to the fleet at minimum cost, or if it required a full depot rework. The "fix" phase was applied to those aircraft determined applicable for minimum rework on site.

ACE did not, however, adequately meet the aircraft corrosion problems experienced in naval aircraft. Standard Depot Level Maintenance (SDLM) was developed as a result of the experiment with the ACE process. Like ACE, it has a "look" and a "fix" phase. The process, however, is always performed in a depot rather than at various sites. The "look" phase of SDLM is standardized and is carefully engineered to completely determine the condition of the aircraft structure and to specify the minimum amount of work necessary to guarantee operation of the aircraft for a full service tour. This standardized engineered "look" phase is the major difference between the ACE and SDLM concepts. It will provide the basis for application of an improved reliability based depot maintenance strategy, patterned after the concept used by the airlines on the wide-bodied jets, which is now under development.

Chairman McCLELLAN. How many engines for a given number of aircraft are considered the minimum needed for a reserve pool? How is this determined?

Admiral FINE. As an example, there are 291 A7E aircraft in the active inventory each of which uses one TF–41 engine. The pool requirement is 59 engines. This pool requirement is determined, in consultation with the operating commands, to provide the minimum number of engines required to support a specified number of aircraft at each of the operating sites and on deployed aircraft carriers.

REIMBURSEMENT TO GENERAL SERVICES ADMINISTRATION

Chairman McCLELLAN. Why were Navy buildings reclassified as GSA-controlled? Which buildings were involved in this reclassification?

Admiral FINE. The facilities occupied by the Navy Investigative Support Center at 4301 Suitland Road, Suitland, Maryland have been determined to come within the Public Buildings Act of 1972. The effect of this ruling by the Office of General Counsel, Office of the Secretary of Defense, that the September 11, 1956 Joint Occupancy Agreement between Navy and GSA was nullified by the Act is to reclassify the facility as GSA-controlled. Costs included in the Navy FY 1976 Federal Building Fund budget request are $1.1 million for the 142,000 square feet facility.

No other Navy buildings have been reclassified as GSA-controlled for FY 1976 or FY 197T.

CIVILIAN PERSONNEL CEILINGS

Chairman McCLELLAN. Is the Navy seeking relief from the civilian personnel ceilings now required as a matter of authorization (i.e., law)?

Admiral FINE. Yes. The Navy believes that arbitrary civilian personnel ceilings are not an effective management tool and can prove counterproductive. End-strength controls limit only the number of personnel who may be onboard as of a certain date in each fiscal year. This does not effectively control costs, but may in fact cause work force disruptions that may increase program costs. If an arbitrary end-strength is assigned, while the Congress approves procurement, R&D and Operating Programs, the appropriated funds will still be spent in one of several ways. First, a large number of temporary employees may be hired during the fiscal year to accomplish funded programs and then be released prior to 30 June. Second, overtime may be increased substantially to perform required work. Third, managers, to achieve their program schedules and planned performance, must assign the work to contractor effort, even if it is more costly.

Each of these alternatives may prove counterproductive. Use of temporaries may involve substantial training costs and increase the personnel office and payroll overhead. Overtime rates are, of course, well above regular rates. In addition, when ceilings put pressure on program managers to go contract, an increased headquarters review effort is required to insure that work placed on contract meets required standards for contractor performance, and is not being placed with private industry simply to circumvent ceilings.

In addition to the above, fixed ceilings may prove costly by denying flexibility to adjust employment to meet workload changes, particularly at industrial activities and in managing effort in the Foreign Military Sales program. Changes may occur in delivery of components from private industry, in workload scheduling to achieve a more effective utilization of manpower and equipment, and in non-Navy funded work. None of these involves changes in Navy program dollars. However, if there is no flexibility to adjust manpower levels, delays in work accomplishment may prove costly and our ability to fulfill commitments to foreign governments will be impeded. In addition, costly and unnecessary reduction-in-force may be required at some activities in order to free ceiling spaces for allocation to high priority projects at other activities.

Allowing program dollars to determine manpower levels is far preferable. The majority of Navy civilians (164,600) are employed in industrial activities. Service customers closely monitor costs of these activities to insure they are controlled and competitive with other sources. Thus, activity commanding officers must insure that personnel costs—and overhead costs in particular—are not excessive. Flexibility to adjust employment levels to meet changing customer demands is essential if these activities are to prove cost effective.

It should be noted that the GAO has also consistently opposed civilian ceilings. GAO Report B–165959 of April 1971 states:

"Personnel ceilings or hiring limitations, whether imposed by statute or by the Executive Branch, do not provide the most effective management controls over civilian personnel resources in our opinion."

A joint GAO/OMB/CSC study on Productivity of June 1973 states:

"Personnel ceilings have major adverse impacts on the efficient management of human resources."

Real Property Maintenance

Chairman McClellan. Compare the real property maintenance program for the past four years and the backlog of essential maintenance. Discuss this in connection with FY 1975 and 1976 funding requested.

Admiral Fine. For several years prior to FY 1975 Navy funding for Real Property Maintenance (RPM) has been less than the annual incidence of new maintenance and repair requirements. The unfinanced work enlarges the backlog of essential maintenance and repair (BMAR).

	Millions
Fiscal year 1973:	
RPM expense	$127.0
BMAR (end fiscal year)	361.1
Fiscal year 1974:	
RPM expense	200.7
BMAR (end fiscal year)	400.0
Fiscal year 1975:	
RPM expense	222.1
BMAR (end fiscal year) estimated	390.0
Fiscal year 1976:	
RPM expense budget	222.8
BMAR (end fiscal year) estimated	400.0

The Navy budget for FY 1975 was the first in several years to attempt to prevent further deterioration of the Navy's shore bases, and start a program to correct the now prevalent state of disrepair.

The FY 1976 budget continues at the same absolute level as the current estimate of FY 1975 expense. Unfortunately the dramatic increase of prices in the year preceding October 1974 means that in real terms the FY 1976 budget will not be enough to continue a reduction of the backlog of unfinanced repairs.

Automatic Data Processing Funding

Chairman McClellan. Provide for the record a breakdown showing all appropriations where funds for automatic data processing are requested.

Admiral Fine. The information follows:

Automatic Data Processing costs are included in the following appropriations and funds for FY 1976:

	Thousands
O. & M.N	$189,876
O. & M.N.R	1,239
R.D.T. & E.N	11,660
MPN	34,058
OPN	34,535
APN	175
MCN	3,059
NIF	101,336
F.H.MA	89
O. & M., MC	16,459
O. & M., MCR	94
MP, MC	16,323
P, MC	4,100
Total	413,003

Skill Mismatch/P.C.S. Moves

Chairman McClellan. The objective of a new management information system is to reduce skill mismatches by 1%. What percent of the force is now mismatched in skill or assignment?

Admiral Fine. As of January 1975, 10.38% of the distributable force was in a skill mismatch situation.

Chairman McClellan. Another objective of this system is to shorten reaction time required to detail personnel. How long does it take now, and what is hoped for with the new system?

Admiral Fine. Currently, the total circuit time ranges from 8 days down to 2 days assuming that everything is "on track". Full implementation of the new system would reduce reaction time for detailing down to 1 day.

Chairman McClellan. What changes have recently (within the past year) been made in weight allowances for household goods shipments on unaccompanied tours to the Pacific? Did the Marine Corps or Navy recently increase the limitation? From what to what? Why? What is the cost in FY 1975 and FY 1976? What would be the FY 1976, saving if the previous policy were reinstated?

Anwer: (Navy) No changes have been made by the Navy to increase to limitation of weight allowances for Household Goods shipments on unaccompanied tours to the Pacific.

Marine Corps). The weight allowance for unaccompanied baggage for those Marines assigned a Fleet Marine Force (FMF) Western Pacific unaccompanied tour and for married personnel who elect an all other tour was increased from 250 pounds to 500 pounds effective 1 January 1975. The original restriction was undesirable but necessary to maintain fiscal solvency within the inflation prone Permanent Change of Station account during Fiscal Year 1974. Inputs from Field Commanders indicated that the baggage restriction was having a significant adverse impact on morale. The restriction was eased when the required funds, amounting to $480,000, were identified during the second quarter of Fiscal Year 1975. The funds became available after an examination of expenditures versus obligations showed that the budgeted rates were slightly high.

The Fiscal Year 1976 Manpower Plan permits all WestPac personnel (FMF) to ship ten (10) percent of their maximum authorized allowance which would be consistent with requirements and would be equitable with the policies of the other services.

The cost, for Fiscal Year 1976 to increase from the 250 pounds restriction to a ten (10) percent restriction is $2.5 million.

Reduction of Average Civilian Grade

Chairman McClellan. Are the Navy and Marine Corps taking steps to reduce the average civilian grade?

Answer: (Navy). Yes.

Chairman McClellan. What specific steps are being taken to reduce the Department of the Navy's average civilian grade?

Answer: (Navy). It is the policy of the Department of the Navy (DON) to reduce the number of high grade civilian positions (GS–13 through GS–15) and its average grade by urging the application of position management principles and standards which have been in effect for several years and by greater emphasis on proper application of position classification standards. Each major claimant/component within DON has been assigned an average grade level target for FY 75 and FY 76 which corresponds to their input to DON's distribution of General Schedule positions, identified as the Schedule of Permanent Positions, Exhibit 35 required by OMB Circular A–11. Two SECNAV Instructions on position management and control of General Schedule grade distribution control have been issued within the past six months.

The emphasis on DON's grade control program is to realize a reduction of high grade positions since reductions at these levels will result in significant savings in expenditures. Each major command/component within DON has been assigned a FY 75 target for GS–13/15's and each command is monitored on a monthly basis as to their progress in achieving their target. The effectiveness of position management programs and the accuracy of position classification decisions have recently been made items of special Secretarial concern on the periodic evaluations of activity's civilian personnel program.

Reduction-in-force shall not be used solely to achieve average grade and/or high grade targets but *may* be used by major claimants in order to achieve greater efficiency or economy of operations.

Chairman McClellan. What savings would accrue, by appropriation, if the objective average grade were met in FY 76?

Answer: (Navy) Any savings resulting from a lower average grade were taken into account when developing the Navy's budget submission. The Navy's current average grade is 7.43 compared with a FY 1975 budgeted level of 7.36. The latter figure is expected to be reached by the end of FY 1975 through various management actions including internal reorganizations, reclassification of positions becoming vacant, lapses in filling vacancies, and imposition of high-grade controls on all Navy major commands.

Related to the budget, status is as follows:

Fiscal year 1975 average grade target	7.36
Fiscal year 1976 average grade target	7.32
Difference	—.40

Many variables influence the composition of the average grade and any projection of the value of four one-hundreds of a grade point applied to a work force of more than 80,000 is somewhat conjectural particularly since the projected decrease will occur at a gradual rate throughout the year. Nevertheless, it could be theorized that savings of approximately $5.5 million might accrue. However, the validity of this figure is questionable as it was derived by applying theoretical values to increments of a grade point.

Marine Corps Steps To Reduce Average Civilian Grade

Chairman McClellan. Is the Marine Corps taking steps to reduce the average civilian grade? Describe the specific steps being taken. What is the Marine Corps average civilian grade, and what is the Marine Corps objective? What savings would accrue, by appropriation, if the objective average grade were met in FY 1976?

Answer. (Marine Corps) The Marine Corps reduced the average grade of its civilian workforce from 6.29 in Fiscal Year 1972 to 6.16 in Fiscal Year 1973. The average grade increased during Fiscal Years 1974 and 1975 to 6.24. This increase was caused by the addition of 1194 civilian positions for the Civilian Substitution Program. The average grade planned for Fiscal Year 1976 is 6.24 or at the same level as Fiscal Year 1975. The objective of the Marine Corps average grade control is to maintain a grade level consistent with workload and requirements. Since the average grade planned for Fiscal Year 1976 is level with that for Fiscal Year 1975 there are no anticipated savings related to average grade in Fiscal Year 1976.

Chairman McClellan. Explain the Navy's "CNO Scholars" program. How many individuals are involved in FY 1974–75–76? What is their full cost, by appropriations? What purpose does this program serve? Aren't any other similar programs available?

Answer. The Navy's CNO Scholars Program permits a small group of highly selected officers the opportunity to pursue graduate education in fields of study compatible with their respective specialties and subspecialties, and within the framework of Navy P-coded billet requirements.

Officers must possess a baccalaureate degree, and must have demonstrated unusually high academic excellence in attaining such degree. Officers elect graduate fields of study embraced by existing postgraduate quotas to attend an American college or university.

In FY–74, 10 officers were selected and 7 were enrolled in graduate programs. In FY–75, 10 officers were selected and 6 were enrolled in graduate programs. For FY–76, 10 officers were selected and it is anticipated that 8 will be enrolled in graduate programs.

	Dollars
Fiscal year 1974	
O. & M.N	41,848
MPN	249,240
Fiscal year 1975	
O. & M.N	41,389
MPN	252,730
Fiscal year 1976	
O. & M.N	40,000
Projection	
MPN	250,000

The Program identifies highly qualified, professionally competent officers and offers a certain measure of prestige for those selected for graduate work in their respective specialties or subspecialties.

Chairman McCLELLAN. Provide a list of all Navy and Marine Corps agencies involved in analytical studies in FY 1975 and FY 1976. (This should include all agencies primarily engaged in operations research and systems analysis activities.) For each organization, as well as the total Navy/Marine Corps effort, provide for FY 1975–76 staffing levels, both military and civilian, contractual efforts, total budget authority and computer resources available. Also, give a mission and responsibility statement for each agency.

Answer. The only activities funded within the Operation and Maintenance, Navy appropriation engaged primarily in operation's research and systems analysis are the Naval Weapons Systems Analysis Office and the Systems Analysis Division of the Naval Facilities Engineering Command, both located in the Washington, D.C. area. Enclosures (1) and (2) attached provide a description of these activities and provide mission and responsibility statements, staffing, contractual effort, budget authority, and computer resources available.

NAVAL WEAPONS SYSTEMS ANALYSIS OFFICE, NAVAL AIR SYSTEMS COMMAND

[Dollar amounts in thousands]

	Staffing levels		Total budget authority		Contractual effort	Computer resources available
	Civilian	Military	O. & M.N.	MPN		
Fiscal year:						
1975	18	1	$459	$27	.....	$80
1976	22	1	439	27	.....	80

Mission Statement: Principal work of this office involves the application of operations research/systems analysis techniques to: (1) evaluate support concepts and develop resource requirements and levels, (2) evaluate operational capability in terms of either availability or mission effectiveness, (3) develop force level requirements and (4) develop computer programs and procedures for managers to evaluate data, determine program requirements and costs, and establish long-range plans. Projects relate to the planning, programming, budgeting operations and support of naval aviation for the Naval Air Systems Command. Its purpose is to evaluate alternative courses of action to provide management with an objective, systematic, and analytic basis for decision making.

SYSTEMS ANALYSIS DIVISION, NAVAL FACILITIES ENGINEERING COMMAND

[Dollar amounts in thousands]

	Staffing levels		Total budget authority		Contractual effort	Computer resources available
	Civilian	Military	O. & M., N.	MPN		
Fiscal year:						
1975	1	9	212	27	40	20
1976	1	9	172	27	.....	20

Mission Statement: To provide an improved quantitative basis for executive decisions on ways and means of determining and satisfying the shore facilities needs of the Navy by taking a MACRO (broad), as opposed to a line item (MICRO), view of facilities requirements vs. available assets. To coordinate the Facilities Planning for the Assistant Commander in his capacity as Program Manager.

Assignment of Responsibility: The Director of the Systems Analysis Division under the direction of the Assistant Commander for Facilities Planning is responsible for the successful accomplishment of the mission and the effective management of his organization.

Agencies Moved to New Orleans

Chairman McClellan. Describe in detail the agencies being moved to New Orleans, Louisiana, to consolidate Navy Personnel Management. What is the manning, civilian and military, of all agencies being relocated and what are the annual expenditures? What is the cost of the move for each agency being moved? What will the total revised strength in New Orleans be for all these organizations and how many positions will be reduced?

Answer. The consolidation of Navy Personnel Management activities is currently taking place and involves the relocation of seven activities and a major portion of the Bureau of Naval Personnel. Detailed information is as follows:

The Personnel Accounting Machine Installation Pacific, at San Diego; the Personnel Accounting Machine Installation Atlantic, at Norfolk; and the Personnel Accounting Machine Installation Continental United States, at Bainbridge, will be consolidated as the Personnel Management Information Center at New Orleans (PERMIC). This activity is responsible for maintaining computer records of enlisted personnel on active duty by collecting information to update records and produce reports from those records for use by all levels of personnel management in the Navy.

The Enlisted Personnel Distribution Office Pacific, at San Diego, and Enlisted Personnel Distribution Office Atlantic, at Norfolk, will be consolidated as the Enlisted Personnel Management Center at New Orleans (EPMAC). This activity is responsible to the Manning Control Authorities (Fleet Commanders and BUPERS) for carrying out manning priority policies for the activities under their cognizance.

The Naval Reserve Manpower Center, Bainbridge, and the Naval Officer Records Support Activity, Omaha, will be consolidated as the Naval Reserve Personnel Center at New Orleans (NRPC). This activity is responsible for administering, accounting for, and maintaining the service records of all inactive duty naval personnel not assigned to a naval reserve program, and assigning inactive duty naval personnel to mobilization billets. In addition, NRPC will be responsible for evaluating and recording participation of naval reserve officers in naval reserve programs under applicable laws, and providing participation data to bureaus, offices, commands, and individual officers.

CY 78 Move

A major portion of the Bureau of Naval Personnel at Washington (BUPERS) will be relocated as the Naval Personnel Center at New Orleans (NPC). Approximately 335 of the present positions in BUPERS will remain in Washington. The Bureau of Naval Personnel is responsible for the planning and direction of procurement, distribution, career motivation, and administration of Navy Personnel to meet the quantitative and qualitative manpower requirements of the U.S. Navy, as determined by the CNO, and for development and implementation of service-wide programs for improved human relations.

1975 Relocation

The manning, civilian and military, for all activities is as follows:

Total positions before move (civilian and military)	920
Revised strength after move (civilian and military)	785
Positions reduced incident to move	−135

1978 Relocation

Total positions before move (civilian and military)	2,600
Positions at Naval Personnel Center (NAS New Orleans) (civilian and military)	2,000
Positions at Naval Personnel Center (NSA Building 603) (civilian and military)	150
Positions remaining in Washington (civilian and military)	335
Positions reduced incident to move (civilian and military)	−115

Total Reductions

Total positions reduced 1975 move	−135
Total positions reduced 1978 move	−115
Total reductions	−250

	Fiscal year 1976 congressional budget, fiscal year—		
	1975	1976	197T
PAMIPAC	802		
PAMILANT	837		
PAMICONUS	1,462		
PERMIC	948	4,594	1,263
EPDOPAC			
EPDOLANT			
EPMAC		659	166
NRMC	2,508		
NORSA	279		
NRPC		4,183	1,023
Bupers:			
Headquarters	23,631	26,605	6,758
NPPSA	2,629	3,754	883
Total	33,096	39,795	10,093

1975 Move

Total cost of the move for all activities is as follows:

Enlisted Personnel Management Center; Personnel Management Information Center; Naval Reserve Personnel Center	$1.9M
Move costs 1978 (Bupers operating functions)	11.5M
Total Move Costs Due to Consolidation of Navy Personnel Management Activities	13.4M

This amount estimated on 40% of the affected 1000 civilians opting to relocate to New Orleans. Though no survey has been conducted due to the three years remaining prior to the move, past Department of Defense experience indicates about 40% will relocate.

The 1975 move cost of $1.9 million includes $.3 million in FY 1975 and $1.6 million in FY 1976. The 1978 move cost of $11.5 million cannot yet be broken by fiscal year. This will be done as planning/dates firm up in the next year or so.

Ship Manning Concept in ASW Destroyers

Chairman McClellan. Describe the new ship manning concept being tested in ASW destroyers involving 80/20% active/reserve manning. What specific dollar savings in FY 1976 were programmed as a result of this concept? Will it require establishment of additional reserve ship reinforcement units? Will these come from within Naval Reserve manpower already existing? What will be the additional cost of travel. What is the military value of the 80/20 ships—could they be deployed overseas, or would the reserve component need to be activated first?

Answer. The 80/20 program provides for active ASW ships to be manned by 80 percent active personnel with the remaining 20 percent coming from the selected reserve upon mobilization. The initial five ships will undergo a two year period of program feasibility validation after which the program may be extended.

Specific savings of $3 million ($1.7M MPN+$1.3M O&MN) are programmed for FY 76 as a result of this concept.

Establishment of additional reserve ship reinforcement units is not planned for the initial five ships. If the program expands beyond the five initial ships it would not be feasible to reinforce all participating ships with units in the immediate homeport area. Therefore, to support program validation, a portion of the initial ships will be supported by units located in other than immediate homeport areas. The final determination of reserve unit location has not been made.

Once specific billets have been determined for manning by reserve personnel the necessary manpower quantity and quality will be determined. It is anticipated that reserve personnel will come from within already existing manpower.

Travel costs are not established and can only be determined after unit location is finalized and billet manning requirements are specified.

Ships assigned to the 80/20 program are maintained in a high state of material readiness consistent with mobilization on short notice, but requiring personnel

augmentation to attain full operational capability. These ships will meet training and operational commitments commensurate with reduced manning but will not routinely deploy overseas because of the reduced operational capability. In the event of non-mobilization contingencies the ships could deploy following augmentation with active personnel drawn from the shore establishment. Reserve components would be activated only upon mobilization; or, when authorized by the President in a national emergency.

Allowances in TDY Status

Chairman McClellan. Are military personnel paid allowances while in a TDY status, even if they are provided government quarters and meals? If so, what amount is provided to officers, and what amount to enlisted? For what reason are these payments made? If there is a difference between officers and enlisted payments, explain.

Answer. Military personnel do continue to draw their allowances while in a TDY status, even if they are provided government quarters and meals, except that enlisted members would lose subsistence allowance if they were drawing it. The member would normally still maintain his residence at his permanent station while on TDY. Per diem allowances are paid to partially offset the additional expenses which are incurred as a result of the temporary duty.

(a) The regular allowances would be in accordance with current rates and are dependent upon many variables, i.e., pay grade, whether the member was authorized BAQ at his/her permanent station or, whether the permanent station was in CONUS or at some overseas locations where station allowances were paid.

(b) Travel and Per Diem Allowances.

(1) Travel allowances for temporary duty would be the same for all personnel.

(2) Per Diem allowances vary and are provided to partially defray the additional expenses incurred as a result of the TDY. A variance also exists dependent upon whether the TDY is individual or unit temporary duty. Considering government mess and quarters are available the following rates would be applicable.

(a) Individual TDY. The per diem rate is $8.30 for officers and $2.00 for enlisted members. These rates would be increased in the amount of any charge paid for the use of the Government quarters. The additional $6.30 paid to the officer is to compensate for his meals, in that although a Government mess is available, he is required to purchase individual meals whereas the enlisted member receives the meals without charge. The $6.30 is the daily amount of surcharges to an officer subsisting from a General Mess. If subsistence is furnished the officer without charge, the per diem rate is reduced to $2 per day. The $2 rate prescribed for an enlisted member will be increased by $3.10 for each meal not available in a Government Mess on days when less than 3 meals are available.

(b) Unit TDY. The per diem rate is $6.70 for officers and $2.00 for enlisted. Again the officer must still pay for his meals while the enlisted does not. The $2 rate for enlisted is increased by $3.10 for each meal not available in a Government mess on days when less than 3 meals are available.

Agency Relocations Within Navy and Marine Corps

Chairman McClellan. Are there any Navy or Marine Corps agencies moving from one building to another within the Washington, D.C. area? Identify them, give costs, number of people affected, and the reasons for such moves.

Navy answer. The following relocations are planned in FY 1975 and FY 1976:

Activity	Present location	New location	Number of personnel	Cost	Reason for move
Naval ship engineering center	Prince Georges Center	Crystal Plaza	1,784	$2,600,000	Achieve efficiencies and economies of operations.
Navy council of personnel boards	Arlington Annex	Ballston Center Tower No. 1	37	20,000	Merge with Office of Naval Disability Evaluation. Vacated space to house the joint message Center.
Navy recruiting command	Ballston Center Tower No. 3	Ballston Center Tower No. 2	130	50,000	Final phase of consolidation. Vacated space will be returned to GSA.
BUPERS personnel	Ballston Center Tower No. 2	Ballston Center Tower No. 1	41	5,000	Colocate with remaining BUPERS personnel within Navy recruiting command.
BUMED personnel	Crystal Mall No. 2	Potomac Annex	25	4,000	Organizational adjustment and drawdown of space.
Naval material command offices	Crystal Plaza No. 6	Crystal Plaza No. 5	108	35,000	Organizational realignment to make space for NAVSEC.
	Crystal Plaza No. 5	Crystal Plaza No. 6	49		
Naval weapons engineering activity	Jefferson Plaza	Washington Navy Yard Bldg. No. 220.	177	63,000	Consolidation to achieve economies.
Habitability design development workshop	Washington Navy Yard Bldg. No. 220.	Eads St. Warehouse	0	1,500	Provide space to Naval Weapons systems office.
Navy occupational task analysis group	Bolling AFB, Bldg. No. 1304	Washington Navy Yard Bldg. No. 150.	78	[1] 136,000	Colocation. Must vacate Air Force space.
Naval audit service headquarters	5600 Columbia Pike, Arlington	NASSIF Bldg., Arlington, Va.	12	5,000	Colocate with remainder of headquarters.
Navy warehouse	Federal Records Bldg., Alexandria, Va.	Eads St. Warehouse	0		GSA has given building to city of Alexandria. Must vacate.
Marine Guard Co	Washington Navy Yard Bldg. No. 58.	New Barracks, 8th and I Sts.	144		Move to new barracks. Vacated space to be used for Marine Corps Historical Center.
Marine Corps Historical Center	Arlington Annex, Henderson Hall.	Washington Navy Yard Bldg. No. 58.	52	1,800,000	See above. MILCON funded, fiscal year 1975.

[1] Due to cost of warehouse space renovation move is under evaluation.

(Marine Corps) There are no Marine Corps agencies moving.

Radio and TV Advertising for Recruiting

Chairman McClellan. Does the Navy or Marine Corps plan to use paid radio and TV advertising for recruit purposes in fiscal year 1975 or fiscal year 1976? If so, how much is planned for each fiscal year? If not, why not?

Answer. (Navy) The Navy and Marine Corps do intend to use paid radio advertising for recruiting purposes using FY 1975 funds. As a result of Congressional agreement and DOD approval for the services to test the effectiveness of paid spot radio advertising as a recruiting tool, the Navy and the Marine Corps plan to join with the Air Force and Army in a thirteen week test of paid radio in selected markets across the country starting approximately 1 September. The preparation and scheduling of the radio spots requires a lead time of six months when letting a contract which accounts for the use of FY 1975 funds. Navy expects to expend approximately $350,000 for purchase of time and $12,000 for the purchase of production of the radio spots. Marine Corps expects to spend $200,000 for time and $20,000 for production. The test will extend over a thirteen week period. The tracking research, which is intended to measure the relative effectiveness of the radio advertising and which is being sponsored by OSD (M&RA) will take an additional two to three months to complete. Present plans of both the Marine Corps and Navy call for the use of paid radio in FY 1976 and are contingent on:

(a) Results of Army tests in this area.

(b) The outcome of this test and, if radio proves to be an effective recruiting communications tool.

(c) The subsequent approval of the Congress for the ongoing use of paid radio advertising for recruiting.

Navy and Marine Corps do not anticipate using paid television in FY year 1975 since DOD has not received the expressed approval of Congress to do so. Any use in FY 1976 will, of necessity, be preceded by approval from the Congress and from DOD. Both the Navy and the Marine Corps anticipate that any use of paid television advertising would be extremely limited because of the high cost of the medium. Wider use of television would require additional funding above current budget requests.

(Marine Corps) The Marine Corps does intend to use paid radio advertising for recruit purposes. As a result of recent Congressional approval for the services to test the effectiveness of paid radio advertising, the Marine Corps will join with the Navy and Air Force in a thirteen week test in selected markets across the country. Said test will commence approximately 1 July 1975. The Marine Corps expects to spend approximately $200,000 for time and $20,000 for production. In addition to the thirteen week test, the Marine Corps has been advised by OSD (M&RA), sponsors of the test, that tracking research designed to measure the relative effectiveness of radio advertising, will probably take an additional two to three months to complete. Present plans call for the use of paid radio in fiscal year 1976 contingent on the outcome of the thirteen week fiscal year 1976 test and subsequent approval of the Congress for the ongoing use of paid radio advertising for recruiting. The Marine Corps does not anticipate using paid television in fiscal year 1975 since we have not received Congressional approval to do so. It is anticipated that any use in fiscal year 1976 will, of necessity, be preceded by approval from the Congress. The Marine Corps anticipates that use of paid television advertising will be extremely limited because of the high cost of the medium. A more pervasive use of television will likely require additional funding above current budget requests.

GAO Recommendation for Marine Corps Centers

Chairman McClellan. GAO recommended that civilians rather than military be used at the Marine Corps Finance Center and the Automated Services Center. What would be the annual civilian cost of implementing the GAO recommendation? How much in military personnel cost would be saved? How would the Marine Corps rotation base be significantly affected, with such a small number of personnel involved?

Answer. The annual civilian cost of implementing the GAO recommendation would be approximately $3.2 million. Military personnel costs are approximately $3.5 million. Therefore savings would be approximately $.3 million. As to the

impact of the GAO recommendation on the Marine Corps rotation base, Marine Corps policy on assignment is that Officers will be assigned to meet the needs of the Marine Corps based on grade, MOS and special qualifications and that Enlisted Marines will be assigned to meet the needs of the Marine Corps. This policy is paramount in meeting assignment requirements, however, additional considerations are that the normal three year CONUS tours will be served to the maximum extent practicable and that a goal of five years between unaccompanied tours is met to the maximum extent practicable. The complete civilianization of the Centers has an impact on rotation when computed in relation to the training and skills required at overseas locations. The small occupational field population of each of these fields, Disbursing and Data Processing, causes larger rotation base fluctuations than would affect the entire Marine Corps rotation base. The retention of the military positions the Marine Corps has programmed at the Marine Corps Finance Center will allow a Disburser to transfer every 4.4 years. Using the data contained in the GAO report, the civilianization of these Marine positions will require the rotation of a Marine to an overseas location every 3.7 years. The retention of the military positions that the Marine Corps has programmed at the Marine Corps Automated Services Center requires a data Processor to transfer every 3.1 years. Using the data contained in the GAO report, the civilianization of these Marine positions will require the rotation of a Marine to an overseas location every 2.7 years.

Subsistence Allowances to Enlisted Men

Chairman McClellan. What experiments have been made with payment of subsistence allowances to all enlisted men, then attempting to attract more of them to use dining halls on an a la carte basis? Describe them, including the additional military personnel costs associated therewith. Also indicate what modifications to the dining halls, what additional civilian personnel are involved, if any, and the additional costs associated with such experiments. Has this concept resulted in attracting more enlisted personnel to the use of the dining halls?

Answer. To date, the Navy has not experimented with the payment of subsistence allowances to all enlisted men in an attempt to attract more of them to use dining facilities on an a la carte basis. However, currently the U.S. Army Natick Development Center is involved in collecting data at the request of the Navy in an effort to determine the feasibility of conducting such an experiment.

Ship Overhauls

Chairman McClellan. When a ship goes through normal overhaul procedures, it is normal for its homeport to be shifted. Taking the overhauls in the FY 1974 and FY 1975 budget, discuss each ship's homeport and where (if) the homeport was shifted during a regular overhaul. What happens to the ship's normal crew complement when homeport is shifted. Are these personnel transported to the new homeport at government expense? What was the cost of transporting such personnel for homeport shifts in FY 1974 and FY 1975? What do the military personnel do while a ship is in overhaul?

Answer. Of the 89 overhauls begun in FY 1974, 34 ship's homeport reassignments were made, and, of the 80 overhauls scheduled to commence in FY 1975, 30 homeport reassignments have been made to date. It is Navy policy that the duration a ship must be absent from its normal homeport before qualifying for homeport reassignment due to overhaul is six months. As can be seen above, the majority of Navy ships undergoing overhaul do not shift homeports. The costs in FY 1974 and FY 1975 of the above shifts are:

(Dollars in millions)

Fiscal year 1974	2.2
Fiscal year 1975	2.3

Prior to overhaul commencement, ship manning is normally reduced. Ships crews are transported to the overhaul location aboard ships; while families, who elect to move, travel via public transportation at government expense. Those military personnel who remain aboard ships undergoing overhauls play vital roles in checking work performed by yard personnel, in performing significant

amounts of preventive and corrective maintenance on equipments not being worked on by the yard, and in providing necessary security and administration preparatory to the ship rejoining the fleet for full operations.

As noted above, 34 ships were reassigned homeports in FY 1974 and 30 have been reassigned to date in FY 1975. The reasons for such reassignments have been (1) lack of overhauling yards in normal fleet operating areas, (2) transfers of ships among fleets and forward deployments coincident with scheduled overhauls, (3) assignment to "unique capability" yards (e.g., SSN and SSBN work, etc.), (4) assignment due naval yard workload balancing, and (5) assignment due low bids by private yards.

O&M,N

Chairman McClellan. Describe the source of reimbursement to the O&M,N account, reasons why Navy is performing this work or providing these items, and give dollar amounts for each source.

Answer. Approximately 55 to 56% of the reimbursement work is from within the O&M,N appropriation and represents work and service provided between O&M,N funded Naval Activities, includes such items as utilities, transportation, maintenance and repair of real property, etc. Additionally, this same type of work and service is provided between Naval activities funded by other appropriations such as RDT&E,N. One large source of reimbursement is from the Family Housing O&M account (approximately 18%). Only about 1% of the reimbursement work is from non-Federal sources. The present accounting system does not provide identification of the specific appropriation or account which was the source of reimbursement.

Chairman McClellan. Explain why and how an unobligated balance is available in this appropriation at the end of the year (1973), but then after 1973, none is available. What special case accounted for an available unobligated balance at the start of FY 1974?

Answer. Paragraph 23004 (b) of the DOD Accounting Guidance Handbook (DOD 7220.9H) provides that:

At the end of each fiscal year, a determination will be made as to any earned (or obligated) but uncollected reimbursements which are not required to cover existing or anticipated obligations against expiring or expired appropriation. To the extent authorized by law and subject to prior approval by the ASD(C), such reimbursements may be recorded under the ensuing year's appropriation account and established as opening balances in that account.

Pursuant to that authority, $18,250,800 of reimbursement receivables was credited to the FY 1974 Operation and Maintenance, Navy (O&M,N) account as of 30 June 1973 and reflected as an unobligated balance on the annual certification report of the Department of the Navy to the Treasury on TD Form BA–R 2108 prepared pursuant to 31 U.S.C. 200 and 701.

The President's Budget for FY 1975 reflected this transaction as an "Unobligated balance available, end of year" in the FY 1973 column of the Program and Financing Schedule with an off-setting "Unobligated balance available, start of year" in the FY 1974 column. In effect, therefore, a balance was transferred from the FY 1973 and prior year accounts to the FY 1974 account. The specific O&M,N source accounts were FY 1973 ($14 million) and FY 1971 ($4,250,800).

Shortly after the final closing of the books for FY 1973, it was determined that the $14 million transferred from the FY 1973 account was required in that account to cover upward obligation adjustments known and/or anticipated. Accordingly, the entire amount was returned from the FY 1974 account to the FY 1973 account, as permitted by statute and DOD Accounting Guidance Handbook. Of the remaining $4,250,800, it was determined that $1,860,920 was uncollectible and written-off the books. Therefore, the ultimate net credit to the FY 1974 O&M,N account was $2,389,880.

TRIDENT Facility

Chairman McClellan. Why are 60 additional civilians required in FY 1976 for the TRIDENT Facility?

Answer. The FY 1976 TRIDENT budget includes a request of 69 civilians, 61 more than required in FY 1975. The requirement for these additional personnel is directly related to the activation of the TRIDENT Support Site, located at Bangor, Washington. The initial operational capability dates for the various facilities which comprise the TRIDENT Support Site extend from early 1977 for the TRIDENT Training Facility to October 1978 for the TRIDENT Refit

Facility. In order to meet these operational need dates, people must be available in FY 1976 to conduct activation planning for the entire Support Site, coordinate and monitor the positioning and installation of numerous equipments and materials, conduct public works functions and provide administrative support such as the preparation of operating procedures and instructions. Staffing in subsequent years will increase as additional civilians must be brought onboard to actually operate equipments and conduct varied operations of the Support Site including supply, maintenance, repair, training and administration.

Chairman McCLELLAN. Explain the need for the increase of 291 in end strength for SUPSHIPS and how will this increase be distributed?

Answer. The increase of 291 in end strength in FY 1976 over FY 1975 is attributable to an ever increasing Navy workload in the private sector, primarily in the repair area. As total Navy shipwork increases, private shipyard workload increases in compliance with Congressionally established floors. In addition, to avoid future claims and requests for equitable adjustment, the Navy must impose more stringent procedures on its activities responsible for contract administration. SUPSHIP workload has increased 68% from FY 1973 through FY 1976 projections while staffing has increased 18% over the same period.

The following distribution is based on currently projected workloading:

Brooklyn	30
Portsmouth	38
Charleston	10
San Diego	40
San Francisco	31
Seattle	35
Pearl Harbor	5
Bath	17
Groton	16
Jacksonville	31
Newport News	5
Pascagoula	8
Long Beach	25

INCREASE IN CRIMINAL INVESTIGATORS

Chairman McCLELLAN. Why is there an increase of 93 criminal investigators—is this directly related to workload?

Answer. A significant increase in workload requirements, both past and projected, is the basis for the requested increase in manpower and support for the Naval Investigative Service (NIS). A fairly significant part of the workload increase arises from greater NIS effort on initiative operations designed to prevent or inhibit crime or security threats. Anti-narcotics trafficking operations overseas with local authorities not only help to dry up the supply available to Naval personnel, but generate investigations when they disclose participation by such personnel. Fraud surveys of supply and repair facilities and shipyards are extremely cost effective in identifying weaknesses susceptible to criminal exploitation. Twelve such surveys were done in calendar 1974; 16 done or in progress for January–June 1975; 18 scheduled for July–December 1975; and the new personnel requested (63 Special Agents and 30 clerical billets) will allow for well over 40 surveys in 1976. NIS counterintelligence operations to detect and neutralize hostile intelligence approaches to Naval personnel are running at a level 60% higher than in the spring of 1974.

SHIP REPAIR FACILITIES, PACIFIC

Chairman McCLELLAN. Explain the increase of 163 civilians in the Ship Repair Facilities, Pacific.

Answer. Overtime rates at the Ship Repair Facility, Subic Bay, Philippines have recently averaged as high as 45%. The additional civilian end strength is intended to reduce the overtime rate to a more reasonable level.

Chairman McCLELLAN. For what reason are 126 additional civilians required at Naval Air Stations for supply support?

Answer. Heavy reduction in civilian personnel controls over past years has served to impair mission capability, and increase the backlog of material readiness. As part of an effort to improve the material condition of operating forces units, increases are needed in supply operations manpower at Naval Air Stations under CINCLANTFLT.

Chairman McClellan. How many military positions at medical activities were deleted in connection with the increase of 50 civilian positions?

Answer. As part of the Shore Establishment Realignment, 57 military billets at the Long Beach Dispensary will be civilianized by FY 1976 requiring conversion of military allowance to civilian end strength.

SSBN Operations

Chairman McClellan. Why is there an increase of 32 months of SSBN operations in FY 1976? Provide comparable data, FY 1974, FY 1975, FY 1976. What is the per month cost of operation of an SSBN?

Answer. The increase of 32 months of operations reflects an increase in the number of operating SSBNs during FY 1976. The budget does not discriminate between operational costs during availabilities as opposed to underway operations; therefore, a monthly operational cost is not available.

Operating months and total operational cost for the strategic fleet in FY 1974, FY 1975, and FY 1976 is as follows:

	(Dollars in millions)
Operating months:	
Fiscal year 1974	360
Fiscal year 1975	392
Fiscal year 1976	424
Total ship operating costs:	
Fiscal year 1974	9.5
Fiscal year 1975	11.9
Fiscal year 1976	15.3

Extended Operating Cycle Program

Chairman McClellan. Explain why support costs increase as a result of the Extended Operating Cycle Program. How much is this increase in FY 76?

Answer. Support costs under the Ship Operations line increase by approximately $1 million during FY 76 as a result of the increased deployed level under the Extended Operating Cycle Program. It is further anticipated that additional repair parts, supplies and equipage will be required to support SSBNs operating more than six years between shipyard overhauls.

SSBN Overhauls

Chairman McClellan. Identify the overhauls now programmed, by hull number, FY 74–80. Also provide the estimated cost per overhaul (O&MN funded). What types of O&M funded equipment for SSBN overhauls requires advance funding. How many is included in FY 76 and each of the two prior years for advance funding of SSBN overhauls.

Answer. (Navy). Listed below are the FY 1975 and FY 1976 overhaul costs sheets for the active fleet provided the House Appropriations Committee in April 1975. Data for the period FY 1977–1980 has yet to be finalized. Those types of O&M funded equipment for SSBN overhauls which requires advance funding includes salt water pipe, fittings, and valves, pump parts, electrical switch gear, bearings and seals, and incidental material for alterations installation (e.g., certain electronics cable). Advance funding for SSBN overhauls in FY 1974/1975/1976 is:

	(Dollars in millions)
Fiscal year 1974	7.1
Fiscal year 1975	4.5
Fiscal year 1976	10.8

Regular Overhaul Schedule
FY 1975 Column of FY 1976 Congressional Budget
Repair Costs

Hull No.		Name	Date	($ in Thous.)
CV	64	CONSTELLATION	2/75 - 2/76	$ 36,868
	66	AMERICA	12/74 - 10/75	29,413
SSBN	611	JOHN MARSHALL	11/74 - 2/76	43,780
	618	THOMAS JEFFERSON	7/74 - 10/75	36,505
SSN	585	SKIPJACK	7/74 - 4/76	25,654
	588	SCAMP	8/74 - 10/75	17,305
	591	SHARK	8/74 - 2/76	22,548
	613	FLASHER	3/75 - 7/76	31,501
	664	SEA DEVIL	7/74 - 7/75	12,651
	666	HAWKBILL	12/74 - 12/75	13,902
	670	FINBACK	7/74 - 7/75	15,429
	674	TREPANG	10/74 - 10/75	12,541
	676	BILLFISH	1/75 - 1/76	11,654
DDG	2	CHARLES F. ADAMS	1/75 - 11/75	7,882
	13	HOEL	1/75 - 10/75	7,233
	14	BUCHANAN	2/75 - 12/75	6,983
	16	JOSEPH STRAUSS	7/74 - 5/75	8,461
	17	CONYGHAM	10/74 - 9/75	7,397
	19	TATTNALL	6/75 - 4/76	8,574
	24	WADDELL	1/75 - 11/75	7,073
	31	DECATUR	4/75 - 2/76	7,117
	32	JOHN PAUL JONES	5/75 - 3/76	7,141
	34	SOMERS	1/75 - 10/75	7,735
DLG	14	DEWEY	4/75 - 2/76	6,605
	22	ENGLAND	5/75 - 3/76	6,798
	29	JOUETT	4/75 - 3/76	6,998
	34	BIDDLE	3/75 - 1/76	6,289
DD	937	GEORGE F. DAVIS	1/75 - 9/75	7,830
	938	JAMES INGRAM	10/74 - 6/75	7,505
	941	DUPONT	6/75 - 2/76	6,938
	948	MORTON	4/75 - 12/75	7,204
	950	RICHARD S. EDWARDS	4/75 - 11/75	7,006
DEG	5	RICHARD L. PAGE	4/75 - 12/75	6,213
	6	JULIUS A. FURER	1/75 - 10/75	7,010
DE	1038	McCLOY	5/75 - 9/75	2,580
	1047	VOGE	9/74 - 5/75	5,595
	1048	SAMPLE	8/74 - 4/75	5,363
	1059	W.S. SIMS	6/75 - 3/76	4,872
	1062	WHIPPLE	5/75 - 12/75	4,595
	1064	LOCKWOOD	4/75 - 11/75	3,694
	1066	MARVIN SHIELDS	7/74 - 2/75	3,410
	1067	FRANCIS HAMMOND	7/74 - 3/75	3,789
	1077	OUELLET	9/74 - 5/75	3,613

Hull No.		Name	Date	($ in Thous.)
PG	90	CANON	7/74 - 9/74	$ 560
	92	TACOMA	2/75 - 5/75	500
	93	WELCH	5/75 - 8/75	500
	98	GRAND RAPIDS	1/75 - 3/75	491
	100	DOUGLAS	1/75 - 3/75	526
AD	38	PUGET SOUND	4/75 - 10/75	3,335
MSO	490	LEADER	10/74 - 12/74	444
AG	521	ASSURANCE	5/75 - 7/75	309
LCC	20	MOUNT WHITNEY	7/74 - 2/75	6,664
LKA	115	MOBILE	7/74 - 11/74	3,000
	116	ST LOUIS	9/74 - 1/75	3,000
	117	EL PASO	7/74 - 1/75	6,357
LPD	1	RALEIGH	8/74 - 7/75	5,915
	10	JUNEAU	10/74 - 4/75	6,646
	11	CORONADO	12/74 - 5/75	6,004
LPH	7	GUADALCANAL	9/74 - 4/75	7,507
	10	TRIPOLI	3/75 - 8/75	7,278
LSD	30	FORT SNELLING	2/75 - 7/75	5,596
	31	POINT DEFIANCE	9/74 - 3/75	6,081
	33	ALAMO	12/74 - 4/75	5,169
	37	PORTLAND	6/75 - 12/75	5,357
LST	1180	MANITOWOC	1/75 - 6/75	3,959
	1185	SCHENECTADY	9/74 - 2/75	4,370
	1186	CAYUGA	1/75 - 6/75	5,275
	1187	TUSCALOOSA	7/74 - 12/74	4,963
AFS	2	SYLVANIA	6/75 - 11/75	3,854
	3	NIAGARA FALLS	10/74 - 3/75	4,262
	7	SAN JOSE	3/75 - 8/75	4,534
AO	99	CANISTEO	3/75 - 9/75	6,338
	145	HASSAYAMPA	2/75 - 8/75	5,911
AOE	3	SEATTLE	7/74 - 2/75	6,856
AOR	2	MILWAUKEE	2/75 - 9/75	6,668
ARS	7	GRAPPLE	9/74 - 1/75	1,762
	6	ESCAPE	5/75 - 11/75	1,413
	38	BOLSTER	3/75 - 7/75	1,762
	40	HOIST	9/74 - 3/75	1,352
	42	RECLAIMER	5/75 - 9/75	1,762
SUBTOTAL				$645,536
Advance Funding				$ 67,720
Change Orders				63,687
FY 1975 Column, FY 1976 Congressional Budget (80 overhauls)				$776,943

Repair Costs

Hull No.	Name	Date	($ in Thous.)
SSBN 598	GEORGE WASHINGTON	12/75 - 3/77	$ 38,029
629	DANIEL BOONE	1/76 - 5/77	33,722
AS 34	CANOPUS	1/76 - 9/76	12,881
36	L.Y. SPEAR	4/76 - 10/76	9,736
CVA 63	KITTY HAWK	1/76 - 1/77	36,514
SS 572	SAILFISH	1/76 - 11/76	9,706
576	DARTER	1/76 - 11/76	9,928
580	BARBEL	7/75 - 3/76	9,775
581	BLUEBACK	2/76 - 1/77	9,636
SSN 590	SCULPIN	7/75 - 11/76	26,359
605	JACK	10/75 - 2/77	31,711
606	TINOSA	8/75 - 12/76	23,768
612	GUARDFISH	9/75 - 3/77	32,723
647	POGY	7/75 - 7/76	20,125
650	PARGO	10/75 - 1/77	20,873
653	RAY	8/75 - 11/76	28,874
660	SAND LANCE	1/76 - 1/77	20,985
661	LAPON	1/76 - 4/77	22,202
672	PINTADO	10/75 - 10/76	14,379
675	BLUEFISH	7/75 - 7/76	17,202
678	ARCHERFISH	1/76 - 1/77	16,227
CLG 5	OKLAHOMA CITY	7/75 - 6/76	9,160
DLG 7	LUCE	6/76 - 7/77	8,422
18	WORDEN	2/76 - 12/76	7,753
30	HOWE	4/76 - 3/77	10,499
DDG 3	JOHN KING	9/75 - 7/76	9,093
4	LAWRENCE	12/75 - 11/76	9,909
8	LYNDE McCORMICK	10/75 - 8/76	10,896
10	SAMPSON	10/75 - 9/76	10,015
22	B. STODDERT	10/75 - 9/76	11,823
23	R.E. BYRD	8/75 - 6/76	9,158
DD 931	FORREST SHERMAN	1/76 - 11/76	9,236
933	BARRY	1/76 - 12/76	9,264
940	MANLEY	1/76 - 12/76	10,284
943	BLANDY	10/75 - 9/76	9,629
946	EDSON	1/76 - 10/76	9,387
DEG 3	SCHOFIELD	2/76 - 12/76	6,373
DE 1037	BRONSTEIN	4/76 - 11/76	4,134
1041	BRADLEY	9/75 - 6/76	7,780
1050	ALBERT DAVID	8/75 - 3/76	6,948
1051	O'CALLAHAN	5/76 - 2/77	8,013
1052	KNOX	10/75 - 7/76	7,639
1063	REASONER	10/75 - 7/76	6,836
1065	STEIN	1/76 - 11/76	6,851
1068	VREELAND	12/75 - 11/76	7,048
1071	BAUER	6/76 - 1/77	7,182
1072	BEARELY	7/75 - 3/76	6,625
1074	HAROLD E. HOLT	4/76 - 1/77	7,670
1075	TRIPPE	10/75 - 8/76	7,535
1076	FANNING	5/76 - 2/77	6,972
1078	JOSEPH HEWES	4/76 - 2/77	7,042
1079	BOWEN	5/76 - 3/77	7,752

Attachment #2

Hull	No.	Name	Date	($ in Thous.)
PG	86	ANTELOPE	1/76 - 4/76	$ 533
	87	READY	1/76 - 4/76	501
	101	GREEN BAY	7/75 - 10/75	513
MSO	448	ILLUSIVE	6/76 - 9/76	422
AG	520	ALACRITY	8/75 - 11/75	447
AD	19	YOSEMITE	1/76 - 6/76	3,152
LCC	19	BLUE RIDGE	10/75 - 5/76	7,344
LPD	5	OGDEN	7/75 - 1/76	6,399
	12	SHREVEPORT	3/76 - 10/76	7,283
	14	TRENTON	8/75 - 4/76	6,831
LPH	9	GUAM	9/75 - 3/76	7,306
	11	NEW ORLEANS	2/76 - 10/76	7,133
	12	INCHON	5/76 - 11/76	8,798
LSD	29	PLYMOUTH ROCK	8/75 - 1/76	5,445
	35	MONTICELLO	7/75 - 1/76	6,196
	38	PENSACOLA	11/75 - 5/76	6,482
LST	1181	SUMTER	8/75 - 2/76	4,817
	1188	SAGINAW	2/76 - 8/76	4,584
	1189	SAN BERNARDINO	7/75 - 1/76	4,895
	1191	RACINE	7/75 - 1/76	4,877
AGF	3	LA SALLE	2/76 - 9/76	6,046
AE	28	SANTA BARBARA	12/75 - 9/76	4,584
	29	MOUNT HOOD	11/75 - 7/76	6,877
AOE	2	CAMDEN	6/76 - 4/77	8,285
	4	DETROIT	4/76 - 2/77	11,491
AOR	3	KANSAS CITY	11/75 - 6/76	7,900
AFS	4	WHITE PLAINS	7/75 - 2/76	4,039
AR	5	VULCAN	1/76 - 8/76	2,764
ATF	103	HITCHITI	5/76 - 9/76	2,042
	105	MOCTOBI	10/75 - 2/76	1,963
	113	TAKELMA	1/76 - 5/76	1,963
	162	SHAKORI	10/75 - 2/76	1,329
ASR	8	COUCAL	6/76 - 10/76	1,726
SUBTOTAL				$856,747
Advance Funding				93,089
Change Orders				47,066
FY 1976 Congressional Budget (85)				$996,902

Attachment #2

Regular Overhaul Schedule
FY 1975 Column of FY 1976 Congressional Budget

Hull	No.	Name	Alteration Costs Total Cost ($ in thous.)
CV	64	CONSTELLATION	26,368
	66	AMERICA	21,398
SSBN	611	JOHN MARSHALL	8,780
	618	THOMAS JEFFERSON	8,560
SSN	585	SKIPJACK	4,296
	588	SCAMP	2,922
	591	SHARK	3,607
	613	FLASHER	3,543
	664	SEA DEVIL	2,902
	666	HAWKBILL	2,566
	670	FINBACK	2,434
	674	TREPANG	2,461
	676	BILLFISH	2,682
DDG	2	CHARLES F. ADAMS	6,980
	13	HOEL	6,238
	14	BUCHANAN	4,266
	16	JOSEPH STRAUSS	5,624
	17	CONYGHAM	7,246
	19	TATTNALL	6,747
	24	WADDELL	5,803
	31	DECATUR	3,962
	32	JOHN PAUL JONES	3,184
	34	SOMERS	3,824
DLG	14	DEWEY	7,271
	22	ENGLAND	2,980
	29	JOUETT	4,757
	34	BIDDLE	4,020
DD	937	GEORGE F. DAVIS	2,717
	938	JAMES INGRAM	3,000
	941	DUPONT	3,231
	948	MORTON	3,462
	950	RICHARD S. EDWARDS	3,266
DEG	5	RICHARD L. PAGE	4,933
	6	JULIUS A. FURER	4,727
DE	1038	McCLOY	800
	1047	VOGE	5,137
	1048	SAMPLE	3,331
	1059	W. S. SIMS	3,631
	1062	WHIPPLE	6,265
	1064	LOCKWOOD	2,073
	1066	MARVIN SHIELDS	1,371
	1067	FRANCIS HAMMOND	3,126
	1077	OUELLET	3,733

Hull No.		Name	Total Cost ($ in Thous.)
PG	90	CASCO	29
	92	TACOMA	15
	93	WELCH	17
	98	GRAND RAPIDS	26
	100	DOUGLAS	29
AD	38	PUGET SOUND	2,337
MSO	490	LEADER	133
AG	521	ASSURANCE	334
LCC	20	MOUNT WHITNEY	5,516
LKA	115	MOBILE	786
	116	ST LOUIS	1,260
	117	EL PASO	696
LPD	1	RALEIGH	1,979
	10	JUNEAU	1,426
	11	CORONADO	1,850
LPH	7	GUADALCANAL	4,689
	10	TRIPOLI	4,055
LSD	30	FORT SNELLING	605
	31	POINT DEFIANCE	1,202
	33	ALAMO	887
	37	PORTLAND	1,183
LST	1180	MANITOWOC	1,160
	1185	SCHENECTADY	918
	1186	CAYUGA	1,333
	1187	TUSCALOOSA	973
AFS	2	SYLVANIA	1,814
	3	NIAGARA FALLS	637
	7	SAN JOSE	2,228
AO	99	CANISTEO	1,566
	145	HASSAYAMPA	538
AOE	3	SEATTLE	3,295
AOR	2	MILWAUKEE	5,213
ARS	7	GRAPPLE	58
	6	ESCAPE	270
	38	BOLSTER	587
	40	HOIST	407
	42	RECLAIMER	664
		Subtotal (80)	270,531

Non-Hull Related FMP Items

1.	Nuclear Alterations	38,750
2.	COSAL	11,709
3.	AN/SQR 15 Towed Array Sonar	3,141
4.	Design Services	54,545
5.	Ordnance Alterations	11,700
6.	SSBN Package Alterations	2,275
7.	SSN/AS Package Alterations	1,915
8.	Special Programs (VERDIN, OMEGA, SSR-1 Improvements, etc.)	30,195
9.	Restricted Availabilities	22,885
	Subtotal	177,115
	FY 1975 Congressional Budget	447,646

REGULAR OVERHAUL SCHEDULE
FY 1976 CONGRESSIONAL BUDGET
ALTERATION COST

Hull No.		Name	($ in Thous.)
SSBN	598	GEORGE WASHINGTON	$ 4,969
	629	DANIEL BOONE	14,535
AS	34	CANOPUS	4,075
	36	L.Y. SPEAR	3,328
CVA	63	KITTY HAWK	25,599
SS	572	SAILFISH	309
	576	DARTER	127
	580	BARBEL	483
	581	BLUEBACK	454
SSN	590	SCULPIN	2,520
	605	JACK	7,917
	606	TINOSA	5,365
	612	GUARDFISH	10,918
	647	POGY	5,936
	650	PARGO	1,491
	653	RAY	2,924
	660	SAND LANCE	6,049
	661	LAPON	5,234
	672	PINTADO	5,622
	675	BLUEFISH	1,885
	678	ARCHERFISH	5,251
CLG	5	OKLAHOMA CITY	1,624
DLG	7	LUCE	9,060
	18	WORDEN	3,133
	30	HORNE	7,929
DDG	3	JOHN KING	8,412
	4	LAWRENCE	7,180
	8	LYNDE McCORMICK	5,046
	10	SAMPSON	5,369
	22	B. STODDERT	9,643
	23	R.E. BYRD	7,067
DD	931	FORREST SHERMAN	3,929
	933	BARRY	3,212
	940	MANLEY	3,386
	943	BLANDY	3,589
	946	EDSON	3,253
DEG	3	SCHOFIELD	5,646
DE	1037	BRONSTEIN	2,628
	1041	BRADLEY	3,973
	1050	ALBERT DAVID	4,731
	1051	O'CALLAHAN	3,687
	1052	KNOX	6,153
	1063	REASONER	3,999
	1065	STEIN	4,321
	1068	VREELAND	7,164
	1071	BADGER	5,184
	1072	BLAKELY	4,815

Hull No.		Name	($ in Thous.)
DE	1074	HAROLD E. HOLT	$ 4,648
	1075	TRIPPE	4,733
	1076	FANNING	4,630
	1078	JOSEPH HEWES	5,544
	1079	BOWEN	4,979
PG	86	ANTELOPE	38
	87	READY	33
	101	GREEN BAY	44
MSO	448	ILLUSIVE	316
AG	520	ALACRITY	303
AD	19	YOSEMITE	2,032
LCC	19	BLUE RIDGE	7,182
LPD	5	OGDEN	3,306
	12	SHREVEPORT	2,984
	14	TRENTON	2,660
LPH	9	GUAM	8,239
	11	NEW ORLEANS	9,091
	12	INCHON	10,347
LSD	29	PLYMOUTH ROCK	2,396
	35	MONTICELLO	2,924
	38	PENSACOLA	2,744
LST	1181	SUMTER	1,540
	1188	SAGINAW	1,640
	1189	SAN BERNARDINO	1,691
	1191	RACINE	1,738
AGF	3	LA SALLE	1,381
AE	28	SANTA BARBARA	3,506
	29	MOUNT HOOD	3,983
AOE	2	CAMDEN	9,037
	4	DETROIT	6,902
AOR	3	KANSAS CITY	6,786
AFS	4	WHITE PLAINS	1,857
AR	5	VULCAN	2,710
ATF	103	HITCHITI	466
	105	MOCTOBI	596
	113	TAKLEMA	628
	162	SHAKORI	615
ASR	8	COUCAL	729
FY 1976 Congressional Budget (85 overhauls)			$374,102

GENERAL SUPPORT AND SPECIAL PROGRAM ITEMS

Nuclear Alterations	$ 56,900
Design Services	59,420
Coordinated Shipboard Allowance List (COSAL)	14,178
Ordnance Alterations	13,500
SSN/SSBN Package Alterations	3,398
Verdin, AN/SRR-1 Improvements	4,750
Service Craft Alterations	6,230
NTDS Mod IV	3,500
Submarine Safety, SSBN 627	1,000
Alteration s accomplished during Restricted Availabilities	51,677
AN/SPS-40	1,300
REWSON	1,180
LAMPS DE 1052	1,732
HARPOON	1,000
Increase for Advance Planning	10,581
Miscellaneous Increases (Too numerous to list)	5,878
TOTAL	$236,224
FY 1976 Congressional Budget	$610,326

Non-Scheduled Ship Repair Estimates

Chairman McClellan. Explain how non-scheduled ship repair estimates are developed. Compare the original budgeted requests for non-scheduled ship repairs in FY 73–74–75 with the final (or present) program.

Answer: Marine Corps non-scheduled ship repairs include routine depot-level maintenance of a planned or of an emergent nature. Planned availabilities include such maintenance as scheduled restricted availabilities for major combatants, Fleet-funded maintenance within known post-shakedown availabilities (for work not supported by the SCN appropriation), and interim drydockings. Estimates for these major components of the non-scheduled ship repair account are developed based on known work load requirements and scheduled availabilities of designated ships. Work load requirements are generated by such factors as new construction ship delivery schedules, interim drydocking and maintenance requirements of the Extended Operating Cycle (EOC) program, and known carrier depot level maintenance.

Emergent repairs include depot-level maintenance resulting from unforeseen material failure or casualty. Estimates for such repairs are developed based on historical experience of fleet size and operating and maintenance strategies.

Comparative data between the original and current programs, with annotated times of submission and budget activity 1 identified, are shown below:

[In millions of dollars]

	Fiscal year—		
	1973	1974	1975
Original request	$176.6 (January 1972)	$192.6 (January 1973)	$215.4 (January 1974).
(Budget activity 1)	($3.5)	($3.7)	($15.9).
Final (present) program	$267.2 (January 1974)	$238.1 (January 1975)	$235.5 (January 1975).
(Budget activity 1)	($3.5)	($4.6)	($17.1).

The large increase in budget activity 1 in FY 1975 relates to known increased requirements of the Extended Operating Cycle program.

Forward Site Modernization Program

Chairman McClellan. How many ships will undergo alterations in FY 1976 compared with FY 1975? Describe the cost of each of the major alterations in FY 1975 and FY 1976. Explain what the "forward site modernization program" is and provide its costs in FY 1976.

Answer. Ships may have alterations installed during any shipyard or tender availability depending on the alteration and the length of the availability. Alterations not available for installation during a regular overhaul period are often installed during a short term availability at a shipyard or by the tender.

[Dollar amounts in thousands]

	Fiscal year—	
	1975	1976
Ships undergoing alteration during regular overhaul	80	85
Cost of each of the major alterations:		
Sample installation cost for fleet satellite communications	$200	$250
NATO Sea Sparrow missile system	1,654	2,500
Increase underway replenishment stores capability	1,500	2,000
Improved 5" gun	260	400
Aqueous film forming foam firefighting system	56	75
Rubber window for destroyer sonar dome	808	870
AN/BQQ–5 sonar system	(1)	2,500
AN/BQR–15 sonar system	1,050	1,300

[1] Not Inst.

For costs of alterations for each ship overhauled in FY 1976 see question 41.

The Forward Site Modernization Program (FSMP) is the plan to install

urgent military alterations in SSBN's between overhauls, thereby avoiding unacceptably long delays in modernization which would otherwise result from the extended operating cycle (EOC).

FSMP is accomplished by industrial teams at the SSBN deployment sites. Unless otherwise scheduled by CNO, FSMP installations will be accomplished within the time limits of normal tender refits, with no consequent effect on patrol cycles.

The FY 1976 FSMP is planned to cost $12.19M, and includes high priority noise quieting, sonar and satellite communications alterations.

Submarine Maintenance Monitoring System

Chairman McClellan. Are there tangible examples of cost savings or cost avoidances (along with specific amounts) that have resulted from the use of the Submarine Maintenance Monitoring System? Describe some of them over the past two years.

Answer. It is difficult to separate out cost avoidances attributable only to the SSBN Shipsystem Maintenance Monitoring System (SMMS). The value of this program is that it is an essential element of the Extended Operating Cycle (EOC) Program which in turn will permit extending the period between SSBN shipyard overhauls from six to nine years. As a result of the EOC Program there are ten fewer overhauls during FY 76–80. Comparison of the EOC costs with the cost estimates of the ten overhauls indicates a net cost avoidance of approximately $200 million during this period.

Other tangible benefits have accrued as a result of the SMMS effort which relate to the elimination in many cases of the need to open and inspect certain major pieces of equipment and in other cases have permitted the extension of the time period between required major maintenance.

Chairman McClellan. Compare the number of SSBN's actually deployed (on the average) during each fiscal year 1974–76.

Answer. The SSBN deployed levels as of the end of each fiscal year are shown below:

SSBNs deployed as of end of:	
Fiscal year 1974	[Deleted]
Fiscal year 1975	
Fiscal year 1976	

Limited Life Component Exchange Program

Chairman McClellan. What is the limited life component exchange program, which is new in FY 1976? What is its cost?

Answer. The Limited Life Component Exchange Program (LLCE) involves the exchange of both ERDA (AEC) and DOD cognizance limited life re-entry system components and is primarily funded in the WPN appropriation. The LLCE program is accomplished at the ERDA (AEC) PANTEX Facility. The major DOD limited life component (LLC) is the release assembly which requires replacement of the ordnance component. During accomplishment of the LLCE, some non-LLCE components will require repair as a result of the disassembly of the re-entry bodies, and funding is required to perform this repair. The cost of repair generated by the LLCE program in the budget time frame is $0.9 million in FY 1976 and $0.3 million in FY 197T.

Fleet Personnel Tactical Support Training

Chairman McClellan. (a) Where is fleet personnel tactical support training accomplished? (b) At any given time (use recent representative periods) how many personnel are undergoing this training prior to patrols or in between patrols? (c) As C–4 backfit training is phased in in FY 1976, will there not be any decrease in POSEIDON training programs? (d) Is FY 1976 the first year for SONAR Operational refresher training?

Answer. (a) Fleet personnel are trained on tactical equipment at the following locations to support the FBM program:

1. Naval Guided Missiles School, Virginia Beach, Va.
2. Fleet Ballistic Missile Submarine Training Center, Charleston, S.C.
3. Naval Submarine School, Groton, Ct.
4. Naval Submarine Training Center Pacific, Pearl Harbor, Hi.

(b) During the month of March 1975, an average of approximately 650 officer and enlisted personnel were undergoing training at Naval Guided Missiles school and Naval Submarine Training Center Pacific prior to assignment to SSBNs for their first patrol. Similarly, during this month approximately 22 crews were in training status between patrols with approximately 400 personnel undergoing Weapons and Navigation associated training at Charleston, S.C., Groton, Ct., and Pearl Harbor, Hi.

(c) C–4 Backfit training is principally phased in during FY 1978, although some very minor tender training occurs in FY 1977. FY 1976 funds associated with C–4 Backfit are principally related to systems design and planning for the conversion of existing C–3 training facilities and development of curricula to support this FY 1978 effort. Poseidon trainers are being modified for C–4 Backfit, yet significant Poseidon training must still occur in the out-years. Overall there should be a decrease in the support of the Poseidon trainers, and a commensurate increase in C–4 Backfit with the combined total remaining stable since 31 SSBNs (combined Poseidon/Backfit force) will still be supported.

(d) FY 1976 is not the first year for SONAR Operational Trainers at refresher sites. These trainers will become operational at the three refresher sites during FY 1978 and FY 1979. The FY 1976 funds associated with this effort are principally for systems design and related efforts necessary to acquire this training capability, not "refresher training."

POLARIS/POSEIDON Updating

Chairman McClellan. How frequently are POLARIS/POSEIDON targets updated? Compare FY–1976 with each of the two previous fiscal years.

Answer. Targeting requirements are generally updated [deleted]. Funding for this is noted below:

Fleet targeting support:	*Millions of dollars*
Fiscal year 1974	2,006
Fiscal year 1975	2,627
Fiscal year 1976	3,345

The primary reason for the FY–1975 and FY–1976 increases relate to increased and more complex targeting requirements [deleted]. This new requirement has resulted in a significant systems analysis and programming effort at the facility which supports FBM targeting, [deleted].

Trident Training Facility

Chairman McClellan. What is the total cost of the Trident Training Facility? What is the fiscal year funding profile? Where will the training facility be located? How many actual hours of training will occur in FY 1976 at the training facility? Compare this with FY 1975 in order to account for the increase in funds requested; how long are personnel to be trained at the facility prior to deployment aboard Trident equipped submarines?

Answer. The total costs by year through FY 197T including construction of the Trident Training Facility to be located at Bangor, Washington, is as follows:

MILCON/OPN:	
Fiscal year 1974	12.9
Fiscal year 1975	125.4
Fiscal year 1976	19.0
Fiscal year 197T	0.6
O. & M. N.:	
Fiscal year 1974	1.0
Fiscal year 1975	9.9
Fiscal year 1976	12.2
Fiscal year 197T	5.2

This funding essentially completes the construction and minimal initial outfitting of the Trident Submarine Training Facility. Requirements will, however, continue in subsequent years as equipment will require modification and replacement and operational cost which approximate $3.5 million per year are incurred.

The Trident Training Facility is planned to be operational by early 1977; no actual training is planned at the facility for FY 1976. Although actual training

at the facility will not occur until FY 1977. FY 76 funding is required to provide for the development of training plans, schedules, and to conduct equipment installations, checkout, and testing of the numerous training systems and devices which comprise the training facility. These latter efforts account for the O&MN increase in training from FY 1975 to FY 1976.

Individual personnel training paths vary in length from 1½ months to 7 months, depending upon the degree of complexity of the equipment for which the course was designed. Also, individual experience varies among crew members and crew station assignments often will change between patrols. Each prospective crew member on an average will receive approximately 4½ months of intensive schooling prior to initial patrol assignments. Those crew members attending Strategic Weapons System "A" school receive an additional 4 to 5 months training at the Trident Training Facility. The facilities are also to be used to provide training to crews of the Trident submarines who are ashore while the submarines are on patrol manned by the alternate crew. This training will average 7 weeks.

Chairman McClellan. What is the initial operational capability date for the first Trident SSBN and for subsequent submarines?

Answer. The Initial Operational Capability for the Lead Trident Submarine is April 1979 with the first follow-on ship deployment planned for April 1980. Subsequent Trident Submarines are planned to be deployed at 8 month intervals.

Fuel Cost Increases of AS–34

Chairman McClellan. Explain why there is increased cost of fuel associated with AS–34 (USS CANOPUS) while the ship is being overhauled. How much is the increase?

Answer. Increase of $.6 million for fuel and utilities related to overhaul of AS–34 (USS CANOPUS) involves return transit of the CANOPUS from Holy Loch to Charleston for overhaul, transit of relief tender from conversion in Puget Sound to Charleston, sea trials and refresher training for both tenders and forward transit of USS HOLLAND (AS–32) to Holy Loch.

Chairman McClellan. Explain why there is an increase in tender manning in FY 1976. How much is the increase, and what is the estimated cost?

Answer. Increase in tender manning is a reflection of the ratio of productive man hours to the total man hours assigned to the weapons and repair departments on which material costs are projected. Of the total increase in material costs, 18½% and $950 thousand is attributable to manning increase over FY 1975.

Intermediate Maintenance Activity

Chairman McClellan. Explain why there is increased emphasis being placed on intermediate maintenance activity.

Answer. Intermediate level workload requirements are far in excess of present capacity of the Navy's intermediate level maintenance activities. The existing backlog, estimated at about 40% of requirements, is expected to grow by about 10% per year, unless corrective action is taken. Such backlogs result from the low level of skills available, inadequate skill mixes, lack of adequate intermediate maintenance capacity, the changing technical requirements of increasingly complex ship systems and equipment, and inadequate funding for repair materials. We have requested increased funding for repair materials for these activities so that they can perform more of that maintenance which is within their capability.

CAPE Program

Chairman McClellan. Explain what is meant by "increased tender CAPE effort for SSBN-Unique SONAR," and identify the costs associated with such effort.

Answer. The CAPE program is an established program which the FBM Weapon System Program Manager has considered essential. The overall CAPE program is a joint effort by the project office and cognizant fleet activities to assure that FBM tenders have the required capability and proficiency to accomplish their mission in support of the FBM Weapon System. The program evaluates the maintenance and repair functions of the tender and the availability and adequacy of support equipments, facilities and technical documentation provided by the

project office, shipyard, supply and other material stock points. The Capability and Proficiency Evaluation is essential to the program manager and the FBM program in order to assure that the tender is fully capable of supporting SSBN refits during the specified time for the specified weapon system configuration, such that the FBM submarine forces may be deployed at the CNO prescribed state of readiness in accordance with operational patrol requirements. Prior to deployment, this office certifies that the tender is capable of performing its mission in the same manner that we certify the SSBN weapon system after overhaul or conversion.

With the assumption of responsibility for SSBN-Unique sonars, FBM tenders are now required to support the SSBN-unique sonar suit. In order to assure that support of these sonars is of the same caliber as the FBM Weapon System, a sonar CAPE program has been established, and the initial cost of planning and implementing this effort in the budget time frame is $0.2 million in FY 1975, $0.5 million in FY 1976 and $0.1 million in FY 197T.

Weapon System Costs of USS CANOPUS

Chairman McClellan. Why is the cost of the weapon system on the USS CANOPUS identified separately from the cost of overhaul? Identify the costs of the overhaul of the ship, the weapon system and any other direct costs related to this ship's overhaul.

Answer. Costs for planning and conduct of overhaul of the tender equipments needed to repair and maintain Strategic Weapon Systems performed on contract, or on order, are issued directly by the Project Manager, rather than by the overhauling shipyard, and are separately funded and managed by the Project Manager.

The repair, modernization and weapon system overhaul costs for USS CANOPUS in Fiscal Year 1976 are as follows:

	Millions
Repairs	$12.9
Alterations	4.1
Weapon system overhaul	1.5

Chairman McClellan. How many aircraft are involved in the FBM system communications, and what were the flying hours in FY 74 and 75? Explain an increase in flying hours.

Answer. There are 12 aircraft in FY 74 and 75. Flying hours are 14,764 in FY 74 and 15,568 in FY 75.

The increase in FY 75 over FY 74 of 804 hours was required to restore the program to its required level after being degraded by the fuel crisis in FY 74. FY 76 is basically level with FY 75 at 15,681 hours.

Special Communications Project Office

Chairman McClellan. How many civilian and military personnel are involved in the Special Communication Project Office?

Answer. The Special Communications Project Office has 81 civilian end strength in FY 1975 and FY 1976, and 13 military personnel in FY 1975 and 16 military in FY 1976.

U.S. Naval Space Surveillance System

Chairman McClellan. How large is the U.S. Naval Space Surveillance System? What can this system do that can not be accomplished by the similar system that the U.S. Air Force operates?

Answer. The Naval Space Surveillance System consists of a headquarters and computation center at the Naval Surface Weapons Center at Dahlgren Laboratories, Dahlgren, Virginia. There are also nine field stations stretching along a great circle from Fort Stewart, Georgia to San Diego, California. Three of these are transmitters. The central transmitter, which is located at Lake Kickapoo, Texas produces a nominal power output of one megawatt and is one of the largest of its type in the world. The two outboard transmitters have fifty kilowatt output and are essentially gap fillers, providing low altitude coverage at the fence extremities.

There are fourteen military personnel and one hundred and three civil service employees at the headquarters computation center, and one hundred and twenty-eight contractor personnel at the field stations.

The essential capability of the Naval Space Surveillance System is unalerted detection of non-cooperating satellites in orbit over the United States. This means that the Naval Space Surveillance System can detect such targets without assistance of any kind, regardless of where the satellites are launched. The element of the SPACETRACK System with a similar capability is the FPS–85 phased array radar at Eglin Field, Florida, Eglin Air Force Base, but the Naval Space Surveillance System has three times the high altitude detection capability of the FPS–85. To take advantage of the Naval Space Surveillance System capability for high altitude detection, the Department of Defense has integrated the two systems so that apparent unknowns detected by the Naval Space Surveillance System above the high altitude limit of the FPS–85 are handed off to the FPS–85 for subsequent tracking.

A similar integration is currently being worked out between the Naval Space Surveillance System and the Lincoln Laboratories Millstone Hill radar in Massachusetts. This radar has essentially no detection capability, but has a tracking capability significantly better than the FPS–85.

The high altitude capability of the Naval Space Surveillance System for unalerted detection is the largest available to the United States.

Although on the surface it would appear that there is a duplication of equipment for the same job, in actual fact this is not the case. As noted, the missions of each differ and they accomplish a separate function. To preclude a duplication of equipment and mission DOD has required that the systems be integrated.

Per Diem to Squadron Members

Chairman McClellan. Under what conditions is per diem paid to military personnel assigned to fleet squadrons? How much is this amount in FY 75 and 76? (Include both per diem and travel costs). What amount is included for addition "AVCAL" requirements, and what are they?

Answer. Per diem is paid when a member of a squadron is away from his home station or ship. Examples of this are: a member of a P–3 squadron who remains overnight at a field other than his home station; members of a helicopter squadron temporarily assigned to an aircraft carrier; members of a squadron temporarily deployed for a mission; members assigned to a Class A school on a TDY basis; other training requiring temporary deployment or assignment; and administrative travel.

The amount for both per diem and travel for fleet squadron personnel is $13.2 million in FY 75 and $15.6 million in FY 76. The increase over FY 76 is required to fund MAC rate increases and the change to a multipurpose carrier (CV) concept.

The increase in AVCAL/outfitting in FY 76 is $7.7 million. $5.8 million is attributed to increased requirements and the balance to increased stock fund charges effective 1 July 1975. The increased requirement arises from the modification of the Navy's Attack Carrier Force to a multipurpose force. Basically the modification will allow the carrier to be used in an attack or ASW mission as the situation warrants. This modification requires a more complex range of aircraft items to be stored aboard ships. In addition, the introduction of the F–14 and the S–3A to the fleet requires a greater inventory to maintain the complex systems in these aircraft.

Steaming Hours

Chairman McClellan. Compare the number of ship years in FY 75 and 76 as well as steaming hours in the same years. Explain what total number of steaming hours, and cost, is attributable to increasing ship operational tempo to "normal levels" in FY 1976. What APA items migrated to the Navy Stock Fund in FY 76 that accounts for $9.4 million increase here? Please explain.

Answer. The following depicts ship years and steaming hours in FY 75 and 76 for the general purpose ships:

Ship years:	
Fiscal year 1975	446.7
Fiscal year 1976	435.0
Steaming hours:	
Fiscal year 1975	956,616
Fiscal year 1976	1,001,600

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Ship years and steaming hours are calculated independently for each fiscal year taking into account the beginning ship inventory and the applicable repair schedules and operational requirements for the various ship types in each year.

As a short term solution to the fiscally constrained FY 1975 fuel allocation, readiness was sacrificed in the non-deployed forces to preserve the combat capability of deployed forces. If this condition was prolonged the readiness decline would spread throughout the fleets by the lack of training of non-deployed forces and subsequent degradation of mobilization and contingency capabilities.

The migration of APA items to the Navy Stock Fund reflects a revised DoD policy that field repairables shall be considered as expense items and, hence, stock funded. Such items include general purpose test equipment, selected search and fire control radar equipment, ordnance equipment, and some aviation support equipment. The applicable procurement appropriation requests have been reduced ($30.7 million) and necessary funds ($26.7 million) to support the new policy have been added to the O&M,N and O&M,NR requests. This was not a dollar-for-dollar transfer since a reduction in demand due to customer restraint is projected and greater emphasis on repair and care of items is ongoing.

Chairman McCLELLAN. Explain what the number of steaming hours and cost of the carrier force was in FY 75 and is planned for FY 76. Do carrier operations increase in FY 76? If so explain why.

Answer. The cost of carrier operations is not based so much on steaming as it is on the deployment theater and length of deployment. The cost of operating the carrier force in FY 1975 was $110.9 million and the FY 76 plan is $131.8 million. There is no increase in the number of deployed carriers in FY 1976. As noted previously, extension of the HANCOCK and ORISKANY and delivery of USS NIMITZ contribute to the increased operational costs.

MAN-DAYS AND OVERHAUL COSTS

Chairman McCLELLAN. For each major ship type undergoing overhaul in FY 1975 and FY 1976, provide the number of repair man-days in each year. Also provide the average cost of overhaul.

Answer. The requested information follows:

	Fiscal year 1975		Fiscal year 1976	
	Average mandays	Average Cost (millions)	Average mandays	Average Cost (millions)
Carriers	219,556	$36.4	264,662	$42.5
Attack submarines:				
Refueling	188,320	39.1	[1] [2] 227,379	41.2
Regular	117,272	17.7	[2] 132,917	21.6
Destroyers	45,624	7.0	52,636	8.6
Diesel submarines			62,416	10.8
Light cruiser (CLG)			8,677	9.8
Amphibious	47,162	7.1	51,790	8.7

[1] Includes 26,000 mandays additional due to ship condition and impact of being overcycle at overhaul induction.
[2] Includes increases due to control of testing and ship conditions during overhaul not effective in fiscal year 1976.

PROJECT RED "E"

Chairman McCLELLAN. What is the total cost of Project Red "E"? Explain exactly what type of an output this project is intended to have—merely a study or something in addition to a plan.

Answer. Project Red "E" is a program to provide an improved, more effective maintenance strategy for the Fleet. The FY 1976 budget includes $5M for this program.

Project Red "E" will increase the maintenance capacity and capability of internal Navy assets with an engineered restructuring of the allocation of maintenance accomplishment from the shipboard to industrial level. Simultaneously, maintenance facilities and skills will be improved to support the future maintenance requirement. The priority of Project Red "E" investment will be in products—maintenance operations, hardware and training—to achieve an improved balance within the maintenance community. These actions fully support the Navy's policy to reduce the backlog of deferred maintenance that exists in the Fleet today.

A second output of this project is an extended, in-depth analysis of the strategy

for maintenance of Navy ships. This study will investigate alternative strategies for ship maintenance and is constrained only to determine the most appropriate and effective maintenance strategy for the Navy. This study will also assess the value of those near term actions being implemented in the program.

Base Operations Flying Hours

Chairman McClellan. Base operations flying hours increase about 3600 in FY 76. Explain the reasons for the increase.

Answer. The FY 75 base operations flying hours were 93,363 hours as originally submitted to the Congress. Due to energy conservation actions, fuel price increases and inflation, the FY 75 program has been decremented to 90,523 hours. The 3,699 hour increase in FY 76 represents those hours required to return to the level necessary to support fleet readiness.

Chairman McClellan. Compare the flying hour program of special combat support forces in FY 75 and 76, as well as the cost of the flying hour program. Explain the increase.

Answer. Special combat support forces flying hours increased from 8,491 hours in FY 75 to 9,862 hours in FY 76 for an increase of 1,371 hours. The cost increased from $1.7 million in FY 75 to $2.2 million in FY 76 for an increase of $.5 million.

The increase of 1,371 hours is to return to the OSD approved level of readiness from the decremented FY 1975 program. The $5.0 million increase in costs are: $278 thousand for the increased flying hours; $265 thousand for the increased stock fund-charges on material effective 1 July 1975; offset by $42 thousand POL consumption reduction.

Mine Countermeasure Deployments

Chairman McClellan. Why is there a $3.9 million increase for construction battalion and airborne mine countermeasure deployments—does this relate to increased deployment time, or merely additional cost of similar deployment in FY 1975 and 76.

Answer. The increase of $3.9 million consists of $1.3 million for MAC rate increases, $.9 million for increased cost of travel of personnel, and $1.7 in support of one additional airborne mine countermeasures deployment in FY 1976.

Chairman McClellan. How are amounts for selected restricted availabilities estimated? Compare these amounts for each two previous fiscal years with the FY 1976.

Answer. Selected restricted availabilities provide planned depot-level maintenance for major combatants. Estimates for this portion of the non-scheduled ship repair account are developed based on known work load requirements and scheduled availabilities of designated ships. Work load requirements are generated by such factors as known carrier depot level maintenance back log and maintenance requirements of the Extended Operating Cycle (EOC).

Selected restricted availabilities estimates for all budget activities in the Operation and Maintenance, Navy appropriation request for fiscal years 1974, 1975, and 1976 are:

	(Dollars in millions)
Fiscal year 1974	54.3
Fiscal year 1975	62.1
Fiscal year 1976	78.4

Ship Overhaul and Alterations

Chairman McClellan. Are normal ship alterations accomplished at the same time ships are in overhaul or are they specially scheduled? How many of the ships scheduled for overhaul will also under go alteration, and the costs, by ship, as well as the nature of alteration in FY 1976?

Answer. Normally ship alterations are accomplished in connection with the ship's regular overhaul; all ships undergoing overhaul have alterations accomplished on them. These costs cover installation of such major combat systems as NATO Sea Sponsor Missile System, Improved 5 inch gun, and the AN/BQQ–5 Sonar System as well as several maintainability and reliability improvements.

Temporary Additional Duty Costs

Chairman McClellan. Under what conditions are temporary additional duty costs for ships' personnel incurred? How long are individuals assigned to a

specific ship, on average? How many cruises in that ship will an individual normally have? What happens in between cruises?

Answer. Some of the reasons for utilization of Temporary Additional Duty funding (e.g. only appropriate when a man is physically removed from his deployed ship but is still officially assigned to it) are listed below:

(1) Returnable quota training ("A" school, "C" school, fleet training, team training, etc.—less than 20 weeks).

(2) Conferences, scheduling conferences, meetings, etc.

(3) Emergency leave funding during deployed status (normally funding citation provided by Type Commander).

(4) Shore patrol, beach patrol requirements where any travel or per diem is entitled.

(5) TAD travel for operational support requirements (e.g. aviation personnel when aircraft down at shore activity due to mechanical problems, etc.).

(6) TAD for legal problems, children, witnesses, short term hospitalization, etc.

The average tour in a ship or squadron is 24 months.

Ship deployment schedules are predicated on many factors such as type ship, mission, availability, etc. In general, however, an individual could experience about 1.5 extended cruises (6 months or longer) during an average seat tour assignment.

The periods between cruises are primarily devoted to personnel training and ships' maintenance and upkeep activities as shown below:

(1) Personnel post-deployment leave periods.
(2) Ships' upkeep period. (accomplished mainly by ship's force)
(3) Shipyard regular overhaul periods.
(4) Restricted Shipyard availability, for minor ship repair.
(5) Type Commander administrative and material inspections.
(6) Independent scheduled exercises—Individual Ship Exercises.
(7) Local (stateside) operations and scheduled commitment.
(8) Individual and Group Training (schools).
(9) Pre-deployment, underway training.

Overall, an individual will spend more than 50% of the 24 month period out of his homeport.

CRAW Readiness Training

Chairman McClellan. What is CRAW readiness training? What was the impact of 92% readiness in this area in FY 1975? What would be the savings if readiness remained at 92% in FY 76?

Answer. The primary mission of Readiness Squadron training (formerly called CRAW or RAG training) is the training of fleet replacement aircrews and enlisted maintenance personnel in current fleet operational aircraft. The principal objective is to provide basic operational and combat readiness qualifications for personnel enroute to fleet attack carrier (TACAIR) and air anti-submarine warfare (ASW) squadrons. The Readiness Squadron's overall mission includes the training of aircrews and maintenance personnel, conducting combat operations if required, providing emergency deployable combat aircrews from instructor allowance as required. NATOPS Model Manager, NATOPS Standardization Evaluator, ORI/ORE inspector, Tactical Manual Expertise, evaluations of various tactical and training projects, qualification in tactical procedures, technical assistance and maintenance support for fleet squadrons, receipt, transfer and scheduled maintenance of pipeline aircraft and preparation of aircraft for TRANSPAC/TRANSLANT operations.

Decrementing Readiness Squadron training in FY 75 will result in failure to accomplish the training requirements for the year. The percent of shortfall would not be linear. An 8 percent funding reduction would not necessarily result in a simple 8 percent reduction in student output.

FY 76 Readiness Squadron inputs are already on-board at Undergraduate Pilot Training (UPT) bases. The 8 percent reduction in FY 75 is creating pools of students in both UPT and Readiness Squadrons. These people must be kept current to prevent erosion of skills already gained. The decrement in FY 75 will be carried forward into FY 76 and any further decrement in FY 76 would be additive (8% in 75+8% in 76=16%).

The impact on fleet readiness could be minimized by extending people in fleet billets; but, this creates havoc in personnel planning, school assignments, home life and general morale. Pools which are created by cutback in training funds may prove to be more expensive than the "savings" generated by the cut back.

Navy is making every effort to keep down the costs of Readiness Squadron training. Increased emphasis on simulator substitution and on-going syllabus review and revision are two factors which have brought about the better, more cost effective utilization of every training dollar. Saving in the flying program in FY 76 if the program were held at 92% would be 19,825 hours and $7.9 million.

Chairman McClellan. Why were Undersea Surveillance Systems supporting programs transferred to BA 7?

Answer. Direct Fleet support programs such as Command and Control, Air Stations and REWSON, as well as SOSUS were included in BA 2 and assigned to specific, established program elements to collect total costs of these efforts. A review of these efforts indicated that they were similar to other support areas in BA 7 and should be transferred there to be compatible with other Naval Systems Commands.

Naval Ocean Surveillance Information System

Chairman McClellan. Describe the Naval Ocean Surveillance Information System, including its Mission, specific operational components, and total costs in FY 75 and 76.

Answer. The Ocean Surveillance Information System (OSIS) is an all-source system which will improve present methods of receiving, processing and disseminating ocean surveillance data through the use of automatic data processing and improved communications and operational techniques. OSIS is a world-wide system consisting of the Naval Ocean Surveillance Information Center at Suitland, Md., and five regional activities (Hawaii, Japan, London, Norfolk, and Spain) to support Fleet Commanders in Chief and numbered Fleet Commanders. High speed communications links will be provided between centers. The system will receive information on targets on, under or above the oceans; correlate, evaluate/analyze the data; and disseminate information by reports and in response to queries.

Funding requested:

Appropriation	Fiscal year 1975	Fiscal year 1976
R.D.T. & E	$5,235	$2,570
OPN	1,800	7,900
O. & M., N	3,252	3,992

The funding change between FY 1975 and FY 1976 reflects the transition from Research and Development to Procurement purchase of hardware that will become operational after FY 1976.

Naval Intelligence and Investigative Services

Chairman McClellan. For each field, unified and fleet activity conducted by the Naval Intelligence Command, provide its location and mission, as well as FY 75 and 76 funding.

Answer. The following information is furnished on all activities of the General Defense Intelligence Program and the Naval Investigative Service.

1. General Defense Intelligence Program

(*a*) Naval Intelligence Command

(1) Headquaters, Naval Intelligence Command, Alexandria, Virginia

Mission: To direct and manage the activities of the Naval Intelligence Command to ensure fulfillment of the intelligence, counterintelligence, investigative, and security requirements and responsibilities of the Department of the Navy.

Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Intelligence management	1,453,000	1,554,000
Special security	375,000	386,000
Intelligence communications	520,000	328,000
Total	2,348,000	2,268,000

(2) Naval Intelligence Support Center, Suitland, Maryland

Mission: To produce technical intelligence of national and naval interest as directed by the Director, Defense Intelligence Agency, and the Director of Naval Intelligence; to provide scientific, technical, and imagery intelligence support to the Chief of Naval Operations and his staff, to the Naval Materiel Command and the Systems Commands, to the Navy Laboratories, and to the fleet; to support research, development, test and evaluation of equipment, materials, and techniques associated with the production of technical and imagery intelligence; and to provide technical guidance for intelligence collection activities.

Operation and Maintenance, Navy, Funding:

	Fiscal year—	
	1975	1976
Imagery	4,942,000	5,365,000
Production	282,000	289,000
Scientific and technical	10,017,000	12,278,000
Intelligence data handling	1,261,000	1,206,000
Special security	26,000	30,000
Intelligence communications	140,000	143,000
Total	16,668,000	19,311,000

(3) Naval Intelligence Processing System Support Activity, Alexandria, Virginia

Mission: To support the Chief of Naval Operations, the Director of Naval Intelligence, the Naval Intelligence Command, and Naval Intelligence activities in the planning, development, implementation, and operation of automation and telecommunications systems involved in the processing of Naval Intelligence and related information; and perform such other functions as may be directed.

Operation and Maintenance, Navy, Funding:

	Fiscal year—	
	1975	1976
Intelligence data handling	3,584,000	3,698,000
Special security	43,000	46,000
Intelligence communications	242,000	243,000
Total	3,869,000	3,987,000

(4) Navy Field Operational Intelligence Office, Fort Meade, Maryland

Mission: To provide operational intelligence to the Chief of Naval Operations, the Defense Intelligence Agency, the major fleet commanders, and other designated recipients. Mission includes operation of the Naval Ocean Surveillance Information Center, Suitland, Maryland.

Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Production	1,945,000	1,920,000
Technical sensors	670,000	1,057,000
Intelligence communications	13,000	13,000
Total	2,628,000	2,990,000

(5) Fleet Intelligence Support Activity, Alexandria, Virginia

Mission: To implement the responsibilities of the Commander, Naval Intelligence Command, for providing and directing Naval Intelligence support of fleet intelligence operations. Mission includes operation of task units in Naples, Italy; Pearl Harbor, Hawaii; and Norfolk, Virginia; and of task groups in Suitland, Maryland; Kami Seya, Japan; and Fort Meade, Maryland.

Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Fleet intelligence support	2,959,000	2,851,000
Intelligence communications	4,000	4,000
Total	2,963,000	2,855,000

(6) [Deleted.]
Mission: To conduct the Navy's sensitive HUMINT collection program,

[Deleted].

Operation and Maintenance, Navy, Funding:

HUMINT
Fiscal year 1975 3,132,000
Fiscal year 1976 3,606,000

(7) Scientific and Technical Group, Europe, Frankfurt, Germany
Mission: To collect scientific and technical information of naval interest in response to requirements levied by the Department of Defense, the Department of the Navy, the Commander-in-Chief, Europe, and the Commander-in-Chief, U.S. Naval Forces, Europe.
Operation and Maintenance, Navy, Funding:

HUMINT
Fiscal year 1975 166,000
Fiscal year 1976 168,000

(8) Scientific and Technical Group, Far East, Yokosuka, Japan
Mission: To collect scientific and technical information of naval interest in response to requirements levied by the Department of Defense, the Department of the Navy, and the Commander-in-Chief, Pacific.
Operation and Maintenance, Navy, Funding:

HUMINT
Fiscal year 1975 63,000
Fiscal year 1976 63,000

b. Commander-in-Chief, Atlantic, Norfolk, Virginia
Mission: To maintain the security of the Atlantic Command and protect the United States, its possessions, and bases against attack or hostile incursion in the assigned area of responsibility. Mission includes general intelligence programs shown below:
Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Intelligence data handling	821,000	829,000
Special security	10,000	10,000
Intelligence communications	11,000	11,000
Total	842,000	850,000

c. Commander-in-Chief, Pacific
Honolulu, Hawaii
Mission: To maintain the security of the Pacific Command and protect the United States, its possessions, and bases against attack or hostile incursion in the assigned area of responsibility. Mission includes general intelligence programs shown below:
Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Intelligence data handling	168,000	175,000
Special security	112,000	112,000
Intelligence communications	41,000	41,000
Total	321,000	328,000

d. Fleet Intelligence Center, Europe/Atlantic
Norfolk, Virginia

Mission: To develop an intelligence production capability which is immediately available for support of U.S. Naval Forces in the European area and other forces assigned to the Commander-in-Chief, Atlantic and to provide these forces with intelligence necessary to carry out efficiently their respective missions and to provide for the peacetime and wartime augmentation of intelligence personnel when required.

Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Intelligence production	1,088,000	956,000
Intelligence data handling	916,000	665,000
Intelligence communications	42,000	42,000
Total	2,046,000	1,663,000

e. Fleet Intelligence Center, Pacific Pearl Harbor, Hawaii

Mission: To develop an intelligence processing and producing capability which is immediately available to support U.S. Naval Forces in the Pacific Area and that portion of the Indian Ocean assigned to Pacific Command for defense responsibility; to provide those forces with the intelligence materials necessary to carry out efficiently their respective missions; to maintain sufficient qualified and trained intelligence personnel for assignment to peacetime and wartime augmentation requirements; and, to provide direct support and assistance to Commander-in-Chief, Pacific Fleet which will enable him to fulfill his requirements for nuclear weapons employment and planning.

Operations and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Intelligence production	635,000	533,000
Intelligence data handling	875,000	745,000
Total	1,510,000	1,278,000

f. Atlantic Command Electronic Intelligence Center Norfolk, Virginia

Mission: To provide electronic intelligence based upon analysis of all available information in support of the national intelligence effort, Commander-in-Chief, Atlantic, and subordinates thereof.

Operations and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Electronic intelligence	39,000	40,000
Intelligence data handling	35,000	36,000
Total	74,000	76,000

g. Intelligence Center, Pacific—Honolulu, Hawaii

Mission: To prepare and maintain an all-source intelligence data base for use by the Commander-in-Chief, Pacific, theater service components and sub-unified commands, those military attaches in the Pacific Command, and national authorities; to produce and disseminate that intelligence required by those commands, organizations, and authorities which is within the scope of the functions charged to the center.

Operation and Maintenance, Navy, Funding:

	Fiscal year 1975	Fiscal year 1976
Electronic intelligence		218,000
Intelligence production	207,000	1,381,000
Intelligence data handling	277,000	1,284,000
Intelligence communications	15,000	15,000
Total	499,000	2,898,000

The increase in FY 1976 reflects Navy assignment as executive agent for this function, previously Army, Navy, and Air Force provided funding.

h. Fleet Ocean Surveillance Information Center, London, England

Mission: To provide timely and relevant information derived within the Mediterranean, Baltic, Barents, and Black Seas and the East Atlantic area in support of the Commander-in-Chief, Europe, Commander-in-Chief, U.S. Naval Forces, Europe, and Commander, Sixth Fleet.

Operation and Maintenance, Navy, Funding:
Intelligence production:

Fiscal year 1975	83,000
Fiscal year 1976	86,000

i. Fleet Ocean Surveillance Information Center, Norfolk, Virginia

Mission: To provide timely and pertinent information derived within the Commander-in-Chief, Atlantic areas to the Commander-in-Chief, Atlantic Fleet, the Ocean Surveillance Information System and to national authorities as directed.

Operation and Maintenance, Navy, Funding:
Intelligence production:

Fiscal year 1975	56,000
Fiscal year 1976	60,000

j. Fleet Ocean Surveillance Information Center, Makalpa, Hawaii

Mission: To support major commands throughout the Pacific area; and to provide real-time analysis using comprehensive data bases and analytical expertise available through the Ocean Surveillance Information System and local commands.

Operation and Maintenance, Navy, Funding:
Intelligence production:

Fiscal year 1975	45,000
Fiscal year 1976	45,000

k. Fleet Ocean Surveillance Information Facility, Rota, Spain

Mission: To provide real-time ocean surveillance information and operational intelligence to the Commander-in-Chief, U.S. Naval Forces, Europe, the Commander, Sixth Fleet and subordinate commands in the Mediterranean and Black Sea areas as directed.

Operation and Maintenance, Navy Funding:
Intelligence production:

Fiscal year 1975	21,000
Fiscal year 1976	21,000

l. Fleet Ocean Surveillance Information Facility, Kami Seya, Japan

Mission: To serve the needs of the Commander, Seventh Fleet and its subordinate units by functioning as an extension of the Seventh Fleet staff ashore, and provide traffic screening function.

Operation and Maintenance, Navy, Funding:
Intelligence production:

Fiscal year 1975	61,000
Fiscal year 1976	45,000

m. Naval Electronics Systems Command, Washington, D.C.

Mission: To provide material support for electronic equipment and systems of the Navy. This mission includes support for the Intelligence Communications program, as shown below.

Operation and Maintenance, Navy, Funding:
Intelligence communications:

Fiscal year 1975	568,000
Fiscal year 1976	603,000

n. Naval Telecommunications Command, Washington, D.C.

Mission: To exercise operational direction of the Naval Telecommunications System as a servicewide system, serve as the Operations and Maintenance Manager of the Defense Communications Systems assigned to the Navy; act as central coordinator for the Chief of Naval Operations in carrying out Department of the Navy responsibilities for telecommunications as assigned. Mission

includes funding of certain leased lines for the Special Intelligence Communications network, as shown below:

Operation and Maintenance, Navy, Funding:

Intelligence communications	
Fiscal year 1975	161,000
Fiscal year 1976	161,000
Total general defense intelligence program	
Fiscal year 1975	38,124,000
Fiscal year 1976	43,362,000

2. Naval Investigative Service, Alexandria, Virginia

Mission: To maintain, command, and operate a worldwide organization to fulfill the investigative and counterintelligence responsibilities of the Department of the Navy (less those combat related counterintelligence matters which are the functional responsibility of the Marine Corps).

Operation and Maintenance, Navy, Funding:

Counterintelligence and investigative activity	
Fiscal year 1975	17,319,000
Fiscal year 1976	19,958,000

Gapfiller Satellites

Chairman McClellan. What is the function of the two leased Gapfiller satellites? When do these satellites come on line? Are they solely contractor-supported?

Answer. The Gapfiller contract calls for one wideband channel in each ocean (Atlantic and Pacific) for a two year period with the Navy having the option to extend the lease for a third year. The Army plans to lease one narrowband channel in each ocean (contract option) while the Navy has budgeted for the lease of the remaining narrowband channel in each ocean (contract option). Gapfiller is an interim, minimal satellite service that will provide six (6) high speed links for Navy use in each ocean. Near term terminal equipment availability is projected as follows:

Atlantic:	
Fleet broadcast receivers:	
July 1975	112
January 1976	172
Transceivers:	
July 1975	11
January 1976	46
Pacific:	
Fleet broadcast receivers:	
September 1975	124
January 1976	174
Transceivers:	
September 1975	22
January 1976	47

Anticipated Launch dates: Atlantic; August 7, 1975. Pacific; October 2, 1975.

Anticipated Operational dates: Atlantic; September 4, 1975. Pacific; November 1, 1975.

The satellites are solely contractor supported through the launch. When the satellites become operational, the Navy assumes the responsibility for operations and maintenance. The contractors will provide the leased communications services.

Naval Investigative Service

Chairman McClellan. Why is an increase in manpower and support of the Naval Investigative Service being requested in FY 76. Is there a corresponding workload increase projected. Provide comparative estimates of manpower and workload, FY 75–76.

Answer. A significant increase in workload requirements, both past and projected, is the basis for the requested increase in manpower and support for the Naval Investigative Service (NIS). Total investigative workload increased sharply in recent years: 23,085 cases opened in calendar 1972; 33,250 in calendar

1973; and 41,228 in calendar 1974. Crimes of violence investigations (assaults, homocides, robberies, rapes, etc.) went from 1,517 in 1972, to 2,644 in 1973, and to 3051 in 1974 (far greater increase than for Army and Air Force counterparts or for the country as a whole). A meaningful result cannot be obtained by projecting those figures into the future. Experience has made it possible for both the naval commands which request NIS investigations and NIS itself to tighten criteria to ensure that only serious offenses are subjected to professional investigation. In 1974 NIS stopped doing field tests of suspected narcotics when commands did not desire investigation of possession or use, and NIS raised to $100 the minimum value level for larceny of Government property cases. Similar refinements in other areas have been and continue to be made. Notwithstanding these efforts, and the steady addition during 1975 of additional Special Agents, the NIS backlog of cases pending increased from the fall of 1974 to the spring of 1975. A fairly significant part of the workload increase arises from greater NIS effort on initiative operations designed to prevent or inhibit crime or security threats. Anti-narcotics trafficking operations overseas with local authorities not only help to dry up the supply available to naval personnel, but generate investigations when they disclose participation by such personnel. Fraud surveys of supply and repair facilities and shipyards are extremely cost effective in identifying weaknesses susceptible to criminal exploitation. Twelve such surveys were done in calendar 1974; 16 done or in progress for January–June 1975; 18 scheduled for July–December 1975; and the new personnel requested (63 Special Agents and 30 clerical billets) will allow for well over 40 surveys in 1976. NIS counterintelligence operations to detect and neutralize hostile intelligence approaches to naval personnel are running at a level 60% higher than in the spring of 1974.

Reworked Aircraft and Engines

Chairman McClellan. Are aircraft engines always overhauled at the same time aircraft reworks are accomplished? What percent of the total operating aircraft inventory will be reworked in FY 75, 76? What percent of the total engine operating inventory will be overhauled in FY 75, 76?

Answer. No, aircraft engines are not overhauled at the same time as aircraft reworks are accomplished. Engine overhauls are performed on the basis of operating hours completely independent of the aircraft.

The percent of the total operating aircraft inventory to be reworked in fiscal years 1975 and 1976 is 33% and 35% respectively.

13.5% of the total engine operating inventory will be overhauled in FY 75 and 13.2% in FY 76. In addition 12% will be repaired at depot in FY 75 and 10.7% repaired in FY 76. These figures are for the total engine program since there is no means of differentiating between Navy and Reserve engines in the operating inventory.

Chairman McClellan. What is the backlog of deferred maintenance on aircraft repair components, and what has it been for the past two years, as well as projected for end FY 1976.

Answer.

	Amount (millions)	Units
Fiscal year:		
1973	$12.2	20,500
1974	22.7	37,150
1975	28.7	44,840
1976	36.7	54,370

NAVAIR Calibration Program

Chairman McClellan. Explain why $7.7 million is required for increased test equipment calibration in the supporting programs of the aircraft maintenance program. What impact on Fleet readiness would occur if the increase were not funded. Also describe the advanced aircraft maintenance techniques being developed at an additional cost of $5.3 million in FY 76.

Answer. The NAVAIR calibration program has been funded at approximately 50% of requirement for several years resulting in a large backlog of support

equipment in the Fleet which cannot be calibrated or can be calibrated only on extended intervals, resulting in decreased support equipment readiness and reliability. This decreased reliability is passed on to the aircraft serviced and maintained by the support equipment. Current year funding is such that emergency calibration requests by Fleet elements are commonplace. Some Fleet elements have reported operational readiness impairment due to uncalibrated support equipment.

The $7.7 million increase in calibration program funding is to be applied to the backlog of Fleet calibration equipment. In more precise terms, the additional funds will provide for 77,000 additional calibrations which will significantly improve calibration support. The program will be funded at aproximately 78% of identified requirements.

Ground Support Equipment now in use in the Fleet can be expected to perform its function accurately only 60% of the time. As a result, many airborne systems which are dependent on the accuracy of the related GSE will be rejected when functioning normally. In addition, many items which are not of tolerance will not be detected due to uncalibrated GSE. Both conditions decrease Fleet readiness. The first increases downtime of airborne equipment and the second increases the instances of malfunction of airborne systems, e.g., poor bombing accuracy and reduced navigation accuracy.

The Analytical Maintenance Program (formerly Project REVAMP (Revision, Revitalization and Restructuring of Aviation Maintenance Program)) is a task to design and implement an Aviation Maintenance Program that provides for optimum use of available resources to achieve maximum operational readiness. The goal is to analyze the maintenance requirements of each aircraft and to justify every maintenance action. Further, it is intended to enforce the performance of only those actions, permitting no unnecessary maintenance to be performed. All levels of maintenance will be included and special emphasis will be placed on the depot level. The Airline Manufacturer Maintenance Program Planning Document (MSG–2) is one of the primary analysis methods and decision logics used.

The Analytical Maintenance Program is currently examining the Navy's entire maintenance program at the depot, intermediate and organizational levels. By FY 77 the depot level analysis under the MSG–2 concept will have been completed on 8 first line aircraft types with all other aircraft to be analyzed in follow-on programs. Two aircraft types will have reached the sustaining mode of the program with six in implementation. Intermediate and organizational maintenance programs will follow on in an orderly manner. For the Navy to realize the benefits of economics in cash and manpower and of increased readiness this program must be funded to the completion of its modern management information and engineering analysis techniques will result. The Analytical Maintenance Program is the only program that has proven that these objectives can be accomplished.

Shipboard Rework and Maintenance

Chairman McClellan. Shipboard rework and maintenance increases $30.7 million in FY 76, to increase the availability of on-board operational combatant equipments. Explain what the deficiencies were in this area, and to what extent this increase will improve the problem.

Answer. This program is for the repair of spare and repair parts in support of hull, mechanical, electrical and ordnance equipments. The requirements for repair have grown as more complex equipment has been introduced into the fleet. Modular equipment design and the need for expensive complex test equipment to isolate equipment malfunctions have increased the importance and volume of depot level repair. Repair funding has kept pace with the increasing requirements.

As a measure of the trend resulting from inadequate funding, material availability has declined continuously since fiscal year 1972 from a high of 78.7% to the current level of 66.4%. In addition, there is a current backlog of orders for material of $65.1M at procurement value as of the end of February 1975. Repair is the fastest most cost effective source of repairable material. Repair in general can be accomplished in one half the time and at one third to one half the cost of new procurement. Although repair cannot replace procurement, procurement budgets assume full funding of the repair effort.

In a view of the downward trend of material availability and the increasing importance of the repair program, the Navy in fiscal year 1976 is proposing to

reduce backlogs of repair and to more fully fund the annual consumption requirement in an attempt to improve fleet readiness.

INACTIVE SHIP MAINTENANCE FACILITIES

Chairman MCCLELLAN. What is the cost of Inactive Ship Maintenance Facilities—FY's 74, 75, 76? What is the total number of ships managed at these facilities in 74, 75, and 76?

Answer. The O&M,N costs of operating the facilities and the civilian manyears are:

[In thousands of dollars]

	1974	1975	1976
Cost	$4,379	$5,032	$5,908
m/y	230	282	274

The total number of ships and craft managed each year is:

1974	729
1975	559
1976	480

Operating costs are increasing due to increased numbers of people; increased salaries; increased costs of fuel, utilities and supplies; and FY 76 costs of $425 thousand associated with the closure of the Orange, Texas facility.

There is not necessarily a correlation between numbers of ships managed and dollars required to operate the facilities. FY 75 was the peak employment year due to civilian substitution, and personnel levels are decreasing from FY 75 due to facility closures. At the same time, costs are increasing due to the above factors. It is expected that operating costs will decrease once the base closures are completed.

ELECTRONIC SYSTEMS TECHNICAL SUPPORT

Chairman MCCLELLAN. Electronic Systems Technical Support includes $11.0M for major equipments and component repair (electronic modules) to improve Fleet Readiness. How far behind in this repair area is the Navy?

Answer. Electronic Maintenance is performed in several major areas as indicated below. All of these programs began to develop a backlog of work due to increasing average age, increasing inventories of materials, and inflationary factors. Inflation hit all programs with the same general impact. Material costs have increased substantially in FY 74 with many items using copper, silver, and gold rising 300–500 percent. The effect of these cost increases reduced the number of units restored by 10 percent in FY 74 and it is expected that FY 75 will show a slightly larger reduction.

The Air Station Electronic Restoration program will have a maintenance backlog of $2.2M by the end of FY 75. These systems are critical to safety in flight of both military and commercial aircraft. The GCA radars and TACANs are over twenty years old and replacements are not scheduled until the 1980s. Components are no longer manufactured and some items must be rebuilt during the overhaul process. In the past year two F–4 aircraft were lost in the Mediterranean which was attributed to inoperational TACANs.

The Fleet Electronic Restoration program will have a backlog of $1.7M at the end of FY 75. The age, complexity and growing inventory of these shipboard equipments necessitate a planned maintenance program to provide speedy replacement of operational items.

Fleet Test Equipment Maintenance provides calibration and repair for shipboard test equipment critical to the performance of Fleet weapons systems. The lack of calibrated test equipment has been described as the "Achilles Heel" of the Navy's combatant ships. Only slightly more than half (55 percent) of the Fleet's test equipment is routinely serviced and those requiring repair at the time of calibration are not available for use by Fleet personnel for periods up to several months. The increase provides for full repair of these equipments to assure maximum availability and reduce inventory requirements.

Radiac and Cryptographic Repair provides for the safe operation of the Navy's Nuclear Propulsion Systems, readiness in nuclear warfare defense, and secure

electronic communication systems. The increase will enable the Navy to stay abreast of requirements created by the introduction of additional nuclear propulsion ships and the growing inventory of cryptographic devices to provide "secure" communications. A backlog of $1.0M will exist by the end of FY 75.

SOSUS cable repair provides for refurbishment and splicing of undersea cables. Refurbishment reduces procurement costs for new cables. Splicing is necessary to repair the recurring breaks in the network caused by earthquakes, fishing nets and ships anchors being dragged across the cables. Cable breaks are occurring with increasing frequency as more cables are laid and trawlers drag fish nets deeper and deeper in an effort to produce greater yields. In FY 73 there were 16 cable breaks, in FY 74—20 breaks were repaired, and in the first four months of FY 75—14 breaks had been reported.

Electronic Component Repair restores electronic modules that fail in use and returns them to the operators through the supply system. Requirements in this program will continue to grow as modern modularized equipment is delivered and replaces the older systems of single unit design. The backlog is illustrated by the decline in Supply Support Effectiveness (SSE) from 80 percent in FY 73, to 74 percent in FY 74, to 69 percent in FY 75 against a target SEE of 85 percent. The increase in FY 76 will raise the SSE to 75 percent.

Electrical Installation Support

Chairman McClellan. Explain why an increase of $12.9M for Remote Sensors, Fleet Command and Control, Air Stations, and other electronic installation support is required in FY 76?

Answer. The increase in installation requirements in FY 76 is the result of additional deliveries of new equipments from contractors, the need to improve the protection of nuclear weapons at storage sites, and upgrade Fleet Command and Control capabilities. Included in this increase is a transfer of $1.7M from OPN, the transfer of $1.5M from other O&M,N areas, and certain projects which relate only indirectly to installation.

Remote Sensors ($3.4M). This program is being accelerated in FY 76 to improve the protection afforded the Navy's nuclear devices, small arms, and other sensitive ordnance.

REWSON ($2.3). This program will deliver $40M worth of Fleet equipment per year for three years starting late in FY 75. The program funds installation support, groom and calibration, and technical services to the Fleet for special operations and electronic warfare.

Command and Control ($1.5). Site preparation, installation design and installation is required to improve the Fleet Command and Control Effectiveness. Installation schedules are phased with equipment deliveries from contract.

Air Station and Training Equipment ($1.1). Additional equipments will be received from contractors plants for installation to improve control tower operations and provide operation and maintenance training to Fleet personnel.

Field change kits and Tactical Electro-Magnetic Program (TEMP) modifications and operations ($1.5M). Increased emphasis is being placed on the installation of field changes to Fleet electronics to improve operational capabilities. In addition, modifications are required to TEMP aircraft and to fund the full years operations in FY 76.

Technical Services ($3.1). This area includes a $1.5M transfer and an increase for additional MOTU contractor assistance on electronic equipments which are beyond the capability of Fleet personnel.

Specialized Training Increases

Chairman McClellan. Specialized training increases $11.7 million in FY 76. $5.8 million of this is for new training plans. What traning plans are being deleted from the syllabus, if any?

Answer. Actions such as reduction of special Seabee training cancellation of the search radar operator jamming recognition and countermeasure courses in Norfolk, cancellation of carrier air traffic control center training in San Diego, reduction in transceiver instructor courses at Pearl Harbor and the cancellation of boiler maintenance lab training at Great Lakes were accomplished.

Chairman McClellan. Explain why there is an increase of 37 helicopter pilots being trained in Fiscal Year 76 over FY 75.

Answer. The increases are exclusively additional foreign students.

Chairman McClellan. Breakdown the cost of NROTC into the Junior and Senior programs, FY 74–76.

Answer. The breakdown of O&M, N dollars is as follows:

	Fiscal year—		
	1974	1975	1976
NROTC	12, 027, 000	13, 018, 000	12, 974, 000
NJROTC	3, 710, 000	3, 530, 000	3, 414, 000
Total	15, 737, 000	16, 548, 000	16, 388, 000

Enlisted Occupational Classification System

Chairman McClellan. Explain what the Navy enlisted occupational classification system is. How many skills does it cover/exclude. What is the total estimated cost of this system.

Answer. The Navy enlisted occupational classification system is a system for identifying personnel and requirements to facilitate effective manpower and personnel management for the accomplishment of the naval mission and to provide for the career welfare of naval personnel. The system identifies skills ranging from X-ray technician to Chaplain's clerk to high pressure welder.

The existing occupational classification system consists of occupational specialities (ratings), specific skill identifiers (navy enlisted classification codes) and special qualifications such as divers and aircrewmen. There are presently in existence 86 ratings and over 1100 navy enlisted classification codes. Unique to the Navy, and to the other sea services of this and other nations, is the long-standing practice of designating occupational specialties in words (such as Machinist's Mate or Personnelman) rather than numerically (by military occupational specialty codes) as is done in the land and air services. Also unique to the Navy is the legal requirement for the Secretary of the Navy to approve the institution or disestablishment of a rating.

A current program has been implemented to revise and update the classification system in accordance with recommendations of the 1973 Navy Enlisted Occupational Classification System Study. This program consists of a detailed review of manpower requirements and updating of occupational standards in the Aviation Maintenance field, with follow-on action projected for the Marine Engineering field. The review includes a more precise definition of skill levels, an investigation of commonality among ratings in the field, and a modification of training strategy and personnel distribution methods to support the changed occupational standards. Lessons learned in these occupational fields will later be applied to others.

Funds are primarily dedicated to contractual efforts for curriculum development, changes to the Navy Manning Plan and the projection and distribution systems, and to provide analysis support as the revisions take place. It will also support revisions of the Occupational Standards Manual, Rating Review Board staffing and long range personnel planning associated with new developments in platforms, equipment, and technology. Total costs for the program revisions in the FY 1976 Congressional Submission are as follows:

[In thousands of dollars]

	Fiscal year 1975	Fiscal year 1976	Fiscal year 197T
O. & M., N	$2, 400	$5, 800	$1, 400
MPN	755	756	189
Civilian personnel	27	27	27
Military personnel	47	47	47

Medical Care in Non-Service Facilities

The total estimated cost of the revised system is $35.0 million.

Chairman McClellan. Under what circumstances do military personnel and retired personnel and dependents undergo medical care in Non-Service facilities that are not covered under the CHAMPUS program?

Answer. The portion of the non-service budget which is not identified to the CHAMPUS program provides funding for care in civilian hospitals (active duty

personnel only) and care in Veterans' Administration, Public Health and Canal Zone hospitals.

Active Duty personnel are only hospitalized in civilian hospitals when it is related to an emergency situation and no uniformed service facility is nearby. Dependents and retired personnel have free choice of utilizing Public Health Service hospitals since they are designated as "Uniformed Service Facilities". Navy must reimburse the Public Health Service for all inpatient care.

Retirees have free choice of care at Veterans' Administration hospitals if space is available. Navy reimburses the Veteran's Administration for this care for all cases except retirees who were retired for physical disability.

The Canal Zone has no military hospitals, nor is it covered under the CHAMPUS program. Charges for medical care are established by the Panama Canal Company, Canal Zone Government. The Navy is billed for all medical care provided.

Chairman McCLELLAN. Why is inpatient average daily patient load (ADPL) declining in FY 76 even though costs are rising $20 million?

Answer. The majority of the increase between FY 75 and FY 76, is not relatable to change in workload. This increase is comprised of $4.1 million intended to fund increased costs for stock funded materials planned for FY 76, $5.0 million to provide contract security and janitorial services to a number of hospitals, $2.6 million for mechanization of clinical procedures for improved patient care, $1.0 million due to reinstitution of the drug screening program, $2.1 million for civilian pay raises, $1.2 million for increased attendance at professional conferences, and the remainder for full year cost of ongoing programs and minor program changes.

The decrease in ADPL results from a reduction in the length of patient stay (LOPS) for active duty patients. This reduction in LOPS results from discharge of the convalescing patient to a medical holding company vice retention on the sick list. This recognizes the convalescent nature of care received which requires very minimal resources when compared to acute phase of care.

The reduction in workload results from the administrative recognition of acute vs convalescent care, thus resulting in an apparent workload decrease without concurrent decrease in resource requirements.

Medical Training Programs

Chairman McCLELLAN. Other than Health Professionals Scholarship Program what types of professional medical training are included in the budget in Fiscal Year 1976?

Answer. Other than the Armed Forces Health Professions Scholarship Program, the following types of professional medical training are included in the Fiscal Year 1976 budget:

1. *Medical and Osteopathic Student Scholarship Program.* This program permits eligible active duty personnel to matriculate in approved medical schools under Navy sponsorship. Participants are appointed to the rank of Ensign and receive full pay and allowances of that rank. Additionally, tuition, fees, and books, and other educational expenses are defrayed by the Navy.

2. *Dental Scholarship Program.* This program permits eligible students to matriculate in approved dental schools under Navy sponsorship. Participants are appointed to the rank of Ensign and receive full pay and allowances of that rank. Additionally, tuition, fees, books, and other educational expenses are defrayed by the Navy.

3. *Senior Medical Student Program.* Participants in this program are appointed to the rank of Ensign in their final year of medical school and receive the pay and allowances of that rank. This is an early commissioning program designed to provide the Navy with medical officer accessions with extended active duty obligations to offset manpower losses in the Navy Medical Corps.

4. *Navy Nurse Corps Candidate Program.* This program was established as a means of drawing from the student nurse population to meet the critical need for a stable, reliable input of nurses to fill quotas needed for maintenance and replenishment of Nurse Corps numbers. The Navy subsidizes either the last one or last two years of the students college education. In addition to payment of tuition costs, students are enlisted on active duty and receive the pay and allowances of pay grade E–3. These students are commissioned as Ensigns in the Nurse Corps upon graduation.

5. *Navy Enlisted Nursing Education Program.* This is a four year baccalaureate degree nursing program offered to male and female petty officers of the Navy

Hospital Corps. Students in this program receive the pay and allowances of their rate as well as all tuition payments. These students are commissioned as Ensigns upon graduation.

6. *Navy Enlisted Dietetic Education Program.* The purpose of this program is to provide the opportunities for educating a dietitian who has the understanding and skill in the application of the principles of good nutrition and who is motivated for a military career. The program yields fully trained and educated personnel to fill existing dietetic billets and partially compensates for the increasing difficulty in filling these billets from other sources.

7. *Medical Service Corps Student Program.* This is an early commissioning program designed for students of Dietetics, Physical Therapy, Occupational Therapy and Health Care Administration. Students for this program are commissioned as Ensigns, 1935, USNR, Active, and receive full pay and allowances of that rank during the final year or two years of their academic program, as appropriate. All educational expenses must be paid by the student.

8. *Medical Corps Officer full-time training in civilian institutions.* This program provides training in clinical and research disciplines where a clear cut requirement exists for expertise in particular fields, and where the training spaces of in-house military programs are numerically insufficient, or where no in-service capability exists. Assignment to such sponsored training is based clearly on required staffing projections by allocating highest priorities to the disciplines in shortest supply and need.

9. *Dental Corps Officer full-time training in civilian institutions.* The program of dental graduate courses and training in dental specialties in civilian institutions for active duty Dental Officers is required to satisfy part of the Navy's need for well trained dental officers to practice, teach, and conduct research in the various disciplines of dentistry and to provide some of these officers with part or all of the normal training required for certification by American specialty boards. Civilian institutions programs continue to be necessary because in-house training capabilities are inadequate to provide sufficient numbers of specialists to meet training requirements, and to permit training of dentists in specialty areas not normally available within the naval service.

10. *Nurse Corps Officer full-time training in civilian institutions.* Full-time instruction of active duty Nurse Corps officers in civilian institutions prepares nurses to function more effectively, to assume positions of increased responsibility, and to meet professional standards and qualifications to fill validated positions in the area of Nursing Service Administration, patient care coordination, nursing education, nursing research, clinical nursing specialties and to function as nurse practitioners in the expanded role.

11. *Medical Service Corps Officers full-time training in civilian institutions.* This program is designed to fulfill the mission of the Medical Service Corps in support of the Navy Medical Department in discharging its obligation as part of the Navy. In addition, with the increasing emphasis being placed on educational achievement throughout the Naval Establishment, it is the desire of the Medical Department to assist every Medical Service Corps officer to raise his educational level to the highest degree possible. This program contributes toward the manning of all billets by officers of appropriate qualifications in order that the maximum effectiveness of each position may be achieved.

12. *Physician's Assistant Program.* This program is designed to provide a physician extender who is a skilled health professional, who is not a physician, but who by experience and formal training has become qualified to perform tasks formerly undertaken only by a physician. He is considered to meet the criteria of the "type-A" Physician's Assistant as defined by the Board of Medicine of the National Academy of Science, May 1970. The Physician's Assistant is intended to off-set the loss of General Medical Officer's in the Navy and makes it possible for the remaining professional staff to deliver the same high level of professional health care.

13. *Navy Medical Department Service Schools.* Training programs conducted at the Naval Health Sciences Education and Training Command, Naval Graduate Dental School, Naval School of Health Care Administration and the Naval Aerospace Medical Institute provide for the training of Medical Corps, Nurse Corps, Dental Corps, and Medical Service Corps officers, and of hospital corpsmen and dental technicians, for service ashore and afloat, with special emphasis upon certain phases of medicine and surgery, aerospace medicine, dentistry, and health care administration or particular importance to the Navy Medical Department.

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14. *Off Duty and Part-Time Voluntary Education Programs.* The Navy Medical Department has long emphasized the concept of continuing education during off-duty hours as a means of providing both professional and educational growth. Training in this category generally is limited to courses having a direct relationship to duties performed or those which are prerequisites for degree programs. Many enlisted personnel participating in this program do so in order to permit themselves the opportunity for in-Navy selection for commissioned officer programs. This program fully supports the concept "A University without Walls," which permits enlisted personnel to seek college level degrees within the Navy constraint of personnel assignment policies. This program is considered an important aspect of the All Volunteer Force which enables Navy Medical Department personnel every possible opportunity for self-satisfaction through higher education while at the same time better preparing personnel in pursuit of our mission and tasks.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator YOUNG. Senator Thurmond has also asked that a number of his questions be submitted for your answer and subsequent inclusion in the record.

[The questions and answers follow:]

INFLATION BUDGETING

Senator THURMOND. Why has the Navy not requested its Operation and Maintenance expenses for FY 1976 with a price inflation factor consideration?

Admiral FINE. Sir, the Office of Management of Budget (OMB) guidance prohibits budgeting for price escalation. Specifically, OMB Circular A-11 Section 13.5, states, "It will be assumed that, on the average, the general level of prices will be the same during the budget year as at the time the estimates are prepared, except where increases will result directly from laws already enacted. . . ."

Senator THURMOND. There will be a price inflation of some degree, therefore, I am wondering how the Navy plans to meet the necessary expenses when the budget request does not take it into account?

Admiral FINE. We will be forced to absorb these costs in fiscal year 1976 much as we are doing in fiscal year 1975. We will have to reduce programs by deferring ship and aircraft overhauls, reduce operating tempos, reduce fleet support in terms of availability of repair parts, supplies and equippage. We will have to lower our facilities maintenance level, increasing our backlog of essential maintenance and repair. All of these actions impact upon fleet readiness and are just some of the examples of rebalancing within the appropriation that must be done to fund the increased costs of goods and services due to the inflation for which we are not permitted to budget.

SHIP RETIREMENTS

Senator THURMOND. Where will the 28 older ships being retired be located?

Admiral FINE. Disposition of the 28 ships from the active fleet is as follows: 11—will be stricken from the Navy register; 3—will be turned over to the Military Sealift Command; 11—will be transferred to the Naval Reserve Fleet; 3—will be inactivated and retained in Navy custody.

Ships being stricken from the Navy register are subject to foreign sale or scrap sale and location is irrelevant. Current homeports for these ships are (3) San Diego, Calif., (3) Charleston, S.C., (2) Little Creek, VA, and (3) in Yokosuka, Japan.

Ships to be transferred to the Military Sealift are currently homeported as follows: (4) San Diego, Calif., (3) Chicago, Ill., (1) Norfolk, VA and (3) Little Creek, VA. These ships are expected to remain in the same general vicinity.

Of the three ships inactivating, USS HANCOCK (CVA-19) homeport—Alameda, Calif., and USS *Oriskany* (CVA-34), homeport—Long Beach, Calif., will probably be berthed in Bremerton, Wash. The nuclear submarine is expected to remain in her current homeport—Vallejo, Calif.

Senator THURMOND. To what extent are the older ships being retired maintained?

Admiral FINE. Ships transferred to Naval Reserve and Military Sealift Command will be maintained in essentially the same readiness posture.

Ships to be stricken will be cannibalized; i.e., fleet equipage and classified equipment. Candidates for foreign sales prior to strike require certain material and equipment to remain on board and in specific condition. Candidates for scrap will be completely demilitarized prior to scrap sale.

Ships inactivating will have classified and other selected equipments removed and the balance of the ship preserved. Very little upkeep is performed while in inactive status.

FLYING HOURS REDUCTION

Senator THURMOND. The Air Force reported a significant reduction flying for FY 1976 due to the higher price of oil and gas. Is the Navy taking a similar step?

Admiral FINE. The Navy request for FY 1976 is 132,000 hours less than the original request for FY 1975; a decrease of 6 percent. In addition, Navy has imposed a fuel consumption reduction for FY 1976 on the operating forces equivalent to 5 percent of the program.

Further program reductions are not considered viable options in view of the fact that Navy's request for FY 1976 represents the minimum readiness level consistent with OSD/DON long-range objectives.

JOINT AIR OPERATIONS SURVEY

Senator THURMOND. Has any consideration been given by the Navy to a survey of Air Force and Navy airfields looking toward some consolidation or joint use in order to effect maintenance and operations savings?

Admiral FINE. A tri-service basing study under the direction of OSD has recently re-examined strategic and tactical air bases for possible consolidation or closure efficiencies. The results of the study are presently being examined by appropriate offices in OSD.

Senator THURMOND. Are there any joint use operations in effect now and if so, how many?

Admiral FINE. There are presently nineteen (19) joint use airfields with Navy/Air Force/Army/Coast Guard participation. Eleven bases are Navy managed with other service as joint users. The nineteen airfield bases are listed below:

Activity:	*Joint user*
Andrews AFB	Navy (NAF Andrews)
Dobbins AFB	Navy (NAF Atlanta)
Kirtland AFB	Navy (Naval Weapons Evaluation Facility)
Lajes AB	Navy (NAF Lajes)
Kadena AFB [1]	Navy (FLTACTS Okinawa)
Misawa AFB	Navy (FWP DET Misawa)
Davis Monthan AFB	Navy (A/C storage)
Selfridge ANGB	Navy (NAF Detroit)
NAS Barbers Point	USCG/Army
NAS Corpus Christi	USCG/Army
NAS Dallas	ANG, Army Reserve
NAF El Centro	Air Force
NAS Glenview	USCG, Army
NAS Lakehurst	Army
AFRC Los Alamitos	Army/ANG
NAS Keflavik	NASA
NAS Moffett	USCG/Air Force Res/ANG
NAS New Orleans	Air Force Res/ANG
NAS Willow Grove	Air Force Res/ANG

[1] Effective 4th quarter fiscal year 1975 Navy relocating from Naha Airfield.

THE O&M NAVY ACCOUNT

Senator THURMOND. Admiral, break out for the record the major elements of the $8.3 billion O&M account.

Admiral FINE. Yes, sir. The information follows:

DIRECT READINESS

Fiscal year 1976	(*Dollars in millions*)
Aircraft Reworks—includes airframes, engines and aviation components	642.2
Ship Maintenance/Alts—includes 85 overhauls, alterations and non-scheduled ship repairs	1,882.6
Ship Intermediate Maintenance—costs of repair parts and material used by tenders, repair ships and FMAGS	69.7
Ship Operations—fuel, utilities, repair parts, and general supplies	620.5
Fleet Support—includes construction battalions, fleet commands, aviation outfitting material, MSC charter, travel and TAD	236.1
Calibration—repair of test equipment, etc	43.9
Component Rework—shipboard and electronic; such as pumps, propellors, shafts, etc	98.0
Air Operations—fuel, operational and intermediate maintenance, etc	647.2
Communications—command and control of Navy Forces	192.8
Torpedo Program—MK–48 and MK–46 torpedo and MK–30 target support	30.1
Missile Readiness—rework and maintenance of surface to air launched missiles	96.2
Subtotal	4,559.2

OTHER ITEMS

Federal Building Fund—payment to GSA for non-DOD owend facilities	44.6
Intelligence gathering functions	97.3
Training—(CNET less Air Ops) includes recruit, specialized, flight, Naval Academy, etc	340.7
Medical—hospital operations and medical care	268.6
Base Operations—provides for operation and maintenance of fleet support activities	597.1
Commissary Stores—costs of operation	19.8
Personnel Support—recruiting, human resources, morale, welfare and personnel administration programs	132.6
Transportation—second destination transportation costs of Navy material	215.1
Supply/Procurement—provides for operations	432.7
FBM Systems and Trident—supports operational reliability of SSBN weapon systems	284.4
Other Maintenance Support—includes fleet technical support, surface ordance rework and maintenance, etc	246.6
Other Logistic Support—testing and improvement of operational equipment, material management and information systems, technical and engineering support	362.4
Facilities Engineering Support—operation of (3) construction battalion centers, (6) engineering field divisions, initial outfitting of collateral equipment and pollution abatement	123.9
Electronics Test Support—installation and major maintenance of electronic equipments	162.8
Administration and Associated Activities—departmental costs of SECNAV and OPNAV and selected field activities of these organizations	256.8
Unified Command/Staffs—supports Cinclant, Cincpac and subordinate unified commands	46.1
Navy Oceanographic and Weather Service—Ocean mapping and weather data gathering for Navy Fleet and other users	75.3
Naval Investigative Service—agents to control crime in the U.S. Navy and the Marine Corps	20.0
Miscellaneous Items	34.0
Subtotal	3,760.8
Total	8,320.0

Ship Maintenance Slippage

Senator Thurmond. I understand there has been a slip in ship maintenance. Provide a statement outlining this problem.

Admiral Fine. Yes, there has been slippage in the ship maintenance program. This is the result of limited funds, rapidly increasing costs of material and labor, increased costs to repair the older ships of the fleet, and the increased maintenance requirements of the newer, more complex fleet ships.

Under current budget guidelines, repair cost estimates are based on the latest return costs of completed overhauls for similar ships. Because of the overhaul duration, and the time required to prepare return costs, inflationary effects occurring in the time span between overhaul and program estimation (16–18 months in some cases) cannot be accurately accommodated. Recently, rapid inflation has seriously eroded the adequacy of these cost estimates. Of particular concern to Navy is the rapidly escalating costs of shipyard materials.

Further, ship maintenance requirements have increased as noted above for such items as 1200 PSI improvements in our older ships and SSN recording increases. All the above has resulted in an increase in the backlog of deferred ship overhauls from 21 in FY 1972 to 62 in FY 1975.

The inflationary impact on the ship maintenance program execution is expected to continue until current budget policies are revised. The increase of 15 active fleet deferred ship overhauls in FY 1975 (from 47 to 62) is illustrative. Though 6 of these deferrals resulted from Congressional action, 9 deferrals resulted from the impact of inflation and increased work requirements. Similar numbers of deferrals in FY 1976 for inflation can be expected but the actual number will depend on the actual rate of inflation experienced.

Reserve Personnel, Navy

Operation and Maintenance, Navy Reserve

STATEMENT OF VICE ADM. PIERRE N. CHARBONNET, JR., U.S. NAVY, CHIEF OF NAVAL RESERVE/DIRECTOR OF NAVAL RESERVE

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

REAR ADM. R. G. ALTMANN, U.S. NAVY, DEPUTY DIRECTOR OF NAVAL RESERVE

COMDR. D. L. BOYDEN, U.S. NAVY, HEAD, FINANCIAL MANAGEMENT BRANCH, RESOURCES PROGRAMING DIVISION, OFFICE OF DIRECTOR OF NAVAL RESERVE

V. H. DURRANCE, ASSISTANT FOR LEGISLATION AND LIAISON, OFFICE OF DIRECTOR OF NAVAL RESERVE

JUSTICATION

Senator Young. The next witness is Vice Admiral Charbonnet. I think we will continue on without other witnesses. We will insert the information from the justification, and then hear Admiral Charbonnet's testimony.

[The justification follows:]

RESERVE PERSONNEL, NAVY

For pay, allowances, clothing, subsistence, gratuities, travel, and related expenses for personnel of the Naval Reserve on active duty under section 265 of title 10, United States Code, or while undergoing reserve training, or while performing drills or equivalent duty, and for members of the Reserve Officers' Training Corps, as authorized by law; [$211,900,000] $191,000,000.

For "Reserve personnel, Navy" for the period July 1, 1976, through September 30, 1976, $56,300,000. (10 U.S.C. 600, 683-4, 1475-80, 2031, 2101-11, 5456-57, 6081-86, 6148; 26 U.S.C. 3121; 37 U.S.C. 204, 206, 301, 305, 309, 402-4, 415-18, 427, 1002; 38 U.S.C. 701-12; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed for fiscal year 1976, and for the period July 1, 1976, through September 30, 1976.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-05-1405-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. RESERVE COMPONENT PERSONNEL	197,577	194,139	164,793
	2. RESERVE OFFICER CANDIDATES	22,450	25,134	26,207
	TOTAL DIRECT PROGRAM	220,027	219,273	191,000
	REIMBURSABLE (TOTAL)	199	272	272
10	TOTAL OBLIGATIONS	220,226	219,545	191,272
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-180	-253	-253
14	NON-FEDERAL SOURCES	-19	-19	-19
25	UNOBLIGATED BALANCE LAPSING	573	.....	.....
	BUDGET AUTHORITY	220,600	219,273	191,000
	BUDGET AUTHORITY:			
40	APPROPRIATION	220,600	211,900	191,000
44.30	PROPOSED SUPPLEMENTAL FOR MILITARY PAY RAISES	.....	7,373	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	220,027	219,273	191,000
72	OBLIGATED BALANCE, START OF YEAR	43,800	40,637	33,910
74	OBLIGATED BALANCE, END OF YEAR	-40,637	-33,910	-30,910
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	-8,037	.....	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	215,153	218,996	193,631
91.30	OUTLAYS FROM MILITARY PAY RAISE SUPPLEMENTAL	.....	7,004	369

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-06-1405-0-1-051		1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION			
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	178,210	177,470	155,875
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	11,919	12,311	10,724
26.0	SUPPLIES AND MATERIALS	17,906	16,077	13,851
42.0	INSURANCE CLAIMS AND INDEMNITIES	11,665	13,093	10,238
		327	322	312
	TOTAL DIRECT OBLIGATIONS	220,027	219,273	191,000
	REIMBURSABLE OBLIGATIONS:			
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	168	230	230
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	9	12	12
26.0	SUPPLIES AND MATERIALS	22	30	30
	TOTAL REIMBURSABLE OBLIGATIONS	199	272	272
99.0	TOTAL OBLIGATIONS	220,226	219,545	191,272

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-85-1405-0-1-051			TRANSITION
PROGRAM BY ACTIVITIES:			
DIRECT PROGRAM:			
1. RESERVE COMPONENT PERSONNEL			46,337
2. RESERVE OFFICER CANDIDATES			9,963
TOTAL DIRECT PROGRAM			56,300
REIMBURSABLE (TOTAL)			71
10 TOTAL OBLIGATIONS			56,371
FINANCING:			
RECEIPTS AND REIMBURSEMENTS FROM:			
11 FEDERAL FUNDS			-66
14 NON-FEDERAL SOURCES			-5
BUDGET AUTHORITY			56,300
BUDGET AUTHORITY:			
40 APPROPRIATION			56,300
RELATION OF OBLIGATIONS TO OUTLAYS:			
71 OBLIGATIONS INCURRED, NET			56,300
72 OBLIGATED BALANCE, START OF YEAR			30,910
74 OBLIGATED BALANCE, END OF YEAR			-33,210
90 OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL			54,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

DIRECT OBLIGATIONS:			
PERSONNEL COMPENSATION			44,013
12.2 PERSONNEL BENEFITS: MILITARY PERSONNEL			3,298
21.0 TRAVEL AND TRANSPORTATION OF PERSONS			4,633
26.0 SUPPLIES AND MATERIALS			4,268
42.0 INSURANCE CLAIMS AND INDEMNITIES			88
TOTAL DIRECT OBLIGATIONS			56,300
REIMBURSABLE OBLIGATIONS:			
12.2 PERSONNEL BENEFITS: MILITARY PERSONNEL			60
21.0 TRAVEL AND TRANSPORTATION OF PERSONS			3
26.0 SUPPLIES AND MATERIALS			8
TOTAL REIMBURSABLE OBLIGATIONS			71
99.0 TOTAL OBLIGATIONS			56,371

INTRODUCTORY STATEMENT

The "Reserve Personnel, Navy" appropriation provides financial support for the Naval Reserve. As individually entitled, Reserve Personnel and Reserve officer candidates who perform prescribed training receive pay and allowances, uniforms, clothing, subsistence in kind, travel to and from training and miscellaneous benefits authorized by law. This appropriation also provides funds for the pay and allowances and permanent change of station travel of selected Naval Reserve officers on active duty. These officers are assigned to designated headquarters locations for the training and administration of Naval Reservists.

The purpose of the Naval Reserve is to provide trained units and qualified persons available for active duty in the Navy, in time of war or national emergency and at such other times as the National Security requires. The Secretary of Defense has indicated that reserve forces will be the initial and primary source for augmentation of the active forces in any future emergency requiring a rapid and substantial expansion of the active forces.

Reserve personnel are trained by drills and active duty for training. Drills are conducted at specified periods in reserve centers or facilities, at air stations and aboard ships, planes, or stations. Active duty for training of two weeks duration is required of all members in a drill pay status. It is also made available to those members who drill in a non-pay status who have already served on active duty and desire to maintain their skills. Enlisted members being trained in certain programs are provided active duty for training ranging in length from four to ten months. In addition, essential school and special tours of active duty for training are offered to selected personnel who must qualify in certain specialties to meet changing requirements of the Active Force.

Reserve officer candidates are trained to qualify for commissions in the regular Navy and in the Naval Reserve. Their training consists partly of academic courses and partly of active duty during the summer months. The Naval Reserve Officers Training Corps (NROTC) students are enrolled in colleges and universities throughout the United States. During the school year they pursue studies in approved curricula and in naval science. During summer vacation they are given ship or shore based professional naval training of six to eight weeks. The Reserve Officer Candidates (ROC and AVROC) are provided professional naval training of eight and one-half and twelve weeks during each of two summers at the Officer Candidate School, Newport, Rhode Island and the Naval School, Pre-flight, Pensacola. NJROTC students are enrolled in high schools throughout the country and receive training in naval science and orientation. Members of the Armed Forces Health Professions Scholarship Program are commissioned officers in the Naval Reserve while enrolled in colleges and universities throughout the United States. These officers perform forty-five days of active duty for training annually.

SUMMARY OF REQUIREMENTS

(In Thousands of Dollars)

	Actual	Estimate		
	FY 1974	FY 1975	FY 1976	FY 197T
Reserve Component Personnel	$197,776	$194,410	$165,064	$46,407
Reserve Officer Candidates	22,450	25,135	26,208	9,964
TOTAL PROGRAM REQUIREMENTS (Obligations)	220,226	219,545	191,272	56,371
Less Actual/Anticipated Reimbursements	199	272	272	71
Total Direct Obligations/Appropriations	$220,027	$219,273	$191,000	$56,300

Operation and Maintenance, Navy Reserve

For expenses, not otherwise provided for, necessary for the operation and maintenance, including training, organization, and administration of the Navy Reserve; repair of facilities and equipment; hire of passenger motor vehicles; travel and transportation; care of the dead; recruiting;procurement of services, supplies and equipment; and communications:[$245,200,000] $308,600,000, of which not less than ($11,000,000) $11,500,000, shall be available only for the maintenance of real property facilities.

For "Operation and maintenance, Navy Reserve" for the period July 1, 1976, through September 30, 1976, $80,700,000. (10 U.S.C. 262, 276, 503, 1481-88, 2110, 2202, 2231, 2233a, 2631-34, 5012, 5031, 5251, 6022: 31 U.S.C. 638a; Department of Defense Appropriation Act, 1975.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1806-0-1-051		1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. MISSION FORCES	102,806	150,074	197,104
	2. DEPOT MAINTENANCE	37,674	34,503	39,167
	3. OTHER SUPPORT	54,682	61,611	72,329
	TOTAL DIRECT PROGRAM	195,162	246,188	308,600
	REIMBURSABLE (TOTAL)	5,468	8,000	8,000
	SUBTOTAL	200,630	254,188	316,600
	INTRAFUND OBLIGATIONS	-698	-1,000	-1,000
10	TOTAL OBLIGATIONS	199,932	253,188	315,600
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-4,471	-6,700	-6,700
14	NON-FEDERAL SOURCES	-299	-300	-300
25	UNOBLIGATED BALANCE LAPSING	2,887	.....	.....
	BUDGET AUTHORITY	198,050	246,188	308,600
	BUDGET AUTHORITY:			
40	APPROPRIATION	195,050	245,200	308,600
40	RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-1,100	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	3,000	.....	.....
43	APPROPRIATION (ADJUSTED)	198,050	244,100	308,600
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	1,900	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	188	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	195,162	246,188	308,600
72	OBLIGATED BALANCE, START OF YEAR	23,604	67,986	76,174
74	OBLIGATED BALANCE, END OF YEAR	-67,986	-76,174	-95,774
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	438	.....	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	151,219	236,312	288,600
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	1,500	400
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL	.....	188	.....

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1806-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	24,708	29,984	31,430
11.3	POSITIONS OTHER THAN PERMANENT	490	550	369
11.5	OTHER PERSONNEL COMPENSATION	770	1,353	1,174
	TOTAL PERSONNEL COMPENSATION	25,968	31,887	32,973
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	25,539	31,434	32,535
12.1	PERSONNEL BENEFITS: CIVILIAN	2,211	2,841	3,100
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	2,426	2,335	2,812
22.0	TRANSPORTATION OF THINGS	128	129	94
23.0	RENT, COMMUNICATIONS, AND UTILITIES	8,395	9,624	11,630
24.0	PRINTING AND REPRODUCTION	277	319	392
25.0	OTHER SERVICES	100,472	124,415	164,638
26.0	SUPPLIES AND MATERIALS	54,211	73,684	90,759
31.0	EQUIPMENT	1,503	1,407	2,640
	TOTAL DIRECT OBLIGATIONS	195,162	246,188	308,600
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	429	453	438
12.1	PERSONNEL BENEFITS: CIVILIAN	37	41	42
25.0	OTHER SERVICES	4,752	7,006	7,020
26.0	SUPPLIES AND MATERIALS	250	500	500
	TOTAL REIMBURSABLE OBLIGATIONS	5,468	8,000	8,000
	SUBTOTAL	200,630	254,188	316,600
96.0	INTRAFUND OBLIGATIONS	-698	-1,000	-1,000
99.0	TOTAL OBLIGATIONS	199,932	253,188	315,600

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-10-1806-0-1-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. MISSION FORCES	52,622
	2. DEPOT MAINTENANCE	9,053
	3. OTHER SUPPORT	19,025
	TOTAL DIRECT PROGRAM	80,700
	REIMBURSABLE (TOTAL)	2,000
	SUBTOTAL	82,700
	INTRAFUND OBLIGATIONS	-250
10	TOTAL OBLIGATIONS	82,450
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-1,675
14	NON-FEDERAL SOURCES	-75
	BUDGET AUTHORITY	80,700
	BUDGET AUTHORITY:	
40	APPROPRIATION	80,700
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	80,700
72	OBLIGATED BALANCE, START OF YEAR	95,774
74	OBLIGATED BALANCE, END OF YEAR	-88,474
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	88,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1806-0-1-051				TRANSITION
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS			7,900
11.3	POSITIONS OTHER THAN PERMANENT			83
11.5	OTHER PERSONNEL COMPENSATION			293
	TOTAL PERSONNEL COMPENSATION			8,276
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION			8,166
12.1	PERSONNEL BENEFITS: CIVILIAN			779
21.0	TRAVEL AND TRANSPORTATION OF PERSONS			753
22.0	TRANSPORTATION OF THINGS			24
23.0	RENT, COMMUNICATIONS, AND UTILITIES			3,041
24.0	PRINTING AND REPRODUCTION			97
25.0	OTHER SERVICES			40,531
26.0	SUPPLIES AND MATERIALS			26,648
31.0	EQUIPMENT			661
	TOTAL DIRECT OBLIGATIONS			80,700
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION			110
12.1	PERSONNEL BENEFITS: CIVILIAN			10
25.0	OTHER SERVICES			1,755
26.0	SUPPLIES AND MATERIALS			125
	TOTAL REIMBURSABLE OBLIGATIONS			2,000
	SUBTOTAL			82,700
96.0	INTRAFUND OBLIGATIONS			-250
99.0	TOTAL OBLIGATIONS			82,450

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PERSONNEL SUMMARY

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total number of permanent positions	3,056	3,036	3,117	3,117
Full-time equivalent of other positions ..	58	61	40	40
Average paid employment	2,619	3,009	3,066	3,066
Average GS grade	4.9	4.9	4.9	4.9
Average GS salary	$9,187	$9,830	$9,983	$9,983
Average salary of ungraded positions	$10,561	$10,837	$11,239	$11,239

INTRODUCTORY STATEMENT
(In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total Direct Obligations	$195,162	$246,188	$308,600	$80,700
Proposed Supplemental for Civilian Pay Increases		- 2,088		
Transfer from other Accounts	- 3,000			
Unobligated Balance	+ 2,888			
Appropriation	$195,050	$244,100	$308,600	$80,700

This appropriation was established by the Congress in 1973 to provide for the costs of operating the Naval Reserve forces and maintaining their assigned equipment at a state of readiness which will permit rapid employment in the event of full or partial mobilization. These forces, consisting primarily of ships and aircraft and the personnel to man them, are a vital part of the Navy's total force. The cost of operating and maintaining aircraft in the Fourth Marine Air Wing is also contained in this appropriation.

The Operation and Maintenance, Navy Reserve appropriation consists of three budget activities: 1 - Mission Forces; 2 - Depot Maintenance; and 3 - Other Support. Mission Forces consists primarily of operation and maintenance of Reserve ships and aircraft. Depot Maintenance includes aircraft reworks and training equipment maintenance. Other Support provides for command and administrative activities and the costs of operating air stations, centers and facilities which support the Naval Reserve forces.

Emphasis continues to be placed on making the Naval Reserve a more hardware oriented organization. Three large amphibious ships and 8 modern gas-turbine powered patrol gunboats will enter the Naval Reserve force in fiscal year 1976. While the total number of aircraft in the force declines slightly (from 615 to 590) in fiscal year 1976, the assignment of newer, more capable aircraft continues at a moderate rate. As a result of the energy crisis, the fiscal year 1975 flying program was reduced from a required 265,000 to 204,000 hours. The fiscal year 1976 request provides for an increase to 233,000 hours to avoid the adverse impact on readiness which would result from extended periods of sharply reduced flight operations. Ship operations have also suffered during fiscal year 1975 from the effects of rising fuel prices without supplemental funds. The increase from 50,000 to 60,000 underway hours will provide only a modest 14 steaming days per quarter for each ship in fiscal year 1976.

The primary causes for large increases in this appropriation in fiscal year 1976 are the sharp rises in fuel and material costs. For example, the hourly fuel cost for aircraft rises from $179 in fiscal year 1975 to $219 in fiscal year 1976, an increase of 22% resulting primarily from price increases. Prices for material associated with ship overhauls also increase dramatically.

Naval Reserve units perform their annual two-week training duty during the summer months. For this reason, the operating tempo requested in the transition budget is higher than one-quarter of a normal year. Ship operations are at 29 percent and flight operations are at 28 percent of the fiscal year 1976 level.

Direct Hire Civilian Employment

(Dollars in thousands; strength in whole numbers)

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate			FY 1977 Estimate
	Average Strength	End Strength 6/30/74	Est. Oblig.	Average Strength	End Strength 6/30/75	Est. Oblig.	Average Strength	End Strength 6/30/76	Est. Oblig.	Average Strength	End Strength 9/30/76	Est. Oblig.	End Strength 9/30/77
Direct Hire Civilians													
Full-time permanent	2,561	3,026	27,713	2,948	3,006	34,200	3,026	3,086	35,730	3,026	3,086	8,978	3,093
Other	58	47	503	61	41	569	40	20	385	40	20	87	20
Total Direct Hire Civilians	2,61°	3,073	28,216	3,009	3,047	34,769	3,066	3,106	36,115	3,066	3,106	9,065	3,113
Detail by Budget Activity													
Mission Forces	-	-	-	-	-	-	-	-	-	-	-	-	-
Depot Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Support	2,619	3,073	28,216	3,009	3,047	34,769	3,065	3,106	36,115	3,066	3,106	9,065	3,113
Total Direct Hire Civilians	2,619	3,073	28,216	3,009	3,047	34,769	3,066	3,106	36,115	3,066	3,106	9,065	3,113
Reimbursable Obligations Included Above			(466)			(494)			(480)			(120)	

Note: Reflects civilian personnel data identified with direct and reimbursable obligations. Dollars shown include costs reported in object classes 11, 12 and 13 in the Object Classification schedule.

Other Personnel Compensation
(Dollars in Thousands)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Overtime and holiday pay.....	143	115	117	30
Sunday and night differential.....	167	329	281	70
Post differential.....	-	-	-	-
Premium pay (includes firefighters).....	460	909	776	193
Other Compensation (includes payments made to foreign nationals).....	-	-	-	-
Total.....	770	1,353	1,174	293

SUMMARY OF OBLIGATIONS

(In Thousands)

Budget Activity	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	Difference 1976 Compared With 1975
1. Mission Forces	$102,806	$150,074	$197,104	$ 52,622	$+47,030
2. Depot Maintenance	37,674	34,503	39,167	9,053	+ 4,664
3. Other Support	54,682	61,611	72,329	19,025	+10,718
Total Direct Obligations in Budget Document	$195,162	$246,188	$308,600	$ 80,700	$+62,412

BIOGRAPHY AND PREPARED STATEMENT

Senator YOUNG. Admiral Charbonnet, we will place your biographical sketch and prepared statement in the record at this point.

[The biography and statement follow:]

BIOGRAPHY OF VICE ADMIRAL PIERRE N. CHARBONNET, JR.

Vice Admiral Pierre Numa Charbonnet, Jr., was born in San Francisco on December 22, 1919, the son of Dr. Pierre N. Charbonnet of New Orleans, La., and Blanche Rogers Charbonnet of Tulsa, Okla (both deceased). He attended Cascia Hall, Tulsa, and the Hotchkiss School, Lakeville, Conn., prior to entering the U.S. Naval Academy on appointment from the state of Oklahoma in 1937. He was commissioned ensign on February 7, 1941, and subsequently advanced in rank, attaining the grade of Vice Admiral on August 23, 1974.

He was serving in the heavy cruiser USS Augusta when the United States entered World War II, and upon transfer to the Pacific Theater, served in the USS New Orleans, participating in the sea actions in support of the Guadalcanal Campaign.

After completing flight training in Pensacola, he was designated a naval aviator March 4, 1944, and proceeded to Naval Air Station, Melbourne, Fla. for operational training in fighter aircraft.

He joined Fighter Squadron 24 in July 1944 and assumed command of Fighter Squadron 24 and Air Group 24 in April 1945 on USS Santee when the Air Group Commander was lost in combat. Under his command, Carrier Air Group 24 received the Presidential Unit Citation and he was awarded the Distinguished Flying Cross with Gold Star in lieu of a second, and the air medal with six Gold Stars.

Returning to the United States, he was assigned to Fleet Air West Coast until November 1945; he then served with Fighter Bomber Squadron 17 as executive officer. In May 1946, he assumed command of Fighter Bomber Squadron 82, later redesignated Fighter Squadron 172, operating from USS Randolph with the SIXTH Fleet. From March 1948 to January 1951, he was attached to Naval Air Station, Pensacola, as personnel officer and administrative officer and officer-in-charge of the Flight Instructors School. In March 1951, he joined Air Development Squadron Three, where he served as executive officer and project pilot for development of fighter and attack tactics for carrier aircraft until Feb. 1953.

Admiral Charbonnet was ordered to the Naval Air Test Center, Patuxent River, Md., completed test pilot training in 1953, and served in the Tactical and Flight Test Divisions, where he directed tactical and engineering flight testing for carrier aircraft. In May 1955, he assumed command of Attack Carrier Air Group Eight in USS Intrepid and deployed with the Sixth Fleet in the Mediterranean Sea.

In 1957 he served as air group training officer on the staff of Commander Naval Air Force, U.S. Atlantic Fleet and in 1958 reported as executive officer in USS FORRESTALL (CVA 59). In July 1959 Admiral Charbonnet entered the National War College, Washington D.C. for one year and then assumed duties as head aviation requirements planning in the Office of the Deputy Chief of Naval Operations for Air.

From September 1962 to August 1963, he commanded the fleet oilers USS Marias and USS Pawcatuck. Under his command, the former was the recipient of the Battle Efficiency Award for the Atlantic Fleet. Following participation in the Advanced Management Program at Harvard University, he reported in February 1964 as Commanding Officer, USS Coral Sea in the Pacific Fleet.

Departing Coral Sea in February 1965, he reported as Chief of Staff and Aide to Commander Carrier Division Seven and Commander Attack Carrier Striking Force, Seventh Fleet, on deployment to Vietnam in USS Midway for combat operations from March through October 1965. For performance of duties he was awarded the Legion of Merit for "exceptionally meritorious conduct" while serving as Chief of Staff to Commander Carrier Striking Force Seventh Fleet for performance in coordination of all carrier combat air operations in North and South Vietnam.

He assumed duties as Commandant of the Eighth Naval District in New Orleans, La. on November 30, 1965, his first assignment as a flag officer and for which he was awarded his second Legion of Merit in May 1968.

On May 24, 1968, Vice Admiral Charbonnet relieved Commander Carrier Division Six while embarked in USS Franklin D. Roosevelt (CVA 42) and served as Commander Carrier Striking Force Sixth Fleet from January to August 1969 with his staff embarked in the carriers Shangri-La, Forrestal and John F. Kennedy.

In September 1969 Vice Admiral Charbonnet reported to the Chief of Naval Operations and was assigned duties as director of the Fleet Operations Division and the Naval Reconnaisance Center. For meritorious performance of duty he was awarded his third Legion of Merit in March 1971.

On April 3, 1971 Vice Admiral Charbonnet relieved Rear Admiral Fleming, Commander Fleet Air Mediterranean/Commander Anti-Submarine Warfare Force SIXTH Fleet/Commander Maritime Air Mediterranean. He was detached from this command and assumed his present position as Chief of Naval Reserve with headquarters in New Orleans on August 21, 1974.

He is married to the former Mary A. Dutton of Annapolis, Maryland and Upperville, Virginia. They have five children, Heldegarde (Mrs. John S. Leffen, Jr.), Louise (Mrs. John Alton McIver, Jr.), Michele (Mrs. Vincent Carr Tompkins III), Pierre N., III, and Suzanne.

Son, Pierre N. Charbonnet, III, Lieutenant, USN is serving aboard USS LEXINGTON.

STATEMENT OF VICE ADMIRAL PIERRE N. CHARBONNET, JR.

Mr. Chairman and members of the committee:

I am Vice Admiral Pierre N. CHARBONNET, Director of Naval Reserve. It is a pleasure for me to appear before this committee in support of the request for two appropriations dedicated to the support of the Naval Reserve. In the Reserve Personnel, Navy appropriation we are requesting $191 million for fiscal year 1976 and $56.3 million for the three month transition period refered to as fiscal year 197T. In the Operation and Maintenance, Navy Reserve appropriation we are asking for $308.6 million in fiscal year 1976 and $80.7 million in fiscal year 197T.

First I would like to present some general information regarding changes to the Naval Reserve program.

The Naval Reserve has been undergoing restructuring this fiscal year to relate manpower, training and hardware more closely to stated mobilization requirements. The new Selected Reserve alignment consists of units undergoing training to perform specific jobs within a very short time after recall. This contrasts with the former philosophy of having a pool of individuals trained in rating skills who required additional unit training after mobilization to perform their assignments. A ship or squadron reinforcement unit, for example, will be composed of officers and enlisted men needed to man a specific ship class or aircraft squadron type for wartime operations. The unit will perform its annual two-week training periods on a class ship or type

squadron wherever possible. Similarly, units which have been established to reinforce staffs and shore activities will be trained to provide more immediate assistance when recalled. Existing Selected Reserve manpower will be utilized to the fullest in order to minimize turbulence associated with transitioning to the new structure.

To provide more effective command, better management control of training and more efficient administration in the surface Reserve, we are continuing with the orderly establishment of Readiness Commands. We now have 12 of these field headquarters in operation and plan to have 17 by the end of Fiscal Year 1976. These commanders monitor unit training at Reserve Centers, schedule the use by outlying units of training devices and equipment which are located at centralized drill sites and establish policies needed to effectively train and administer this large segment of the Naval Reserve.

While our 1975 surface force was composed primarily of old destroyers and mine countermeasures ships, the 1976 budget will support the addition of patrol craft and amphibious ships. The total number of ships remains essentially unchanged. The aging coastal minesweeping ships which are minimally capable will be dropped during Fiscal Year 1976. Countering this reduction will be the addition of patrol gunboats, which are the coastal patrol and naval inshore warfare craft employed successfully in Vietnam, and two amphibious transports and one amphibious cargo ship. These amphibious ships have an average age of twenty years and therefore have at least ten years of useful life remain-

ing. The destroyer force will continue to be composed of once modernized World War II vintage ships. The age and condition of these ships necessitates adherance to a strict overhaul and maintenance program to keep them in a satisfactory state of material readiness.

Modest modernization of the Air Reserve continues with the updating of various squadrons. Two of four fighter squadrons will fly the more modern F4B aircraft, while land-based patrol squadrons will continue transition from the SP-2H to the P-3 Orion aircraft. The older and obsolescent S-2 carrier based antisubmarine aircraft will be phased out by the end of Fiscal Year 1976. A new combat search and rescue helicopter squadron will be added. This will preserve and exploit the combat search and rescue techniques developed during the Vietnam conflict.

The readiness of our ships and squadrons remains at about the same level as last year. While we had hoped to make significant increases, sharply reduced operating tempo during Fiscal Years 1974 and 1975 has precluded any improvement.

Now I shall discuss the appropriations in detail. First, the Reserve Personnel, Navy Appropriation.

The Reserve Personnel, Navy (RPN) appropriation includes funds for pay and allowances, clothing, subsistence, travel costs and related expenses for members of the Reserve Component performing inactive duty drills or undergoing active duty for training. It also provides for Naval Reserve officers on active duty assigned under the authority

of Section 265, Title 10, USC and for members enrolled in various officer procurement programs.

The appropriation is divided into two budget activities. Budget Activity One provides funding for Reserve component personnel, and Budget Activity Two supports the Reserve Officer Candidate Program, Reserve Officer Training Corps, Navy Junior Reserve Officers Training Corps and the Armed Forces Health Professions Scholarship Program. The total fiscal year 1976 appropriation request of $191.0 million includes $164.8 million for Budget Activity One and $26.2 million for Budget Activity Two.

The Budget Activity One funding is to support a Selected Reserve average strength of 93,972. This represents a 17,945 decrease from the fiscal year 1975 funded average strength of 111,917. The indicated strength reduction results from a realignment of Reserve missions and forces, and a reassessment of high priority mobilization requirements, as well as from fiscal constraints. Thus, mainly as a result of this reduction in strength, the Fiscal Year 1976 funding request for support of Reserve Component Personnel represents a net decrease of $29.3 million from the Fiscal Year 1975 funding level. Also contributing to the funding decrease is the assignment of additional billets from training/pay Category A (48 paid drills per year) to training/pay Category B (24 paid drills per year). Noteworthy in regard to this transfer is the considerable difficulty which has been experienced during Fiscal Year 1975 in attaining pay Category B strengths. To attain the levels approved by Congress in the Fiscal Year 1975 budget

request, sufficient pay Category A billets were transferred to pay Category B. However, many of the transferred personnel, primarily enlisted, have determined pay Category B status to be economically unattractive and as a result have terminated their affiliation with the Naval Reserve. This has resulted in a net strength loss which has left no alternative but to adjust pay Category A and B strength mix in an effort to attain the total appropriated Fiscal Year 1975 strength. The current Fiscal Year 1975 strength plan reflects this adjustment. Every effort will be made to achieve the pay Category B strength levels requested for Fiscal Year 1976 as was done in Fiscal Year 1975.

Included in the Budget Activity One request is funding to support annual active duty for training with pay for 2900 pay Category D officer and enlisted personnel who perform their regular drills without pay. The Fiscal Year 1976 pay Category D allotment request is for $514 thousand more than is programmed in Fiscal Year 1975. The 1975 program was reduced by reprogramming action to help offset travel obligations incurred prior to a $1.0 million reduction in overseas training travel assessed by Congress.

In addition to Reserve component costs associated with drill and annual active duty for training of pay Category A, B and D personnel, the Fiscal Year 1976 request includes $6.7 million to provide basic military and technical training for 2207 non-prior service enlistees. This reflects a $2.4 million reduction below the Fiscal Year 1975 budgeted level. The Fiscal Year 1976 accession projection is in consonance with estimated recruiting capabilities and the needs of the

Naval Reserve. Funding in the amount of $6.4 million is requested for school and special active duty for training tours. This is approximately $0.6 million below the FY 1975 programs as a result of the declining personnel strength. This additional training is necessary to enhance the mobilization posture of the Naval Reserve by providing for needed proficiency in certain skill areas which cannot be achieved solely by regular drills and annual active duty for training periods. In the category of Administration and Support, $5.9 million is requested primarily to provide funding for 206 active duty reserve officers located at the seat of government and at headquarters administering reserve affairs, as authorized by Section 265, Title 10, USC. An average strength decrease of 21 officers in Fiscal Year 1976 accounts for the majority of the $0.7 million funding decrease. The Fiscal Year 1976 request for 206 RPN funded officers exceeds the Fiscal Year 1975 end strength approved by Congress by three. The additional billets are established in the office of the Assistant Secretary of the Navy for Manpower and Reserve Affairs in consonance with Congressional guidance set forth in the House Armed Services Committee Report for Fiscal Year 1975. Funds are also included to provide death gratuities, disability and hospitalization benefits allowable in the event of deaths or injuries incurred by inactive duty Naval Reservists while performing inactive duty training or active duty for training.

In the case of Budget Activity Two, the funding request of $26.2 million for support of the Officer Procurement programs represents a net increase of $1.1 million above

the Fiscal Year 1975 level. This increase is requested to support increased enrollment in the Junior Reserve Officer Training Corps, an increase in the number of students in the Senior Reserve Officer Training Corps eligible to receive a subsistence allowance and perform summer training, and full year funding of the October 1974 military pay raise. The overall average Fiscal Year 1976 enrollment of 8100 students in the Senior and Scholarship Reserve Officer Training Corps is the same as estimated in Fiscal Year 1975. However, an increase in third and fourth year students is projected for the Senior program. These personnel are eligible to receive subsistence allowance payments and to perform a paid summer training period. Fiscal Year 1976 average enrollment in the Junior Reserve Officer Training Corps is projected to increase by 4200 over the Fiscal Year 1975 level of 31,800. The planned Fiscal Year 1976 Reserve Officer Candidate and the Aviation Reserve Officer Candidate programs are essentially level funded with the Fiscal Year 1975 program. Funds will provide for an input of 760 candidates and a projected commissioning of 453 officers. The Woman Officer Candidate program was phased out during Fiscal Year 1975 as a result of an expanded Women's ROTC program. The Fiscal Year 1976 Armed Forces Health Professions Scholarship Program request reflects a minor decrease from Fiscal Year 1975. The Fiscal Year 1975 program provided for an increased number of active duty training periods to resolve a Fiscal Year 1974 performance shortfall. This action is no longer required in Fiscal Year 1976.

The overall Fiscal Year 1976 Reserve Personnel, Navy appropriation request is $28.3 million below the Fiscal Year 1975 appropriation. The total Fiscal Year 197T (Transitional) request is for $56.3 million and includes $46.3 million for Budget Activity One and $10.0 million for Budget Activity Two. This is an extension of the Fiscal Year 1976 program and is slightly more than 25 percent of a full Fiscal Year 1976 program as a result of the traditionally higher training requirements during the summer months. A Selected Reserve average strength of 92,000 is requested.

In the Operation and Maintenance, Navy Reserve appropriation we are requesting $308.6 million for Fiscal Year 1976 and $80.7 million for the transition period. The Fiscal Year 1976 request is $62.4 million above the Fiscal Year 1975 program. The principal reasons for the differences are increases in fuel, material and labor costs. The transition period request is 26.2 percent of the full Fiscal Year 1976 amount. This is so because the period encompasses the summer months when flying and steaming activity historically has been higher in support of annual active duty for training.

Budget Activity 1: Mission Forces

Budget Activity 1 funds provide for training support and for operation and maintenance of aircraft, ships and stations which support the Naval Reserve Forces. In Fiscal Year 1976 we are requesting $197.1 million which is an increase of $47 million over the Budget Activity 1 program for Fiscal Year 1975. Ship and aircraft operations account for the largest percentage of this increase ($24.8 million).

Of this amount $16.5 million is related to increased fuel costs and material price escalation. The remaining $8.3 million permits an increase of 26 thousand flying hours and 10,000 steaming hours. Historically, the tempo of Naval Reserve operations has been limited by the availability of the Reservist, not fuel or funds. When the energy crisis surfaced in 1973, the Reserve forces suffered large reductions in operating funds. Readiness improvements virtually ceased, and despite all efforts to obtain the maximum training for each gallon of fuel, no cost effective substitution for flying and steaming has been found. Expensive weapons systems simulators cannot be located at Reserve activities because their application is limited and would not involve enough use to justify the cost of their procurement. Consequently, the Fiscal Year 1976 budget requests a modest increase in operating tempo for both ships and aircraft. This is considered absolutely essential if the Reserve force is to meet its readiness objectives commitment.

Ship maintenance accounts for $13.3 million more of the increase. We will receive three large amphibious ships from the active forces in Fiscal Year 1976, and all three will require overhaul at a cost of $18.4 million. We will overhaul 7 destroyers, 10 minesweepers and 2 patrol gunboats. While the total number of overhauls is nearly the same as in Fiscal Year 1975, the change in mix and the effects of escalation account for the increased cost. Despite this effort we will have 5 destroyers overdue for overhaul at the end of Fiscal Year 1976 and 4 destroyers and one patrol gunboat overdue at the end of the transition period.

Funding for ship alterations increases $4.3 million in Fiscal Year 1976. This is due largely to labor and material cost increases, but also results from the requirement to install expensive pollution abatement alterations in the three amphibious ships being assigned to the force and to convert their engines to use distillate fuel instead of the less efficient "black oil".

An increase of $2.9 million is requested to support the Coastal/River program for the overhaul of seven additional patrol boats and craft and to offset increased labor and material costs associated with the repair and maintenance of all equipment assigned to these forces.

Other increases include more travel funds to send more enlisted men to available Class "A" schools ($0.1 million) and to offset increased stock fund prices in support of various surface Reserve programs ($0.2 million).

In Fiscal Year 1976, $1.4 million for travel and per diem costs in support of aviation squadrons has been included in this budget activity instead of in Budget Activity 3 as in previous years. This action provides for better management of funds.

Budget Activity 2

This budget activity provides for the maintenance and repair of aircraft and engines as well as the repair and overhaul of technical training equipment. We are requesting an increase of $4.7 million above the Fiscal Year 1975 program. This will permit an increase of 4 airframe reworks and 41 engine overhauls and meet the impacts of

escalation. Technical training equipment repair funds are essentially the same as last year.

Budget Activity 3

This budget activity provides the Naval Reserve with the resources for the management and administration of all Naval Reserve programs as well as base support costs for the training of Reserve personnel We are requesting $10.7 million more in Fiscal Year 1976 than in FY 1975 for this budget activity. The increase is distributed throughout the expense categories and is primarily due to cost increases. Annualization of the civilian pay raises cost $.8 million. Rents, utilities and communication costs increase $2.1 million. An increase of $3.6 million is requested for supplies and equipment principally due to increased material costs. The cost of fuel used for purposes other than flying increased by $.8 million. A $1.4 million increase in the base operation flying program is requested to pay for the increased cost of fuel and supplies plus a 22 per cent increase in flying hours over the depressed FY 1975 program. An increase in purchased services of $2.8 million is needed to provide for the higher contract costs and an added program which provides for the accumulation and reporting of retirement points for enlisted members of the Selected Reserve.

In addition to price increases, changes in base program costs have been caused by a functional transfer of 69 civilian positions and $.7 million from the O&MN to the O&MNR appropriation. These billets are in direct support of the Naval Reserve. Relocation costs of $0.2 million have been

requested to fund lump sum leave and severance pay for civilians electing not to move to New Orleans with the establishment of the Naval Reserve Personnel Center and the deactivation of the Naval Reserve Manpower Center, Bainbridge, Maryland, and the Naval Officer Record Support Activity, Omaha, Nebraska. A decrease of $.8 million in travel costs is due to transferring the budgeting of travel and per diem costs for the Naval Reserve Force Squadrons to Budget Activity One. The purchase of collateral equipment for outfitting of Naval Reserve construction projects has been reduced by $.6 million.

This concludes my statement, Mr. Chairman. I shall be pleased to answer any questions or provide further information as desired.

BUDGET REQUEST

Admiral CHARBONNET. Mr. Chairman, I am Vice Adm. Pierre Charbonnet, Director of Naval Reserve. It is a pleasure for me to appear before this committee in support of the request for two appropriations dedicated to the support of the Naval Reserve.

In the "Reserve personnel, Navy" appropriation, we are requesting $191 million for fiscal year 1976 and $56.3 million for the 3-month transition period referred to as fiscal year 197T. In the "Operation and maintenance, Navy Reserve" appropriation, we are asking for $308.6 million in fiscal year 1976 and $80.7 million in fiscal year 197T.

CHANGES IN NAVAL RESERVE PROGRAM

First, I would like to present some general information regarding changes to the Naval Reserve program.

The Naval Reserve has been undergoing restructuring this fiscal year to relate manpower, training, and hardware more closely to stated mobilization requirements. The new Selected Reserve alinement consist of units undergoing training to perform specific jobs within a very short time after recall. This contrasts with the former philosophy of having a pool of individuals trained in rating skills who required additional unit training after mobilization to perform their assignments.

A ship or squadron reinforcement unit, for example, will be composed of officers and enlisted men needed to man a specific ship class or aircraft squadron type for wartime operations. The unit will perform its annual 2-week training period on a class ship or type squadron wherever possible.

Similarly, units which have been established to reinforce staffs and shore activities will be trained to provide more immediate assistance when recalled. Existing Selected Reserve manpower will be utilized to the fullest in order to minimize turbulence associated with transitioning to the new structure.

READINESS COMMANDS

To provide more effective command, better management control of training, and more efficient administration in the surface Reserve, we are continuing with the orderly establishment of Readiness Commands. We now have 12 of these field headquarters in operation and plan to have 17 by the end of fiscal year 1976.

These commanders monitor unit training at Reserve Centers, schedule the use by outlying units of training devices and equipment which are located at centralized drill sites, and establish policies needed to effectively train and administer this large segment of the Naval Reserve.

RESERVE AIRCRAFT

Senator YOUNG. What kind of aircraft do the Reserves have?

Admiral CHARBONNET. The Reserves have—as an example—the current F–4's. We still retain some Crusader, F–8's, in the fighter squadrons. We are transitioning from the P–2 Neptunes to the P–3's. In the

helicopters, we have the Sea King, the SH–3A. In the fleet tactical support squadrons, of course, we are operating the C–118. We are gradually transitioning—as aircraft are being made available to the Reserve—transitioning to the F–4's and F–8's and A–7's.

Senator YOUNG. How many F–4's do you have?

Admiral CHARBONNET. 24 F–4's.

Senator YOUNG. For the Reserves?

Admiral CHARBONNET. Yes, sir.

Senator YOUNG. How many more do you need?

Admiral CHARBONNET. We need two more squadrons, sir, to make 24 more. There are two Reserve air wings made up to mirror-image the regular tactical air wings which have two fighter squadrons each.

Senator YOUNG. Do you have more than one equipped F–4?

Admiral CHARBONNET. There is only one wing presently equipped with F–4's but the other wing is capable of handling the F–4.

Senator YOUNG. You are waiting for more?

Admiral CHARBONNET. I don't know when the Reserves will get more.

F–14'S IN FLIGHT STATUS

Senator YOUNG. I am speaking now of the active fleet, the carriers. How many F–14 aircraft wings do we have?

Admiral CHARBONNET. Sir, I can find that out; I don't know the total numbers they have.

Admiral COOKE. We have one and I don't know the schedule. I will have to get the answer for you.

Senator YOUNG. One of the reasons I asked is that we are sending F–14's to Iran and we do not have enough for ourselves.

Admiral CHARBONNET. I would love to see us all equipped with F–14's.

Admiral COOKE. I will get the specific answer for you, Senator.

[The information follows:]

Currently, the Navy has two squadrons, each with 12 planes, deployed on the U.S.S. *Enterprise*.

This summer, it is expected that two more squadrons will be assigned to the U.S.S. *Kennedy*.

The Navy currently has 114 F–14's in flight status.

SURFACE FORCE

Senator YOUNG. You may proceed.

Admiral CHARBONNET. While our 1975 surface force was composed primarily of old destroyers and mine countermeasures ships, the 1976 budget will support the addition of patrol craft and amphibious ships. The total number of ships remains essentially unchanged. The aging coastal minesweeping ships which are minimally capable will be dropped during fiscal year 1976.

Countering this reduction will be the addition of patrol gunboats, which are the coastal patrol and naval inshore warfare craft employed successfully in Vietnam, and two amphibious transports and one amphibious cargo ship. These amphibious ships have an average age of 20 years and therefore have at least 10 years of useful life remaining. The destroyer force will continue to be composed of once-modernized

World War II vintage ships. The age and condition of these ships necessitates adherence to a strict overhaul and maintenance program to keep them in a satisfactory state of material readiness.

Senator YOUNG. Are you putting new guns and missiles on these older destroyers?

Admiral CHARBONNET. No, sir. Ours will not have those. These are the FRAM 1's.

They are World War II vintage destroyers which we continue to operate. There are ultimate plans of transferring later model destroyers to us as the Navy retires the World War II ones.

Modest modernization of the Air Reserve continues with the updating of various squadrons. Two of four fighter squadrons will fly the more modern F4B aircraft, while land-based patrol squadrons will continue transition from the SP–2H to the P–3 Orion aircraft. The older and obsolescent S–2 carrier-based antisubmarine aircraft will be phased out by the end of fiscal year 1976. A new combat search and rescue helicopter squadron will be added. This will preserve and exploit the combat search and rescue techniques developed during the Vietnam conflict.

The readiness of our ships and squadrons remains at about the same level as last year. While we had hoped to make significant increases, sharply reduced operating tempo during fiscal years 1974 and 1975 has precluded any improvement.

Now I shall discuss the appropriations in detail. First, the Reserve Personnel, Navy appropriation.

The Reserve Personnel, Navy appropriation includes funds for pay and allowances, clothing, subsistence, travel costs, and related expenses for members of the Reserve component performing inactive duty drills or undergoing active duty for training. It also provides for Naval Reserve officers on active duty assigned under the authority of Section 265, Title 10, United States Code, and for members enrolled in various officer procurement programs.

BUDGET ACTIVITIES

The appropriation is divided into two budget activities: Budget Activity One provides funding for Reserve component personnel, and Budget Activity Two supports the Reserve officer candidiate program, reserve officer training corps, Navy Junior Reserve officers training corps and the Armed Forces health professions scholarship program. The total fiscal year 1976 appropriation request of $191 million includes $164.8 million for Budget Activity One and $26.2 million for Budget Activity Two.

The Budget Activity One funding is to support a Selected Reserve average strength of 93,972. This represents a 17,945 decrease from the fiscal year 1975 funded average strength of 111,917. The indicated strength reduction results from a realinement of Reserve missions and forces, and a reassessment of high priority mobilization requirements, as well as from fiscal constraints.

Thus, mainly as a result of this reduction in strength, the fiscal year 1976 funding request for support of Reserve component personnel represents a net decrease of $29.3 million from the fiscal year 1975

funding level. Also contributing to the funding decrease is the assignment of additional billets from training pay category A with 48 paid drills per year to training/pay category B with 24 paid drills per year.

Noteworthy in regard to this transfer is the considerable difficulty which has been experienced during fiscal year 1975 in attaining pay category B strengths. To attain the levels approved by Congress in the fiscal year 1975 budget request, sufficient pay category A billets were transferred to pay category B. However, many of the transferred personnel, primarily enlisted, have determined pay category B status to be economically unattractive and, as a result, have terminated their affiliation with the Naval Reserve.

This has resulted in a net strength loss which has left no alternative but to adjust pay category A and B strength mix in an effort to attain the total appropriated fiscal year 1975 strength. The current fiscal year 1975 strength plan reflects this adjustment. Every effort will be made to achieve the pay category B strength levels requested for fiscal year 1976 as was done in fiscal year 1975.

Included in the Budget Activity One request is funding to support annual active duty for training with pay for 2,900 training pay category D officer and enlisted personnel who perform their regular drills without pay. The fiscal year 1976 pay category D allotment request is for $518,000 more than is programed in fiscal year 1975. The 1975 program was reduced by reprograming action to help offset travel obligations incurred prior to a $1 million reduction in overseas training travel assessed by Congress.

In addition to Reserve component costs associated with drill and annual active duty for training of pay category A, B and D personnel, the fiscal year 1976 request includes $6.7 million to provide basic military and technical training for 2,207 nonprior service enlistees. This reflects a $2.4 million reduction below the fiscal year 1975 budgeted level.

The fiscal year 1976 accession projection is in consonance with estimated recruiting capabilities and the needs of the Naval Reserve. Funding in the amount of $6.4 million is requested for school and special active duty for training tours. This is approximately $0.6 million below the fiscal year 1975 programs as a result of the declining personnel strength.

This additional training is necessary to enhance the mobilization posture of the Naval Reserve by providing for needed proficiency in certain skill areas which cannot be achieved solely by regular drills and annual active duty for training periods. In the category of administration and support, $5.9 million is requested primarily to provide funding for 206 active duty reserve officers located at the seat of Government and at headquarters administering reserve affairs, as authorized by section 265, title 10, United States Code. An average strength decrease of 21 officers in fiscal year 1976 accounts for the majority of the $0 7 million funding decrease. The fiscal year 1976 request for 206 RPN funded officers exceeds the fiscal year 1976 end strength approved by Congress by three. The additional billets are established in the office of the Assistant Secretary of the Navy for Manpower and

Reserve Affairs in consonance with congressional guidance set forth in the House Armed Services Committee Report for fiscal year 1975. Funds are also included to provide death gratuities, disability, and hospitalization benefits allowable in the event of deaths or injuries incurred by inactive duty Naval Reservists while performing inactive duty training or active duty for training.

In the case of budget activity two, the funding request of $26.2 million for support of the officer procurement programs represents a net increase of $1.1 million above the fiscal year 1975 level. This increase is requested to support increased enrollment in the Junior Reserve Officer Training Corps, an increase in the number of students in the Senior Reserve Officer Training Corps eligible to receive a subsistence allowance and perform summer training, and full year funding of the October 1974 military pay raise. The overall average fiscal year 1976 enrollment of 8,100 students in the Senior and Scholarship Reserve Officer Training Corps is the same as estimated in fiscal year 1975. However, an increase in thi and fourth year students is projected for the senior program. These personnel are eligible to receive subsistence allowance payments and to perform a paid summer training period.

JUNIOR RESERVE OFFICER TRAINING CORPS

Fiscal year 1976 average enrollment in the Junior Reserve Officer Training Corps is projected to increase by 4,200 over the fiscal year 1975 level of 31,800. The planned fiscal year 1976 Reserve Officer Candidate and the Aviation Reserve Officer Candidate programs are essentially level funded with the fiscal year 1975 program. Funds will provide for an input of 760 candidates and a projected commissioning of 453 officers. The Woman Officer Candidate program was phased out during fiscal year 1975 as a result of an expanded Women's ROTC program. The fiscal year 1976 Armed Forces Health Professions Scholarship program request reflects a minor decrease from fiscal year 1975. The fiscal year 1975 program provided for an increased number of active duty training periods to resolve a fiscal year 1974 performance shortfall. This action is no longer required in fiscal year 1976.

OVERALL BUDGET REQUEST

The overall fiscal year 1976 Reserve personnel, Navy, appropriation request is $28.3 million below the fiscal year 1975 appropriation. The total fiscal year 197T (transitional) request is for $56.3 million and includes $46.3 million for budget activity one and $10 million for budget activity two. This is an extension of the fiscal year 1976 program and is slightly more than 25 percent of a full fiscal year 1976 program as a result of the traditionally higher training requirements during the summer months. A selected Reserve average strength of 92,000 is requested.

In the operation and maintenance, Navy Reserve appropriation we are requesting $308.6 million for fiscal year 1976 and $80.7 million for the transition period. The fiscal year 1976 request is $62.4 million above the fiscal year 1975 program. The principal reasons for the differences are increases in fuel, material, and labor costs. The transition period request is 26.2 percent of the full fiscal year 1976 amount. This is so because the period encompasses the summer months when flying and

steaming activity historically has been higher in support of annual active duty for training.

BUDGET ACTIVITY 1: MISSION FORCES

Budget activity 1 funds provide for training support and for operation and maintenance of aircraft, ships and stations which support the Naval Reserve Forces. In fiscal year 1976 we are requesting $197.1 million which is an increase of $47 million over the budget activity 1 program for fiscal year 1975. Ship and aircraft operations account for the largest percentage of this increase ($24.8 million). Of this amount, $16.5 million is related to increased fuel costs and material price escalation. The remaining $8.3 million permits an increase of 26,000 flying hours and 10,000 steaming hours. Historically, the tempo of Naval Reserve operations has been limited by the availability of the reservist, not fuel or funds. When the energy crisis surfaced in 1973, the Reserve Forces suffered large reductions in operating funds. Readiness improvements virtually ceased, and despite all efforts to obtain the maximum training for each gallon of fuel, no cost effective substitution for flying and steaming has been found. Expensive weapons systems simulators cannot be located at Reserve activities because their application is limited and would not involve enough use to justify the cost of their procurement. Consequently, the fiscal year 1976 budget requests a modest increase in operating temp for both ships and aircraft. This is considered absolutely essential if the Reserve Force is to meet its readiness objectives commitment.

Ship maintenance accounts for $13.3 million more of the increase. We will receive three large amphibious ships from the Active Forces in fiscal year 1976, and all three will require overhaul at a cost of $18.4 million. We will also overhaul 7 destroyers, 10 minesweepers, and 2 patrol gunboats. While the total number of overhauls is nearly the same as in fiscal year 1975, the change in mix and the effects of escalation account for the increased cost. Despite this effort we will have five destroyers overdue for overhaul at the end of fiscal year 1976 and four destroyers and one patrol gunboat overdue at the end of the transition period.

Funding the ship alterations increases $4.3 million in fiscal year 1976. This is due largely to labor and material cost increases, but also results from the requirement to install expensive pollution abatement alterations in the three amphibious ships being assigned to the force and to convert their engines to use distillate fuel instead of the less efficient black oil.

An increase of $2.9 million is requested to support the coastal river program for the overhaul of seven additional patrol boats and craft and to offset increased labor and material costs associated with the repair and maintenance of all equipment assigned to these forces.

Other increases include more travel funds to send more enlisted men to available class A schools—$0.1 million—and to offset increased stock fund prices in support of various surface Reserve programs—$0.2 million.

In fiscal year 1976, $1.4 million for travel and per diem costs in support of aviation squadrons has been included in this budget activity instead of in budget activity 3, as in previous years. This action provides for better management of funds.

BUDGET ACTIVITY 2

This budget activity provides for the maintenance and repair of aircraft and engines as well as the repair and overhaul of technical training equipment. We are requesting an increase of $4.7 million above the fiscal year 1975 program. This will permit an increase of four airframe reworks and 41 engine overhauls and meet the impacts of escalation. Technical training equipment repair funds are essentially the same as last year.

BUDGET ACTIVITY 3

This budget activity provides the Naval Reserve with the resources for the management and administration of all Naval Reserve programs as well as base support costs for the training of Reserve personnel. We are requesting $10.7 million more in fiscal year 1976 than in fiscal year 1975 for this budget activity. The increase is distributed throughout the expense categories and is primarily due to cost increases.

Annualization of the civilian pay raises cost, $0.8 million. Rents, utilities, and communication costs increase $2.1 million. An increase of $3.6 million is requested for supplies and equipment principally due to increased material costs. The cost of fuel used for purposes other than flying increased by $0.8 million. A $1.4 million increase in the base operation flying program is requested to pay for the increased cost of fuel and supplies plus a 22-percent increase in flying hours over the depressed fiscal year 1975 program. An increase in purchased services of $2.8 million is needed to provide for the higher contract costs and an added program which provides for the accumulation and reporting of retirement points for enlisted members of the Selected Reserve.

In addition to price increases, changes in base program costs have been caused by a functional transfer of 69 civilian positions and $0.7 million from the O. & M.N. to the O. & M.N.R. appropriations. These billets are in direct support of the Naval Reserve. Relocation costs of $0.2 million have been requested to fund lump sum leave and severance pay for civilians electing not to move to New Orleans with the establishment of the Naval Reserve Personnel Center and the deactivating of the Naval Reserve Manpower Center, Bainbridge, Md., and the Naval Officer Record Support Activity, Omaha, Nebr. A decrease of $0.8 million in travel costs is due to transferring the budgeting of travel and per diem costs for the Naval Reserve force squadrons to budget activity 1. The purchase of collateral equipment for outfitting of Naval Reserve construction projects has been reduced by $0.6 million

This concludes my statement, Mr. Chairman. I shall be pleased to answer any questions or provide further information as desired.

Senator YOUNG. Thank you for a good statement.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

If you will, please answer these questions submitted by Chairman McClellan for the record.

[The questions and answers follow:]

RESTRUCTURING OF NAVAL RESERVE

Chairman MCCLELLAN. Would you described generally the kind of units that will be part of the Naval Reserve and provide for the record a detailed listing of all units planned to be formed in FY 76 and through 1980.

Admiral CHARBONNET. The Naval Reserve restructure consists of the following kinds of units:

1. *Complete Capability Response Units (CRU).* A CRU is a self contained unit designed to provide complete capabilities upon recall. Prime examples of this type of unit are Naval Air Reserve Force Squadrons; Naval Reserve Force Ships; Naval Reserve Construction Force Battalions (Seabees); Naval Reserve Cargo Handling Battalions; Naval Reserve units in support of the Fourth Marine Division and Fourth MAW; Naval Reserve UDT units; Naval Control of Shipping units, etc.

2. *Ship or Squadron Reinforcement Units (SRU).* An SRU is a task performing unit containing a mix of specific skills needed to bring an active Navy operating platform to organizational (Battle) manning or full complement. Prime examples of this type of unit are active ship augmentation units (DD, DE, AS, AR, AD, CV, LPD, LPH, LCC, etc.) and active air augmentation units (VF, VA, VS, VP, VC, VAW, VAQ, etc.).

3. *Other (than platform) Reinforcement Units (ORU).* An ORU is similar in character to an SRU except, by definition, it is tailored for activities other than ships or aircraft (operating platforms). Each ORU is structured to a specific type of non-platform activity and provides additional capabilities for such activities as Beachmaster Units, Intelligence Activities, Air Stations, Naval Bases, Training Activities, Shipyards, Technical Management Activities, etc.

Current plans reflect the formation of very few new units for FY 1976 through FY 1980. Units already exist for the new types of ships coming into the Naval Reserve force in 1976 and will merely require redesignation to CRUs. The newly formed Navy Mobilization Planning Office will undoubtedly revise many current existing stated mobilization requirements. This will, in turn, necessitate the formation of Naval Reserve units to meet any of these requirements which are new or different. However, this effort is not sufficiently advanced at this time to permit any projection of such unit establishments.

The only new units currently planned are: (80/20 program—80% manning active duty; 20% Reserve)

1976: 5 ASW ship SRUs (80/20) locations to be determined; 1 combat SAR (HC) Squadron CRU San Diego, CA.

1977: 5 AWS ship SRU's (80/20) locations to be determined: 3 fleet tug (ATF) CRUs locations to be determined; 1 ASW patrol (VP) Squadron CRU South Weymouth, MA; 2 helicopter attack (HAL) Squadron CRUs Norfolk, VA and San Diego, CA.

1978: 4 ASW SHIP SRUs (80/20) locations to be determined.

1979: 8 ASW SHIP SRUs (80/20) locations to be determined.

1980: 5 ASW SHIP SRUs (80/20) locations to be determined.

MANPOWER "POOL"

Chairman MCCLELLAN. Will all of the individuals in the "pool" of available manpower be assigned to ship/squadron or shore reinforcement units?

Admiral CHARBONNET. Ship, squadron, or shore reinforcement units are structured by manning documents to provide recallable units to fill functional requirements. Training of these units on a regular drilling basis is designed to maximize team and functional proficiency. Individuals in the "pool" of available manpower will not be assigned to these units, but will be utilized to fill individual mobilization requirements.

Ship Reinforcement Units

Chairman McClellan. Is it the intention of the Naval Reserve that a certain ship reinforcement unit be capable of providing total manning for a certain type of ship, or will they only reinforce active manning (a part of the ship complement)?

Admiral Charbonnet. Ship Reinforcement Units (SRUs) do not provide total manning for any ships. They will augment the active duty crew to bring a ship to full organizational (battle) manning.

Readiness Commands

Chairman McClellan. Do the readiness commands replace anything existing in the Naval Reserve? How much of an increase in officer personnel is required by each readiness command? Why must 17 readiness commands be established; couldn't this be done by a centralized headquarters?

Admiral Charbonnet. Readiness commands take over certain Reserve command responsibilities previously carried out by the Naval District Commandants. Each Readiness Command currently is authorized three active duty officer billets and eleven inactive duty reserve officer billets. Readiness Commands are being established geographically commensurate with reserve population concentrations, ship locations, and training opportunities at Navy shore activities. The mission of these commands is to manage designated Naval Reserve programs, training support resources and systems, and perform other tasks as may be assigned by Chief of Naval Reserve. A centralized headquarters could not manage effectively the manpower and other resources at several hundred Reserve centers and facilities throughout the country. A minimum of 17 Readiness Commands is considered necessary to accomplish this field management function.

Ships in Naval Reserve

Chairman McClellan. How many ships of each type will be in the Naval Reserve in FY 1976? Will there be a specific ship reinforcement unit in the Selected Reserve to man each one of these ships?

Admiral Charbonnet. It is planned that the Naval Reserve will have the following ships in FY 76:

Destroyers	30
Minesweepers	22
Patrol Gunboats	8
Amphibious Transports	2
Amphibious Cargo	1
Total	63

These ships have Complete Capability Response Units (CRUs) assigned.

Readiness

Chairman McClellan. You indicate that readiness of ships and squadrons remains at the same level of last year. What is the readiness of each of the units, and what is the objective readiness?

Admiral Charbonnet. The readiness of the Naval Reserve ships, squadrons and mobile construction battalions is as follows:

Ships	C1	C2	C3	C4	Note
DD–714	[Deleted]				2
DD–716					
DD–717					2
DD–718					2
DD–719					
DD–724					2
DD–743					
DD–763					2
DD–784					2
DD–785					
DD–788					2
DD–806					
DD–817					
DD–819					
DD–820					2
DD–821					
DD–822					
DD–825					
DD–827					2
DD–829					
DD–835					2
DD–839					
DD–842					
DD–846					
DD–862					
DD–863					
DD–864					
DD–866					
DD–871					
DD–876					
DD–880					
DD–883					
DD–885					
DD–886					
DD–890					2
MSO–427					
MSO–428					2
MSO–429					
MSO–430					2
MSO–431					
MSO–433					
MSO–437					
MSO–438					
MSO–439					
MSO–440					
MSO–441					
MSO–442					
MSO–446					
MSO–449					2
MSO–455					2
MSO–456					
MSO–464					
MSO–488					
MSO–489					
MSO–492					
MSO–509					
MSO–511					
MSC–198					
MSC–199					
MSC–201					
MSC–203					
MSC–204					
MSC–205					
MSC–206					
MSC–207					
MSC–209					
Total (66)					
NAVAL RESERVE MOBILE CONSTRUCTION BATTALION					
RNMCB–2	[Deleted]				
RNMCB–12					
RNMCB–13					
RNMCB–14					
RNMCB–15					
RNMCB–16					
RNMCB–17					
RNMCB–18					
RNMCB–20					
RNMCB–21					
RNMCB–22					
RNMCB–23					
RNMCB–24					
RNMCB–25					
RNMCB–26					
RNMCB–27					
RNMCB–28					
Total (17)					

See footnotes at end of table.

AVIATION UNITS AS OF MAR. 24, 1975

VA-203	[Deleted.]	
VA-204		
VA-205		
VA-303		
VA-304		
VA-305		
VAQ-208		
VAQ-308		
VAW-78		
VAW-88		
VC-12		
VC-13		
VF-201		
VF-202		
VF-301		
VF-302		
VFP-206		
VFP-306		
VS-72		
VS-73		
VS-81		
VS-83		
HS-74		
HS-75		
HS-84		
HS-85		
VP-60		
VP-62		
VP-64		
VP-65		
VP-66		
VP-67		
VP-68		
VP-69		
VP-90		
VP-91		
VP-92		
VP-94		
VR-51		
VR-52		
VR-53		
VR-54		
Total (42)		

[1] These squadrons are C-4 due to transition to newer model aircraft.
[2] Ships in overhaul or preparing for deactivation.

NOTES

The objective for all units readiness is to attain C2 or above.
Readiness rating system: C1—Fully ready; C2—Substantially ready; C3—Marginally ready; C4—Not ready. All C ratings are as of Mar. 24, 1975.

Strength Reductions

Chairman McClellan. What specific strength reductions and unit reductions are being contemplated in the Naval Reserve?

Admiral Charbonnet. The strength and unit reductions and additions contemplated are:

Units or programs	*Personnel changes*
5 Destroyers inactivated	−577
9 Coastal minesweepers inactivated	−234
3 Gasoline tanker ship reinforcement units eliminated	−111
6 Air anti-submarine squadrons eliminated	−1,248
2 Carrier airborne early warning squadrons eliminated	−84
9 Construction battalions eliminated	−5,304
15 Tank landing ship reinforcement units eliminated	−450
Naval Reserve support of Marine Corps Reserve units reduced	−459
Base Support, operational staff groups, special and general support units, surface divisions reduced or eliminated	−13,192
Trainee reductions (Pay Group F)	−524
5 Augmentation units added to provide 80 percent active/20 percent reserve manning of regular Navy ship	+285
1 Combat rescue helicopter squadron added	+105
1 Amphibious cargo ship (LKA) and 2 amphibious transport ships (LPA) added	+733
8 Patrol gunboats (combatants) added	+270
Net reduction	−20,790

Pay Category Reassignments

Chairman McClellan. How many billets were reassigned from pay category A to pay category B? Are there other candidates for billets that could be assigned to category B?

Admiral Charbonnet. For some years, the Naval Reserve maintained a limited number of officer billets designated as Tra/Pay Category "B". In FY 74, the Department of Defense directed a transfer of 3,000 Naval Reserve billets to Tra/Pay Category "B". The FY 75 Congressional appropriation supported a Department of Defense directed transfer of an additional 10,000 Naval Reserve billets to Tra/Pay Category "B", divided into an approximate 60/40 officer/enlisted ratio. The FY 75 Naval Reserve allowance currently reflects 15,524 Tra/Pay "B" billets (9,078 officer/6,446 enlisted).

No additional billets should be assigned to Tra/Pay Category "B". Some units currently assigned Tra/Pay "B" could better achieve the desired level of readiness training in a 48 drill pay status. In those units where officers have been required to transfer to Tra/Pay "B", while enlisted personnel remain in Tra/Pay "A", a lessening of effective training leadership has occurred.

Chairman McClellan. You mention that Category A and Category B have been adjusted in order to attain total 1975 strength. Explain in what way.

Admiral Charbonnet. The FY 75 President's Budget reflected an average strength plan of 13,919 officers and enlisted personnel in Training/Pay Category B. Execution of this plan required the transfer of approximately 10,000 officer and enlisted personnel from Category A to Category B. Many reservists have chosen to terminate their reserve affiliations rather than participate in the lower paying Category B status. Consequently, a net strength decrease was occurring largely as a result of this personnel transfer. In an effort to reverse this trend and to attempt achievement of the Congressionally appropriated average strength of 111,917, the FY 1975 Category B plan has been revised to reflect an average strength of 8,510. This is a more reasonably attainable strength. Concurrently, the Category A plan has been revised to reflect an offsetting average strength increase.

Junior ROTC

Chairman McClellan. What percentage of enrollees actually become productive members of the Navy? How much is the increased funding for Junior ROTC?

Admiral Charbonnet. Approximately 15% of the 6000 June 1974 high school graduates participating in the NJROTC program entered an active Navy program. Since the NJROTC program was established as a citizenship program and not as a Navy accession program, a direct correlation between program participants and active Navy accessions does not reflect the program's accomplishment of its stated purpose. An increase of $315,000 over the FY 1975 funding is requested for FY 1976.

Transition Request

Chairman McClellan. Are any new programs being requested in the transition quarter, or are all simply a continuation of ongoing efforts? Please answer for both personnel and operation and maintenance.

Admiral Charbonnet. No new programs currently are being planned for the transition quarter. There will be a reduction in programmed average strength from 93,972 in Fiscal Year 1976 to 92,000 in transition quarter.

Mission Forces Increases

Chairman McCellan. Compare the fiscal year 1975 and the fiscal year 1976 flying and steaming hour programs for the Naval Reserve.

Admiral Charbonnet.

Flying hours:	
Fiscal year 1975	203,952
Fiscal year 1976	233,106
Steaming hours:	
Fiscal year 1975	49,710
Fiscal year 1976	60,032

Flight requirements are:	*Annual hours per pilot*
Carrier-based pilots in squadrons	150
Land-based pilots in squadrons	150
All pilots in reinforcement units	115

The fiscal year 1975 flight hour program provides for only 88 percent of requirements.

The fiscal year 1976 flight hour program meets full requirements at the levels described above.

Underway steaming hour requirements are:	*Hours per year*
All ships	1024 per ship.

The fiscal year 1975 steaming hour program provides 73 percent of requirements.

The fiscal year 1976 steaming program provides 88 percent of requirements.

Management of Funds

Chairman McClellan. Explain how transfer of travel and per diem in support of aviation squadrons will improve management of funds.

Admiral Charbonnet. All direct costs for aviation squadrons other than travel and per diem are presently contained in budget activity one (mission forces). Realinement of travel funds to coincide with operating funds will allow aviation commanders to attain a better balance between operations and other requirements, such as specialized schools, that are necessary to increase readiness. As a consequence, both better management and increased readiness should result. An additional benefit is the simplification of accounting which will allow easier identification of the true costs of each squadron.

Purchased Services

Chairman McClellan. Explain what kinds of services are funded in Activity 3 (contract costs). Also explain the cost of and reason for the new program on reporting retirement points for Selected Reserve members.

Admiral Charbonnet. Types of services funded in activity 3 under Purchased Services are as follows:

Refueling contracts;
Food service contracts;
Automated data processing contracts;
Inter service support activities contracts;
Vehicle maintenance contracts;
Training contracts;
Janitorial contracts; and
Contracts for maintenance and repair of facilities.

At present the Navy regularly provides retirement point information to inactive reserve officers only. The enlisted retirement point totals are provided to an individual only upon his request. The periodic report is needed to advise the member when records show that he has completed or failed to complete a satisfactory federal year for retirement purposes. Both the Army and Air Force provide this data to inactive officers and enlisted personnel on a routine basis.

At present the Navy's officer system is being automated so that the regular reports to individuals will be computer-generated. With an automated system being developed, it can easily be expanded to include routine reports to inactive duty enlisted personnel. This program can be implemented using present procedures if an ADP Data Base for the enlisted member can be established. The requested $175 thousand is for contractor support to convert data from the flat paper records contained in the individual's service record to the ADP Data Base. Once the data base has been constructed, the automated enlisted system can be maintained and operated without additional personnel assets beyond those required to maintain the officer system.

Chairman McClellan. What is the total number of operating aircraft and squadron composition of the Naval Air Reserve, FY 74–76? Why is the number of pilots increasing in FY 76 by almost 100? What is considered to be necessary and required numbers of hours per pilot per year?

Answer. The operation and Maintenance, Navy Reserve Appropriation provides support for the flying program of the Marine Corps Air Reserve. The total

number of operating aircraft and squadron composition of the Naval Air Reserve and Marine Corps Air Reserve during FY 74–76 is as follows:

NAVAL AIR RESERVE

Type	Fiscal year 1974		Fiscal year 1975		Fiscal year 1976	
	Number of squadrons type aircraft	Average operational aircraft	Number of squadrons type aircraft	Average operational aircraft	Number of squadrons type aircraft	Average operational aircraft
VP	(7) P-3A	35.0	(9) P-3A	58.5	(10) P-3A	80.0
	(5) SP-2H	86.5	(3) SP-2H	66.5	(2) SP-2H	37.0
VS	(6) S, 2E	42.4	(2) S-2E	21.0	(2) S-2E	14.0
HS	(3) SH-3A	24.5	(3) SH-3A	24.0	(2) SH-3A	16.0
	(1) SH-3G	8.0	(1) SH-3G	8.0	(2) SH-3G	16.0
VC	(1) A-4L	4.0	(2) A-4L	16.0	(2) A-4L	16.0
	(1) F-8H	4.0				
VR	(4) C-118B	30.0	(4) C-118B	30.0	(4) C-118B	30.0
VF	(1) F-4B	6.0	(2) F-4B	18.0	(2) F-4B/N	24.0
	(3) F-8H/J	42.0	(2) F-8H/J	30.0	(2) F-8H	24.0
VAQ	(2) KA-3B	8.0	(2) KA-3B	10.0	(2) KA-3B	12.0
VFP	(2) RF-8G	8.0	(2) RF-8G	8.0	(2) RF-8G	8.0
VAW	(4) E-1B	14.0	(2) E-1B	8.0	(2) E-1B	8.0
VA	(4) A-7A	36.0	(4) A-7A	48.0	(4) A-7A	48.0
	(2) A-4L	38.0	(2) A-4L	28.0	(2) A-4L	28.0
HC						
Total Navy		386.4		374.0		364.0

FOURTH MARINE AIR WING

Fiscal year 1974		Fiscal year 1975		Fiscal year 1976	
(Number squadrons) type aircraft	Average operational aircraft	(Number squadrons) type aircraft	Average operational aircraft	(Number squadrons) type aircraft	Average operational aircraft
(1) F-4B	6.0	(1) F-4B	12.0	(2) F-4B	19.5
(2) F-8K	24.0	(1) F-8K	6.0		
(1) RF-8G	9.0				
(1) F-8H	6.0	(1) F-8H	12.0	(1) F-8H	6.0
(7) A-4	106.3	(5) A-4	72.0	(5) A-4	72.0
(1) C-119F	8.5	(1) C-119F	7.0	(1) C-119F	3.5
(1) OV-10A	9.0	(1) OV-10A	9.0	(1) OV-10A	9.0
(1) AH-1G	4.5	(1) AH-1G	6.0	(1) AH-1G	6.0
(2) CH-53A	24.0	(2) CH-53A	21.0	(2) CH-53	18.0
(3) CH-46D	36.0	(3) CH-46D	38.0	(3) CH-46	40.0
(1) UH-1E	18.0	(1) UH-1E	18.0	(1) UH-1E	18.0
C-131G	1.0	C-131G	1.0	C-131	1.0
				KC 130F	3.0
Total marine	252.3		202.0		196.0
Total Navy	386.4		374.0		364.0
Total	638.7		576.0		560.0

Note: The number of pilots varies according to the specific type of aircraft. For example, an SP-2H squadron requires 43 pilots for 12 aircraft. Upon transition to the P3A, the same squadron will require 57 pilots for only 9 aircraft. The primary reason for the increase in the number of pilots in fiscal year 1976 concerns the 4th Marine Air Wing. The wing had a requirement to fly 647 pilots in fiscal year 1975; however, funds available would support only 536 pilots at required flight hours for readiness, or all pilots at a minimum level for safety (with considerable loss in readiness). The Marine Corps chose to ground pilots in H. & M.S. (headquarters and maintenance squadrons) and MABS (Marine Air Base Squadrons) units during fiscal year 1975 and maintain readiness for the remaining pilots. In combat, H. & M.S. and MABS pilots fly regular combat missions as well as perform staff functions; however, squadron pilots fly a larger percentage of combat assignments. The decision to ground these pilots was the best alternative available; however, it was not by any means a desirable action. The fiscal year 1976 marine requirement is 628 pilots.

The necessary and required numbers of hours per pilot per year are:

Naval Air Reserve

Type unit:	*Hours/pilot/year*
Carrier-based CRU	150
Land-based CRU	130
Airlift CRU	150
All SRU	115

Marine Air Reserve

Type unit:	
Land-based CRU	130
Airlift CRU	150

CRU—Complete Capability Response Unit.
SRU—Squadron Reinforcement Unit.

Fleet Augmentation Pilots

Chairman McClellan. How many pilots are in the category of "Fleet Augmentation Pilots"? How many personnel are involved in Squadron Reinforcement Units—and describe exactly what they do? Provide data for FYs 74–76.

Answer. Squadron Reinforcement Units (SRU) are task performing units containing a mix of specific skills (aviation, maintenance, administrative, etc.) needed to bring active Navy squadrons to organizational manning or full complement. Each SRU is tailored to a specific aircraft squadron-type. SRUs utilize the aircraft, equipment and facilities of a Reserve squadron or active force parent activity for readiness training and have the same basic training requirements as their active counterpart.

The number of aviation officers (pilots and Naval Flight Officers (NFO)) and total personnel assigned to SRUs (augmentation units) are:

	Fiscal year—					
	1974		1975		1976	
Pilots	652		645		623	
NFO's	280		268		268	
	Officers	Enlistees	Officers	Enlistees	Officers	Enlistees
Total personnel	1,072	7,160	1,106	5,146	1,070	4,963

Ship Steaming Hours

Chairman McClellan. Why is there such a large increase in ship steaming hours in FY 76, when the number of ship years actually declines. Which ships account for the large increase in steaming hours and why?

Answer. The 20% increase in ship steaming hours is requested in FY 1976 to partially restore the Naval Reserve ship operating program to a level which will allow improvement in readiness. The FY 1974 and FY 1975 operating programs were severely constrained in reaction to the energy crisis, and the steaming hours provided have precluded attainment of additional readiness.

The FY 1976 budget was also scrutinized during its development and review process to ensure that a proper balance between energy conservation and readiness was achieved. The 14 day per quarter tempo requested in Fiscal Year 1976 for each Naval Reserve ship is a very tightly constrained operating level.

The increase in steaming hours is uniformly distributed throughout the various classes of Naval Reserve Force ships.

Chairman McClellan. What is the total ship composition of the Naval Reserve, FY 1974–76?

Answer. The following is the total end year composition of Naval Reserve Force Ships (NRF) for FY 1974 through FY 1976:

	DD	MSO	MSC	PG	LPA	LKA	Total
Fiscal year:							
1974	37	16	9	0	0	0	62
1975	34	22	9	0	0	0	65
1976	30	22	0	8	2	1	63

Ship Overhaul Cost Comparisons

Chairman McClellan. Compare the cost of overhaul of a Naval Reserve force Ship to costs of overhauling a similar class active ship and explain reasons for difference.

Answer. The following is the average costs by ship class per overhaul, including advanced funding:

SCOST

[In millions of dollars]

Ship class	NRF	Active
MSO	0.6	0.4
PG	.6	.6

A comparison of the overhaul costs of the Fram I destroyers, the Amphibious Attack Transports (LPA) and the 112 Class Amphibious Attack Cargo Ship (LKA) is not possible since no active force overhauls are scheduled for FY–74 and subsequent years.

There are only three Minesweepers (MSO) in the active force with only the USS ILLUSIVE (MSO 448) being overhauled in FY 1976 for $.4 million. The Naval Reserve Force minesweeper USS FEARLESS (MSO 442) is scheduled for overhaul in the same port as the ILLUSIVE at the same cost. The deviation of the costs of overhauls within the NRF to raise the average costs to $.6 million is due to the varying material condition of the ships and the varying costs associated with different overhaul locations.

Justification of Ship Alterations

Chairman McClellan. Provide a breakout and justification of major ship alterations, by type of new equipment/changes etc. for FY 1976.

Answer. 1. Compliance with legal requirements:

a. Pollution abatement

	(Thousands)
S/A LKA	
871 Fuel oil overflows	$81.8
860 Overboard discharge bilge riser	13.2
879 JP–5 flush back	15.8
869 Tank level indicator	71.9
873 Oil/water segregation	26.0
906 Oily waste discharge	21.0
907 Collect secondary drains	12.5
853 Sewage collection holding tank	478.6
S/A LPA	
1091 Tank level indicator	109.0
1089 Bilge riser piping	131.2
1095 Oil/water segregation	70.0
1092 Oily waste hold tanks	125.2
1093 Combine fuel oil overflows	156.0
1084 Sewage collection holding tank	1,390.0
Total	2,702.2

b. Dual array task lights

S/A	
DD 2287 Dual array task lights	426.8
LKA 952 Dual array task lights	47.0
LPA 1101 Dual array task lights	52.9
Total	526.7

2. *Safety.*—Major portion of NRF MSO funds will be expended on safety and firefighting. Firefighting (F/F) alterations are also being installed on most other ships to improve machinery space firefighting capability.

S/A		(Thousands)
DD 2,299	Machinery spaces firefighting	$1,163.4
MSO 420	Machinery space sprinkling system	187.9
418	Install P-250 FP-180	111.2
416	Install emergency diesel generator	83.3
414	Increase fire pump capacity	224.0
LKA 855	Aqueous film foam firefighting/purple K phosphorus	89.5
LPA 1,085	Aqueous film foam firefighting/purple K phosphorus	135.8
PG 97	Encapsulated liferafts	8.6
Total		2,003.7

3. *Compatibility.*—Funds are provided to provide communications compatibility on the fleet SATCOM Broadcast and UHF secure voice communications.

S/A		
MSO 444	VHF/UHF secure voice	8.7
255	UHF communications	13.4
257	Single side band communications	89.8
LKA 960	Fleet satellite communications WSC-3	157.1
961	Fleet satellite communications peripherals	71.5
LPA 1,108	Fleet satellite communications WSC-3	382.6
1,109	Fleet satellite communications peripherals	85.0
Total		808.1

4. *Habitability.*—MSO living accommodations are far below acceptable standards and efforts are being made to reverse this situation.

S/A		
MSO 404	Sheathe sanitary spaces	484.0
355	Improve food service line	870.1
Total		1,354.1

Coastal/River Reserve Program Force

Chairman McClellan. What is the size of the Coastal/River Reserve Program Force?

Answer. The Coastal River program consists of two (2) Coastal River Squadrons and three (3) Coastal River Divisions. These units are sized as follows:

Unit	Active duty		Selected Reserve		Combatant craft assigned
	Officers	Enlistees	Officers	Enlistees	
Cosrivron 1	27	180	17	120	42
Cosrivron 2	14	148	20	118	47
Cosrivdiv 11	8	60	15	160	26
Cosrivdiv 21	7	40	22	84	6
Cosrivdiv 22	10	40	23	145	17
Total	66	508	97	627	134

Aircraft Rework

Chairman McClellan. (A) With regard to aircraft rework, why was FY 76 selected as the year to induct the majority of the backlog of unfunded aircraft on extension? (B) What has been the backlog for the past four years and what is projected at end FY 1976?

Answer. (A) For FY 1976, increased emphasis is planned to reduce the Reserve aircraft reworks backlog. A combination of increased funding and a revision in the reworks maintenance strategy that reduced the scope of effort accomplished by depot level maintenance has resulted in an increase in the quantity of reworks thus reducing the backlog of deferred maintenance.

(B) Aircraft rework backlog for Reserves in the past four years and projection for FY 76 is as follows:

Fiscal year:

1972	187
1973	174
1974	113
1975	102
1976	80

Chairman McCLELLAN. Compare the cost of rework of a Naval Reserve aircraft with costs of rework of a similar model aircraft in the Active Forces, and explain reasons for difference.

Answer. See attached document.

AIRFRAME REWORK

Type/model/series of aircraft	Fiscal year	Units	Program	Basic norm (direct man-hours per unit)	Unit cost	Installation of airframe modification kits: Modification kit installation norm (direct man-hours per unit)	Installation of airframe modification kits: Unit cost
A-7A:							
USN	1975	7	SDLM	2,100	$49,635	800	$16,280
USN	1976	11	SDLM	2,100	51,937	1,700	35,649
USNR	1975	9	SDLM	2,200	51,770	600	12,210
USNR	1976	18	SDLM	2,200	54,234	800	16,776
P-3A:							
USN	1975	6	PAR	[1] 9,400	217,406	800	16,392
USN	1976	9	SDLM	9,900	238,578	700	14,854
USNR	1975	19	PAR	[1] 10,000	233,900	700	14,343
USNR	1976	26	SDLM	9,900	243,478	700	14,854

[1] The difference between USN and USNR rework man-hours is a result of the Reserve Forces operating the earlier model of P-3A. The age of the earlier model causes an increase in the work content.

AIRCRAFT CONDITION EVALUATION

Chairman McCLELLAN. As a result of incorporation of Aircraft Condition Evaluation (ACE) into the Standard Depot Level Maintenance (SDLM) program, depot work is being reduced 3% to 18%. Provide some specific examples of aircraft rework times, FY 74, 75 and 76 that demonstrate this specific reduction in depot work.

Answer. See attached document.

AIRFRAME REWORK

Type/model/series of aircraft and fiscal year	Program	Units	Basic norm (direct man-hours per unit)	Unit cost	Percent change in basic norm from fiscal year 1974	Installation of airframe modification kits: Installation norm (direct man-hours per unit)	Installation of airframe modification kits: Unit cost
F-8H:							
1974	PAR	13	7,400	$143,640	----------	2,000	$34,200
1975	SDLM	13	5,900	126,283	20.3	200	3,674
1976	SDLM	6	5,100	113,726	31.1	800	14,608
A-7A:							
1974	PAR	13	4,800	104,560	----------	700	13,265
1975	SDLM	9	2,200	51,770	54.2	600	12,210
1976	SDLM	18	2,200	54,234	54.2	800	16,776
A-4L:							
1974	PAR	29	4,200	84,264	----------	250	3,984
1975	SDLM	25	2,400	54,776	42.9	200	4,048
1976	SDLM	17	1,800	44,324	57.2	700	14,476
SH-3A:							
1974	PAR	8	4,200	86,574	----------	2,000	33,336
1975	SDLM	14	1,900	44,856	54.8	1,300	26,312
1976	SDLM	13	1,900	46,692	54.8	1,300	26,884
CH-53A:							
1974	PAR	10	6,100	131,383	----------	850	12,824
1975	SDLM	2	2,800	81,348	54.1	800	13,538
1976	SDLM	6	2,900	89,647	52.5	700	12,201

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator YOUNG. Senator Thurmond has submitted a list of questions to be answered for the record.

[The questions and answers follow:]

EMERGENCY MANPOWER REQUIREMENT

Senator THURMOND. I note in last year's testimony, the figure was given as 274,621. What is the first 30 days' emergency manpower requirement for the Naval Reserve according to current estimates?

Admiral CHARBONNET. The Navy requirement for Reserve personnel from various sources during the first 30 days of a mobilization situation is 184,997.

Senator THURMOND. How do you plan to get to that level if you continue to reduce the Reserve by over 20,000 this year—in comparison to last year's authorization of 117,000?

Admiral CHARBONNET. The most urgent requirements which demand a high level of training will be filled by the Selected Reserve. The remainder will be filled by Individual Ready Reservists. Members of the Fleet Reserve, Standby Reserve, and retirees from the Regular and Reserve components are sources of manpower to satisfy requirements by skill level which cannot be met from the Selected Reserve or Individual Ready Reserve.

SELECTED RESERVE

Senator THURMOND. What was the recommended size of the Selected Reserve for this FY, as recommended by your office? How many did you recommend for drill pay categories A, B, and D?

Admiral CHARBONNET. The Navy's (RPN) budget requests for FY 1976 was for an average strength of 107,526. The pay category distribution was as follows:

Category A	92,607
Category B	13,919
Category F	1,000
Total	107,526
Category D [1]	2,900

[1] Category D is not a part of the Selected Reserve and as such is not included in the 107,526 average strength.

RESERVE CUTBACK

Senator THURMOND. I understand the Navy's cut-back of the Reserves has resulted in letting trained people go out of the program. Will this program provide for proper training for the essential personnel who will be needed by the Fleet in an emergency?

Admiral CHARBONNET. We have lost and will continue to lose trained personnel as a result of strength reductions as well as the results of other factors. Prior to the restructuring of the Naval Reserve, many of our Naval Reserve personnel were organized into heterogeneous pools of personnel who were being trained in their military occupational specialties as well as in general military training areas prescribed for all Navy personnel. Such organizations were neither mission oriented nor task capable. Restructuring corrected that situation, but created a problem of matching assets to requirements in a given geographical area of immense proportion. For example we may have a well qualified career Naval Reservist in Anderson, South Carolina who is an Electronics Technician Second Class. While there are no billets in Anderson for such a person, there may be vacant billets for such personnel in Charleston, South Carolina. It is impossible to move the Charleston unit to Anderson, and it is unrealistic to expect the individual Reservist to drive the width of the state one weekend a month at his own expense. As a result, the Reservist is inclined to leave or to enlist in a Guard unit in Anderson, with the Charleston units' billet remaining vacant.

Other losses of trained personnel will occur as hardware equipment of the Naval Reserve changes. If we lose or are reduced in a mission area requiring particular expertise, for example propeller driven aircraft, we tend to lose a large number of the people associated with the unit having that mission unless

they are easily retrainable. This would not happen in an Army Reserve Infantry Division going from M–1s to M–16s.

I believe that the program will provide for proper training of essential personnel who will be required by the Navy in an emergency provided that we can recruit good people in an organization which has displayed anything but stability, and if we are provided the wherewithal to accomplish necessary training such as weekend away training aboard active force activities.

Reserves Authorized Strength

Senator Thurmond. Authorization levels for the Reserves have been previously explained as being a floor rather than a ceiling. Has the Navy made any efforts to find the funds from all available service sources to keep the manning levels up to or above the authorization for the Reserve?

Admiral Charbonnet. In FY 1974 a Naval Selected Reserve average strength of 119,231 was authorized by Congress. However, funds were appropriated to support only an average strength of 116,857. In FY 1975 a Selected Reserve average strength of 117,000 was authorized. To support the FY 1975 authorization the House Appropriations Committee recommended $14.3 million be added to the FY 1975 President's Reserve Personnel, Navy (RPN) budget request. However, the Senate Appropriations Committee disagreed with providing any additional funds for that purpose. A position was reached in joint conference to add $10 million to support an increase in average strength. This increase resulted in the FY 1975 appropriated average strength of 111,917. Since the Congress has not appropriated sufficient funds to support the authorized Selected Reserve average strength during the past two years, the Navy has presumed that it was the intent of Congress that the authorized average strength not be attained. Consequently, no reprogramming action has been requested to add funds to the RPN appropriation.

Fiscal Personnel Constraints

Senator Thurmond. If the Congress gives the Navy an authorization this year above what is being requested, would you try to find proper missions for these talented people to attract them, to help keep their skills available for our national defense posture?

Admiral Charbonnet. Fiscal constraints have forced reductions in personnel strength in most Naval Reserve programs. An increase in authorization would permit restoration of personnel strengths in these programs only if funds were appropriated to support the authorization. The Navy is continually seeking new initiatives and missions for reserve forces. The Naval Reserve has the potential to assume additional missions in many areas, particularly the service forces, amphibious forces, and air forces. It should be understood that some skill areas have a very limited application to new mission areas. For example, a construction electrician in the Seabees cannot normally be readily employed as a shipboard electrician.

Reserve Requirements

Senator Thurmond. Are the Naval Reserve requirements based on a protracted emergency situation for a conventional war at sea involving Soviet submarine warfare, or are they for a Vietnam or a Korean type contingency in which no submarine warfare was experienced?

Admiral Charbonnet. The Naval Reserve requirements are established for the purpose of providing additional hardware and manpower resources to assist the active Navy in meeting the entire spectrum of mobilization requirements from limited contingencies to full mobilization for a major war or military conflict.

Nuclear Aftermath Callup

Senator Thurmond. What use would be made of the Naval Reserve force in the planning for the aftermath of a nuclear exchange?

Admiral Charbonnet. In addition to defending the United States against enemy attack, either overt or covert, the military services have a responsibility to: provide protection for key military and industrial facilities, furnish military support to civil authorities in civil defense mergences and assist the Immigration and Naturalization Service Border Patrol.

All military forces (active and reserve) may be used to provide assistance in a civil defense emergency such as a nuclear aftermath. The degree of reserve involvement during the post attack phase will be dependent upon the extent of damage suffered and the active military operations in progress or required offensive, defensive, or self-survival efforts.

Reserve Contingencies

Senator Thurmond. During recent years, our Navy has been cut back in both regular and reserve forces, and now again this year further cuts are being proposed for the reserve forces. But we are told that the Soviet interdiction capabilities are continuing to grow stronger and more efficient. Are you taking advantage of all the naval capabilities needed and available that could be usefully performed by reservists?

Admiral Charbonnet. We consider the Naval Reserve an integral part of the total force and are striving to take advantage of the capabilities of the reservists. For example, plans for FY 1976 provide for the transfer to the Naval Reserve of 2 amphibious transport ships, 1 amphibious cargo ship, 8 patrol gunboats, and 1 combat search and rescue helicopter squadron. Two helicopter attack (light) squadrons and a maritime patrol squadron are planned for FY 1977.

We are thoroughly examining another new role for the Reserve, the Reserve Merchant Ship Defense System. This concept is to station self-supporting CADRES of ASW helicopters, manned by Naval Air Reservists, aboard commercial container type merchant ships during periods of mobilization. Support for the CADRES would be provided from special containers configured in aviation support modules (aircraft maintenance, fuel, and personnel accommodations). In fiscal years 1976 and 1977, we are conducting a test of five active destroyers with an active and Reserve manning mix. Eighty percent of the crew will be active duty personnel with the remaining twenty percent being Selected Reservists. Additionally, we are investigating alternatives for the direct procurement of new ships for the Reserves.

Other potential areas for increased utilization of Reservists will be examined as they are identified.

Selective Reserve Strength

Senator Thurmond. Would you comment on the fact that of all the Reserve components only the Naval Reserve provides less than half of the 30-day level of requirements in the Selected Naval Reserve?

Admiral Charbonnet. Manpower requirements for the Selected Reserve consist of the number of reservists who can be utilized and trained adequately with the hardware and equipment available and planned for the Naval Reserve to man all the ships, squadrons, and other combat units of the Reserve Force, to augment the active ships and squadrons of the regular Navy, and to support the mobilization requirements of the Navy Shore Establishment.

The Navy has sized its Selected Reserves to provide trained personnel to satisfy the most critical initial wartime requirements. It is considered unrealistic for the Navy's Selected Reserve to recruit and retain a force of the magnitude required for the first 30 days of mobilization.

Reserve Hardware

Senator Thurmond. To what extent are the recommendations for the reserve manning level influenced by the availability or non-availability of ships and aircraft with which to operate?

Admiral Charbonnet. The size of the Naval Reserve is determined by the difference between the regular force and the U.S. Navy total force. Because the total force of the Navy is defined by the Navy's equipment inventory, the ability of the Navy to utilize manpower effectively is limited by the numbers of ships and aircraft which require manning and support. The FY–76 Budget request provides for Selected Reservists to man all the ships, squadrons, and other combat units of the Reserve Force and to augment active ships and squadrons of the regular Navy. In addition, the FY–76 Budget includes Selected Reservists to satisfy some of the mobilization requirements in support of the Navy Shore Establishment.

HARDWARE UNIT REDUCTION

Senator THURMOND. I understand the Navy has been trying to be more unit and hardware oriented in the reserve program. Will you comment on the parts of the program where there are hardware units you are proposing be dropped out this year? If you could get the money, would you keep them operating?

Admiral CHARBONNET. The following hardware units are proposed for being dropped this year:

Nine Naval Reserve Mobile Construction Battalions.
Five Destroyers.
Nine Coastal Minesweepers.
Six Aviation Antisubmarine Warfare Squadrons (VS).
Two Carrier Airborne Early Warning Squadrons (VAW).

In the case of Reserve Construction Battalions, or Seabees, in order to attain a better balance of combat to combat support in the Total Force, a conscious decision was made in the Defense Department to reduce the number of both Reserve and active Construction Battalions. The Navy was directed to plan on private sector completion of construction requirements beyond the capability of available Forces. Our Reserve Seabees, as you know, are well trained and are capable. The Naval Reserve Seabee Program has long been one of the most viable of all in the Reserve components. If funds were available, not at the expense of other important programs, I would not disestablish nine Battalions.

The five destroyers are being dropped as a result of age and degraded material condition. If funds were available for construction or other procurement of additional ships, I would support additional ships since the Total Force has an unquestionable requirement for more surface combatants than we have in the inventory. I would support retention of these destroyers being decommissioned where material conditions could be improved to a satisfactory level if funds were made available, but only after other higher priority needs were met.

The same holds true for the nine Coastal Minesweepers. We need more Minesweeping and Minehunting ships than we have. The mining threat of potential adversaries is significant. This mission area is one ideally suited to placing in the Reserve Forces since there is no peacetime presence or forward deployment requirement. Despite my strong desire to retain the trained Reserve personnel from these ships in this mission, I could not support the retention of obsolescent ships. However I strongly support any efforts to provide replacement ships for the Reserve Mine Warfare Forces.

Plans to disestablish the Carrier Aviation Antisubmarine Warfare Squadrons and Airborne Early Warning Squadrons coincide with elimination of aviation gasoline from aircraft carriers which will obviate the deployability of these squadrons. This disestablishment is not the result of a budgetary shortfall. The assets from the reduction are programmed to provide for the establishment of a Helicopter Combat Search and Rescue Squadron (HC) in Fiscal Year 1976 and two Riverine Helicopter Light Attack Squadrons (HAL) and an additional P–3 Squadron in Fiscal Year 1977. The Helicopter Squadrons represent new initiatives for the Naval Air Reserve.

RESERVE JUSTIFICATION

Senator THURMOND. We have heard that some defense planners are not convinced that investment in reserve forces may be a good idea, because in some contingencies the reserves might not be called up. We note this year also the recommendations of defense include a bill to authorize a reserve call-up of up to 50,000 for up to 90 days in less than a full emergency. To what extent are the reserve force level recommendations this year influenced by the possibility that reserves might not be called up except for a national emergency leading to mobilization?

Admiral CHARBONNET. The Navy fully supports the total force policy including the reliance on the Naval Selected Reserve as the initial source for augmentation of the active Navy in the event of future emergencies. Therefore, the reserve force levels recommended for FY 1976 have not been influenced by the possibility that the reserves might not be called up except for a national emergency leading to mobilization.

STATEMENT OF CAPT. GEORGE G. DOWD, JAGC, USN, DIRECTOR OF NAVAL PETROLEUM AND OIL SHALE RESERVES

ACCOMPANIED BY:

REAR ADM. E. W. COOKE, U.S. NAVY, DEPUTY COMPTROLLER OF THE NAVY

REAR ADM. S. S. FINE, U.S. NAVY, ACTING DIRECTOR OF BUDGET AND REPORTS/FISCAL MANAGEMENT DIVISION, DEPARTMENT OF THE NAVY

F. NEWMAN, BUDGET ANALYST, OFFICE OF THE DIRECTOR OF NAVAL PETROLEUM AND OIL SHALE RESERVES

JUSTIFICATION AND PREPARED STATEMENT

Senator YOUNG. Now we have Capt. George G. Dowd.

Before you begin Captain, I want to include the material from the justifications, and then you may proceed. If you want to summarize your statement, we will insert it in full for the record.

[The justification and statement follow:]

Justification

APPROPRIATION INTRODUCTION

The appropriation under this title finances the day to day costs, except military personnel salaries, of conserving, operating, and maintaining the 4 petroleum reserves and the 3 oil shale reserves under the Secretary of the Navy. These funds include amounts for pay of civilian personnel, consultant services, contract services for maintenance of equipment and facilities and for necessary drilling operations, fuel, supplies, equipment repair parts, exploration of Reserves No. 1 in California and No. 4 in Alaska, and development of Reserves No. 1 and No. 3 in Wyoming and the 3 oil shale reserves in Colorado and Utah.

At present this appropriation is limited to financing operations, maintenance, exploration, and development costs. Authorization is required for any production, so funds for production are not currently reflected in this appropriation justification.

NOTE: Legislation revising title 10, US Code, to authorize production of petroleum from the Naval Petroleum Reserves has been transmitted to the Congress. The legislation also proposes that proceeds from the exchange or sale of the petroleum produced be placed in a special fund in the Treasury to be used to finance the operations, exploration, and development of the petroleum reserves, as well as the costs associated with the construction and management of a proposed National Strategic Petroleum Reserve.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1807-0-1-051	BUDGET PLAN (AMOUNTS FOR OBLIGATIONS					
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
	.....	69,400	117,700	.....	69,400	117,700
FINANCING:						
BUDGET AUTHORITY	.....	69,400	117,700	.....	69,400	117,700
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET				.....	69,400	117,700
72 OBLIGATED BALANCE, START OF YEAR				.....	.....	19,400
74 OBLIGATED BALANCE, END OF YEAR				.....	-19,400	-38,100
90 OUTLAYS				.....	50,000	99,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1807-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	.....	785	1,090
11.5	OTHER PERSONNEL COMPENSATION	.....	5	6
	TOTAL PERSONNEL COMPENSATION	.....	790	1,096
	PERSONNEL COMPENSATION	.....	790	1,096
12.1	PERSONNEL BENEFITS: CIVILIAN	.....	56	82
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	.....	77	77
23.0	RENT, COMMUNICATIONS, AND UTILITIES	.....	40	40
24.0	PRINTING AND REPRODUCTION	.....	7	7
25.0	OTHER SERVICES	.....	68,395	116,363
26.0	SUPPLIES AND MATERIALS	.....	26	26
31.0	EQUIPMENT	.....	9	9
99.0	TOTAL OBLIGATIONS	.....	69,400	117,700

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1807-0-1-051	BUDGET PLAN (AMOUNTS FOR TRANSITION	OBLIGATIONS TRANSITION
PROGRAM BY ACTIVITIES:		
	47,500	47,500
FINANCING:		
BUDGET AUTHORITY	47,500	47,500
RELATION OF OBLIGATIONS TO OUTLAYS:		
71 OBLIGATIONS INCURRED, NET		47,500
72 OBLIGATED BALANCE, START OF YEAR		38,100
74 OBLIGATED BALANCE, END OF YEAR		-43,600
90 OUTLAYS		42,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-1807-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	273
11.5	OTHER PERSONNEL COMPENSATION	1
	TOTAL PERSONNEL COMPENSATION	274
	PERSONNEL COMPENSATION	274
12.1	PERSONNEL BENEFITS: CIVILIAN	20
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	21
23.0	RENT, COMMUNICATIONS, AND UTILITIES	11
24.0	PRINTING AND REPRODUCTION	3
25.0	OTHER SERVICES	47,162
26.0	SUPPLIES AND MATERIALS	7
31.0	EQUIPMENT	2
99.0	TOTAL OBLIGATIONS	47,500

Personnel Summary

Identification code: 07-10-1807-0-1-051	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Total number of permanent positions.....	(31)	52	70	70
Full-time equivalent of other positions.....	-	-	-	-
Average paid employment.....	(29)	46	70	18
Average GS grade.....	(974)	10.18	10.04	10.04
Average GS salary.....	(16,451)	15,541	15,571	15,571
Average salary of ungraded positions.....	-	-	-	-

		PET RES. #1	PET RES. #2	PET RES. #3	PET RES. #4	TOTAL
LOCATION:						
AREA		ELK HILLS	BUENA VISTA HILLS	TEAPOT DOME	ARCTIC SLOPE	
COUNTY		KERN	KERN	NATRONA	------	
STATE		CALIFORNIA	CALIFORNIA	WYOMING	ALASKA	
ESTABLISHED BY:						
EXECUTIVE ORDER OF		PRESIDENT TAFT	PRESIDENT TAFT	PRESIDENT WILSON	PRESIDENT HARDING	
DATE		2 SEPTEMBER 1912	13 DECEMBER 1912	30 APRIL 1915	27 FEBRUARY 1923	
ACREAGE - TOTAL		46,095	30,181	9,481	23,680,000	23,765,757
GOVERNMENT		37,554	10,446	9,481	23,680,000	23,737,481
PRIVATE		8,541	19,735	---	--------	28,276
ESTIMATED REMAINING RECOVERABLE	TOTAL	1,000,000,000	32,655,000	42,500,000	10,000,000,000	11,075,155,000
OIL RESERVES (BARRELS), 1-1-73	NAVY	772,000,000	15,000,000	42,500,000	10,000,000,000	10,849,500,000
					(NOT PROVEN BY DRILLING BUT CONSIDERED CONSERVATIVE BY MANY AUTHORITIES)	
ESTIMATED NET WORTH	TOTAL	$4,500,000,000	$146,947,500	$191,250,000	$45,000,000,000	$49,838,197,500
(USING A CONSERVATIVE AVERAGE OF $4.50 PER BARREL OF OIL. DOES NOT CONSIDER VALUE OF NATURAL GAS)	NAVY	3,564,000,000	67,500,000	191,250,000	45,000,000,000	48,822,750,000

NAVAL OIL SHALE RESERVES

	OIL SHALE RES. #1	OIL SHALE RES. #3	OIL SHALE RES. #2	
LOCATION				
COUNTY	GARFIELD	GARFIELD	UINTAH AND CARBON	
STATE	COLORADO	COLORADO	UTAH	
ESTABLISHED BY:				
EXECUTIVE ORDER OF	PRESIDENT WILSON	PRESIDENT COOLIDGE	PRESIDENT WILSON	
DATE	6 DECEMBER 1916	27 SEPTEMBER 1924	6 DECEMBER 1916	
ACREAGE	54,893 (NOSR'S 1 & 3 ARE CONSIDERED JOINTLY)		90,440	145,333
ESTIMATED RECOVERABLE OIL FROM SHALES ASSAYING 15 GAL/TON OR MORE (BARRELS)	12,000,000,000		4,000,000,000	16,000,000,000
ESTIMATED NET WORTH (USING $1.00 PER BARREL OF OIL)	12,000,000,000		4,000,000,000	16,000,000,000

SUMMARY OF OBLIGATIONS

(In Thousands)

	Budget Program	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	Difference 1976 Compared with 1975
A	Naval Petroleum Reserve No. 1	($58,512)	$42,691	$68,475	$40,002	+$25,784
B	Naval Petroleum Reserve No. 2 & 3	(248)	456	747	402	+291
C	Naval Petroleum Reserve No. 4	($10,316)	25,615	47,182	6,672	+21,567
D	Naval Oil Shale Reserves	(97)	100	600	250	+500
E	Office of Director	(255)	538	696	174	+158
	Total direct obligations in budget document	($69,428)	$69,400	$117,700	$47,500	+$48,300

STATEMENT OF CAPTAIN GEORGE G. DOWD

The appropriation under this title finances the day-to-day costs, (except military personnel salaries), of conserving, operating, and maintaining the 4 petroleum reserves and the 3 oil shale reserves under the jurisdiction and control of the Secretary of the Navy. These funds include amounts for pay of civilian personnel, consultant services, contract services for maintenance of equipment and facilities, and for necessary drilling operations, fuel, supplies, equipment repair parts, exploration of Reserves No. 1 in California and No. 4 in Alaska, and development of Reserve No. 1 (Elk Hills) and Reserve No. 3 (Teapot Dome) in Wyoming.

At present this appropriation is limited to financing operations, maintenance, exploration, and development costs. Authorization is required for any production, so funds for production are not currently reflected in this appropriation justification.

SUMMARY OF OBLIGATIONS

(In Millions)

	Budget Program	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	Difference 1976 Compared with 1975
A	Naval Petroleum Reserve No. 1	($58.5)	$42.7	$68.5	$40.0	+$25.8
B	Naval Petroleum Reserve No. 2&3	(0.2)	0.5	0.7	0.4	+0.3
C	Naval Petroleum Reserve No. 4	($10.3)	25.6	47.2	6.7	+21.6
D	Naval Oil Shale Reserves	(0.1)	0.1	0.6	0.2	0.5
E	Office of Director	(0.3)	0.5	0.7	0.2	0.1
	Total direct obligations	($69.4)	$69.4	$117.7	$47.5	+$48.3

Mr. Chairman and members of the Committee, I appreciate this opportunity to appear before you to discuss the Naval Petroleum Reserves program for fiscal year 1976. This program is being financed by a separate appropriation in 1976.

There are four Naval Petroleum and three Naval Oil Shale Reserves which were created by Executive Order during the period 1912 through 1924. These Reserves were subsequently confirmed by statute which set forth their fundamental program and purpose. The statute directs the Secretary of the Navy, subject to the approval of the President, to explore and develop the Reserves for the production of a supplemental supply of oil when required for national defense.

When a oil shortage occurred towards the end of World War II, the Congress called on Navy to explore and develop its two most important Reserves, Naval Petroleum Reserve No. 1, (Elk Hills, California), and Naval Petroleum Reserve No. 4 located on the North Slope of Alaska. Considerable progress was made on both of these programs, at both Reserves, but they were prematurely terminated in 1953. Comparatively little further exploration and development was accomplished on the Reserves until, in 1974, faced with another national oil shortage, the Congress took action to explore and develop these two Reserves by passage of the Supplemental Appropriation Act of 1974 and a separate appropriation for fiscal year 1975. The exploration and development programs were initiated and are underway. At NPR No. 1, 26 exploratory wells and 65 development wells are planned for completion by end of fiscal year 1975. At NPR No. 4, a geophysical explorations survey is now being conducted and 3,600 line miles will be completed by end of fiscal year 1975. Two test wells will be completed by the end of fiscal 1975 and materials needed for the next year's drilling have been purchased for shipment on this summer's annual supply barging to that Arctic Reserve.

Continuation of the exploration programs in NPR Nos. 1 and 4 and the development program in No. 1 make up the major part of our

1976 budget of $117.7 million. The budget is in three parts; $8.4 million for regular operations, $51.2 million for exploration, and $58.1 million for development.

OPERATIONS

	FY 74	FY 75	FY 76	FY 7T
NPR #1	6.6	3.9	4.2	1.0
NPR #2 and #3	.2	.5	.3	.1
NPR #4	3.2	2.4	3.1	.3
NOSR	.1	.1	.1	.1
HQS	.3	.5	.7	.2
TOTAL	10.4	7.4	8.4	1.7

The regular operations budget provides for the following continuing programs:

(1) Maintenance of wells and facilities, limited remedial production, and protective offset production at NPR No. 1 in California;

(2) Administration of oil and gas leases on Navy's lands in NPR No. 2 in California;

(3) Protective offset production on NPR No. 3 in Wyoming;

(4) Environmental clean-up, and the drilling of one exploratory gas well in the Barrow area of NPR No. 4 in Alaska. The purpose of this gas well is to assure sufficient current and future gas supplies to meet increasing demands of the Federal installations in the Barrow area and the residents of the City of Barrow;

(5) Management of the Naval Oil Shale Reserves located in Colorado and Utah, including management of grazing, timber, wildlife and recreation; and

(6) Administration of the Reserves and the employment of petroleum and oil shale consultants.

EXPLORATION

	FY 74	FY 75	FY 75	FY 7T
NPR #1	4.4	3.8	6.5	2.1
NPR #3	-	-	.4	.3
NPR #4	7.1	23.2	44.0	6.3
NOSR	-	-	.3	.2
TOTAL	11.5	27.0	51.2	8.9

The exploration budget provides for the following programs in fiscal year 1976:

(1) The drilling of 11 exploratory wells at NPR #1, and 4 exploratory wells at NPR #3 to further define the limits of the fields;

(2) 2,280 line miles of seismic survey and drilling of two exploratory wells at NPR #4; and

(3) 50-60 line miles of seismic survey on the Naval Oil Shale Reserves in Utah and Colorado.

DEVELOPMENT

	FY 74	FY 75	FY 76	FY 7T
NPR #1	47.5	35.0	57.8	36.8
NOSR	-	-	.3	-
TOTAL	47.5	35.0	58.1	36.8

The development budget provides for the following programs:

(1) The drilling of 164 development wells and installation of additional surface facilities to handle production of up to 160,000 barrels per day at NPR #1, in california; and

(2) The preparation of a master development plan for the Naval Oil Shale Reserves in Colorado and Utah.

This concludes my prepared statement Mr. Chairman. I shall be pleased to provide any additional information you may desire.

BUDGET REQUEST

Captain Dowd. That will be fine. Mr. Chairman and members of the committee, I appreciate this opportunity to appear before you to discuss the naval petroleum reserves program for fiscal year 1975. This program is being financed by a separate appropriation in 1976.

There are four naval petroleum and three naval oil shale reserves which were created by Executive order during the period 1912 through 1924. These reserves were subsequently confirmed by statute which set forth their fundamental program and purpose. The statute directs the Secretary of the Navy, subject to the approval of the President, to explore and develop the reserves for the production of a supplemental supply of oil when required for national defense.

OIL RESERVE EXPLORATION

When an oil shortage occurred towards the end of World War II, the Congress called on Navy to explore and develop its two most important reserves, Naval Petroleum Reserve No. 1 (Elk Rivers, Calif.), and Naval Petroleum Reserve No. 4 located on the North Slope of Alaska.

Considerable progress was made on both of these programs at both reserves, but they were prematurely terminated in 1953. Comparatively little further exploration and development was accomplished on the reserve until in 1974 faced with another national oil shortage, the Congress took action to explore and develop these two reserves by passage of the Supplemental Appropriation Act of 1974 and a separate appropriation for fiscal year 1975. The exploration and development programs were initiated and are underway. At NPR No. 1, 26 exploratory wells and 65 development wells are planned for completion by end of fiscal year 1975. ATNPR No. 4, a geophysical explorations survey is now being conducted and 3,600 lines miles will be completed by end of fiscal year 1975. Two best wells will be completed by the end of fiscal 1975 and materials needed for the next year's drilling have been purchased for shipment on this summer's annual supply bargaining to that Arctic reserve.

Continuation of the exploration program in NPR Nos. 1 and 4 and the development program in No. 1 make up the major part of our 1976 budget of $117.7 million. The budget is in three parts; $8.4 million for regular operations, $51.2 million for exploration, and $58.1 million for development.

CONTINUING PROGRAMS

The regular operations budget provides for the following continuing programs:

1. Maintenance of wells and facilities, limited material production, and protective offset production at NPR No. 1 in California.
2. Administration of oil and gas leases on Navy's lands in NPR No. 2 in California.
3. Protective offset production on NPR No. 3 in Wyoming.
4. Environmental cleanup, and the drilling of one exploratory gas well in the Barrow area of NPR No. 4 in Alaska. The purpose of

this gas well is to assure sufficient current and future gas supplies to meet increasing demands of the Federal installations in the Barrow area and the residents of the city of Barrow.

5. Management of the naval oil shale reserves located in Colorado and Utah, including management of grazing, timber, wildlife, and recreation.

6. Administration of the reserves and the employment of petroleum and oil shale consultants.

EXPLORATION

	Fiscal year—			
	1974	1975	1976	197T
NPR No 1	4.4	3.8	6.5	2.1
NPR No 3			.4	.3
NPR No 4	7.1	23.2	44.0	6.3
NOSR			.3	.2
Total	11.5	27.0	51.2	8.9

FY 1976 EXPLORATION PROGRAMS

Captain Dowd. The exploration budget provides for the following programs in fiscal year 1976: (1) The drilling of 11 exploratory wells at NPR No. 1, and four exploratory wells at NPR No. 3 to further define the limits of the fields; (2) 2,280 line miles of seismic survey and drilling of two exploratory wells at NPR No. 4; and (3) 50–60 line miles of seismic survey on the naval oil shale reserves in Utah and Colorado.

DEVELOPMENT

	Fiscal year—			
	1974	1975	1976	197T
NPR No 1	47.5	35.0	57.8	36.8
NOSR			.3	
Total	47.5	35.0	58.1	36.8

DEVELOPMENT BUDGET

Captain Dowd. The development budget provides for the following programs:

1. The drilling of 164 development wells and installations of additional surface facilities to handle production of up to 160,000 barrels per day at NPR No. 1, in California.

2. The preparation of a master development plan for the naval oil shale reserves in Colorado and Utah.

This concludes my prepared statement, Mr. Chairman. I shall be pleased to provide any additional information you may desire.

COLORADO OIL SHALE

Senator Young. What are you doing about oil shale in Colorado? Are you doing any exploration in there?

Captain Dowd. We have some seismic work planned for 1976, Mr. Chairman, and the Navy is participating in an experimental program in conjunction with the Department of the Interior, whereby Navy shale is being used by a company known as DEI, Inc.

Senator YOUNG. Are we getting some oil out of Elk Hills now?

Captain DOWD. A very limited amount. Something like 3,000 barrels a day.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator YOUNG. Would you answer these questions for the record which have been submitted by Chairman McClellan?

Captain DOWD. Yes, sir.

[The questions and answers follow:]

PETROLEUM RESERVE PERSONNEL

Chairman MCCLELLAN. How many military personnel are assigned to the Naval Petroleum Reserves for all purposes, and what is their cost? Please show data for FY 1974, FY 1975, and FY 1976.

Captain DOWD. In FY 1974, we had a total of nine military personnel assigned, four of which were in the Washington office and five in the field offices, and their total cost was $188,967.00. In FY 1975 there are five in the Washington office and six in the field, for a total of eleven, at a cost of $240,173.00. In FY 1976 we estimate we will have seven in the Washington office and ten in the field, for a total of seventeen military personnel, at a cost of $388,670.00.

OIL RESERVE CAPACITY

Chairman MCCLELLAN. Describe the land area and estimated capacity of each of the reserves, including the oil shale reserve.

Captain DOWD. Naval Petroleum Reserve (NPR) No. 1, Elk Hills, Calif. consists of 46,095 acres, 37,554 of which are government owned and currently has a production capability of 160,000 barrels per day. These are proven reserves of 1.1 billion barrels of oil in this Reserve.

NPR No. 2 in California consists of 30,181 acres of which 10,446 belong to the government. This reserve is fully developed and producing at its maximum rate of about 10,000 barrels per day including production from non-government lands. These are proven reserves of 15.6 million barrels of oil in the Reserve.

NPR No. 3, Teapot Dome, Wyo. contains 9,481 acres, all government owned, and currently has the capability to produce a maximum of 2,000 barrels per day. It has a proven reserve of 43 million barrels of oil.

NPR No. 4, in Alaska is the largest of the reserves and contains 23,680,000 acres. The current production capability is about 400 barrels of oil per day. The government owns all the mineral rights in the Alaska reserve. It has proven reserves of 100 million barrels of oil and it is estimated to contain 10–33 billion barrels of oil.

The Naval Oil Shale Reserves Nos. 1 and 3 in Garfield County, Colo. consists of approximately 55,000 acres and Naval Oil Shale No. 2 is located in Carbon and Uintah Counties in Utah consists of about 90,000 acres. The Oil Shale Reserves have no current capability to produce except for two experimental retorts located and operated on the Colorado Oil Shale Reserves under a lease between Development Engineering, Inc. (DEI) and the Department of the Interior. The retorts are capable of producing a few hundred barrels per day.

RESERVE OIL WELL SITES

Chairman MCCLELLAN. How many exploratory and development wells are located presently at each of the reserves and what are the long range plans—with and without production?

Captain DOWD. At Naval Petroleum Reserve No. 1, as of July 1, 1974, the number of exploratory and development wells is as follows together with those projected in the five year plans with or without production.

Exploratory:	
Present	84
Projected	76
Development:	
Present	1,003
Projected	829

At Naval Petroleum Reserve No. 2 Navy merely acts as a lessor.

Naval Petroleum Reserve No. 3 currently has 195 oil and/or gas cap wells. A modest exploratory program of four wells is programmed for FY 1976 and two exploratory wells per year through FY 1980. However, if Congress directs the full development and production of this Reserve, an additional 562 wells will be required.

At Naval Petroleum Reserve No. 4, there have been 38 exploratory wells and eight development wells drilled in NPR 4. All development wells are located in the South Barrow Gas Field which supplies natural gas to the Barrow area users. In addition, there were 44 core tests drilled during the PET–4 program from 1944–1953. The seven year exploration program call for the drilling of 26 exploratory wells and the completion of 10,000 line miles of reflection seismograph profiles.

Well Types Defined

Chairman McClellan. What is the difference between a development well and an exploration well?

Captain Dowd. In general, a development well is a well drilled within the proved area of an oil and gas reservoir to the depth of a stratigraphic horizon known to be productive. If the well is completed for production, it is classified as an oil or gas development well. If the well is not completed for production, it is classified as a dry development hole.

A new field wildcat well (exploratory well) is a well located on a structural feature or other type of trap which has not previously produced oil or gas. In regions where local geological conditions have little or no control over accumulations, these wells are generally at least 2 miles from the nearest producing area. Distance, however, is not the determining factor. Of greater importance is the degree of risk assumed by the operator and his intentions to test a structure or stratigraphic condition not prevously proved productive.

"Remedial Production"

Chairman McClellan. Explain what "remedial production" is, why it is necessary, and how much oil pumping is involved here.

Captain Dowd. "Remedial production" is composed of:

(*a*) Production incident to maintaining the various production zones in a condition of readiness and to protect the zone from losses due to water encroachment or oil migration off the reserve caused by natural forces.

(*b*) Production incident to maintaining the wells and mechanical equipment in a condition of readiness to produce.

(*c*) Test production.

(*d*) Production for injection (water/gas). The volumes of oil involved in the various reserves are as follows:

NPR–1	2500 B/D
NPR–2	Leased
NPR–3	320 B/D
NPR–4	None

"Protective Offset Production"

Chairman McClellan. Explain what "protective offset production" is and how much occurs at each of the Reserves.

Captain Dowd. Protective offset production is necessary production to prevent oil migrating from the Reserves to offset non-reserve lands. The amount of crude produced at each reserve for this purpose is:

NPR–1	660 B/D
NPR–2	Leased
NPR–3	144 B/D
NPR–4	None

Oil Shale Reserves

Chairman McClellan. Explain what specific activities occur at the Naval Oil Shale Reserves.

Captain Dowd. With the exception of that portion of the Oil Shale Reserves in Colorado leased by the Department of the Interior, most activities on the

Oil Shale Reserves are currently limited to those associated with surface management of the Reserves. As noted earlier, the Department of Interior currently has a lease with DEI to demonstrate the Paraho retort and DEI has proposed to construct a larger, commercial size, module retort.

"Line Miles of Seismic Survey"

Chairman McClellan. Explain what "line miles of seismic survey" means. What kind of results are obtained from these line miles of seismic survey and what remains to be accomplished when such surveys are completed?

Captain Dowd. "Line miles of seismic survey" refers to the linear extent of the seismic surveys. Two common methods of performing seismic surveys are: (1) using dynamite charges set in drilled holes, or, (2) using a vibrating source at the surface. In both cases instruments are used to gather data regarding the reflection and refraction of sound waves. The raw data collected in the field is then fed into a computer which analyzes the data and provides an output that indicates the type of subsurface structures present, including faults. Maps indicating apparent subsurface conditions can then be prepared and potential traps for oil and gas identified.

Petroleum Reserve Program

Chairman McClellan. Summarize the Administration's proposed legislation for production of the reserves and the establishment of a national strategic petroleum reserve. Indicate the year by year cost of such legislation for the next five years.

Captain Dowd. Titles I and II of S. 594, the President's Energy Independence Act of 1975, are closely linked and provide the President with general authority pertaining to the Naval Petroleum Reserves and the National Strategic Petroleum Reserve. There is provision made for a National Strategic Petroleum Reserve of up to 1 billion barrels for the civilian economy which is provided in Title II and a 300 million barrel reserve for the military which is provided in Title I. Title I also provides for production at Elk Hills and other Naval Petroleum Reserves for storage in the National Strategic Petroleum Reserve, for replenishment of Department of Defense stocks, and for sale and exchange. A special fund would be established in the Treasury derived from the funds realized from sale of this petroleum. The special fund will provide monies for exploration and development of all of the petroleum reserves and will provide for the establishment of the National Strategic Petroleum Reserve.

YEAR-BY-YEAR COSTS OF LEGISLATION

[In millions of dollars]

	1975	1976	197T	1977	1978	1979	1980
Naval petroleum reserve	$69.4	$117.7	$47.5	$173.6	$130.2	$139.3	$125.
National strategic reserve	2.0	110.0	50.0	300.0	1,702.0	2,170.0	2,170.

Naval Reserves Legislation

Chairman McClellan. Summarize the major alternative bills that have been introduced and are being considered by Congress with respect to the Naval Reserves.

Captain Dowd. Senate Joint Resolution 13, introduced by Senator Cannon, would authorize the production of petroleum from NPR 1 for national defense purposes at a rate not to exceed the maximum efficient rate in accordance with sound engineering and economic principles. The proceeds from such production would be placed in a special account in the Treasury to be used for the exploration, development, and production of all of the Naval Petroleum and Oil Shale Reserves. This Joint Resolution, which is virtually identical to S.J. Res. 176, 93rd Congress, which was passed by the Senate but not by the House, is based on a determination made by the Secretary of the Navy on November 6, 1973, in accordance with our statutes (10 U.S.C. 7422), that production was needed for national defense purposes. The conditions under which that determination was

made have changed considerably and therefore the determination could now be challenged.

S. 677, which was introduced by Senator Jackson, would create strategic energy reserves in storage capable of replacing energy imports for at least ninety days in order to reduce the impact of interruptions or reductions in imports of energy supplies. Included within the strategic reserve system would be (1) national strategic energy reserves; (2) industry storage reserves; (3) utility storage reserves; and (4) coal storage reserves. The national strategic energy reserve would be composed of crude oil produced from Federal lands, including the naval petroleum reserves to the extent authorized by law, and crude oil to which the United States is entitled as royalty from future production upon Federal lands, including the Outer Continental Shelf.

H.R. 49, which was introduced by Congressman Melcher and others in the House, would effectively transfer the Naval Petroleum Reserves from the Navy to the Department of the Interior.

Disposition of Oil Receipts

Chairman McClellan. If production is authorized, how many dollars would the sale of oil in FY 1976 generate? What happens to these funds? Are they available for use to offset part of the appropriations required? If income exceeds the cost of production, what will happen to the excess funds that are in the form of receipts?

Captain Dowd. It is estimated that the sale of this oil would bring in $468 million in FY 1976. These funds would go into the special fund I mentioned and would be available to offset appropriations. Funds in excess of those needed could be transferred by the President into the Treasury as miscellaneous receipts.

Subcommittee Recess

Senator Young. The subcommittee will stand in recess until Monday at 10 a.m. We will meet in room 1223.

Thank you very much, gentlemen.

[Whereupon, at 11:50 a.m. Friday, March 7, the subcommittee was recessed, to reconvene at 10 a.m. Monday, March 10.]

Material Submitted Subsequent to Conclusion of Hearings

[CLERK'S NOTE: By order of the Chairman, the following material, received subsequent to conclusion of the hearings, will be inserted in the record at this point:]

QUESTIONS ON SHIPBUILDING AND CONVERSIONS

The following questions and answers on shipbuilding and conversion were submitted for inclusion in the hearing record:

NO-YEAR FUNDS

Chairman MCCLELLAN. Why is the Navy requesting that the SCN appropriation be changed from a 5-year to a no-year appropriation?

Admiral PRICE. Mr. Chairman, the building time of ships today with their technological complexity, has increased to the point where we cannot fully obligate all funds that are made available for the entire ship program within the 5-year period of the appropriation. The building period, as addressed here, includes the time we get approval of the program, follow the procurement process, award the contract, build the ship and get delivery.

Chairman MCCLELLAN. What are the consequences if this request for change from a 5-year to a no-year appropriation is not approved.

Admiral PRICE. The problem that faces us is using the unobligated balances for a particular ship that remain after the appropriation expires even though the ship is still under construction. This becomes serious if we have to make changes to a ship which are outside the scope of what we had planned, but still within the budgeted cost of the ship, and the ship is in an appropriation that will be expiring on 30 June. If we have not recognized these out of scope changes before the 30 June expiration date of the appropriation, then we cannot make them.

Chairman MCCLELLAN. If the money expires and the ship has not been completed, why not budget for it next year and advise the Congress that the request for funds is to complete the ship?

Admiral PRICE. To do this we are asking for money for a particular ship twice. We have to rebudget for these funds, get them approved, and wait until the money becomes available through the administrative processes of fiscal management. Also, we are operating under fiscally constrained conditions and we would have to rebudget for it possibly at the expense of other items which we also need.

Chairman MCCLELLAN. Can you explain why the SCN funding problem is different from other procurement appropriations?

Admiral PRICE. Ships and their integral weapons systems are becoming more complex. The new class of nuclear submarines, for example, will require production efforts of some 5 or more years per ship. Added to the front end of this program is the contracting effort and extended SCN funded engineering required before actual construction begins. Without any compounding problems, delivery will be well beyond the expiration date of the appropriation funding for these submarines. The same problem holds true of carriers and other major combatants.

In summation each ship is tailormade rather than a mass produced item and adjustments to physical characteristics, electronics, armanent, and other equipment must be made in order to meet requirements of current technology.

UNOBLIGATED BALANCE

Chairman MCCLELLAN. What are you projecting for an unobligated balance for the fiscal year 1971 and prior year SCN appropriations on June 30, 1975?

Admiral PRICE. The unobligated balance in the fiscal year 1971 and prior year SCN appropriations is currently estimated to be $250 million on 30 June 1975.

Chairman McCellan. How do you plan to use the unobligated balance?
Admiral Price. This $250 million will be used as follows:

Program	Balance (millions)	Purpose
DE	$35.0	Claim.
DD-963	24.5	Target-to-ceiling.
DD-963	3.0	Silencing incentive.
DD-963	3.6	Article 43.
DD-963	38.9	Escalation.
DLGN-38 and 39	25.0	Target-to-ceiling.
SSN	80.0	Changes.
SSN	12.0	Escalation.
SSN	28.0	Other.
Total	250.0	

NEED FOR LEGISLATIVE CHANGE

Chairman McCellan. Since the Navy Counsel has determined that expired funds can be used for within contract scope changes, such as claims, why is a change in legislation necessary?

Admiral Price. At best, execution of programs within such fiscal year account is a difficult task. Contract administration is compounded by various changes dictated by reason of engineering defects, technical and technological changes, changes in weapons systems and components. Not all changes require additional funding, but a sufficient number do result in increased cost.

Should the fiscal year 1971 SCN account expire on 30 June 1975, we will have a limited continuing availability for settlement of contractor claims, escalation payments, adjustment of target-to-ceiling prices, and change orders that do not change the scope of the contract. These latter transactions may give pause for concern. Problems will undoubtedly arise whether or not a given change order is properly fundable within expired funds. With some construction programs possibly extending into the "M" account period, the sensitivity of these transactions becomes more acute.

Further, additional effort with respect to the shipbuilding program may be required, which effort is outside of the shipbuilding contract itself. Expired funds would not be available for such effort.

The answer to these compounding problems, we firmly believe, is the extension of the availability of the SCN accounts. We don't think it a convenience as much as a necessity. Try as we may, it is impossible to telescope the construction and ultimate delivery of the many complex vessels. A no-year appropriation would be ideal but the minimum should be an 8-year period of ship construction.

JUSTIFICATION FOR BUDGET AMENDMENT

Subsequent to the conclusion of subcommittee hearings, a budget amendment for the Department of the Navy was submitted to the Congress. Following is the justification for that amendment:

For expenses necessary for the construction, acquisition, or conversion of vessels as authorized by law, including armor and armament thereof, plant equipment, appliances, and machine tools and installation thereof in public and private plants; procurement of critical, long leadtime components and designs for vessels to be constructed or converted in the future; and expansion of public and private plants, including land necessary therefor, and such lands and interest therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statutes, as amended: [as follows; for the Trident program, $1,166,800,000; for the SSN-688 nuclear attack submarine, $502,500,000: for the DLGN nuclear powered guided missile frigate program, $244,300,000, which shall be available only for construction of DLGN 41 and for advance procurement funding for DLGN 42, both ships to be constructed as follow ships of the DLGN 38 class; for the DD-963 program, $457,100,000; for the patrol hydrofoil missile program, $92,300,000; for the patrol frigate program, $186,000,000; for a destroyer tender, $116,700,000; for a fleet ocean tug, $10,800,000; for the Poseidon conversion of fleet ballistic-missile submarines, $104,600,000; for conversion of a submarine tender, $18,300,000; for craft, $22,000,000; for pollution abatement craft, $10,400,000; for outfitting material, $24,900,000; for post delivery, $30,400,000; and for escalation on prior year programs, $71,900,000; in all:] [$3,059,000,000] $5,506,000,000 [and in addition $70,000,000 for escalation and cost growth on prior year programs which shall be derived by transfer from "Shipbuilding and Conversion, Navy 1973/1977".] to remain available for obligation until [June 3, 1979] expended: Provided, That none of the funds herein provided for the construction or conversion of any naval vessel to be constructed in shipyards in the United States shall be expended in foreign shipyards for the construction of major components of the hull or superstructure of such vessel: Provided further, That none of the funds herein provided shall be used for the construction of any naval vessel in foreign shipyards.

For "Shipbuilding and Conversion, Navy" for the period July 1, 1976, through September 30, 1976, $474,200,000, to remain available for obligation until expended. (5 U.S.C. 3103: 10 U.S.C. 5012, 5031, 7296, 7298; 31 U.S.C. 718; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed.)

Change in the language with respect to the restriction of the use of the SCN appropriation for the Navy Shipbuilding programs is required in order to allow the best management of this appropriation. During the long shipbuilding period, many factors influence ship cost estimates. Management ability to occasionally rebalance estimates is required as conditions warrant. Placing fences around major programs within an appropriation severely limits our management options. It is the position of the DOD that reprogramming procedures provide Congress with adequate means to monitor the stewardship of the SCN program and that the fencing of individual program appropriations is detrimental to good management.

Change in the language with respect to the availability of these funds is required in order to establish a separate and new account under this head to remain available until expended. Experience with the multi-year appropriations to date has shown the current 5-year appropriation to be too short to allow for some shipbuilding programs to complete. When the FY 1971 and prior appropriation expires for obligation on 30 June 1975, at least 24 ships will remain uncompleted. Based on this experience and current program status, similar situations are projected to occur as the FY 1972 and subsequent appropriations reach their separate obligation limitation dates. Appropriations previously made under this head in FY 1971 and prior years will be maintained in a separate account which will expire for obligational purposes on 30 June 1975. The appropriation made under this head in FY 1972 will be maintained in a separate account which will expire for obligational purposes on 30 June 1976. The appropriation made under this head in FY 1973 will be maintained in a separate account which will expire for obligational purposes on 30 June 1977. The appropriation made under this head in FY 1974 will be maintained in a separate account which will expire for obligational purposes on 30 June 1978. The appropriation made under this head in FY 1975 will be maintained in a separate account which will expire for obligational purposes on 30 June 1979.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1611-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		FY 1976 Request Pending	FY 1976 Proposed Amendment	FY 1976 Revised Request	FY 1976 Pending Request	FY 1976 Proposed Amendment	FY 1976 Revised Request
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. FLEET BALLISTIC MISSILE SHIPS	608,800	------	608,800	731,834	------	731,834
	2. OTHER WARSHIPS	798,000	60,000	858,000	1,188,906	60,000	1,248,906
	3. AMPHIBIOUS SHIPS	-------	------	-------	------	------	------
	4. MINE WARFARE AND PATROL SHIPS	1,038,900	------	1,038,900	818,251	------	818,251
	5. AUXILIARIES AND CRAFT	3,000,300	------	3,000,300	1,843,764	------	1,843,764
	TOTAL DIRECT	5,446,000	60,000	5,506,000	4,582,755	60,000	4,642,755
	REIMBURSABLE (TOTAL)	100,000	------	100,000	323,434	------	323,434
10	TOTAL	5,546,000	60,000	5,606,000	4,906,189	60,000	4,966,189
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-15,000	------	-15,000	-15,000	------	-15,000
13	TRUST FUNDS	-85,000	------	-85,000	-85,000	------	-85,000
14	NON-FEDERAL SOURCES	------	------	------	------	------	------
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	------	------	------	-2,505,130	------	-2,505,130
	AVAILABLE TO FINANCE NEW BUDGET PLANS	------	------	------	------	------	------
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	------	------	------	------	------	------
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	------	------	------	------	------	------
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	------	------	------	------	------	------
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	------	------	------	3,144,941	------	3,144,941
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	------	------	------	------	------	------
	BUDGET AUTHORITY	5,446,000	60,000	5,506,000	5,446,000	60,000	5,506,000
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET				4,806,189	60,000	4,866,189
72	OBLIGATED BALANCE, START OF YEAR				7,125,037	------	7,125,037
74	OBLIGATED BALANCE, END OF YEAR				-9,300,226	-55,200	-9,355,426
90	OUTLAYS				2,631,000	4,800	2,635,800

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1611-0-1-051		FY 1976 Request Pending	FY 1976 Proposed Amendment	FY 1976 Revised Request
	DIRECT OBLIGATIONS:			
22.0	TRANSPORTATION OF THINGS	1,200	------	1,200
25.0	OTHER SERVICES	1,396,800	------	1,396,800
26.0	SUPPLIES AND MATERIALS	196,000	------	196,000
31.0	EQUIPMENT	2,988,755	60,000	3,048,755
	TOTAL DIRECT OBLIGATIONS	4,582,755	60,000	4,642,755
	REIMBURSABLE OBLIGATIONS:			
25.0	OTHER SERVICES	60,700	------	60,700
26.0	SUPPLIES AND MATERIALS	6,700	------	6,700
31.0	EQUIPMENT	256,034	------	256,034
	TOTAL REIMBURSABLE OBLIGATIONS	323,434	------	323,434
99.0	TOTAL OBLIGATIONS	4,906,189	60,000	4,966,189

SHIPBUILDING AND CONVERSION, NAVY
(In Thousands of Dollars)

	FY 1976 Request Pending	FY 1976 Proposed Amendment	FY 1976 Revised Request
BUDGET ACTIVITY NO. 2: OTHER WARSHIPS	$798,000	$+60,000	$858,000

The addition of $60 million to Budget Activity 2 will provide for Advanced Procurement of long leadtime nuclear components for a nuclear-powered Strike Cruiser (CSGN) to be funded in FY 1977. The AEGIS Weapons System, currently installed in USS NORTON Sound AVM-1, has recently completed highly successful tests with Standard Missile 1 (SM-1). Testing with Standard Missile 2 (SM-2) is scheduled in calendar year [D] On completion of testing with SM-2, the AEGIS Weapons System will be ready for production. A FY 1977 Nuclear-Powered Strike Cruiser (CSGN) has been selected as the lead AEGIS ship.

FY 76 PROCUREMENT PROGRAM

SUMMARY
($ IN MILLIONS)

16 JAN 1975 (Amended - June 1975)

1134

APPROPRIATION, SHIPBUILDING AND CONVERSION, NAVY

ACTIVITY	FY 74	FY 75	FY 76	TRANSITION	FY 77
1. FLEET BALLISTIC MISSILE SHIPS	797.9	1,330.7	608.8	254.3	1,396.7
2. OTHER WARSHIPS	2,405.4	1,203.9	~~798.0~~ 858.0	189.0	1,196.7
4. MINE WARFARE + PATROL SHIPS	3.9	278.3	1,038.9	24.2	1,623.5
5. AUXILIARIES + CRAFT	301.2	361.8	3,000.3	6.7	611.9
TOTAL	3,508.4	3,174.6	~~5,446.0~~ 5,506.0	474.2	4,828.8

[D]=Deleted

DEPARTMENT OF THE NAVY
FY 1976 PROCUREMENT PROGRAM

EXHIBIT P-1

APPROPRIATION: 1611 N SHIPBUILDING AND CONVERSION, NAVY

DATE: 16 JAN 1975

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1976 UNIT COST	MILLIONS OF DOLLARS FY 1974 QUANTITY	FY 1974 COST	FY 1975 QUANTITY	FY 1975 COST	FY 1976 QUANTITY	FY 1976 COST	TRANSITION QUANTITY	TRANSITION COST	FY 1977 QUANTITY	FY 1977 COST
	BUDGET ACTIVITY 1: FLEET BALLISTIC MISSILE SHIPS												
	FLEET BALLISTIC MISSILE SHIPS												
1	SSBN BALLISTIC MISSILE SUB(NUC)(CONV)			2	(165.5)	3	(220.2)						
	LESS: ADVANCE PROCUREMENT (PY)				(-49.8)		(-82.9)						
					115.7		137.3						
2	SSBN BALLISTIC MISSILE SUB(NUC)(CONV)												
	ADVANCE PROCUREMENT (CY)				13.8								
	(FY 1974 FOR FY 1975) (MEMO)				(13.8)								
3	AS SUBMARINE TENDER (CONV)					1	(38.7)						
	LESS: ADVANCE PROCUREMENT (PY)						(-18.9)						
							19.8						
4	AS SUBMARINE TENDER (CONV)												
	ADVANCE PROCUREMENT (CY)				8.7								
	(FY 1974 FOR FY 1975) (MEMO)				(8.7)								
5	OUTFITTING				3.7		3.0		3.7		1.3		6.1
6	POST DELIVERY				3.5		3.8		2.5				2.8
7	TRIDENT (NUCLEAR)		641,200,000	1	(780.8)	2	(1065.0)	1	(641.2)			2	(1418.2)
	LESS: ADVANCE PROCUREMENT (PY)				(-194.0)		(-138.0)		(-81.3)				(-196.8)
					586.8		927.0		559.9				1221.4
8	TRIDENT (NUCLEAR)												
	ADVANCE PROCUREMENT (CY)				65.8		239.8		42.7		25?.8		166.4
	(FY 1974 FOR FY 1975) (MEMO)				(52.0)								
	(FY 1974 FOR FY 1976) (MEMO)				(13.8)								
	(FY 1975 FOR FY 1976) (MEMO)						(36.5)						
	(FY 1975 FOR FY 1977) (MEMO)						(138.9)						
	(FY 1975 FOR FY 1978) (MEMO)						(64.4)						
	(FY 1976 FOR FY 1977) (MEMO)								(36.1)				
	(FY 1976 FOR FY 1978) (MEMO)								(6.6)				
	(FY 1976T FOR FY 1977) (MEMO)										(21.4)		
	(FY 1976T FOR FY 1978) (MEMO)										(16.2)		

DEPARTMENT OF THE NAVY
FY 1976 PROCUREMENT PROGRAM

EXHIBIT P-1

APPROPRIATION: 1611 N SHIPBUILDING AND CONVERSION, NAVY

DATE: 16 JAN 1975 (Amended-June 1975)

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1976 UNIT COST	MILLIONS OF DOLLARS FY 1974 QUANTITY	FY 1974 COST	FY 1975 QUANTITY	FY 1975 COST	FY 1976 QUANTITY	FY 1976 COST	TRANSITION QUANTITY	TRANSITION COST	FY 1977 QUANTITY	FY 1977 COST
	(FY 1976T FOR FY 1979) (MEMO)										(219.0)		
	(FY 1977 FOR FY 1978) (MEMO)												(75.1)
	(FY 1977 FOR FY 1979) (MEMO)												(74.8)
	(FY 1977 FOR FY 1980) (MEMO)												(116.5)
	TOTAL FLEET BALLISTIC MISSILE SHIPS				797.9		1330.7		608.8		754.1		1196.7
	BUDGET ACTIVITY 2: OTHER WARSHIPS												
	OTHER WARSHIPS												
9	CVN AIRCRAFT CARRIER (NUCLEAR)			1	(956.0)								
	LESS: ADVANCE PROCUREMENT (PY)				(-299.0)								
					657.0								
10	SSN-688 CLASS SUBMARINE (NUCLEAR)		245,500,000	5	(908.2)	3	(580.5)	2	(491.0)			1	(411.5)
	LESS: ADVANCE PROCUREMENT (PY)				(-125.0)		(-78.0)		(-52.0)				(-314.0)
					783.2		502.5		439.0				597.5
11	SSN-688 CLASS SUBMARINE (NUCLEAR)												
	ADVANCE PROCUREMENT (CY)				138.0				182.0		149.8		149.5
	(FY 1974 FOR FY 1975) (MEMO)				(78.0)								
	(FY 1974 FOR FY 1976) (MEMO)				(52.0)								
	(FY 1976 FOR FY 1977) (MEMO)								(182.0)				
	(FY 1976T FOR FY 1977) (MEMO)										(112.0)		
	(FY 1976T FOR FY 1978) (MEMO)										(77.0)		
	(FY 1977 FOR FY 1978) (MEMO)												(68.8)
	(FY 1977 FOR FY 1979) (MEMO)												(121.5)
12	DD-963 CLASS DESTROYER			7	(614.5)	7	(655.4)						
	LESS: ADVANCE PROCUREMENT (PY)				(-247.0)		(-198.3)						
					367.5		457.1						
13	DD-963 CLASS DESTROYER												
	ADVANCE PROCUREMENT (CY)				198.1								
	(FY 1974 FOR FY 1975) (MEMO)				(198.1)								
14	DLG 6/16 (ASW)GUIDED MSL FRIG (CONV)			2	(98.1)								
	LESS: ADVANCE PROCUREMENT (PY)				(-40.2)								
					58.1								
14A	CSGN STRIKE CRUISER (NUCLEAR)												
	ADVANCE PROCUREMENT (CY)								60.0				*

* FY1977 AUTHORIZATION AMENDMENT WILL BE FORTHCOMING

DEPARTMENT OF THE NAVY
FY 1976 PROCUREMENT PROGRAM

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15	DLGN-TA CLASS GUIDED MSL FRIG (NUC)		368,000,000			1	(268.0)	1	(368.0)				
	LESS: ADVANCE PROCUREMENT (PY)						(-113.6)		(-111.0)				
							154.4		257.0				
16	DLGN-TA CLASS GUIDED MSL FRIG (NUC)												
	ADVANCE PROCUREMENT (CY)				79.0		89.8						
	(FY 1974 FOR FY 1975) (MEMO)				(67.8)								
	(FY 1974 FOR FY 1976) (MEMO)				(11.2)								
	(FY 1975 FOR FY 1976) (MEMO)						(89.8)						
17	DLGN GUIDED MSL FRIGATE (NUC) (CONV)			1	(113.0)								
	LESS: ADVANCE PROCUREMENT (PY)				(-30.1)								
					82.9								
18	SCS SEA CONTROL SHIP				29.3								
19	VCC												60.0
20	CVN(NUC)												
	ADVANCE PROCUREMENT (CY)												149.7
	(FY 1977 FOR FY 1978) (MEMO)												(149.7)
TOTAL OTHER WARSHIPS					2405.4		1203.9		~~798.0~~ 858.0		149.0		1196.7
BUDGET ACTIVITY 41 MINE WARFARE + PATROL SHIPS													
MINE WARFARE + PATROL SHIPS													
21	PHM PATROL HYDROFOIL MISSILE		41,700,000			4	(96.2)	2	(83.4)			9	(415.4)
	LESS: ADVANCE PROCUREMENT (PY)						(-3.9)						(-21.2)
							92.3		83.4				190.2
22	PHM PATROL HYDROFOIL MISSILE												
	ADVANCE PROCUREMENT (CY)				3.9						24.2		
	(FY 1974 FOR FY 1975) (MEMO)				(3.9)								
	(FY 1976T FOR FY 1977) (MEMO)										(24.2)		

DEPARTMENT OF THE NAVY
FY 1976 PROCUREMENT PROGRAM

EXHIBIT P-1

APPROPRIATION: 1611 N SHIPBUILDING AND CONVERSION, NAVY

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23	PF PATROL FRIGATE		95,550,000			3	186.0	10	955.5			11	1211.1
TOTAL	MINE WARFARE + PATROL SHIPS				3.9		278.3		1038.9		24.2		1623.5
BUDGET ACTIVITY	5: AUXILIARIES + CRAFT												
	AUXILIARIES + CRAFT												
24	AD DESTROYER TENDER		196,600,000			1	127.7	2	393.2				
25	AS SUBMARINE TENDER											1	227.1
26	AGHS (CONV) PHM SUPPORT SHIP											1	33.1
27	AO FLEET OILER		129,900,000					2	231.8			2	198.5
28	ATF FLEET TUG		101,900,000									1	28.1
29	T-ATF FLEET OCEAN TUG		13,800,000			1	10.8	3	41.4				
30	SWOB (SHIP WASTE OFF LOADING BARGE)				10.4		10.4		11.5				
31	SERVICE CRAFT						22.8		1.4				38.6
32	OUTFITTING				22.8		22.8		34.5		6.7		39.2
33	POST DELIVERY				21.1		27.8		17.2				56.1
34	COST GROWTH				143.3		78.8		1119.5				
35	ESCALATION ON PRIOR YEAR PROGRAMS				104.3		71.9		1149.8				
TOTAL	AUXILIARIES + CRAFT				301.2		361.8		3088.3		6.7		611.9
TOTAL	SHIPBUILDING AND CONVERSION, NAVY				3508.4		3174.6		~~5446.8~~ 5,506.0		474.2		4428.9

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