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Before the Committee on Appropriations

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Fiscal Year 1976

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Part 4 DEPARTMENT OF THE AIR FORCE

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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 4—Department of the Air Force

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

WEDNESDAY, FEBRUARY 26, 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, Montoya, Inouye, Young, Hruska, Case, Fong, Stevens, and Schweiker.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

STATEMENT OF HON. JOHN L. McLUCAS, SECRETARY OF THE AIR FORCE

ACCOMPANIED BY GEN. DAVID C. JONES, CHIEF OF STAFF, DEPARTMENT OF THE AIR FORCE

BUDGET REQUEST

Chairman MCCLELLAN. The hearing will come to order. This morning we shall hear testimony from the Secretary of the Air Force and the Chief of Staff with respect to the fiscal year 1976 and transition fiscal quarter budget request for the Department of the Air Force.

BIOGRAPHY AND PREPARED STATEMENT

Our first witness is Dr. John L. McLucas, Secretary of the Air Force.

I see you have a formal statement. Would you prefer to insert that in the record and highlight it?

Secretary MCLUCAS. Yes, sir, I will do that, Mr. Chairman.

Chairman MCCLELLAN. Without objection, your biography and statement will be inserted in the hearing record.

[The biography and statement follow:]

BIOGRAPHY OF DR. JOHN L. McLUCAS

Dr. John L. McLucas became Secretary of the Air Force on July 19, 1973. He had been Acting Secretary of the Air Force since May 15, 1973, and Under Secretary of the Air Force since March 1969. Prior to his appointment as Under Secretary, he was president and chief executive officer of MITRE Corporation of Bedford, Mass., and McLean, Va.

Dr. McLucas was born in Fayetteville, N.C., on August 22, 1920. He attended public schools in McColl and Latta, S.C., graduating from Latta High School in 1937. He received a Bachelor of Science degree from Davidson College in 1941, a Master of Science degree in physics from Tulane University in 1943, and his Doctorate in physics from Pennsylvania State University in 1950.

During World War II, he served as an officer in the U.S. Navy from 1943 to 1946. After one year at the Air Force Cambridge Research Center in Cambridge, Mass., he enrolled at Pennsylvania State University.

From 1950 to 1957, he was vice president and technical director of Haller, Raymond and Brown, Inc., an electronics firm at State College, Pa. In 1958 he was made president of HRB-Singer, Inc. He joined the Department of Defense in May 1962 and served as Deputy Director of Defense Research and Engineering (Tactical Warfare Programs).

Two years later, he was appointed as Assistant Secretary General for Scientific Affairs at NATO Headquarters in Paris, France. In 1966 he became president of MITRE Corporation, where he remained until his appointment as Under Secretary of the Air Force on March 17, 1969.

He was elected a Fellow of the Institute of Electrical and Electronic Engineers in 1962; an Associate Fellow of the American Institute of Aeronautics and Astronautics in 1971; and a member of the National Academy of Engineering in 1969. He received the Department of Defense Medal for Distinguished Public Service in 1964, and first bronze palm in 1973; and the Air Force Exceptional Service Award in May 1973.

He is a member of the Chief Executives Forum; American Physical Society; Operations Research Society of America; and of several honorary societies, including Sigma Pi Sigma and Sigma Xi. He is a former member of the Defense Science Board, Air Force Scientific Advisory Board, and the Young Presidents Organization.

STATEMENT OF DR. JOHN L. McLUCAS

As we submit our FY 1976 budget statement to this committee, I want to acknowledge the many years of vision and dedication demonstrated by Congress in supporting an Air Force that possesses outstanding capabilities. During the past six years, first as Under Secretary, then Secretary of the Air Force, I have learned how important these annual meetings with Congressional committees are. This is my second appearance as Secretary of the Air Force in these proceedings, and I welcome the opportunity to discuss Air Force programs with Congress.

Today's Air Force is powerful and prepared, but maintaining a high level of effectiveness in the years ahead requires coping with inflation, limited resources, and increasing Soviet military power.

The impact of inflation is significant in our FY 1976 budget. The purchasing power of the FY 1975 Air Force budget of $26 billion (TOA) has been eroded by an inflation rate substantially greater than was anticipated when we developed our request at the end of 1973.

In our modernization efforts, we are faced with the problem of forecasting weapon systems costs well out into the future -- as far out as 1984 for the B-1 as an example. We need your help in this respect, especially your understanding and perspective of the magnitude of the problem.

The degree of escalation in operating costs over the last several years is evident in the price of petroleum. Air Force fuel consumption in FY 1975 is projected to be 27% less than that of FY 1973, yet the cost this year will be 133% greater than in 1973.

Even after major cutbacks, in fuel use and elsewhere, inflation is driving up the cost of maintaining a ready Air Force capable of meeting its responsibilities. An effective and efficient combination of people and hardware is imperative, as is an optimum mix of quality and quantity.

Our effectiveness begins with and depends upon our people. In this all-volunteer era, we are acquiring and retaining quality people, our personnel management programs are working well, and Air Force morale is good.

On the other hand, the continuing reductions in authorized manpower are forcing us to separate experienced people. Authorized manpower levels must remain compatible with Air Force equipment, activity rates, and mission responsibilities, and reductions should not outstrip our ability to adjust to lower force levels.

Along with the need for adequate numbers of capable people, national security and world stability require that we continue to modernize Air Force equipment.

The nation's strategic forces must remain sufficient to deter nuclear war and to assure the balance of power needed for international negotiations toward peace. The Air Force must continue to maintain a force of strategic bombers and missiles that are modern and capable, and which serve to prevent U.S. forces from falling into a position of inferiority.

Our efforts to improve Air Force tactical capabilities are bearing fruit. The F-15 is now entering the operational inventory. The A-10 will be available next year. We have just selected the F-16 as the new Air Combat Fighter, a program that demonstrates a balanced approach to the challenge of maintaining a quality force of adequate numbers in the face

of rising costs. Our weapons development programs, such as improved strike and defense suppression systems, are progressing well. Overall, we are on the verge of fielding a new generation of tactical forces that are indispensable to the conventional combat strength that strategic parity is making increasingly essential.

Throughout our research, development, and procurement programs, we are aggressively pursuing Design to Cost (both acquisition and life cycle costs), standardization, and high-low mix concepts in order to hold down the price of modernization.

Meanwhile, we are cutting operating costs through such actions as sharply increasing the use of simulators, reducing energy consumption, improving logistics management, consolidating units, phasing out older support aircraft, and trimming our headquarters structure.

All in all, our FY 1976 budget (summarized in Table I, page 50*) reflects the appropriations required to maintain a first-rank Air Force. It is an austere, but realistic blend of essential research and development investments, prudent procurement expenditures, restrained operating costs, and essential personnel costs. The Air Force continues to recognize its responsibility for managerial efficiency in this era of economic stress. We have tightened our belts, and we will continue to strive for maximum return from our resources.

I believe that the Air Force is lean but strong, and that the needs specified in this budget request are essential to continued U.S. airpower effectiveness and national security.

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*The tables at the end of this statement list separate figures for fiscal year 1976 and fiscal quarter 7T. The statement itself discusses FY 1976 funding only, except that any major new start in fiscal quarter 7T also is addressed.

II. PERSONNEL

People, and creating an atmosphere in which they can perform productively and efficiently, continue to be top priority concerns. The cost of supporting our personnel programs in FY 1976 is projected at approximately $11.6 billion; by comparison, people costs were $11.2 billion in FY 1974 and $11.6 billion this fiscal year. These relatively stable costs during a period of rising inflation can be traced to steadily declining strengths.

Fiscal Year 1976 will be the eighth consecutive year of decline in our personnel totals. Since 1968, the force structure has been reduced by approximately 315,000 (35%) active duty military personnel -- including approximately 40,000 officers and 275,000 airmen -- resulting in the smallest Air Force personnel structure since 1950. The civilian trend is similar. The total FY 1976 civilian end strength of about 270,000 is approximately 87,000 (24%) less than the FY 1968 level. Overall, the military and civilian reductions since FY 1968 total 401,000 -- a decrease of 32%.

We recognize the necessity to fit manpower levels to new equipment and mission requirements. However, continued reductions in Air Force manpower of the magnitude annually being sustained reduce our surge capability and impair our short-term flexibility to realign available personnel with adjusted requirements. As the force shrinks, our ability to assimilate cuts is hampered; a force of 900,000 active duty military personnel can absorb cuts more readily than can our projected FY 1976 end strength of about 590,000. Moreover, the ramifications are proportionate to the rate of drawdown. The impact of reductions is felt over several years; thus,

annual cuts compound the turbulence in our personnel planning and can impinge upon our combat readiness.

Personnel strengths and costs are summarized in Table II, page 51.

Total Force Policy. Because of this substantial reduction in manpower, the Total Force Policy is vital to maintaining our combat capabilities. The Total Force Policy blends active duty and Reserve Components (Air National Guard and Air Force Reserve) into a highly qualified team capable of meeting military contingencies. High-priority, early-response missions and associated modern equipment continue to be assigned to our Reserve Components. Their performance in air defense, airlift, and tactical air operations demonstrate the reality of the Total Force.

Fiscal Year 1976 manpower levels in the Air National Guard (ANG) are projected at 95,000 -- 27% above the FY 1968 figure. In the Air Force Reserve (AFR), FY 1976 totals are projected at 53,000 -- 33% greater than in FY 1968. The overall increase within the Reserve Components since FY 1968 has been 29%.

In terms of equipment, our Reserve Components are being modernized at an accelerating rate. Two ANG tactical fighter squadrons -- the 188th at Kirtland AFB, New Mexico, and the 120th at Buckley ANG Base in Denver, Colorado -- have completed conversion from the older F-100 to new production A-7D aircraft and are combat-ready. Another -- the 166th at Rickenbacker AFB, Ohio -- has recently converted to A-7s and three additional units will be converted by the end of FY 1976. We will continue in the future to modernize the ANG and AFR

fighter and reconnaissance forces with F-4, A-7, A-10 and RF-4 aircraft replacing F-100s, F-105s, RF-101s, and A-37s.

Elsewhere, 56% of our tactical airlift aircraft are now assigned to Reserve Components. By the end of FY 1976, 50% of the AC-130 gunship aircraft in the Air Force will be the responsibility of the AFR. Also in FY 1976, we will begin the assignment of 128 KC-135 tanker aircraft to the Reserve Components -- a move that involves not only modernization for their long-established tactical role, but the assumption of an important strategic mission. Despite the turbulence generated by the various equipment and mission changes, approximately 90% of our Reserve Components are combat ready.

The Total Force Policy requires increased emphasis and reliance on ANG and AFR forces. With decreasing active duty manpower, we must recognize that future major contingencies will require the quick activation of our Reserve Components. We urge approval of DoD's legislative proposal to authorize the President to call up as many as 50,000 selected Reservists in situations short of national emergency.

Support and Headquarters Cuts. Meanwhile, we are continuing aggressive action to reduce headquarters and support manning and to manage more efficiently overall support functions.

Savings reflected in the FY 1976 budget request include approximately 2,900 positions from Air Force management headquarters and significant numbers of additional spaces through such actions as retirement of support aircraft (6,400 spaces); consolidation and realignment of Research, Development, Testing and Evaluation aircraft and laboratories (800 spaces); relocation of Air National Guard and Air Force Reserve

activities from Ellington AFB, Texas, and the closure of that facility (1,000 spaces); and other initiatives. This does not mean that vital functions are being discontinued. For example, the fact that we are disestablishing the Air Force Communications Service Headquarters does not mean that we are de-emphasizing communications. Rather, we are providing administrative support and non-specialized logistics for our communications functions through consolidation under Military Airlift Command (MAC).

Our efforts to find better, more economical ways of supporting Air Force combat forces include initiatives in the area of logistics improvements. We initiated in April of 1974 a Maintenance Management Information Control System (MMICS) at base level. This system uses computers to perform many of the routine tasks previously performed by people. By the end of FY 1976, MMICS will result in the net reduction of 499 manpower authorizations. This is the first phase of a multi-phase program to improve effectiveness and efficiency within our base level maintenance operation. Another example is the Customer Integrated Automated Procurement System (CIAPS) which became operational in 1972. The system was designed and developed to support base level procurements primarily in the area of commodities acquisition. Like MMICS, CIAPS uses computers to perform routine tasks and has resulted in the reduction of 110 manpower authorizations from base level procurement.

Another major logistics initiative, begun in 1972 and now reaching fruition, is the Depot Plant Modernization Program (DPMP). The numerous projects embraced within this program provide monetary savings through enhanced productivity, improved workmanship, and reduced manpower requirements.

In brief, we are committed to reducing support costs and reinvesting these funds into force modernization and improved combat capability.

Recruiting. Despite the overall reduction in manpower, we must continue our recruiting efforts to maintain a capable, balanced force.

We expect to meet this year's active duty recruiting quota of 75,655 airmen. Moreover, 89% of our first-term enlistments during the first six months of FY 1975 were high school graduates or the equivalent (state certified General Educational Development test) -- a percentage that exceeds draft era levels.

We anticipate little difficulty in meeting our manpower needs in the Air National Guard, but we are having to work hard to meet Air Force Reserve requirements. In FY 1974, the Air Force Reserve experienced a 12% shortfall in enlisted manning (involving selected Reserves and comparing programmed end strengths of 40,852 to the 35,936 actually assigned). We believe that increased emphasis on recruiting and retention, and greater cooperation between active and Reserve Components are closing the gap in FY 1975.

Strength Reductions. The Air Force has sought in the past to accomplish force reductions through strictly voluntary separations because this method saves money and is least disruptive to the mission and our people.

Enlisted reduction in FY 1976 again will be accomplished through voluntary programs. However, as was the case in FY 1974 and FY 1975, voluntary actions will not produce sufficient reductions within the officer corps. Based on current FY 1976 strength projections, a reduction of approximately 4,500

officers will be required -- including an involuntary reduction in force (RIF) of 1,200-2,200 depending on voluntary losses.

DOPMA. The Defense Officer Personnel Management Act (DOPMA) is extremely important to our personnel management program because it would enable us to manage our people more effectively and fairly. Furthermore, it would provide the permanent grade tables required to maintain an equitable promotion program compared with the other Services.

We enthusiastically support DOPMA, and we already have started to align, where possible, our personnel management with this new system. Last fiscal year, promotion opportunity was lowered to coincide with DOPMA levels -- promotion to major was changed from 90 to 80% and to lieutenant colonel from 75 to 70%. We are also aligning our Regular officer augmentation program to facilitate our transition to a force structure based on DOPMA.

Equal Opportunity. Another personnel responsibility of great interest to the Air Force is equal opportunity. Currently 3% of our officer corps consists of minorities. Our goal is to increase that to 5.6% by 1980 and thereby approximate the percentage of minority college graduates in the U.S. population. Our minority enlisted manning is 15.4%.

Today, women compose about 4.2% of our active duty force and we expect that percentage to almost double (8.2%) by 1978. Women are being given full opportunities in all career specialties except those directly related to combat.

Whether in the active force, civilian structure, or Reserve Components, I think we are making continued progress in equal opportunity. In 1971, for example, we experienced eight serious racial incidents. In 1974, we had none.

Our human relations training program is resulting in more cohesion and creating an atmosphere in which men and women of differing backgrounds, races, ethnic groups, and religions can work together more cooperatively and efficiently. Our work in equal opportunity certainly is not finished, but we have made many improvements and we intend to continue our emphasis.

Education and Training. In education, the Community College of the Air Force continues to qualify our people for academic credit in civilian institutions for work performed in Air Force training courses. The Career Education Certificates that are available through this program are also credentials for entering the civilian labor force at the journeyman level. The Community College program assists Air Force career development and is a major asset in recruitment and retention.

The Airman Education and Commissioning Program (AECP) and the Graduate Education Program for officers are also areas of current emphasis. Congress curtailed the Graduate Education Program and cut off inputs to AECP; however, I would like to stress their value to the Air Force. For example, AECP is a necessary source of technical degree holders. Moreover, it has provided the major avenue by which skilled airmen could progress to officer status, and thus it is an important morale and motivational factor for our airmen. The program also is extremely cost effective, with a graduation rate of 97% and 95% retention of these graduates.

The Graduate Education Program is an essential source of advanced technical and managerial degree holders. With a forecast shortage of engineers in the civilian sector, this

program will play a crucial role in providing the technical competency the Air Force needs.

In the training area, the Instructional Systems Development (ISD) process (the application of systems logic to training and education) is used to identify training requirements on an individual and group basis. This helps insure that we expend only those resources that are needed. Over the last three years under the ISD system, we have restructured 213 high-cost technical training courses, resulting in a reduction of over 3,000 man-years in the technical training pipeline and a cost avoidance of about $20 million. We expect to do a lot more in this area.

Furthermore, we are participating in an Interservice Training Review Program to insure that training courses of other Services are used when they prove to be more cost effective and practical. Present goals are to develop common-core courses in the areas of construction equipment operation, military police, data processing, and audio-visual services. In addition, a task group was formed recently to analyze flight training programs for possible cost-saving consolidations.

Meanwhile, there are several other aspects of the personnel picture where we need your help.

Medical Care. Despite the decline in our active duty force, our medical beneficiary population has remained relatively constant due to dependent and retiree increases. However, the active force drawdown has been accompanied by a reduction in medical authorizations, and a shortage of physicians has further decreased our medical resources. In addition, the effects of inflation and advanced medical technology have increased costs.

Several actions have helped to maintain quality medical care. Variable incentive pay passed by the 93rd Congress has been most promising in increasing physician recruitment and aiding retention. Sponsored medical education continues as our best source of recruitment.

The expanded use of physician assistants and nurse practicioners has been quite helpful, and increased interservice use of medical resources has helped. We emphasize the need for your continued support to insure adequate contingency response and the continued high quality of care in Air Force medical facilities.

PCS Funding. There also are problems with funding for the Permanent Change of Station (PCS) travel program. This program -- which permits us to position the force, support our overseas commitments, and equitably distribute assignments -- has been severely reduced. Inflation and fund limitations have forced us to eliminate or defer nearly 15% of our requirements this year. The deferrals from FY 1975 and the full effect of increasing transportation costs will further compound the problem in FY 1976.

Although we will continue to be very prudent in our reassignment policies, we need your help to prevent cuts in these fund requests.

III. RESEARCH AND DEVELOPMENT

Before going into specifics, I would like to express my belief in the particular importance of research and development. I am convinced the United States needs to maintain superiority in certain key technologies, with aerospace being a major one. Technological leadership is needed to maintain a military balance with the Soviets.

Also, technological superiority is an essential hedge against technological surprise. This is especially important for an open society, such as the United States, when faced by a closed society, such as the Soviet Union.

We used to think of the Soviets as building only simple, rugged equipment. This is no longer the case. The swing-wing MIG-23 FLOGGER fighter-bomber and their tactical and strategic missiles are examples of complex, high-technology developments. Further, according to the estimate CIA Director William Colby gave to Congress last summer, Soviet defense outlays have exceeded those of the United States since 1970 and are increasing by 3 to 4% each year. Mr. Colby estimated that the Soviets spent some 30% of their military budget on military R&D and space programs in 1973, appreciably more than the U.S.

Airpower is a highly technical area. Americans have pioneered in its development. Air superiority has been a basic tenet of our strategy since the Second World War, when it played a key role both in land and sea battles. Historically, we have depended upon airpower, not only to protect our ground forces, but also to carry the battle to opponents. With advances in aviation technology, especially in aircraft range and delivery accuracy with guided weapons, airpower has the potential to play an even greater role. We count upon it to offset the Warsaw Pact advantage in numbers of tanks and to help the Navy protect vital sea lanes.

Successful development programs depend upon relevant research. Last summer, Senator Barry Goldwater wrote to Secretary Schlesinger and me expressing his concern about the erosion of basic research. Due to essentially level funding

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during a period of inflation, there has been a reduction in real research effort. Both Dr. Schlesinger and I share the Senator's concern; we are taking steps to halt the erosion and to protect research funding from undue competition with development and production programs. While we capitalize upon Air Force research and that of other government agencies, my primary emphasis will be to preserve and enhance the effectiveness of our contract research programs in universities and industry. I believe that the talents of our colleagues in academe and business are vital to a well-balanced defense research program.

To support essential RDT&E programs, we are requesting $3.9 billion (13% of the USAF budget request). While this is about 7% more in real buying power than the level of the last three years, it is about one-third less than in the pre-Vietnam war year of 1964.

The major equipment categories of our RDT&E request include aircraft ($1,430 million), missiles ($358 million), space ($561 million), ordnance and combat vehicles ($189 million), and other equipment ($720 million). A summary of our RDT&E funding request is at Table III, page 52.

B-1 Strategic Bomber. Within the aircraft category is our most important development program, the B-1. Since I know you are particularly interested in this program, I would like to reiterate why we believe the B-1 is a sound value in terms of significantly increased national security. Let me discuss what bombers do for us in peacetime, particularly in relation to SALT, and also what they do for us in periods of crisis.

In peacetime, bombers serve as an element of our strategic Triad that helps deter nuclear attack upon the United States and our Allies.

Bombers enormously complicate any attack planned on our strategic forces by helping to make it impracticably difficult to coordinate a successful surprise attack on all Triad elements. In addition, bombers provide a hedge against possible countermeasures or technological breakthroughs that an enemy might seek to employ against our missiles, either in a prelaunch attack or in terminal defense.

A second basic way bombers contribute to deterrence is by complicating the defenses any potential aggressor would need to block our retaliation. Bomber capabilities require the Soviets to continue to commit very substantial resources to air defenses that must guard against retaliatory air strikes from any altitude or direction. Yet Soviet air defenses are an aspect of their armed forces that least threaten the United States directly. At the same time, our bombers are not destabilizing, because their relatively long time-of-flight does not pose a first strike threat.

Bombers play a particular role in relation to SALT. Although not specifically included in the 1972 SALT I agreements, bombers helped compensate for Soviet advantages such as in numbers of missiles and throw weight. With the proposed SALT II limits on the total number of strategic delivery vehicles, and considering continuously improving Soviet air defenses, our future bomber force must have high unit performance.

The B-1 is designed to have just that. It will be able to penetrate with high-subsonic speeds at tree-top level

below enemy radar coverage. It will be able to deliver gravity bombs with precision accuracy or carry internally up to 24 SRAM air-to-surface missiles to attack various targets, including defenses. The B-1 force should be able to attack any target system with high confidence of success well into the 21st century.

Bombers are also uniquely useful in crucial periods of international tension -- serious crises like, or more intense than, Cuba in 1962. Fortunately, such crises have not happened frequently, and visible national resolve coupled with a strong defense posture reduces their likelihood. But we cannot guarantee that they will not occur again, with or without detente. It is of the utmost importance to be prepared for such crises. They increase sharply the terrible risk of catastrophic, all-out nuclear war, and we must have means to try to control them.

In serious crises, the flexibility of bombers becomes more apparent. The President used them to signal our determination to the Soviets during the Cuban missile crisis. The bomber force can be dispersed or put on higher alert status, including airborne alert, to insure its prelaunch survivability. If further security or signals are required, the President could launch all or part of the bomber force, yet still have time for decision, negotiation, and recall.

In an even more extreme situation, such as limited nuclear strikes against the United States or the imminent overrun of Western Europe, bombers would be particularly suitable for carrying out limited nuclear options. Bombers can be highly selective, discriminating, and controlled. Small scale bomber attacks are relatively easy to distinguish

from large attacks and they allow time for negotiation. Given the Soviet capability for secure second-strike, a limited nuclear option capability is essential if we are to deal with limited nuclear aggression and continue to deter broader nuclear conflict. We all hope that nuclear proliferation can be halted; however, none of us can predict with certainty that it will, nor how vital U.S. interests will be involved. In the future it may be necessary to deter actions in parts of the world where only long-range bombers can do this quickly, visibly, and effectively.

Bombers were proven effective with conventional weapons in World War II, Korea, and Southeast Asia. The B-1 is designed primarily as a nuclear deterrent, but it has the potential to carry up to 57 tons of conventional bombs, about twice the payload of the B-52. Bombers also have a swift, worldwide ocean surveillance and attack capability, especially with guided weapons.

The many and varied capabilities of the B-1 will not be inexpensive. Therefore, I believe it is important that all of us not only understand what the aircraft can do but also have a good perspective on its real cost.

Our estimate of the B-1 program cost has increased since we began development in 1970. Since our economic crystal ball is no better than that of others, we did not predict the recent rate of inflation. It is difficult to determine or comprehend the full effect of economic escalation on a large program like the B-1 that involves compounding inflation over future years.

Imagine that you had gone to sleep in 1965 and just awoke now. Today's prices would be a shock. When we look at

the estimated cost of the B-1, it is as if we were suddenly awakening ten years from now after another decade of inflation. We're just not used to thinking in 1985 dollars, but we must to put the B-1 cost in perspective.

In 1970, we planned on $1.3 billion for inflation. Today we estimate $9.6 billion for inflation -- almost half the current total program estimate. Each 1% increase in the inflation rate adds about $1 billion to the program. To put it another way, the present estimate of B-1 unit procurement cost in 1970 dollars is $34.3 million, an increase of less than 12% since the program began.

We realize that costs are a problem for everyone: DoD, Congress, and citizens. We are determined to do our share to hold down the price of the B-1. We have taken many actions to get the most cost-effective aircraft possible. For example, we have substituted aluminum for more expensive titanium where we could in the B-1's airframe. We have modified the engine inlet to a more easily manufactured design. Last year we conducted another intensive review to identify any additional possible design changes to reduce costs. This review went well beyond the specific requests made last year by the Senate Appropriations Committee. As a result, we are taking a number of cost and technical risk reduction actions such as replacing the crew escape module with new, advanced technology ejection seats in the fourth and subsequent aircraft. We re-examined the variable-sweep wing and determined that it is essential for B-1 performance. Simply stated, we need the greater lift provided by the wings in the forward position for efficient takeoff and aerial refueling. But we also need the low drag associated with swept wings for high speeds at low altitudes.

We will continue to evaluate other tradeoffs. Realizing that cost is a prime factor, we will give up features that are not absolutely essential to mission performance. Let me assure you, though, that the B-1 will continue to be able to meet its mission requirements.

We are pleased with how well the B-1 has performed since its first flight last December. We now have a flying aircraft that is meeting its test goals. As is appropriate for a complex, expensive system, we have a rigorous, thorough flight test program that lasts for two years. Our planning is geared to permit a production decision by late 1976, based on development progress and the SALT environment. The B-1 Initial Operational Capability is planned for 1981, with deliveries continuing for about five years.

In FY 1976 we are requesting $672 million for R&D and $77 million for long-lead procurement. The R&D funds are to continue building the remaining R&D aircraft and to conduct the flight test program. The long-lead money will be used to complete design of production tooling and to order material for tooling and for the early aircraft. It may be questioned why we need procurement funds when we have not made a production decision. The answer is that this is the minimum we can invest to protect the schedule. Otherwise, delivery of operational aircraft would slip one year, which could increase costs by about $1 billion.

Strategic Missiles. Before talking about our strategic missile R&D, I want to put strategic force program costs in perspective. The overall DoD strategic force program has been funded at an annual level of about $7 billion in direct costs for a number of years. Even in then-year dollars, this is over $3 billion less than what we spent in 1962, for

example. Until the government has had more time to study all the ramifications of the recent Vladivostok agreements and until the agreements are more formalized, our options should be kept open. However, the Vladivostok agreements have not caused the Air Force to commit to the production of any new systems, beyond those already planned. In fact, SALT II proposed ceilings generally consistent with our previously planned programs.

In the Vladivostok proposals, each party is allowed freedom to mix types of weapon systems within the overall limits. Since it will be some time before our current programs approach these limits--and we are hopeful for early negotiations on lower limits--we believe it is too soon to foreclose options to increase any type system, including alternatives such as mobile ICBMs.

The major points I'm making are that (1) SALT II is a cap on strategic arms; (2) beyond those weapon systems already programmed, we are not now planning to initiate any new ones just to reach the numerical limits proposed at Vladivostok; and (3) it is too early to foreclose strategic options.

Therefore, we believe it is still necessary to carry out the previously planned R&D on strategic missiles. Let me discuss the key programs.

For MINUTEMAN R&D, we are seeking $123 million for FY 1976. The major items are continued development of options for MINUTEMAN III such as better accuracy ($41 million) and the Mark 12A larger-yield warhead ($36 million). These qualitative improvements become increasingly important as quantitative limits are set.

We must be in a position to retain strategic arms balance and stability as the Soviets deploy more advanced strategic forces. The potential Soviet growth in numbers and yields of their MIRVs could create more serious threats to a wide range of U.S. targets including our strategic forces. Therefore, we are pursuing an Advanced ICBM Technology Program to examine options for improving our land-based missile force.

Two years ago the Air Force began investigating advanced ICBM technology, larger throw weight missiles, and more survivable basing modes, including air mobile, ground mobile, and improved silo concepts. To demonstrate the basic technical feasibility of the air mobile concept, we air launched a MINUTEMAN missile from a C-5 aircraft last fall. For FY 1976 we are requesting $41 million to continue work on those key items of technology necessary to support a future decision on full-scale development of an M-X missile. We do not contemplate deployment before the mid-1980s. The pace and scope of this program are keyed to the evolving Soviet threat and, via SALT, further progress on arms limitations, including, hopefully, reductions.

In the Advanced Ballistic Reentry System (ABRES), we are requesting $101 million in FY 1976 to continue our investigation of improved reentry systems. Also we are asking for $51 million to continue advanced development of the Air Launched Cruise Missile (ALCM) to provide an extended range, modern weapon to be launched by and complement the penetrating bomber force. We have extended development to further design validation and to maximize commonality with the Navy Sea Launched Cruise Missile. The ALCM should dilute enemy defenses, improve bomber survivability, and increase overall force effectiveness.

Tactical Programs. We also must keep an effective, but economical, balance of forces in the tactical area.

Our Lightweight Fighter program, which investigated advanced fighter technology in less costly but high performance aircraft, was so successful that we were able to pick one of the two prototypes, the YF-16, as the basis for full-scale development as the Air Combat Fighter (ACF). The F-16 will be a multi-mission fighter weighing about half as much as the F-15 and costing significantly less. It will help control the trend toward rising weapon systems costs. We are requesting $273 million for ACF development in FY 1976. The Air Force intends to ask Congress for at least 650 F-16s to modernize and expand our tactical fighter force. We hope our European allies will select the F-16 as a replacement for their aging F-104s.

Another program in which we are using prototypes to investigate advanced technology is the Advanced Medium STOL Transport (AMST). Our present basic tactical transport, the C-130, cannot meet all current or future tactical airlift requirements. Further, by the mid-1980s, most of the C-130 force will be between 20 and 30 years old, and will require either expensive modification or replacement. The AMST is being designed to accommodate the Army's new larger equipment, carry about 2 1/2 times the C-130's payload, operate from shorter runways, and be air refueled to help meet strategic airlift surge requirements.

As we found in the Lightweight Fighter and other programs, prototype competition between two contractors can

provide us a better, more economical aircraft. Therefore, we are requesting $85 million in FY 1976 to have Boeing and McDonnell Douglas continue development of their YC-14 and YC-15. The first YC-15 prototype is in final assembly with first flight scheduled for the latter part of this year. The AMST should give us an option for significant improvement in supporting the Army's mobility and reducing our operating costs.

In another prototype program called COMPASS COPE, we have two contractors developing high altitude, long endurance Remotely Piloted Vehicle (RPV) prototypes. These unmanned RPVs could carry a variety of surveillance and data relay packages on 24-hour-long missions above 50,00 feet. Both versions successfully flew last fall and we plan to select one contractor and start engineering development in FY 1976.

We also are requesting $5 million to continue the development of an Advanced Tanker/Cargo aircraft to meet our most demanding, long-endurance aerial refueling requirements for airlift, tactical, and strategic forces. We are examining currently-produced, wide-bodied transports and expect to select a candidate this year.

In keeping with DoD's mutual support principle of force interdependence, the Air Force is assisting in the ocean surveillance and control mission. For FY 1976 we seek $7 million to initiate interface modifications essential to the B-52/HARPOON system, using two B-52Ds as prototypes to carry and launch the Navy-developed anti-ship missile, the HARPOON. This will give us a swiftly deployable, global capability to attack ships with an all- weather, standoff weapon.

Improved Night, All-Weather Defense Suppression and Strike Capabilities. As I reported last year, the recent conflicts in Southeast Asia and the Middle East emphasized the need for effective, 24-hour tactical air operations in intense defensive environments. This need is particularly critical in Europe where in addition to very sophisticated air defenses, weather is often bad. We have concentrated on development of effective defense suppression and strike systems for day, night, and all-weather use. We have given special management emphasis to a group of such systems (PAVE STRIKE) to assure their expeditious entry into the operational force. They include surveillance systems that can locate electronic radiators and direct weapons against them under all-weather conditions; forward looking infrared (FLIR) systems for day/night target acquisition and weapons delivery; laser guided weapons and designators that can be used with FLIR systems or independently; a modular family of guided munitions for attacking point and area targets; aircraft for suppressing and attacking ground systems that employ electronic emitters; and multi-mission RPVs for selected EW, reconnaissance, and strike missions.

Space. We are requesting $561 million for FY 1976 astronautics R&D programs. Some essential missions can be accomplished only in space, and others can be handled more effectively or less expensively there.

The Air Force is working on two complementary, worldwide satellite systems to improve the responsiveness and effectiveness of U.S. forces by upgrading our communications capabilities. The Defense Satellite Communications System (DSCS) handles general communications at high data rates

between fixed sites and rapidly deployable smaller equipment. The two satellites we launched in 1973 have been giving DoD better long distance capacity from both the Pacific and Europe. The launching of two more satellites early this year will complete the initial system. A contract for replacement satellites through 1980 has been signed, and in FY 1976 we plan to start development of an improved satellite for the 1980s.

The second system is the Air Force Satellite Communications System (AFSATCOM), a highly reliable, low data rate system designed to provide command and control communications to strategic forces. It will not require satellites of its own, but will use communications capabilities on other satellites. Terminals will be installed in strategic aircraft, missile launch control centers, and key command centers. Terminal equipment testing is to be completed in FY 1976 and Initial Operational Capability is planned shortly thereafter.

Perhaps the most important present space program is our satellite early warning system. We have two satellites over the Western Hemisphere and one over the Eastern. Using infrared and other sensors, they provide us warning of ICBM and SLBM launches in near real time.

A space system that I believe has the potential of revolutionizing the effectiveness of airpower and world navigation is NAVSTAR. We are developing this global positioning system, consisting of satellites and user terminals, to give the position of aircraft, ships, and ground vehicles with an accuracy of tens of feet in three dimensions. Besides helping to stop the costly proliferation of navigation systems, one of NAVSTAR's most important applications could be in weapons delivery worldwide, especially

at night and in adverse weather. Last year we began the first phase of a deliberate, evolutionary development program aimed at initial launch of prototype satellites in 1977 to demonstrate the actual accuracy capability.

Also for space use in the 1980s, the Air Force has been designated as the DoD executive agent to participate with NASA in the Space Shuttle program. The Space Shuttle is a reuseable vehicle for carrying payloads to and from low earth orbit. DoD is participating with NASA in the shuttle design to assure that military requirements are satisfied. NASA will provide the East Coast launch facility at the Kennedy Space Center. A West Coast site is essential for polar orbits, and DoD is planning to provide that at Vandenberg AFB, California, not earlier than December 1982.

For launches into high orbits, NASA plans an upper stage called a Space Tug for the mid-1980s. Since all DoD payloads launched from the East Coast require higher orbits, we plan a minimum cost modification of an existing upper stage to make an Interim Upper Stage (IUS). This IUS is expected to be available in 1980 and will allow earlier use of the Space Shuttle for East Coast launches and earlier phase out of expensive expendable space boosters.

IV. PROCUREMENT

After research and development activities provide the technology necessary to maintain a modern, effective Air Force, we then must select, procure, and deploy appropriate new equipment. In the strategic sector for FY 1976, we want to continue MINUTEMAN III production for one more year and other on-going efforts to improve our ICBM force. Increased U.S. strategic airlift capability also is a high priority objective.

For our tactical forces, we are requesting funds to continue production of the F-15 and the AWACS, and to begin full-rate production of the A-10. In addition, our request covers procurement of tactical missiles, such as the MAVERICK for air-to-surface, and SPARROW and SIDEWINDER for air-to-air operations.

The FY 1976 procurement request includes $266 million for 50 MINUTEMAN III missiles to provide an adequate operational test program, $388 million to modernize the MINUTEMAN force, and $2.3 billion for 191 aircraft. Sixteen C-12 utility airplanes are for use by Defense Attache Offices and Military Assistance Advisory Groups. For the Air Force, we want to procure 175 aircraft consisting of 108 F-15s, 61 A-10s, and 6 E-3As (AWACS). The missile and aircraft procurement requests are summarized in Tables IV and V, pages 53 and 54, respectively.

ICBM Force. For several years we have had under way programs to modernize our ICBM force, which as of February 1975 was composed of 500 MINUTEMAN II, 500 MINUTEMAN III, and 54 TITAN missiles. We have been replacing older missiles with the much more capable MINUTEMAN III. In fact, this past September the last of the MINUTEMAN Is were removed from the force. The newer MINUTEMAN III not only provides us with an increased number of targetable weapons, but, because of its accuracy and yield combination, also increases our overall effectiveness and ability to tailor our response to changing military and political conditions.

Last year we requested funds for 61 MINUTEMAN III missiles for testing reliability and evaluating accuracy. This also allowed us to maintain a production base, a prudent step in

view of the continuing Soviet drive to produce greatly improved ICBMs. I believe we should continue this production base in FY 1976. The 50 missiles we are requesting are needed to continue the testing that will maintain high confidence of force effectiveness.

We are requesting $388 million to continue the two-element Force Modernization Program. To assure the continued high survivability of the force into the mid-1980s, existing silos are being upgraded to improve resistance to nuclear blast, shock, and electromagnetic pulse effects. To provide better control and flexibility, the Command Data Buffer modification gives MINUTEMAN III a secure, rapid, and remote retargeting capability that further increases the deterrent potential of the force against all-out or selective nuclear attacks.

Force modernization is on schedule. Three hundred and fifty Upgraded Silos have been completed as of February 1975. By FY 1977 the entire MINUTEMAN III force will be deployed in these improved silos with Command Data Buffer. By FY 1979 all MINUTEMAN II missiles will be in Upgraded Silos.

Strategic Airlift. Strategic airlift is a vital part of our capability to deter conventional wars and to support United States interests overseas. Effective strategic airlift forces help strengthen relationships with our allies and play a crucial role in establishing stability in crisis situations. One familiar example occurred during the 1973 Middle East conflict, but it is apparent that a much greater challenge could face us in Europe.

We need to increase our total strategic airlift capability to move a large force to Europe in the critical early weeks of a NATO-Warsaw Pact conflict. This improvement is needed so

that we could counter a major attack by conventional means. Currently, the predominant requirement is for oversize cargo, that is, cargo that can be transported by a medium aircraft such as the C-141. If we can increase our capacity in medium transport aircraft to a point where those aircraft can move all of the required oversize equipment to Europe in the same time the C-5s need to move the outsize cargo, we will be able to double the amount of forces deployed in the early stages of currently planned NATO reinforcement.

Last year we proposed an extensive airlift enhancement program. Congress recognized the fundamental need for improvement, but directed additional study of alternative ways to meet requirements. This study was completed in January 1975 as a joint effort by the Air Force and the Office of the Secretary of Defense, and its conclusions form the basis of our FY 1976 request. There are several related parts in the enhancement effort.

In this year's budget, we are asking for $17 million to complete the prototype and testing of the C-141 stretch and inflight refueling modification. We consider this program to be one of the most readily attainable means of enhancing airlift capability. Stretching the fuselage provides a potential increase in force productivity equivalent to about 80 new C-141s, without the associated increases in manpower or maintenance costs. Since the purpose of this modification is to increase capability during emergency conditions, we do not plan to add extra payload during normal peacetime operations. Therefore, the impact on aircraft fatigue life should be negligible. The inflight refueling capability will allow us to reduce our dependence on foreign bases in crisis situations.

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To improve surge and sustained wartime utilization rates for strategic airlift aircraft, we are increasing the crew-to-aircraft ratio for both the active force and Reserve Components. Our primary emphasis is on increasing the crew ratio for the Reserve Components in both the C-5 and C-141, but we also are increasing slightly the active ratio for the C-5. In addition, we are beginning an auxiliary aircrew concept under which former transport crew members and certain support personnel are programmed to be diverted from other duties to the airlift mission during emergencies. With these improvements plus a modest outlay for additional war readiness spares, we can increase future emergency capability of the C-5/C-141 force by 25%.

To support another aspect of the program, we are requesting $22 million in FY 1976 and $24 million in the transition period to begin a program to modify floors and entrances of wide-bodied jet passenger aircraft in the U.S. Civil Reserve Air Fleet (CRAF) so that they could carry military cargo in an emergency. By using these aircraft, we could secure this additional capability at a fraction of the cost it would take to acquire and maintain its equivalent within organic military resources.

The airlift enhancement program is not our only effort to improve strategic airlift. We have been training our C-5 aircrews for inflight refueling, and we can now utilize that capability as circumstances require. We also are proposing a modification of the C-5 wing to extend the useful life of this unique and important aircraft. Pending this modification, we are carefully controlling the use of the C-5 to prolong its life while meeting current airlift

requirements. In FY 1976, we are requesting $22 million in RDT&E funds for this alteration to cover design of the conversion kit and modification of a test article.

F-15 Tactical Fighter. The FY 1976 request includes $1,438 million to procure 108 F-15 tactical fighters. This aircraft is needed to give us all-weather air superiority against all challengers. Effective tactical air warfare in support of ground forces depends on maintaining, at a minimum, local air superiority.

The F-15 was designed from the beginning to optimize its counterair capability. Because of its inherent aerodynamic and avionic performance, it also possesses an excellent air-to-surface strike potential. In its flight test program, which has been under way for 2 1/2 years, the F-15 has met or exceeded all of our expectations. We are encouraged by its reduced cost of ownership compared to contemporary operational fighters. The aircraft is durable and requires only moderate maintenance. In fact, the radar in the F-15 that flew to the Farnborough Air Show in 1974 went 72 flights before maintenance was required -- a performance many times better than current fighters achieve.

The 108 aircraft being requested for FY 1976 will provide an F-15 production rate of 9 per month in lieu of the 6 per month previously planned. This accelerated production will give us lower total program costs per aircraft and could provide the last three F-15 wings six months earlier than currently scheduled.

During FY 1976 the F-15 development test program will be completed, and plans call for the first operational wing at Langley Air Force Base, Virginia, to receive two of its three

squadrons. The first operational aircraft were delivered to Tactical Air Command in November 1974, as scheduled, and are being used for training. We plan to seek procurement of a total of 729 F-15s through FY 1980.

A-10 Close Air Support Aircraft. Providing combat air support of ground troops has been a primary mission of tactical air forces since World War I. In Europe, one of the most challenging tasks for air support is to help counter the Warsaw Pact's numerical advantage in armor. In the A-10, we have an aircraft that has been designed specifically for the destruction of enemy ground power, including armor.

During its development program, the A-10 has demonstrated that it has all the necessary attributes of an excellent combat air support system, including extended loiter time, a lethal weapons load, survivability, and responsiveness to ground commanders' needs. The A-10 can operate from forward, austere bases, and can do so with a large, versatile ordnance load, including the new 30mm GAU-8 gun that can defeat even heavy armor. Because it is highly maneuverable, it is effective even under low clouds and in poor visibility, conditions that are often encountered in Central Europe.

We expect to complete the initial tactical evaluation of the A-10 in October 1975. The 22 aircraft being procured with FY 1975 funds will be used for operational test and aircrew training. In this year's budget we are requesting $361 million for 61 aircraft. Our request takes into account the effects of increased inflation, as well as Congressionally directed changes in the FY 1975 program, and thus we now project a unit flyaway cost of $3 million.

Airborne Warning and Control System (AWACS). The effectiveness of both the F-15 and the A-10, as well as our other tactical systems, can be greatly increased by better surveillance, warning, and control. We learned in Southeast Asia that with fast, relatively long-range jet aircraft, a commander needs an improved ability to monitor and direct large scale air operations. In Central Europe the difficulties are much greater because there the environment would be one of high aircraft density and variety. Moreover, there has long been a need for more effective integration of the operations of the various national air forces in NATO.

The E-3A AWACS is able to provide this improved surveillance and control capability. With its exceptionally capable radar, the AWACS can detect hundreds of aircraft at all altitudes over all kinds of terrain and over water. It is the only system which can detect aircraft flying at very low levels. It also will be configured to detect and track ships at sea. At its normal operating altitude near 30,000 feet, it can detect aircraft hundreds of miles away.

The AWACS radar is highly resistant to ECM. An independent review panel under the chairmanship of Dr. H. P. Smith, Jr. concluded that AWACS is "an impressive technical accomplishment that has met its design goals and in so doing is less susceptible to ECM than ground surveillance radars now employed in Europe." This characteristic, plus its IFF sensor and substantial surveillance capability to monitor the activities of enemy aircraft, make AWACS operationally effective even in the presence of ECM.

Finally, the AWACS can be deployed to any region of the world, and immediately begin its mission of surveillance, warning, or direction of air-to-air or air-to-surface combat

operations. The inherent mobility of the E-3A, coupled with its long range radar, will enable it to perform its mission while remaining outside the threat area of enemy surface-to-air missiles or fighter aircraft. However, should the need arise, AWACS can issue precise directions to friendly surface-to-air missiles or fighters to act in its defense. All of these factors make AWACS far more survivable than current ground systems.

The AWACS would greatly increase the effectiveness of our forces in a variety of situations. It has been demonstrated in Europe and has generated considerable enthusiasm there. A multinational study group is investigating the feasibility and cost of several AWACS variants for the European mission. Of course, any NATO AWACS program will depend upon continuation of U.S. procurement.

In December 1974 we completed a successful Systems Integration Demonstration which verified that the AWACS concept is technically and operationally suitable for tactical and air defense operations. In FY 1976 we plan to complete work on the second and third Development Test and Evaluation aircraft. We are continuing work on the six operational aircraft funded last year and are requesting $431 million in FY 1976 to procure six aircraft and $199 million to continue development and testing.

Advanced Airborne Command Post (AABNCP). With advances in command, control, and communications (C^3) equipment, we have been trying to get the most effective and survivable command post possible for the National Command Authorities (NCA) and the SAC Commander. The Advanced Airborne Command Post will provide the greatly increased capability required by

the NCA to assess damage, monitor status of forces, evaluate enemy intentions, and allow selection of a controlled response. The AABNCP utilizes the larger Boeing 747, designated the E-4, to replace the presently used EC-135 aircraft. The basic 747 aircraft presents little technical risk, and our major development effort has concentrated on the advanced C^3 equipment. In FY 1976, we are requesting $42 million in research and development funds to continue C^3 development efforts. Also in FY 1976, we plan to accept and initiate modification of the test bed aircraft for the advanced C^3 package, and to begin testing of that package in a ground mockup.

Three production aircraft were funded in previous years. In fiscal quarter 7T, we are requesting $175 million to procure three additional aircraft. This will allow us to exercise a firm, fixed-price option in the present aircraft contract before it expires in July 1976.

Tactical Missiles. To exploit fully the capabilities of our tactical aircraft, we are developing better missiles for both the strike and air-to-air missions. The TV-guided MAVERICK continues to demonstrate excellent effectiveness, against both moving targets like tanks and reinforced stationary targets such as bunkers. With this missile we have not only a very high probability of hitting the target, but also a launch and leave capability that decreases exposure of our aircraft to enemy fire. We are working with the Navy to expand MAVERICK's usefulness with a modular warhead and Imaging Infrared guidance. We also are cooperating with both the Navy and the Army on a tri-service laser-seeker option. Our request includes $144 million for 6,000 missiles, $33 million of which

is advance procurement for FY 1977. Additionally, we are asking for $46 million to purchase 1,318 SHRIKE missiles for use against electronic emitters, such as air defense radars.

In two other joint programs with the Navy, we have been developing improved missiles for air-to-air combat. We have completed a successful development program, characterized by a very extensive testing effort, on the improved SPARROW, or AIM-7F, radar-guided missile. Our requested FY 1976 procurement is 620 SPARROWS for $80 million. We also are working on an improved version of the SIDEWINDER, or AIM-9L, heat-seeking missile. We are now in the final stages of testing and anticipate a decision regarding production in a few months. If the decision is favorable, planned initial procurement would be 710 missiles at a cost of $40 million.

Aircraft Spare Parts. A key aspect of Air Force readiness is the availability of aircraft spare parts. While our operating requirements generally are consistent with those of the past few years, this year's request includes $332 million to acquire War Reserve Materiel spares, the previous procurement of which has been delayed. This is especially true of strategic airlift requirements. Further deferral of these requirements could place in jeopardy our capability to perform assigned wartime missions. In the case of our new weapon systems, such as the F-15, A-10, and AWACS, our request for investment spares represents the minimum acquisition of those items necessary to bring these aircraft systems to operational status.

Reducing Modernization Costs. In both our RDT&E and procurement programs, we are employing methodologies specifically aimed at reducing costs -- both initial acquisition cost and the cost of ownership. We are placing

greater emphasis on design-to-cost concepts and have established specific goals for our new major programs. We are taking into account total life cycle costs -- that is, operating and maintenance costs, as well as acquisition costs. The life cycle perspective helps to ensure that we buy neither a cheaper product that soon breaks down nor one that is so complex that maintaining it would be prohibitively expensive. These considerations are applied throughout the design and development phases of a new system to help us make necessary tradeoffs between cost and performance. We have used them in such major programs as the A-10 and, most recently, the Air Combat Fighter. Our objective is to merge them into a design-to-overall cost concept.

In the Air Combat Fighter program we have focused the contractor's attention on the cost of ownership by incorporating an award fee incentive approach to both the development and production phases. Additionally, rather than relying on logistic performance promises, we have contractually structured forms of warranties for demonstrated logistic performance in the operational environment.

The Air Combat Fighter program also illustrates two other cost controls. In partnership with the F-15, the F-16 will permit us to operate the required number of fighter aircraft at a cost effective balance and, hopefully, it will be a means of establishing standardization with our allies. If effective standardization is achieved, each user would realize substantial savings, not only in acquisition costs, but also in total operating and support costs. Moreover, operational effectiveness could be improved.

In our pursuit of increased reliability, maintainability, and standardization, as well as reduced life-cycle costs, we have initiated several modifications designed specifically to achieve these objectives. As an example, installation of the ARC-164 UHF radio in most of our aircraft will result in savings of $9 million per year when fully implemented.

V. SOCIETAL RESPONSIBILITIES

Although the primary missions of the Air Force are deterrence and defense, we also realize our further responsibilities for energy conservation, humanitarian assistance, and environmental improvements.

Energy Conservation. Energy conservation is not a new topic with the Air Force. However, rising costs, especially of petroleum products, have provided new significance to that objective.

In FY 1976, we anticipate the purchase of approximately 111 million barrels of petroleum products -- a figure 28% less than the amount purchased in FY 1973. However, the cost of this diminished amount will exceed the FY 1973 total by more than $1 billion.

To achieve the interrelated purposes of conservation and cost reduction, we have instituted a number of promising measures. The retirement of 400 reciprocating engine support aircraft should provide an overall cost avoidance of $75 million in FY 1976 and reduce our fuel consumption by over 1.5 million barrels annually.

The Department of Defense has asked all branches of the armed forces to strive for a 25% reduction in flying hours by 1981. One of the major actions we are taking toward that

goal is significantly increased use of flight simulators. We anticipate an investment of more than $1 billion over the next six years for modern, state-of-the-art equipment.

The results of this effort are being felt already. Flying training has been completely eliminated for Electronic Warfare Officer (EWO) and navigator-bombardier students. Recent acquisition and use of our only modern, visual-display simulators have resulted in a 20% reduction in programmed flying hours for C-5 and C-141 initial qualification and upgrade training.

Obviously, all flight training cannot be accomplished through simulation, but our investment in this area should pay extensive dividends in terms of energy conservation and cost avoidance. The resultant annual savings could build to 300,000 flying hours, 9.5 million barrels of fuel, and 270 million in constant FY 1975 dollars by the middle of the next decade.

The Air Force also has accomplished a significant reduction in the consumption of energy for operation of our facilities. Using consumption levels in FY 1973 as a base, the President's goal of 15% reduction was exceeded (17.2%) during the first three quarters of CY 1974, with an estimated cost avoidance of $50 million. In new construction, we are incorporating energy-saving features as a primary design parameter for all new Air Force facilities. Existing facilities will be upgraded for increased energy effectiveness using military construction funds requested in this year's budget for the DoD Energy Investment Program.

Humanitarian Assistance. Another responsibility that we in the Air Force readily accept involves humanitarian assistance. Air Force people in the United States and

throughout the world are deeply involved in programs that create a better life for their fellow men and women.

Probably most familiar is the airlift of food, medicine, and other supplies to disaster victims in many foreign countries -- the floods in Bolivia, Chile, Burma, Bangladesh, and the Philippines; the landslides in Colombia; the hurricane in Honduras; the cyclone in Darwin, Australia; and the drought in the Sahel region of Africa. Altogether, Air Force C-5s, C-141s, and C-130s, including Guard and Reserve participation, airlifted nearly 20 million pounds of relief supplies in CY 1974 to alleviate human suffering.

Here in the United States, our Aerospace Rescue and Recovery Service participates in the Joint Military Assistance to Safety and Traffic (MAST) program, which provides emergency medical evacuation for civilian victims of serious illnesses or accidents. The Air Force Rescue Coordination Center established in 1974 at Scott Air Force Base, Illinois, coordinates the use of military and civilian resources for both military and domestic rescue requirements here in the continental U.S. The Alaskan Air Command Rescue Coordination Center at Elmendorf Air Force Base performs that same function for Alaska. Civilian pilots working with the Civil Air Patrol, an official Air Force auxiliary, also contribute significantly to rescue operations. The Air Force, in conjunction with the U.S. Forest Service, has developed an Airborne Fire Fighting System specially designed for use by C-130 cargo aircraft. The method is proving invaluable in containing forest fire damage in situations where civilian fire-fighting capability is inadequate.

Air Force people stationed here in the U.S. also are involved in a vast variety of community service projects.

The programs range from vocational education to youth summer encampments, but all indicate the desire of Air Force people to be good neighbors and responsible citizens.

Environmental Protection. Environmental protection is also a subject of Air Force emphasis. Since 1967 and including the program envisioned for FY 1976, we have allocated $190 million for pollution control to insure our installations meet federal, state, and local standards.

We are working with other federal agencies on a variety of projects that seek to reduce environmental pollution. For example, a cooperative effort is being conducted with the Environmental Protection Agency to evaluate a flue gas desulfurization system. In Hampton Bay, Virginia, we are working with the city government, other nearby communities, and NASA to develop a total energy system which will burn trash to provide heat and power. This project not only will conserve fuel but also will end the use of valuable land for waste disposal.

The Air Force's environmental protection efforts actually began in 1949; however, guided by the National Environmental Policy Act of 1969, we have further modified a number of operations to support the national concern for environmental enhancement. Last year alone, some 1,000 environmental assessments were accomplished to examine the impact of proposed projects at the earliest possible moment in the planning process. Moreover, Air Force civil engineers have established an Environmental Planning Division to control more carefully the impact of Air Force activities on the environment.

The Air Installation Compatible Use Zone (AICUZ) Program is proceeding at all major flying installations within the United States. The program emphasizes cooperation with local and state governments to encourage compatible use by the civilian community of land adjacent to our bases.

Wherever possible, we are permitting public use of recreational areas on Air Force installations. Currently, 18 of our bases are involved and some three million recreational visits were reported in FY 1974. About 60% of the visits were by civilians. Eglin Air Force Base, along the Gulf Coast of Florida, is a good example. Some 510,000 recreational visits were made there in FY 1974 -- about 75% from the civilian community.

VI. CONCLUSION

We are determined to maintain a powerful Air Force despite the challenge of inflation, but we need support. The nation must not attempt to pay for today's efficiency by jeopardizing tomorrow's effectiveness; both economic operation and modernization are essential. Our development programs must keep pace with a world characterized by technological advance and political and economic uncertainty. The Chief of Staff, General Jones, will discuss management initiatives that are reducing Air Force operating costs.

I assure you that the Air Force is ready and capable of carrying out its mission to protect this nation's security interests. With your help and the support of the American people, in the form of resolve and resources, our future strength will match our vital responsibilities.

TABLE I

Total Obligational Authority
(Millions of $)

	FY 75	FY 76	FY 7T
RDT&E	$3,298.9M	$3,903.2M	$1,034.0M
Procurement			
Aircraft	3,060.0	4,575.5	1,087.1
Missile	1,542.7	1,791.4	277.4
Other	1,656.0	2,342.8	383.6
Military Construction	444.9	703.6	14.0
Military Personnel	7,500.0	7,400.6	1,816.3
Operations & Maint.	7,327.7	7,956.3	2,020.3
Reserve & Guard	1,371.2	1,522.2	391.1
Total (TOA)	$26,201.4M	$30,195.6M*	$7,023.8M

*The OSD contingency line ($397.1M is USAF portion) for October 1975 military and civilian pay raises and military travel pay increases is not included.

TABLE II

Personnel End Strengths
(Thousands)

	FY 75	FY 76	FY 7T
Active-Duty Military	612	590	590
Civilian			
Direct Hire	266	256	258
Indirect Hire	15	15	15
Selected Reserve			
AFR	52	53	54
ANG	96	95	95

Personnel Costs
(Millions of $)

	FY 75	FY 76	FY 7T
Active-Duty Military	$7,500M	$7,401M	$1,816M
Civilian	3,768	3,805M	938
Selected Reserve			
AFR*	(25) 148*	(24) 161*	(6) 51*
ANG	205	213	61
Total (TOA)	$11,621M	$11,580M	$2,866M
% of Budget**	44.4	38.3	40.8

*Parentheses indicate funds included for ROTC and Health Professions Scholarship programs.

**When the Air Force portions of the OSD accounts (funded by OSD and not included in the Air Force budget request) for family housing and retired pay are added, personnel and related costs are 49.1% of FY 1975 costs and 44.2% of FY 1976 costs.

	FY 75	FY 76	
Family Housing	330	340	
Retired Pay	2,138	2,495	
		354	(FY 76 Pay Raise)
Personnel Subtotal	$14,089M	$14,769M	

TABLE III

Research and Development By Category
(Millions of $; funds in parentheses
show funding for selected major systems)

	FY 75	FY 76	FY 7T
AIRCRAFT	$1,097.5M	$1,430.2M	$ 362.5M
B-1	(445.0)	(672.2)	(168.3)
YF-16 (ACF)	(32.0)	(273.0)	(82.5)
AMST Prototype	(55.8)	(85.0)	(11.4)
A-10	(81.4)	(51.9)	(1.0)
F-15	(182.6)	(39.9)	-0-
Adv Tanker/Cargo	(2.0)	(5.2)	(1.4)
MISSILES	370.5	358.3	107.9
MINUTEMAN III	(123.9)	(122.7)	(34.0)
ABRES	(111.8)	(101.0)	(29.2)
ALCM	(66.5)	(51.0)	(13.0)
Adv ICBM Technology	(37.3)	(41.2)	(15.3)
ASTRONAUTICS	453.7	560.5	133.7
NAVSTAR GPS	(23.9)	(74.6)	(13.2)
Space Shuttle	(10.0)	(22.7)	(8.2)
ORDNANCE & COMBAT VEHICLES	149.4	188.7	57.6
OTHER EQUIPMENT	633.7	719.9	204.7
AWACS	(202.0)	(199.2)	(54.5)
AABNCP	(62.7)	(42.2)	7.8)
MILITARY SCIENCES	132.2	143.6	38.3
MANAGEMENT & SUPPORT	462.0	502.0	129.3
TOA	$3,298.9M	$3,903.2M	$1,034.0M

TABLE IV

Missile Procurement
(Number of missiles in parentheses; millions of $)

	FY 75		FY 76		FY 7T	
MINUTEMAN III	(61)	$298.4M	(50)	$265.8M		
MINUTEMAN FORCE MODERNIZATION		298.9		387.7		70.5
MAVERICK	(5600)	72.7	(6000)	144.0	(1200)	25.0
SHRIKE	(270)	11.1	(1318)	45.9	(300)	9.6
SPARROW	(300)	43.3	(620)	80.1		
SIDEWINDER (AIM 9L)			(710)	39.5		
SIDEWINDER (AIM 9H)			(800)	22.7		
MODIFICATIONS		40.9		49.1		0.3
SPARES		43.3		86.6		6.2
OTHER		734.1		670.0		165.8
TOA		$1,542.7M		$1,791.4M		$277.4M

TABLE V

Aircraft Procurement
(Number of aircraft in parentheses; millions of $)

	FY 75	FY 76	FY 7T
F-15	(72) $756.9M	(108) $1,437.8M	(27) $319.5M
A-10	(22) 166.9	(61) 360.7	(33) 87.0
AWACS	(6) 370.7	(6) 430.5	30.0
AABNCP			(3) 175.0
B-1		77.0	31.0
C-12*		(16) 11.8	
A-7**	70.5		
F-111***	82.6		
F-5	(71) 69.2		
MODIFICATIONS	525.8	660.7	126.3
SPARES	726.2	1,101.7	190.1
OTHER	291.2	495.3	128.2
TOA	$3,060.0M	$4,575.5M	$1,087.1M
Acft for USAF	(171)	(175)	(63)

* For DAO/MAAG use
** $29.6M impounded
*** $122.9M impounded

BUDGET REQUEST

Secretary McLucas. Mr. Chairman and members of the committee, I am very glad to appear here with General Jones today to support our fiscal year 1976 budget request. I would like to start out by thanking you for the past support which we have had which has kept the Air Force in a good, strong position.

Today we are presenting our request for fiscal year 1976 of $30.2 billion, and for the transition budget of $7 billion. The budget that was approved last year was $26.2 billion. So we are asking for a significant increase, specifically for a $4 billion increase. Of this increase, $2 billion represents inflation. In other words, if we were buying out the fiscal year 1975 budget in fiscal year 1976, it would cost about $28.6 billion just to make up for inflation.

Senator Young. Mr. Chairman, could I ask a question at this point?

Chairman McClellan. Yes.

PAY RAISES

Senator Young. How did you figure pay raises for this budget? Did you use the limitation that President Ford wants of no more than a 5-percent increase?

Chairman McClellan. If they got a full increase, then you would have to ask for more money.

Secretary McLucas. Yes; but the Air Force budget does not include funds for fiscal year 1976 pay raises. Rather, the fiscal year 1976 pay raise requirement is carried as a contingency item in the overall DOD total for fiscal year 1976 pay raises.

The other $2 billion of our increased request is program growth, specific things that we think need to be added to the budget. About $300 million in program growth for research and development. We think that to maintain our readiness, research and development is a most critical item. To complete and/or continue the R. & D. on some of our principal systems, we are asking for a TOA which totals $3.9 billion for R. & D.

We are asking for about a $2 billion increase in procurement. Several of the systems that have been developed recently such as the F–15 have reached a stage where we feel it is appropriate to increase the rate of production. The A–10 is also in that category. Adding those together we come up with a request for $2 billion increase in real program, and $2 billion to compensate for inflation.

I am sure you know that the inflation we planned for last year when we submitted our budget has been exceeded significantly by events. In fact, it has been roughly twice the inflation we assumed when we made up our budget.

The fuel cost, of course, has gone up much faster than other commodities that we buy.

ESTIMATES OF FUEL COST INCREASE

Chairman McClellan. How much do you estimate your fuel costs have increased above last year's?

Secretary McLucas. Compared to 2 years ago it is up about $1 billion.

Chairman McClellan. $1 billion in the last 2 years?

Secretary McLucas. Yes, sir. In the fiscal year 1973, for example, we spent around $700 million on fuel, and our request for 1976 is $1.9 billion. So, it is an increase of over $1 billion, or more than 100 percent. It is a 172-percent increase in fuel cost.

Chairman McClellan. There has been that much increase in fuel cost in the last 2 years?

Secretary McLucas. Yes, sir. The actual flying we are doing over that same period has been reduced. We are flying 22 percent less compared to 1973. So, we are flying less and paying much more.

Senator Young. Before you leave that subject—are you through, Mr. Chairman?

Chairman McClellan. Go ahead.

Senator Young. What is your basis for full costs? Present prices? There are two proposals to increase fuel prices. President Ford would increase tariffs by $3 a barrel, and the Democrats in the House came out yesterday, according to the newspaper, with a program that gasoline would cost 20 cents a gallon more over a 3-year period.

Secretary McLucas. Yes, sir.

Senator Young. Would either one of these programs increase your cost?

Secretary McLucas. We are assuming we would be exempt from those taxes. They are not included in our budget.

Senator Inouye. Their gas won't be taxed by the Federal Government.

Senator Young. If you increase the tariff, the cost to the refinery would automatically be more. You would have to have some kind of special arrangement to exempt the services.

Senator Inouye. Under the President's program?

Senator Young. Yes.

Chairman McClellan. If a tax is placed on oil imports, I don't see how you can avoid paying the increased price. Would you receive some sort of rebate?

Secretary McLucas. It would be an interdepartmental transfer of some sort. I don't see how it affects our total cost.

Chairman McClellan. You buy the finished product. The tax is placed on the raw product, the oil as it is imported. That tax goes to the refinery; they have to pay it before they refine it. How can they escape passing it on to you if you buy it after it is refined? You don't buy the crude oil.

Secretary McLucas. I am afraid we will have to turn that over to our fiscal experts. It is our assumption that a Government agency would not pay that.

Chairman McClellan. I don't know how it can be avoided.

Secretary McLucas. I don't mean to debate it because I don't know.

Chairman McClellan. I don't either. But I feel we must consider the effects of such a tariff on your petroleum expenditures.

ENERGY TAX EQUALIZATION PAYMENTS

Secretary McLucas. I'll see what information we can get on this matter, and supply it for the record.

(The information follows:)

OIL IMPORT TAX/COST TO AIR FORCE

The Budget of the United States Government for 1976 (see pages 56, 57, 58 and 316 for details) provides an allowance for energy tax equalization payments. The $7 billion of offsets are included in the budget to compensate nontaxpayers, State and local governments and Federal agencies for higher petroleum and natural gas costs. Current planning is that the affected individual appropriations and funds will be reimbursed from the Allowances account.

SIMULATORS

Secretary MCLUCAS. While we are talking about fuel, I want to mention that our total flying is reduced because of the cost of the fuel, but we are trying to offset that as much as possible through increased use of simulators for training. Pilots can get a good deal of their training without actually flying if they have a good simulator. Over the last few years we have been able to develop much more realistic simulators so that they are more realistic and hence better for training. This year, fiscal year 1975, we are spending about $100 million of our budget to develop and procure simulators. In the fiscal year 1976 request we are asking for about $250 million. Thus it is part of a long-term buildup of training capability and readiness maintenance capability whereby we would spend close to a billion dollars over a 6-year period to accumulate enough simulators to allow our pilots to train to fly essentially all of our main mission aircraft in simulators.

Senator INOUYE. How many simulators do you get for $1 billion?

Secretary MCLUCAS. Typically they cost somewhere between $5 and $10 million. So you get a lot.

Chairman MCCLELLAN. Each simulator costs $5 to $10 million?

Secretary MCLUCAS. Yes, sir.

Chairman MCCLELLAN. You will have only one trainee in there at a time?

Secretary MCLUCAS. One crew, but we can use them 24 hours a day. I was going to say that by the use of simulators we can reduce about 360,000 hours of flying a year by the mid-1980's. The average direct cost of flying is about $1,000 an hour. So that would translate to about $360 million a year. So, if we spend $1 billion on simulators, we get that money back every 3 years and save fuel in the process. We would also accomplish a lot in just the fuel saved. It is not just a question of how much it costs, but the avoidance of using scarce resources.

Senator INOUYE. Is this simulator used to train, say, a pilot to fly an F–15 or another aircraft, A–10, or B–52?

Secretary MCLUCAS. Yes, sir.

Senator INOUYE. The same one?

Secretary MCLUCAS. You have a simulator which typically would simulate a fighter, another one would simulate a cargo-type airplane.

Senator INOUYE. So, you have a whole array of simulators of different types?

Secretary MCLUCAS. Yes, trainer aircraft, such as the T–38.

Senator INOUYE. When you change your aircraft you have to change your simulators?

Secretary MCLUCAS. That is right. So, it doesn't pay to change too often. We would like to get 15 or 20 years of use out of the airplanes, so the simulators should have similar lifetimes.

C–5A SIMULATOR

General JONES. Mr. Chairman, may I add a point on this?

Chairman MCCLELLAN. Yes, certainly.

General JONES. First, the airlines use simulators very extensively. I have heard that with some of their experienced pilots transitioning to new aircraft they are given check rides on their first flight after extensive simulator time.

A few weeks ago I flew in a C–5 simulator in Oklahoma. It is so realistic that psychologically you believe you are in the airplane. It has a complete display coming in to land. You can simulate a poor weather situation. You can simulate day or night conditions.

We have found in our C–5 program that we can cut down the flying hours for the checkout period very, very substantially by extensive simulator use.

I expect on a dollar return basis, we probably will get a $3 or $4 return for every dollar we put into a good, up-to-date simulator.

We have had a problem in the Air Force in that the old type simulators really don't simulate actual flight. They have that name and in a few ways they do something like actual flying, but the new ones are like those used in the space program. They are so realistic that the first time the crew actually flies a new aircraft they can do very well.

We think it is the training method of the future, not only because of savings in fuel and spare parts but also noise abatement. It is not a total substitute, but especially valuable training for bombers, tankers, and transports.

Chairman MCCLELLAN. In other words, the time a trainee spends in simulators cuts down materially on the training time that he actually has in the plane?

General JONES. Yes, sir, very substantially, if the simulator is modern and has all of the capabilities such as those we have in the C–5 simulator now, or some of the commercial ones. We think updating and older simulators providing new simulators is extremely cost effective.

NUMBERS OF SIMULATORS

Chairman MCCLELLAN. How many simulators are in your arsenal now?

General JONES. It would be an estimate, but I believe it's about 200 operational flight simulators and trainers. We also have a number of procedural trainers, for missiles, navigation, gunnery, et cetera.

Chairman MCCLELLAN. Do you have some for each type of plane now?

General JONES. Almost, except for some of the older and smaller airplanes. Many of the old simulators are first generation.

Chairman MCCLELLAN. You are talking about the 200 simulators you now have.

General JONES. In some cases, but not all. I would estimate about 200.

Chairman MCCLELLAN. Are you buying these as replacements?

General JONES. In some cases. For example, we have had B–52 and C–135 simulators. What we are doing now is procuring replacement simulators that truly substitute for flying. Before it was marginal

substitution. Now, they will substitute a great deal. However, with the new F–15, we for example, are procuring entirely new simulators.

Chairman McClellan. You have to develop different simulators for each plane?

General Jones. Yes, sir. But once they are developed; the payoff is excellent. In fact, our older pilots don't believe how realistic they are. The younger pilots have a little different attitude because they have been accustomed to simulators, although often not very good ones. It was a chore for the older pilots. Now the C–5 is the first simulator I have flown that I felt truly simulated actual flight.

Senator Young. Did you spend several years flying as a training instructor?

General Jones. Yes, sir. In those days we had simulators in which we could learn how to throw switches, but they were not very good in simulating flying. We had the Link trainer that everybody trained in, but really we didn't use it as a substitute for flying. Now we can substitute extensively, not totally, and less in fighters, less than in bombers, because in fighters you have stresses resulting from throwing yourself at the ground, situations like positive and negative "G" that you can't simulate very well. So you can't substitute quite as much in training fighter aircraft.

Secretary McLucas. I went out to McDonnell Douglas where the F–15 is built and got in the simulator there. They put another pilot in another simulator. His airplane appeared on the screen of the airplane I was flying. I could try to overtake him, and he could try to avoid me. It creates a very realistic environment when you can do things like that.

PERSONNEL

I want to talk somewhat, Mr. Chairman, about our people situation. First, by saying that the Air Force continues to maintain a very high-quality force.

Some people worried what would happen when the draft was ended. If there has been any change at all in the quality of our people it is practically unmeasurable.

There has been a little bit of change in where we get our people from. During the draft we got a lot of people who came into the Air Force so that they wouldn't be drafted. Thus, we got more college people. Now without the draft we are getting more of what you might call blue collar people.

But the quality of people in terms of educational capabilities has not gone down. We have four mental categories we score people on. Ninety-nine percent of our people are in the top three categories, the average or above average categories. Only 1 percent is in the below average category. Ninety percent of our people are high school graduate or equivalent. That again is very comparable to what it was during the days of the draft.

So, we have not had specific difficulties in getting good people to be attracted to the Air Force. We think that the reason there are more noncollege people is that a lot of people see in the Air Force an opportunity to get an education.

We do have a few special areas where we have had trouble getting people. A specific one is in the doctor area. With the absence of the

draft it looked like we were going to have very large shortfalls in doctors.

We did get some help from the Congress. We have a bonus plan which is in effect now. At this time, we have obligated $25 million under that bonus plan; $8 million has actually been spent. The rest of it will be spent over the next couple of years to pay that bonus to doctors who have agreed to stay a certain number of years in the military.

This has made a significant change in our ability to recruit and retain doctors. So, the shortage which we were estimating at something like 600 doctors this year now looks like it will be closer to 300. So the bonus seems to be working.

Now we are going down in numbers of military people overall. At the end of this year, in June, our military end strength will be down to 612,000. That is a considerable reduction since 1968.

Chairman McClellan. How much is that under last year's total?

Secretary McLucas. That is this year's figure. It is about a 32,000 reduction from end fiscal year 1974 strength.

Chairman McClellan. What reduction is planned for end fiscal year 1976?

Secretary McLucas. We plan to come down to 590,000, which would be an additional cut of 22,000 military.

Chairman McClellan. Will that affect the real strength of the Air Force? Does it have an adverse impact or diminish its capabilities in any way?

Secretary McLucas. I think if we had not changed anything else the answer to that would have to be yes, but we have taken actions which we think have softened the reduction. Specifically we have taken people out of headquarters units and we have reorganized, and combined various units. We don't believe that we have seriously affected our readiness.

MANPOWER REDUCTIONS

Chairman McClellan. How much more can we reduce without weakening our potential striking power?

Secretary McLucas. Again I think it depends on what else happens. We have reduced from 900,000 people in the last 6 years. We have been able to take those cuts because of our decreasing involvement in Southeast Asia, and because of the closing of a lot of bases and so forth.

Obviously, at the 612,000 level we are not able to take sizable cuts like that any more. We think that when we get down to 590,000 at the end of next year that we will be approaching an optimum force.

We think the optimum force is really determined by the total budget that we have to have, the number of bases we have to maintain, and the number of new systems that we want to buy, and so forth. In other words, we cannot isolate the personnel problem from the rest of our budget problems.

We are trying to maintain a balance. If we spend too much on people, we don't have enough to buy new systems. We can alleviate the situation somewhat through further base closures. But we are not sure it will be considered appropriate.

We have done a lot, as you know, in closing and reducing headquarters, combining headquarters, and streamlining headquarters. We think, depending on what budget pressures are in the future, we can make further cuts, but we hope they will not be significant cuts.

Senator INOUYE. May I ask a question?

Chairman MCCELLAN. Certainly.

Senator INOUYE. You may have reduced personnel, but haven't your firepower and delivery capability increased?

Secretary MCLUCAS. Yes, sir, in the long term it will because of some of the new systems we are introducing. As an example, if we replace an F–4 with an F–15, we have a two-place airplane being replaced by a one-place airplane. We get some personnel savings there. If we replace airplanes of relatively low capability with higher capability, then we don't have to have as many of them, if it is true that we had enough capability at the outset.

For example, the B–1 is a very capable airplane. We have no intention of ever replacing B–52's by B–1's on a one-for-one basis. Again, we will need fewer people to maintain the B–1 force than we have to maintain the B–52 force. So, changes of that type come along.

We can make some manpower cuts without affecting our capability, but that process cannot be continued indefinitely without eventually impacting capability.

There is another area where we hope to make savings. Some of the new systems such as the F–15, require a lot less maintenance than the F–4, which the F–15 eventually will replace. If we have less required maintenance, presumably we will need fewer maintenance people. That is still a hope for the future. We have not yet demonstrated that this is true, but I sincerely hope we can demonstrate it.

I mentioned the cuts on the military side. I should say that this year's civilian strength is 8,000 below fiscal year 1974 and we plan an additional 10,000 cut for fiscal year 1976. Looking at the overall cuts we have made in personnel the last eight years, the cut in military has been about 35 percent and the cut on the civilian side about 24 percent.

The reason the civilian side does not appear to have been cut as much is due to two factors. First, many military jobs have been civilianized; approximately 17,000 military jobs have been converted to civilian jobs since fiscal year 1972.

The other reason that civilians do not appear to have been cut as much, is that we have increased the Reserve Forces by something like 25 percent in total strength. Each of those Reserve units requires increased civilian technicians to maintain that Reserve unit in a state of readiness as more modern weapon systems are transferred to the reserve forces. Therefore, we added about 10,000 extra civilian technicians and employees since fiscal year 1968.

I would like to make a few remarks about some of our major programs, if I might.

B–1 AIRCRAFT

The most important development we have going on right now, of course, is the B–1. The B–1, as you probably read in the newspapers, made its first flight on the 23d of December. It was a short flight, but it accomplished the objectives of the mission.

All together we have now made four flights with the B–1. It appears to be living up to its billing. There has been very little difference between what the airplane has actually done and its performance predictions. Obviously, however, we have not yet explored the whole flight envelope. Of course, the way we do it is each time we fly we expand that envelope a little bit more.

All I can say after the first four flights is that things indicate that the airplane is flying very well, and that it is living up very closely to what we expected.

Chairman McClellan. How many B–1's are we building?

Secretary McLucas. Three are now under construction. The first one, as I say, has just flown. The second one is being used to carry out certain structural tests. It is rigged up in a jig that puts various stresses on it to see if the wings and other structure are as strong as they should be. The third one will have the offensive avionics in it. That airplane will be ready to fly in about a year.

We would like to get approval to start work on a fourth airplane. In approving the budget for fiscal year 1975, the Congress told us not to go ahead with a fourth airplane until after we had demonstrated the first flight and the Committees approved our going ahead.

Now we have had the first flight, and the performance looks good. We are working with the contractor, Rockwell International, to specify more exactly what the fourth airplane should consist of because we would like the fourth airplane to take advantage of what we have learned in flying the first one. There are certain design changes we would like to make based on what we have learned. We can make the airplane lighter and cheaper by certain changes of a relatively minor nature.

Chairman McClellan. What is the present estimate of the cost of those planes per unit?

B–1 COSTS

Secretary McLucas. The average program unit cost is $84 million, in inflated dollars of the future, when the B–1 production begins in several years. It also includes all the R. & D. cost.

So that is the program unit cost. If you want to compare that with something that might be a little more realistic, that same program cost of $84 million translates into about $65 million in 1975 dollars. If you take out the research and development cost and just talk about what it costs to build a B–1, it is more like $50 million.

When we quote the number we send to the Congress in the SAR report, we include all the research and development cost, and we price it at what we think the dollar will be worth in the year we plan to spend it. We plan to buy the B–1 several years in the future when dollars have been inflated considerably beyond what they are now. We think that gives people an erroneous impression of what the B–1 will actually cost.

The specific answer to your question is $84 million program unit cost in then-year dollars.

Senator Young. If you take out research and development cost it will be about $50 million.

Secretary McLucas. In today's dollars, $49.6 million.

Senator Young. The research and development money, whether you go ahead or not, is spent.

Secretary McLucas. A large part of it has been spent, yes, sir.

Chairman McClellan. What you are saying then is that the real acquisition of the plane will cost about $50 million from now on?

Secretary McLucas. No, sir. I did not mean that. I am saying if you were buying it today. In other words, if we let the contract today to build the B–1, we would have to spend $40 to $50 million a copy to get it, but we are not going to let the contract for several years.

Chairman McClellan. So you anticipate it will continue to go up?

Secretary McLucas. We anticipate high inflation, 8 percent next year, 7 percent the year after, and so on. If you add all that inflation, the amount that we expect to actually pay for each airplane including development costs is $84 million.

Chairman McClellan. Let me ask one other question. On the basis of what it would cost today, how much does it exceed the original estimate?

Secretary McLucas. About 50 percent, of which 40 percent is inflation from 1970 to now.

Chairman McClellan. In other words, it has gone up 50 percent since we started the program?

Secretary McLucas. That is right.

Chairman McClellan. And you anticipate that, because of future inflation, the cost of the B–1 will go up another 25 percent by the time we actually buy it?

Secretary McLucas. Another 33 percent.

There is one additional number we would like to cite. I don't know if it is significant to you, but we think it indicates something about our management. When we started the program in 1970, we estimated what it would cost to build the B–1 as of 1970. The program that we priced out was, in round numbers, about $10 billion—$9.9 billion I think was our estimate.

Using that same measure, what it would cost to do the program in 1970 dollars, our current estimate is $11 billion. So, that is roughly a 10 to 12 percent real growth. We think for an airplane that is as advanced as the B–1, that that is a good record.

So, when we look at our current SAR which we give the Congress, it shows a little over $20 billion for the program cost versus the $11 billion figure that I have just cited. The difference between the $11 billion and the $20 billion is $9 billion of inflation. There is $1 billion of real program growth because of errors in judgment on our part, and $9 billion of inflation.

Senator Young. May I ask a question at this point?

Chairman McClellan. Senator Young.

ENGINES FOR THE B–1 AND F–15

Senator Young. Is there any similarity between the engine of a F–15 and the B–1? Are the engines entirely different?

Secretary McLucas. The engines are entirely different, yes, sir. The B–1 engine is a considerably larger engine, has more thrust. It is different in quite a few ways.

Senator Young. Besides being bigger, more powerful engine——

Secretary McLucas. They are roughly comparable in technology. In other words, they were developed simultaneously. We are taking advantage of the same state of the art.

Senator YOUNG. Are the engines made by the same company?

Secretary MCLUCAS. No, sir, the F–15 engine is made by Pratt & Whitney. The B–1 engine is made by the General Electric Co.

Senator YOUNG. Is that engine fully developed, or are they still doing research and development?

Secretary MCLUCAS. They are still doing research and development on the B–1 engine. The engine appears to meet essentially all its specifications. It will be another year and a half before it is fully qualified. We don't qualify an engine until we have run several hundred hours of successful testing on an individual engine, and several thousand hours on a number of engines cumulatively.

We are sort of half way in that process right now. The engines have proved themselves qualified for the flight testing. In other words, we don't think there is anything wrong with the engine, otherwise we would not have flown it on the first flight.

However, the full qualification test will not be completed until the fall of 1976.

Senator YOUNG. That is all, Mr. Chairman.

REPLACEMENT FOR THE B–1

Chairman MCCLELLAN. Mr. Secretary, we have spent a little more than $2 billion on this plane already in research and development.

Secretary MCLUCAS. Yes, sir.

Chairman MCCLELLAN. Suppose we abandon procurement of this plane, what will replace it? What can we substitute for it from our arsenal? What other plane will be available to meet the need for this B–1?

General JONES. Mr. Chairman, in my informal presentation I was going to go through the requirement area and talk about alternatives.

Chairman MCCLELLAN. All right. We will get to that. The point is, the B–1 is a tremendously expensive weapon, and of course inflation is making it more and more expensive. Many people feel that we are paying too much for it. Would it be prudent to stop this program at this time? Is there any way we can execute savings and still achieve a goal of preparedness without this program? Could we get smaller planes, or some other substitute? I would like to hear your thoughts on these matters.

Senator MONTOYA. I notice that the difference in projected cost, total program from fiscal year 1975, represents an increment of 37 percent, or a $5 billion, $571.6 million.

Secretary MCLUCAS. Yes, sir.

Senator MONTOYA. Why is there such an increase when on the F–15 fighter the incremental cost difference from the fiscal year 1975 is only 13 percent?

Secretary MCLUCAS. Because of the different time frame. The F–15 is in production and we think that we can estimate inflation a little bit better in the near years. Also, we have contracts with the companies as to what the prices of these airplanes will be for the next couple of years. On the B–1 we have not even reached a production decision yet. When we do reach a production decision it will take a while to build up our production rate. So that there is about 5 years more of inflation added to the B–1 cost over what we have on the F–15.

You might ask, didn't we know about this before? All I can say is we have been using OMB approved escalation rates, and these rates have been changed. So, when we got the new rates to be applied, it changed all the numbers.

Senator MONTOYA. What is to stop this rate of increase in the future? Next year it could escalate another 37 percent, and the next year another 37 percent. In the end we would wind up with about a $40 billion program.

Secretary MCLUCAS. Anything is possible, Senator, because we can't predict the future of inflation. We think the rates that have now been approved and given to us to use in our estimate are much more realistic than the ones we used before. In the old days we used about 2 percent escalation for research and development programs, and about 3 percent for procurement programs. Those are obviously very low. The only justification I can give for using them is that we were told to.

I think the assumption on the part of OMB was that if you predict 10 percent inflation it tends to be a self-fulfilling prophecy. So, don't predict such large numbers.

So, we were given higher inflation rates, large numbers, and that is what we now use.

Senator MONTOYA. Do I understand you to say, then, that a 37 percent increase which you project here will apply to final production?

Secretary MCLUCAS. Yes, sir.

Senator MONTOYA. And that no increase will occur next year?

Secretary MCLUCAS. No. We have made a provision for an increase—I see what you mean. If we bring back a new estimate next year would it be higher than this one? Is that your question?

Senator MONTOYA. Yes.

Secretary MCLUCAS. Only if someone tells us that the inflation rates that we are now using have become obsolete.

Senator MONTOYA. What do you mean by that? Let us draw some comparisons. Say today's inflationary rate is 12 percent, and right now it is about 14 percent on an annual basis. What will that do to this 37 percent figure next year?

Secretary MCLUCAS. If that actually comes true, and if that is approved for our use next year the projected cost will go up. The figure that we are using this year is 8.7 percent.

Senator MONTOYA. Then the projection of 37 percent is not a closed figure which is linked to final production?

Secretary MCLUCAS. Well, only in one sense, Senator. The way we get that is to estimate the amount of work that is to be done and estimate the cost of that work, including inflation. We do not see any increase in the amount of the work to be done.

In other words, we have not run into any technical difficulties that would make the airplane more difficult to build. So, the changes then would be geared directly to the inflationary rates that prevail.

Now, one possibility, of course, would be for the Congress to say we are going to put a ceiling on how much you can spend, and don't go beyond that. We feel if that is not done what we should do is give you our best estimate of what it will actually cost.

B–1 PRODUCTION START DATE

Senator YOUNG. I would like to follow through on the question the chairman asked a moment ago about the B–1 production. How many years will it be before you will go into production?

Secretary MCLUCAS. We propose to make a production decision in November 1976. If we decide to do that, then it would be almost 3 years later before we get the first airplane.

F–111 RESCISSION

Senator YOUNG. Suppose this Congress decided to stop the B–1, would you have more need then for the F–111? What I am leading up to frankly is what happened yesterday in our committee. We retained the money for the F–111 which would keep the production line open for one a month in the rescessions bill. On the House floor yesterday they struck it out. Do you need that money, or do you advise the Congress to delete it?

Secretary MCLUCAS. I think you know that the President in his deliberations at the Cabinet level decided not to fund the F–111's. The position we have in the Air Force is, you know, is that it is a good airplane, and we would like to have it. Especially in view of the fact that a considerable portion of the money has already been committed.

I should not say that we won't get anything for it, but we won't get any finished airplanes with the money that is committed if we don't go ahead with the program.

Chairman MCCLELLAN. In the last appropriation bill you were allowed advanced procurement funds, weren't you?

Secretary MCLUCAS. No, sir, no funds were appropriated for advanced procurement. However, we spent something like $72 million of the $205.5 million fiscal year 1975 appropriations.

Chairman MCCLELLAN. Unless these 12 planes are produced, that $72 million will be practically lost, will it not?

Secretary MCLUCAS. That is right.

Chairman MCCLELLAN. So the prudent thing would be to finance these 12 for completion, but not appropriate procurement money for additional F–111's in the 1976 budget?

Secretary MCLUCAS. That is our position too, Senator.

There are at least three arguments why that is a good thing. One you already cited, that we have already spent money.

Chairman MCCLELLAN. How much more now will it take to finish the contract to procure the 12 planes?

Secretary MCLUCAS. $133 million, I think.

Chairman MCCLELLAN. You have spent $72 million of it—money thrown away if this program is discontinued.

Secretary MCLUCAS. That is right. Also the termination cost, and the extra overhead that would apply to the F–16 if the F–111 line is closed down.

Chairman MCCLELLAN. You will have to pay that termination cost sometime anyway, won't you?

Secretary MCLUCAS. If you don't terminate a contract, no, sir. You work your way out.

Chairman McClellan. What would that termination cost likely be, Mr. Secretary?

Secretary McLucas. I think that would be difficult to estimate until the negotiations are completed.

Chairman McClellan. So, if we do not complete the program, we will be out the $72 million, plus termination costs—for which we get virtually nothing—or we can pay an additional $130 million and get the 12 airplanes?

Secretary McLucas. That is especially correct.

Chairman McClellan. All right, proceed.

FOURTH B–1 AIRCRAFT

Secretary McLucas. Let me complete what I want to say about the B–1. As General Jones says, he wants to talk about that more specifically.

I mentioned we would like to get approval to go ahead with the fourth airplane, and we have been working with the contractor to reach agreement as to what features to include in the fourth airplane. We would like to come over to the Congress in about 2 months to get that approval to begin the development of a fourth airplane.

It accomplishes at least two things. It permits us to build a real prototype for the production and to take full advantage of what we have learned in the test program. Second, it keeps the work force from disintegrating. If you let a work force completely fall apart, and then you do make a production decision, you have to go out and retrain people. It takes a year or 2 to get people back up to speed. So, we would hope that we could get approval to go ahead with that fourth airplane in about 2 months.

Chairman McClellan. Should we go ahead with the fourth airplane prior to deciding that we are going to procure the plane?

Secretary McLucas. We believe that we should, Mr. Chairman, because of the factors I mentioned. Namely, we don't want to go into a production decision with a plant closed down. The production on the first three aircraft will be finished very shortly. Then the work force will leave. Then if we made a production decision, we would have to go out and rehire a new force.

Chairman McClellan. Were four planes contemplated in the original planning of this program, or only three?

Secretary McLucas. Well, there is a bit of long history there. Originally the program included five R. & D. aircraft.

Chairman McClellan. So, we are not exceeding the original number planned in the development program.

Secretary McLucas. That is right. At a later stage I should say we felt that we would go with three and develop enough flight test data with those three to decide what to do next.

But, on further reflection, this question of closing the plant came up. At that point we said, you know, we were not very smart to cut back to three.

Senator Young. How big a work force are you talking about?

Secretary McLucas. I am talking about 3,000 to 4,000 people.

Senator Schweiker. Did you mention the cost of the fourth model?

Secretary McLucas. I didn't mention it.

Senator SCHWEIKER. How much would that be?

Secretary MCLUCAS. All together it will cost about $280 million.

Senator SCHWEIKER. For the fourth prototype?

Secretary MCLUCAS. Yes, sir.

Senator SCHWEIKER. Thank you.

Chairman MCCLELLAN. The three you already have cost $2 billion, an amount that includes a good deal of research and development as well as simply building the three planes.

Secretary MCLUCAS. That is right.

Chairman MCCLELLAN. You would get a fourth one for $280 million?

AIRBORNE WARNING AND CONTROL SYSTEM

Secretary MCLUCAS. Yes.

I would like to mention what I might call our second most important development program, which is the AWACS or E–3A airplane. AWACS stands for Airborne Warning and Control System.

Senator INOUYE. That is the Executive plane?

Chairman MCCLELLAN. We have before us a table showing the highest cost programs but it doesn't include the E–3A. What is the one you are talking about?

Secretary MCLUCAS. It is called the E–3A.

Chairman MCCLELLAN. All right, proceed. Give us the background and present status of this project.

Secretary MCLUCAS. The E–3A is a Boeing 707 airplane with a large radar antenna on top of it and a very large radar inside of it. In addition to the radar it has extensive communications and other electronic systems, computers and displays. It is a flying platform with a complete radar system on it, and all the other communications which are needed to allow the people in that airplane to control the air movements of large numbers of our fighters and other types of airplanes.

We started development of this airplane in 1970. The development has gone very well. The first requirement that I know of for this airplane was written in 1963. It has been updated many times, but we have always had the requirement for an airplane with a large radar capable of seeing fighter aircraft and other aircraft over land, and thus be in a position to assess the situation with respect to friendly and enemy aircraft, and to detect the intrusion of enemy aircraft, and to control an air battle.

One of the biggest hurdles to overcome was to build a radar that can see airplanes when they were flying over land. You know that radar gives you a return from the ground as well as from other targets. Flying over normal terrain, any ordinary radar gives you such a strong ground reflection that you just cannot see small things like airplanes.

So, we worked for years and finally perfected a technique for detecting an airplane flying over land. This is done by taking the differential velocity of the airplane over the ground, so that we blank out anything standing still. We look only at moving targets, and moving targets are typically airplanes.

Chairman MCCLELLAN. Is this for detection of airplanes and discrimination of targets?

Secretary McLucas. Yes, sir. We cannot detect another airplane in the air if it is flying low over land unless we use a special kind of radar, which we have finally developed. We think it is the first in the world. We don't know anyone else who has a technique similar to this. We have incorporated that same technique in the F–15 radar, thus allowing it to see small targets over land.

Senator Schweiker. Isn't part of that because you have line-of-sight transmission and your airplane is in the air and the radar is on the ground?

Secretary McLucas. It is comparing the utility of an airborne radar versus a ground radar. The ground radar looking at targets is limited by the horizon. The radar in the air has a much bigger view of the world.

Senator Schweiker. Suppose the plane is in the air and the Rocky Mountains are in front of him. He would not see the plane even if it is moving on the other side of the mountains, would he, even in the air? If the plane is not over the mountain level, he would not see it.

Secretary McLucas. If it was in the radar shadow of the mountains, he would not see it. But the AWACS would be typically flying at 30,000 feet, so it would be looking down.

Senator Schweiker. So the key is that you are getting a radar station in the air that can look behind the mountain.

AWACS USE IN CENTRAL EUROPE

Secretary McLucas. Yes, and can see out [deleted] miles in all directions. So you can paint a picture of the air battle out to [deleted] miles. Obviously, this has many uses. One use is, if you have some sort of engagement in Central Europe or wherever and enemy aircraft are coming toward us, we can detect them and decide what to do earlier than if we were relying on ground-based radar which cannot see out to those ranges. Second, ground radar is very vulnerable because its position is known. It has been there for years. It is highlighted on the enemy target maps, and one bomb can knock it out.

We think the AWACS is a big advance in allowing us to keep track of the air situation in either a major war such as might occur in the NATO area, or for contingencies whether in the Middle East or elsewhere.

Chairman McClellan. Even from our side of the battlefield the E–3 can see behind the enemy lines?

Secretary McLucas. Yes; and it can see out several hundred miles. It is an entirely new type of capability. It has never existed before. We would like to exploit this capability by buying a force of these airplanes.

Chairman McClellan. How many do you contemplate buying?

Secretary McLucas. We have three research and development airplanes.

Chairman McClellan. You have three completed airplanes?

Secretary McLucas. The first one is completed, and the other two are nearing completion.

Chairman McClellan. Have you flown it?

Secretary McLucas. Yes, sir.

Chairman McClellan. Have you tested it?

Secretary McLucas. We took it to Europe, for example, in April 1973. That is roughly 2 years ago, when the plane first became available for flight test. During the ensuing 2 years we have flown it against more and more severe environments. We tested it very adequately, we think.

There is some controversy with the GAO because they say that still more tests are needed. We say we can always test further. If someone says conduct three tests, and we do that, they say we should have done six texts. When we do the sixth, they can say they want three more. We are in that position. We think the airplane has been very thoroughly tested.

In the fiscal year 1975 budget we got approval to procure six airplanes. At the request of the Congress we have not gone on contract for those six except to fund long lead items.

Chairman McClellan. How much has been spent on this plane?

Secretary McLucas. Over $800 million has been spent in the R. & D. account to date.

Chairman McClellan. How many planes do you contemplate procuring?

Secretary McLucas. The number that we have in our planning is 31. We had six, as I say, approved for procurement in the fiscal year 1975 budget. We are asking for six in the fiscal year 1976 budget.

Senator Schweiker. How much is that in dollars?

Secretary McLucas. The fiscal year 1976 budget request for procurement and initial spares is about $490 million.

Senator Schweiker. Your total program would be how much?

Secretary McLucas. $3.7 billion before the program is completed in 1980.

Senator Inouye. At that stage what would be the unit cost?

Secretary McLucas. If you measure it on unit cost, it would be $111 million a copy.

Senator Young. Is the new radar capability similar to the ABM in North Dakota? I think the range of that radar is far greater than anything we had before, isn't that true?

Secretary McLucas. That is true; yes, sir. Of course, that is a ground based radar looking for missiles out at very long range.

Senator Young. What is the range?

Secretary McLucas. It would be [deleted] miles.

Senator Young. I visited the site and they indicated to me they could see the [deleted] away.

Secretary McLucas. Yes, sir. Of course the AWACS radar cannot be that heavy, and that massive, and that powerful.

Senator Young. But there are a lot of new techniques and capabilities in the development of radar?

Secretary McLucas. Yes, sir.

BENEFITS OF AWACS

General Jones. Mr. Chairman, may I add something on AWACS?

Chairman McClellan. Yes, of course.

General Jones. One, it is very controversial, especially with the GAO report. As to whether or not it can be jammed, any radar can be jammed. But all will agree this radar is much, much harder to jam

than any radar we have ever built. If the criterion is that it cannot be jammed, we would never have built the Hawk missile, or a Nike missile or any other system that depends on radar.

There are measures and countermeasures. There are other factors involved.

Secretary Schlesinger recently sent to Congress a letter that certified, it was cost effective, after very deep evaluation and independent review by people outside the Department of Defense, headed by Dr Smith of the University of California. I would certainly invite anyon interested in the program to talk with Dr. Smith, who has had no connection with the Department of Defense, but has looked at AWACS in great depth.

We believe AWACS will provide a great return for the cost. And the unit cost is very sensitive to the number you buy. When you buy 31 or less, relatively small change in the R. & D. cost makes for a great change in the unit program cost. But the one thing that makes us feel that it is probably the most cost-effective system in the program of the Department of Defense and that is my judgment, is that it makes almost everything else work better.

Illustrations: In the Cuban crisis, the airplane as now configured with its current maritime and shipping surveillance capability could have surveyed the whole area around Cuba and the southeast of the United States for movement of ships, friend and foe, and immediately provided a report on the entire situation. Or in Southeast Asia we would have many airmen alive today had we had AWACS. There are many places around the world that we can use it, including NATO.

There are only certain parts of the mission that are controversial, but the debate has been on them. I think we have a good story in that area. Even if the capability were degraded in one area, there are many other capabilities that will be helpful not only in the air, but on the ground and at the sea. We have strong support. The Army is particularly interested in the AWACS to help in the control of the ground battle through techniques which relay signals through the AWACS.

What it does it make billions of dollars of other equipment work better. That is basically what we base our case on for AWACS, not on strictly being able to control one fighter intercepting another, although it has that capability. The controversial issue tends to be associated with that capability when it occurs over the enemy's territory.

CONTROVERSY OVER JAMMING AWACS RADAR

Chairman McClellan. If this radar can be jammed then the plane is useless, is it not?

General Jones. No, sir. For example, the biggest controversy concerns ground jammers, because an adversary can deploy lots of them along the FEBA. Now, the airplane can move from the FEBA or drop in altitude back to where the jammer is below the radar horizon. The only thing you are losing then is a very small area. You position AWACS where the jammer is below the radar horizon and the jammer can't see you and jam you. You still see everything in your own territory. For example, in Europe, the only thing you are missing when you get below his jammer by going out over the English Channel or going down in altitude is a small area over enemy territory. This is all you are losing caused by the ground jammer.

If the Soviets had AWACS, I wouldn't know how to jam it if it were over Warsaw, Poland.

Chairman McClellan. Over where?

General Jones. Our having an AWACS over the English Channel would be comparable to the Soviets having a Soviet AWACS over Warsaw, Poland, and if I, an American in Western Europe, were trying to jam a Soviet AWACS—and they don't have one anywhere near as good an AWACS as ours, but let us suppose they did—I don't know how, with current American technology, or projected American technology, to do jamming very well against that AWACS.

Now our technology is far ahead of theirs. To try to find a needle in the haystack outside of my radars' depth looking into their territory, and trying to find it and jam it, or destroy it, would be almost impossible as the AWACS radar beam only gives out a signal as it comes around about once every 10 seconds. We have had trouble in the Air Force trying to destroy radars on the ground, and with one that is moving at 400 knots with an antenna that is rotating, would be a very, very difficult process especially if AWACS is orbiting over the English Channel, back from enemy territory, to try to find it.

But there are things we can do to counter that jamming. Chaff, which we used heavily in World War II, is also used heavily by the Soviets. This is tinfoil that falls slowly and can jam today's radars. During the invasion of Czechoslovakia they dropped chaff massively to jam radars, and thus mask their operations.

Because AWACS filters out anything that is not moving at a good speed, it looks right through this tinfoil. So that type of jamming is not effective.

If they use other jamming techniques, there are other ways we can counter them. If I had a high-powered flashlight and pointed it in your eyes to blind you, I would not be sure whether you are really blinded, especially if I can't see your reaction.

But here is another AWACS over here, and in Europe we would have at least two airborne at one time. This airborne jammer might be directing heavy jamming at one AWACS. The other AWACS can see crossways and help out if one AWACS is jammed. Further, we think it would be very difficult to find AWACS with a high-powered beam.

There are other things we can do to counter. It is a very complicated situation. The only thing we say is that even if the areas that are controversial are stipulated and granted, we think that for worldwide application not only in Europe but Southeast Asia, Korea, Cuba, any crisis we have had since World War II, it could have made a significant contribution.

When we had it in Europe for demonstration, we flew it in the Eastern Mediterranean. We watched airplanes of [deleted] all operating. We watched the [deleted] do reconnaissance; not during the war, but in April 1973. We watched the [deleted] doing reconnaissance [deleted] at low altitude. We get a tremendous vision of the whole picture.

AWACS UTILITY TO BATTLEFIELD COMMANDER

My greatest problem in all my years in Europe as a senior commander and working with other NATO senior commanders, civilian

and military, was getting a good picture of what was going on. It is very, very difficult.

In Czechoslovakia, as an example, the first word we got that Soviet troops were on the ground in Prague was when a young officer there saw aircraft overhead, went to the airport, saw the men get out of the airplane, and then called collect on the telephone from a telephone booth. I am not saying we could have done anything different had we been able to see what was happening, but it is just a point of information.

I think if we have this information we may be able to prevent some conflict, or prevent unwanted or unnecessary escalation.

One of my concerns about a conventional war in Europe is the retrograde or the movement back of our [deleted]. With AWACS, I can envision a system where you could put a beacon in a convoy of [deleted] have the beacon send a code to the AWACS, and see it displayed there.

The beacon can have codes that say, "I am locked up," "I am on alert," or "I am moving out." You can have one of these small IFF sets—we have thousands in the military—and send a code saying, "We are in great shape," or "We have been bombed, we are out of commission." You can send a simple code. Code 111 could mean that the runway is closed.

You can get that tremendous picture of what is going on. For example, what is the status of your Hawk surface-to-air missiles? One of the problems of SAM defense is that the enemy can attack the radar when it is on the air. AWACS, back to the rear, can watch airplanes coming in before the Hawk can see them, because the aircraft may be behind a hill. AWACS can project that signal to the ground on the [deleted].

We conducted some tests with some Hawk units where the [deleted] stayed off the [deleted] from AWACS. When the [deleted].

The potential, having been a commander in Europe when we brought the demonstration airplane over, almost boggles the mind as to what it could do for all the force, even in the noncontroversial areas.

I would say that its contribution to defense is very great. Maybe that is one of our problems. AWACS can do so much, and because it can't do everything perfectly there are areas that people can concentrate on to criticize the system.

It is not perfect, but I would equate our capability in radar controls today at about 10 drops in the bottom of that glass of water. The current AWACS will bring it up to three-quarters full.

I will grant that there are things we can do in enhancement that can fill the glass more. I am saying that even if that water cannot go any higher this system is one of the best things we have ever invested in.

Chairman McClellan. The AWACS system?

General Jones. Yes, sir.

Senator Schweiker. Where do you say we are on the glass?

General Jones. In Europe, about 10 or 15 drops in the bottom of the glass without AWACS. With [deleted].

To me, we have a far greater combat capability in Europe than most people believe. I believe that NATO can give a good account of itself. The one area I have greatest concern about is not in weapons systems. It is the ability to command and control those systems.

The first thing you need is eyes. The weakest part of the NATO command and control system is the lack of eyes to see what is happening, to see movements, to get warning, and I don't mean just tactical warning, but the deployment of units.

We do very well with our signal intelligence, but our eyes are very limited. In wartime I would say we would be blinded very quickly. Those radars were developed under the old strategy, primarily for warning against nuclear attack. What we wanted was peacetime surveillance and initial warning that somebody was coming.

AWACS TEST IN EUROPE

That to me is the greatest deficiency that we have. One AWACS can really see far more. As an illustration, flying with our allies in the AWACS, senior military and some civilians, and flying over West Germany, I was watching airplanes land in [deleted] down all through West Germany, [deleted].

It came home to me how small Europe is, and especially to our allies who think Europe is pretty big.

Senator INOUYE. I thought the radius was [deleted] miles.

General JONES. It can see anything near the ground for about [deleted] miles and you can see higher targets beyond [deleted] miles. Europe is a very small area. [Deleted] is less than [deleted] miles from West Germany, for example.

Senator INOUYE. Can you see motor vehicles on the ground?

General JONES. No, sir. We gate the low-speed targets out; I think about 70 knots was the lower limit. Anything moving less than 70 knots, we could adjust that in order to get rid of trains. We know because we picked up a few Mercedes and BMW's over there at times. There are ways you can tell.

Senator INOUYE. You can't see troop movements?

General JONES. No, sir, not without beacons.

One last point. One of the problems in air support we had in Vietnam, and I am sure others who have been in conflict know that, was to have up-to-date information of where the forward edge of the battle area was located. In Germany we took, in cooperation with the Army, quite a few Army jeeps with them. The beacon is not susceptible to the type of jamming we have been talking about. Besides, there are countermeasures you can use against beacon jamming. This little IFF set was put on a jeep and simulated that the jeep was a battalion command post. Then we put them up along the border, actually just west of the border and we would interrogate them. An IFF does not transmit except when you interrogate it. You send a code down and it sends a code back. Displayed on the AWACS radarscope is a little dot for every one of those battalion command posts.

With the IFF system as we are developing it, the IFF can send back a different code for each battalion, just as we do with our commercial air traffic today. You can assign different codes to identify separate airplanes. So you could have a code identifying each battalion or the condition of that battalion. You could interrogate each IFF and get a quick response back on the radar display. By interrogating many command posts, we would know where the forward edge of the battle area is located—continuously. If a battalion is missing in this code check, then you know which one to look for.

There are countermeasures you can take against IFF. On the other hand, because the IFF beacons are all in our territory, the countermeasures are easier for us than they are for the enemy because he has to reach into our territory.

All I am saying is that the AWACS has tremendous application to coordinate and control land, sea, and air forces. We have not articulated our story as well as we could have.

Senator SCHWEIKER. The IFF has been around—I was repairing that in the Navy. That is an old system. You are just saying you are using the IFF in the new system?

General JONES. Yes, sir.

Senator SCHWEIKER. You could find a lot of things out with IFF, itself, from an airplane?

General JONES. We don't have the airborne system now to project the overall battle situation.

Senator SCHWEIKER. You can trigger IFF's from a lot of other places.

General JONES. Yes, sir. What I am saying is that as one of the applications of AWACS, we could trigger multiple IFF's and get a broad picture of the area. Now we can trigger them one by one with other systems. We are not saying just this IFF application is the whole AWACS concept. We are saying that it is one area which could help in the land battle plus telling us what the air situation is.

IFF TO DIFFERENTIATE AIRCRAFT

Senator SCHWEIKER. How do you differentiate between foreign civilian airliners and planes, and military planes? They are not coded?

General JONES. Using IFF codes——

Senator SCHWEIKER. I am not talking ours, I am talking the other side. In other words, you have several planes coming at you, how do you know the difference? Is it a Russian airliner——

Secretary MCLUCAS. Are you talking peacetime situations?

Senator SCHWEIKER. I am saying the important thing to know is what is coming at you. How do you know if it is a civilian cargo plane or a bomber.

General JONES. Today we have the great problem in a conflict that as an airplane approaches a radar the need for identification usually shows up very quickly. It is a needed in a short time. Our Hawk is a good system. However, as an aircraft comes over a hill, we have a very short time for identification. That is one of the problems we have not totally solved. However, we have some procedures to identify whether an aircraft is friend or foe. What we were able to do with AWACS is see the whole battle developing and know which are friendly ones and which were coming in from other areas and [deleted] have an ability to manage the whole battle.

You can't say when all of a sudden the blip shows up here that it is friend or foe unless you have an IFF system working. If you are managing a battle, you should know that flowing from this area are enemy aircraft, and from another are friendly aircraft. This is separate from the IFF business. You have multiple radar scopes aboard with which you can work to manage the situation.

Senator INOUYE. Do the other services consider this a priority?

General JONES. The Army is very much for it. The Navy is interested in it. They have a system today, the E–2, that is not as big, does not have the total capability, and it is best over water. Detecting targets over water is much easier than over land. You can have a lesser problem in order to differentiate ships from the water.

Because the greatest advance with AWACS is being able to track targets over land, the Army is very, very enthused about it. The Navy is interested in it, but they don't have quite the need for it.

Senator MONTOYA. What kind of sophisticated electronic warfare equipment do you have on the plane?

General JONES. By its design it has features that prevent jamming, to make it more difficult to jam. For example, many radars are jammed from what they call, side lobes. These are signals that come up to the sides of the main beam. AWACS is very resistant to side-lobe jamming. We have limited frequency diversification. There are some who say we can have more frequency diversification. We say, fine, but that can be modified as needed. We think it is enough now.

There are two other things. We think that two AWACS aircraft over Europe looking at each other act as a countermeasure. When you look at it airplane by airplane it is a little different story than if you are orchestrating the whole battle.

Mr. Chairman, I am sorry to take so long, but you can see my feelings on this system.

Chairman MCCLELLAN. That is all right. This is a very important matter, whether or not to commit ourselves to this procurement.

You say it costs over $3 billion?

General JONES. Yes, sir.

Chairman MCCLELLAN. We need your help. We have to try to decide what is our responsibility and the best way to meet it, taking into account the security of the country and our economic situation.

We just can't keep spending and spending—if we go broke we won't have any of these things. So, we need to be as selective as our intellect, judgment and wisdom will permit in deciding which weapons we procure.

We have to evaluate these, and we have to depend largely on your judgment. If you have to do without one or the other, which is the most essential? We want you to weigh it in that light.

You will have to explain to us those items you consider to be of the first priority, and you must be able to demonstrate their importance.

You may continue your statement.

FURTHER AWACS HEARINGS

Secretary MCLUCAS. I would like to make two comments on AWACS in closing.

First, there are two hearings already set up. Senator Cannon will hold a hearing on March 6 to look into some of the questions that were raised here about the susceptibility of the system to jamming. We will have expert witnesses there to go into the details.

Chairman MCCLELLAN. What committee will that be?

Secretary MCLUCAS. Armed Services.

The other hearing that is already scheduled is before Chairman Price—his R. & D. subcommittee is having a hearing on March 12

to look into the same question. Both the House and Senate have already scheduled hearings to look at the vulnerability of this system to see whether, as you might say, our side of the story is acceptable to them, or whether the GAO's desire to slow down the program is a better way to go.

Obviously, we feel that the AWACS has reached a mature stage of development, and has demonstrated that it has done this, that we ought to buy at least some numbers of AWACS. The number we have in the budget for fiscal year 1975 and fiscal year 1976 is a total of 12. We think we should buy at least 12 AWACS before we wait indefinitely for the perfect AWACS of the future.

I think if we can get 12 that will give us a capability to operate in a contingency situation such as are quite likely to arise in the next few years. With these eyes and ears, that we don't have now, we could control the action that might develop in these situations.

Senator YOUNG. What plane, the 707 or 747?

Secretary MCLUCAS. The 707.

That is all I intended to say about the AWACS.

A–10 AIRCRAFT

I wanted to mention the A–10, our close air support airplane.

During the past year, we have had the so-called flyoff between the A–7 and the A–10 to see whether the A–10 offers specific advantages in close air support. The results of that flyoff led to our decision that, yes, it does have specific advantages and that we would prefer to procure it in quantity for our force. We have funded for 22 aircraft in the fiscal year 1975 budget. We would like to procure 61 aircraft in the fiscal year 1976 budget.

The A–10 is the first aircraft program to which we applied the so-called design-to-cost concept. We set a limit. We said the airplane will not be allowed to cost more than that. If people think of wonderful things to do to improve it, we are not interested. We are going to hold it at this cost. The cost that was set was $1.7 million in fiscal year 1970 dollars, and we intend to hold it to that cost and not add any special features to it that would drive it beyond that cost.

F–15 AIRCRAFT

An additional program that I want to mention briefly is our F–15 program. It is going extremely well. I think you probably saw that we set eight world records here last month with the airplane. These were records on time-to-climb, as it is called, how many seconds it takes to get to a given altitude.

This airplane demonstrated not only that specific capability but demonstrated that the F–100 engine in it had reached a stage of maturity such that we have no reason to feel squeamish in the future about whether it has been fully developed. There was a period last year when people said the engine was not ready. It passed the qualification tests. The fact it was able to set these world records is further assurance that the engine is in good shape.

We are now procuring the F–15 at the rate of three per month. We propose in fiscal year 1976 to increase to a rate of nine per month. The

options that we have with the company allow us to procure anywhere from 6 to 12 per month without breaking the contract.

We feel that the airplane has established its role in the Air Force. It does exactly what we thought it would do. It is a great airplane. We would like to step up the procurement rate.

Senator INOUYE. How does it compare with the MIG-23?

Secretary MCLUCAS. It is roughly the same size airplane. The MIG-23 is a swing wing airplane. The F–15 is a fixed wing. We looked at that feature, whether we should we put in the swing wing or not, and we decided it would add cost and complexity, and that it was not needed. The turn rates, accelerations, most of the measures of performance we use to compare the two airplanes would show that the F–15 is significantly superior to the MIG-23.

Senator INOUYE. The Soviets don't have anything that is better than the F–15?

Secretary MCLUCAS. No, sir. The Soviets have a faster airplane, called the MIG-25 Foxbat, but it is not a fighter in the sense that the F–15 is. The F–15 is a very agile plane. It can speed up and slow down quickly. It can turn very rapidly. The MIG-25, although it flies somewhat faster and higher, is not a fighter. It just flies a straight line essentially. It is more like our SR–71.

Chairman MCCLELLAN. What use does it have in combat then?

Secretary MCLUCAS. We are not sure. It is used for reconnaissance. It does have a long-range missile. It would probably be used more as an interceptor than as a fighter.

Chairman MCCLELLAN. All right.

Secretary MCLUCAS. In any case, the F–15 has been doing an excellent job of meeting its milestones. We are very glad that it has been introduced into the inventory. We accepted some of them at Luke Air Force Base recently. We will start building up from there, increasing the number in the inventory as they come off the production line.

F–16 AIRCRAFT

I want to mention briefly our F–16 airplane. As you know, we had a lightweight-fighter competition. People call it the "arms deal of the century" and so on. A little over a month ago we made a selection between the YF–16 and the YF–17. We chose the F–16 to become what we call the air combat fighter. The term we used before that was the lightweight fighter.

In any case, we had a prototype competition between the two, the YF–16 is built by General Dynamics and the YF–17 built by Northrop. We conducted the competition, and we decided that the F–16 was a better flying airplane.

Chiarman MCCLELLAN. It is a single-engine plane?

Secretary MCLUCAS. Yes, sir; it uses the same engine as the F–15.

Among the reasons why we chose the F–16, by the way, is because it uses that same engine. It is an engine that is already in our inventory, so we won't have to train technicians on the new engine. We won't have to start with a dissimilar engine.

Chairman MCCLELLAN. It is intended to have one plane for both the Navy and the Air Force, is that right?

Secretary MCLUCAS. We are not sure, Senator.

Chairman McClellan. That was the original plan, was it not?

Secretary McLucas. That was the intent. The Navy was asked to look at the two airplanes that were in competition in the Air Force, and they are still looking.

Chairman McClellan. You have made a decision with respect to the Air Force plane, but not the Navy plane?

Secretary McLucas. That is right.

Chairman McClellan. The Navy could well get the other half of the contract?

Secretary McLucas. It could happen that way. From what I have heard. I am not too close to it. In the next few months, they should be ready to make a decision.

Chairman McClellan. So we are moving toward a decision as to whether Northrop will build the Navy version of the 17; is that right?

Secretary McLucas. That is right. We think many of the factors that led us to decide in favor of the F–16 would not apply so specifically to the Navy. So, their decision might be the same as ours, or might be different.

Senator Inouye. Like the F–14 and the F–15 problem.

Secretary McLucas. That is right. It is similar.

NAVY AIR COMBAT FIGHTER

Senator Schweiker. Isn't the Navy pretty well leaning toward the other model, and we will have separate planes? The preliminary data indicates they want the other plane?

Secretary McLucas. That may be the information you have. I hear all kinds of rumors. I don't know that I could say they are leaning or that it would be appropriate if I said they were leaning.

Senator Schweiker. There was some criticism that the Air Force went ahead without conferring with the Navy.

Secretary McLucas. I will be glad to respond to that because it is not true. We went through our analysis of which airplane was better for the Air Force. During the final month or so of that period we went back to the two contractors and solicited, on behalf of the Navy, Navy versions of those airplanes. When the proposals came in, they were sent to the Navy for their own analysis, and we looked at them too.

In some cases we decided that some of the features that had been offered to the Navy would improve the Air Force plane. We conducted this analysis and we had Navy people sitting in with us, the Navy doing their analysis, with Air Force people sitting in with them. The Office of the Secretary of Defense was looking over the shoulder of both services. They had a number of people who looked at what we were doing.

We finally got to the point where we were prepared to make a decision. We said the F–16 looks better for Air Force requirements. The Office of the Secretary of Defense raised the question; yes, but we don't want you to go ahead until the Navy situation is resolved, unless it can be shown that it is better for you to go this way irrespective of how the Navy goes.

To make a long story short, that is the way the analysis came out—that it would be cheaper overall for the Department of Defense for

the Air Force to buy the F–16 even if the Navy bought the YF–17, than if the Air Force and the Navy both bought the F–17. Of course, the least expensive course of action would be for both the Air Force and Navy to procure the F–16.

Senator SCHWEIKER. The F–17 is a twin engine, and the F–16 is a single engine.

Secretary MCLUCAS. That is right.

I stress the fact that the F–16 has the same engine as the F–15 because as the Navy looks at the problem they will see an entirely different situation. They don't have the F–15 engine in their inventory. So they would not have that factor driving them in that direction.

I believe they prefer twin engines, operating as much over water as they do. So they have a somewhat different view on that score. The F–17 is a heavier airplane. Maybe that is not as important to them.

Chairman MCCLELLAN. Is there some advantage to a twin engine in landing on an aircraft carrier?

Secretary MCLUCAS. Not specifically. However, they may consider it a safer airplane because if one engine goes out you have another one.

Senator YOUNG. I think there are some other differences as I understand it. If this plane were to be used, the F–16, by the Navy, you would have to change the frame for landing purposes.

Secretary MCLUCAS. They certainly would, because a Navy landing is a much harder landing than an Air Force landing.

Senator YOUNG. Unless you went ahead with the B–1 you would have another problem of one engine manufacturer having a virtual monopoly.

Secretary MCLUCAS. There is that consideration too.

Senator YOUNG. There would be no competition left in engine manufacture.

Secretary MCLUCAS. That is right.

Senator YOUNG. In the B–1, General Electric would make the engine.

F–16 SALE TO NATO CONSORTIUM

Secretary MCLUCAS. Pratt & Whitney makes the engine we are using in the F–15 and F–16 and General Electric makes the Northrop airplane's engines.

In any case, we are ready to proceed with the full scale development of the F–16. We have a contract with General Dynamics. We are now working with them on what you might call fine tuning the development program right now. We are ready to agree with them on the specific design features and have begun the development. The Navy, as I indicated, should come along with a decision in the next few months.

We have a four-nation consortium of our European allies that are also looking at the F–16. The team happens to be in Washington right now working with our people and looking at whether this airplane suits their purpose. We are very optimistic that they will choose the F–16 for the four NATO countries.

In addition to those countries, we feel that there are a number of other countries both in NATO and other parts of the world who would be candidates for buying the F–16. So, as we look at the potential total

buy of the airplane, first of all we plan to buy 650. We would hope that the four nations in Europe would buy 350; that is 1,000 total. We think there is a market for about another 2,000 of these airplanes for a total of 3,000.

So, we believe that we have developed a very attractive airplane that will appeal to many air forces. We would hope that our NATO allies would buy it because it would achieve a higher degree of standardization in NATO weapons than we have been able to achieve in the past.

Of course, if they buy it, it will help us not only in standardization but also in two other ways. We would have longer production runs which would mean that our airplanes would cost less.

Chairman McClellan. Also it helps employment over here.

Secretary McLucas. It helps employment.

Chairman McClellan. Doesn't selling this plane to other countries help us recoup the research and development costs?

Secretary McLucas. Exactly. That is the second point I wanted to make.

Chairman McClellan. We do add that to the sale price of this plane.

Secretary McLucas. That is right.

Senator Montoya. How do we recoup it?

Secretary McLucas. By a surcharge.

Senator Montoya. Do we give it back to the Treasury, or does that reduce the cost to us of the planes that we purchase? How do we recoup the research cost?

Secretary McLucas. The money comes back to the appropriation which initially financed the development of the aircraft. These funds are then used to reduce the financing of new research and development appropriation requirements.

Chairman McClellan. Who makes the sales—the manufacturer, or the Department of Defense?

Secretary McLucas. The Air Force makes the sales with the approval of the Department of Defense and State. It is a government-to-government agreement.

Chairman McClellan. That money comes back to our Government, not to the contractor?

Secretary McLucas. Exactly. The money goes back to the appropriation which initially financed the sale through its reimbursed accounts. It is negotiated by the Secretary of Defense in each case. The policy in the Department of Defense is that we will recoup a fraction of the research and development cost every time we sell one of these systems.

Chairman McClellan. The Chair might state that we expect to have a special hearing on these foreign sales. We want to find out how our policy is established, how the sales are handled.

Proceed, Mr. Secretary.

Secretary McLucas. I would like to go on briefly concerning the Minuteman.

Chairman McClellan. It appears that we will not finish before noon. I have an engagement at 12 o'clock. I can be ten minutes late. Would you be willing to come back this afternoon and let us finish up?

Senator INOUYE. I don't think this will take too long, but there has been some controversy on the Air Force Advanced Airborne Command Post. Are you going to skip that?

Secretary MCLUCAS. No.

Senator INOUYE. The Minuteman will take a long time.

ADVANCED AIRBORNE COMMAND POST

Secretary MCLUCAS. I had not planned to take long on the Minuteman. But we can talk about the Advanced Airborne Command Post.

Chairman MCCLELLAN. All right, we will continue until 10 minutes after 12. How much longer do you think it will take you to make your full presentation?

Secretary MCLUCAS. I can finish in 10 minutes.

Chairman MCCLELLAN. All of yours?

Secretary MCLUCAS. Everything I planned to say.

General JONES. Mine will only take 15 minutes total, plus any questions.

Chairman MCCLELLAN. All right. We will go on then. If we are near the end we will try to finish. Go right ahead.

Secretary MCLUCAS. It was suggested we mention briefly the Advanced Airborne Command Post. This is an airplane we call the E–4. We have taken delivery of the first one at Andrews Air Force Base. If you go out there you will see a 747 airplane which is our first large airborne command post. We have seven of these aircraft in the program; one in R. & D. and six in procurement. Three have been bought in the interim configuration which is essentially the configuration that we had when we used the EC–135's. In other words, it has the electronics in it that were in that EC–135 airplane. The fourth one is being used as the prototype for an Advanced Airborne Command Post which would include new features, like satellite communications terminals, some data processing equipment, and so forth. That program is underway right now at Boeing.

The plan is that once the fourth one is fully developed the remaining three will be built in that configuration. Then we will go back and retrofit the first three.

Now we have discovered in the last 2 or 3 months that the projected work that was proposed to be done on the advanced Command and Control Communication system will cost more than is in the budget. We are right now trying to decide whether to fall back and not put in all those features, which is the way I am leaning, or to slow down the development to get a better handle on the problem, or to go ahead and buy out the program the way it is right now, and then take the improvements as we can get them from Boeing. Frankly, at this point, Senator, we do not have a position as to which way to go to solve the problem that we know exists.

Senator INOUYE. Who will get all the airplanes?

Secretary MCLUCAS. The aircraft are being built for the National Command Authorities built for the President or anyone he designates, plus his working staff.

Senator YOUNG. Why do you need seven for that purpose?

Secretary MCLUCAS. The program of seven aircraft includes aircraft for the Strategic Air Command. We would make them essentially

interchangeable to be used by the Commander in Chief of the Strategic Air Command and the National Command Authorities here in Washington.

MINUTEMAN

Let me just say a word about the Minuteman. In fiscal year 1975 we bought 61 Minuteman missiles, mainly for training and testing. In fiscal year 1976 we propose to keep the production line open and to buy 50 missiles and then close the line.

Chairman McCLELLAN. Why do you need 50 more?

Secretary McLUCAS. For two reasons, Mr. Chairman. One reason is that we would like to keep the line open. Second, since we are talking about closing the line, that means that we want to keep the missile force viable for another 10 or 15 years, by flying missiles every year to make sure that they still work. With the line closed, such testing would have to be significantly reduced. That is the reason.

Senator YOUNG. You use them up in a test program?

Secretary McLUCAS. That is right. We have to launch several missiles per year to assure ourselves they are not aging or somehow failing.

Senator INOUYE. How many do you fly per year?

Secretary McLUCAS. We fly about a dozen per year or so.

Senator MONTOYA. On page 31 you use the words "to modernize the Minuteman force". Is it actually modernizing, or is it actually replacing obsolescence?

Secretary McLUCAS. I will have to see the context.

Senator MONTOYA. It is on page 31.

Secretary McLUCAS. Those items refer not to buying new missiles but to changes in the ground equipment. First, increasing the hardness of the silos, and second, putting in a new command and control system that gives you better control of the missile.

I would like to conclude, Mr. Chairman, by saying that—of course, the Minuteman is affected greatly by the SALT discussions. SALT continues to be a very important factor in our overall defense picture. We think that it is our job in the Air Force to maintain the existing missile force in as good a condition as we can, and to do whatever research and development is necessary so that the President will have various options available to him.

Included in our research and development budget are two or three improvements to the missile force which could be incorporated if need be in some future year to upgrade the force in various ways. So, we are maintaining that option by keeping that research and development going.

We would hope that the SALT negotiations would lead not only to putting a cap on, which has been done already, but perhaps also to the scaling down of the number of strategic systems that are actually deployed.

Since we don't know how SALT will come out, the only prudent thing that we think we can do is to continue with these R. & D. programs that will allow us to build better missiles either by upgrading the Minuteman or replacing the Minuteman at some later date with another missile.

AIR FORCE SPACE PROGRAMS

I won't mention our space programs except to say that we do have a significant space program going in the Air Force. It is going extremely well. There is really nothing to report there other than our space program is active, successful, and is a significant part of the overall program.

Chairman McCLELLAN. What do you mean by space program?

Secretary McLUCAS. Our satellites. The most important program is our infrared satellite which keeps track of any strategic missile that is launched anywhere in the Northern Hemisphere. It gives us warning [deleted].

Chairman McCLELLAN. I understand.

Secretary McLUCAS. So, to conclude, Mr. Chairman, I will say that the Air Force is in good shape. We think that the appropriations that we have received in the past have allowed us to maintain a good Air Force in good condition and with high morale. We don't think that we have any major development problems ahead of us on the programs that are now under way.

Obviously we do have some problems. Otherwise we wouldn't need money to solve them. I mean we don't have any technical hurdles that we don't think we know how to overcome.

The B–1 is the most critical program. It is flying. It is under test. We don't think we have any structural problems with it. The engines seem to be coming along well. We don't see any technical hurdles ahead of us.

Most of the problems are to get the money programed in our budget and to manage the program in a reasonable fashion. We certainly appreciate your support of our new budget. We recognize your responsibilities to screen our budget, and maybe you will find some things you can't support. We hope that those cuts are not too large.

PRESSURE TO CUT MILITARY BUDGET

Chairman McCLELLAN. Let us assume there may be pressure to cut the military budget by $10 billion. How would that affect the Air Force if we took $3 billion off the Air Force, or $3.5 billion?

Secretary McLUCAS. That would be very hard to accommodate, Senator. We can supply you with whatever information you would like for the record.

Chairman McCLELLAN. We are under the necessity of holding down expenditures wherever possible. Our present pattern of deficit spending—$50-plus billion a year—dictates that every effort be made to reduce spending. But we must reduce wisely.

In the last 3 years, Congress cut the budget by a net of $15.3 billion, with the Department of Defense bearing well over $13 billion of that net cut—nearly 90 percent. There are those who will want you to cut pretty deeply again this year.

I personally feel that we are at the crossroads, where we are going to have to make some very hard decisions. Can we continue making large cuts from our Defense budget and hope to maintain our first-class status as a military Nation? Or, are we going to drift into a second-class position?

It concerns me that we may endanger our military preparedness by continuing our present course. But we must seek ways to reduce this budget.

Secretary McLucas. We would like to work with you, Senator.

Chairman McClellan. We have been cutting Defense nearly 90 percent of all the cuts made in the last 3 years. I don't know that we can continue that indefinitely. This policy will have to be reviewed very seriously.

Senator Young. May I submit some questions for Secretary McLucas to answer?

Secretary McLucas. Yes, sir.

Chairman McClellan. We will be calling on you for answers to other questions, as they arise.

Thank you.

Statement of Gen. David C. Jones

General Jones, if you are ready to make your presentation, we can have your statement printed in the hearing record, and you may discuss any or all of it with us now.

Chairman McClellan. We will place your biography and statement in the record at this point.

[The biography and statement follow:]

BIOGRAPHY OF GENERAL DAVID C. JONES

General David C. Jones was appointed Chief of Staff of the United States Air Force on July 1, 1974.

General Jones began his military career in April 1942 when he enlisted in the U.S. Army Air Corps and, in February 1943, received his commission and pilot wings. His early service included duties as a flying instructor with both active and reserve forces and as a rescue pilot in post-war Japan.

He has served in operations and command positions at squadron, wing, and headquarters level with the Strategic Air Command (SAC) and Tactical Air Command (TAC); held staff positions at Headquarters USAF, and commanded the Second (now Eighth) Air Force (SAC).

In combat General Jones was assigned to a bombardment squadron during the Korean War and accumulated over 300 hours on missions over North Korea. In 1969, he served in the Republic of Vietnam as Deputy Commander for Operations and then Vice Commander of Seventh Air Force.

In Europe, he served with the United States Air Forces in Europe (USAFE) from 1965 to 1969 successively as Inspector General, Chief of Staff, and Deputy Chief of Staff for Plans and Operations. After a two year absence, he returned to Europe as Vice Commander and then Commander in Chief of USAFE. Concurrent with his duty as Commander in Chief, General Jones also commanded the Fourth Allied Tactical Air Force.

General Jones was born in Aberdeen, South Dakota, on July 9, 1921. He graduated from high school in Minot, North Dakota, in 1939 and attended the University of North Dakota, and Minot State College. He is a graduate of the National War College and was awarded an honorary doctor of humane letters degree from the University of Nebraska at Omaha, in 1974.

STATEMENT OF GENERAL DAVID C. JONES

It is a great privilege for me to join the Secretary of the Air Force in presenting the FY 1976 Air Force Posture Statement. As you know, I have served as Chief of Staff of the Air Force for less than a year and this is my first opportunity to testify before this distinguished Committee on the full range of key issues which affect the Air Force's contribution to national and international security. I welcome this opportunity because I believe it is vitally important that the members of Congress have the fullest possible access to the professional military judgments pertaining to U.S. security interests and capabilities.

Therefore, my statement today will feature neither "handwringing" nor "saber rattling." Moreover, I will not presume to deliver an abstract presentation on foreign or defense policy. None of these approaches appears appropriate and there is a much more positive and meaningful message for me to convey on this occasion, namely, the status of Air Force peacetime management and wartime combat capability, each in the context of our perception of the threat. I believe you will find the message encouraging, but not without some solemn concerns in the light of external and internal problems which the country faces.

The members of this Committee are well aware of the rapid expansion of Soviet military strength which proceeds despite an era of detente and negotiations on the control of arms. At the same time, we are witnessing an array of international economic and political crises, increasing interdependence, and growing worldwide demand for resources. Domestically, we are in the midst of a stubborn recession

coupled with serious inflation which has greatly eroded the purchasing power of the dollar. Obviously, a statement on the Air Force posture would be meaningless in isolation of these world conditions. Our framework must also include the nation's commitments both at home and abroad, the contribution of other United States military forces and those of our allies, the expressed intent of the Congress, and guidance from the President and the Secretary of Defense. This statement presents my judgment of these factors as they impact upon the level and cost of Air Force programs.

II MANAGEMENT INITIATIVES

Of the problems mentioned above, it would be a difficult and complex judgment to select any one as the most serious. However, from the standpoint of "clear and present danger" to U.S. vitality, it seems obvious that the problems of our domestic economy must be high on the list. In the context of today's discussions, I would judge that the impact of inflation on defense buying power represents a greater and more immediate threat to our military capability than any other single factor. For example, the proposed Air Force budget for FY 1976 is 5.9 billion dollars larger than the one for FY 1967, yet this "larger" budget represents 38 percent less purchasing power than we had ten years ago.

Although current rates of inflation are at record peaks, the basic problems of rising costs and reduced buying power have, of course, been with us for some time. The Air Force has long recognized that, if we were to continue the modernization necessary to support the American position of Free World leadership, a substantial part of the necessary

resources would have to come from internal efficiencies and economy measures. For a number of years, we have been undergoing a continuous process of belt-tightening, motivated partly by the need to fund some of our modernization out of our own hide and partly by our obligation to perform our mission as efficiently and economically as possible.

I would like to summarize some of the more significant of these past and present initiatives, Mr. Chairman, for two important reasons. First, we have taken these actions in measured and prudent stages over the years, without a great deal of publicity or fanfare. Consequently, their aggregate impact may not be recognized in full by all the members of this Committee. More important, though, the Air Force is accountable to Congress for the efficient management of resources appropriated for us and I believe this Committee is interested in assessing our "track record" in this regard.

From a resource standpoint, people are not only our most important asset but also our most expensive. Well over one-third of our budget (38 percent) is devoted to personnel costs alone. Therefore, our most significant savings have come from manpower reductions, which we have been able to accommodate (while enhancing our overall combat capability) largely by capitalizing on qualitative technological improvements, developing a more streamlined organizational structure, and cutting deeply into the "softer" areas of headquarters, support, and other "overhead" personnel. Strength reductions in recent years have been significant.

The FY 1976 force, when compared to the 1968 peak, reflects a decline of 315,000 military and 87,000 civilian personnel, an overall reduction of 32 percent. But the

total percentage drawdown does not tell the complete story. It is generally recognized, when a large organization makes reductions of this magnitude, especially when the reductions come incrementally over a period of years, that reductions in overhead usually lag appreciably behind. Yet during this same eight year period, we will have reduced headquarters strength by over 50 percent, partly by direct cuts and partly by eliminating some headquarters altogether and absorbing their functions in other organizations. While a large share of these headquarters and other support reductions were pure savings, many of the manpower authorizations were "plowed back" into operational units to increase our combat capability.

We have been able to make reductions of the magnitude I have described through a combination of reorganizing, streamlining, and modernizing our management techniques. A few recent examples will illustrate how we have applied this combination.

In Europe, the focus has been on improving the efficiency and combat capability of our NATO-committed forces, while realizing significant economies through improved management techniques and reorganizations. First, peacetime organizational structures were reduced and recast to put them more on a wartime footing. Second, the USAF peacetime headquarters was collocated with the NATO headquarters that would actually command the force in wartime. Third, headquarters were moved out of cities and onto operational bases to improve operational effectiveness.

I believe it is significant that the U.S. Air Force headquarters and associated support manpower in Europe have

been reduced by over 50 percent since 1968, while the total number of air units in Europe remained essentially level. The personnel resources released by these reductions have been reinvested to provide significant improvements in combat capability. For example, a one-for-one transition from F-100s to F-4s and F-111s in Europe substantially increased our combat capability, but also required additional maintenance personnel per aircraft. Manpower savings from headquarters reductions permitted these positions to be filled with no increase in overall personnel totals, while grade levels and personnel costs actually decreased. We are continuing with actions to streamline our management system.

The Tactical Air Command (TAC) has historically been the doctrinal "parent" of our tactical air forces, in the sense that among other responsibilities, TAC is the principal point of contact and coordination with the Army's Training and Doctrine Command, develops and tests combat tactics, trains all our tactical aircrews, and has operational control over the majority of the U.S. based tactical air forces. We propose to move toward broadening TAC's direct role in tactical airpower worldwide by extending its responsibilities to our tactical Air Force units in the Western Pacific. Naturally, command in combat will continue to reside with CINCPAC, the overall joint theater commander. However, we plan to have TAC assume the majority of the Air Force management and support functions, conducted through the senior Air Force commanders in the Pacific.

Besides strengthening the linkage between the Pacific theater air forces and the Tactical Air Command, this applica-

tion of the single manager concept will enable us to make still further savings in manpower and dollars. Our current plans are to disestablish Headquarters, Pacific Air Forces (PACAF), based in Hawaii. Phasing out PACAF, traditionally one of our larger and more expensive-to-support major command headquarters, will free approximately 2000 headquarters and support personnel for reallocation or reduction, and will save some $32 million annually.

Still other organizations were involved in our consolidation initiatives. In seeking fruitful areas for further savings, we recognized that two of our Major Commands -- MAC and the Air Force Communications Service (AFCS)--had certain key characteristics in common despite their different primary missions. For example, both operate worldwide, frequently at deployed locations with small detachments. Each is a "service" command for customers in the Defense Department and other agencies. Each headquarters devoted much of its attention to caring for and managing the activities of people at distant bases who frequently worked side by side, separated only by differing command lines. Therefore we decided to merge the AFCS field and headquarters functions with MAC and phase out Headquarters, AFCS, as a separate major command. Besides the reductions of over 750 military and 150 civilian positions, we are confident that the airlift and communications missions will be enhanced through the worldwide integration and central direction of these important functions.

An even more dramatic application of this single manager concept within MAC pertains to the prime mission, the airlift business. You are familiar with our three classic categories

of airlift; strategic, tactical, and support. In supporting a national strategy whose implications call for a capability for rapid movement of men and/or supplies quickly over long distances, we are doing everything possible to enhance strategic airlift. We have trained our C-5 crews in air refueling to reduce dependence on enroute bases; we want to stretch the C-141 to increase total capacity at far less cost than by buying more C-141s; and we propose to improve our total oversize cargo capacity through modification of some commercial wide-body jets.

I mentioned tactical airlift earlier, but as we have modernized our aircraft over the years, we have realized that the line between tactical and strategic airlift has blurred appreciably. For example, our C-130s have a strategic capability and can be used in this role (as, indeed, they have been in the past). Similarly, our C-5s and our C-141s have a tactical capability. Therefore, we are transferring all tactical airlift aircraft to MAC -- except, of course, for those in the Reserve forces, which will come under MAC's operational control if called up. The result will be one command responsible for both strategic and tactical airlift roles and for management of resources between them.

MAC's charter has been broadened still further by also picking up responsibility for the third category of airlift I mentioned, support. The aircraft involved -- C-118s, C-131s, T-29s, T-39s, C-97s, etc. -- have some cargo capability, but their main role has been to transport personnel. We have never had them assigned to individuals, but they have been assigned in "ones and twos" to bases around the country for administrative support and proficiency flying.

This arrangement obviously decentralized the scheduling and control and, since many of them are of World War II vintage technology, they have proven increasingly expensive to maintain.

Consequently, we are taking two related actions. First, we are phasing out over 400 of these aircraft, primarily the older reciprocating engine types. Second, we are assigning the remainder to the Military Airlift Command, which will operate and maintain them at a small number of centralized bases. If individuals or groups have travel requirements, they will apply for transportation under MAC-standardized rules. This streamlining will release over 6,000 manpower spaces for increased combat capability, and reduce fuel consumption by roughly 150,000 gallons per day. Naturally, this will result in some increased use of commercial transportation which will require a slight increase in travel funds, but even allowing for offsetting increases, this realignment will avoid costs approaching $100 million per year.

The fuel savings I consider especially important, and we are attacking the problem of energy conservation on a broad front. We are flying half the number of hours today that we did in 1968. In terms of fuel consumption associated with that flying, we are consuming less than half the fuel that we consumed in 1968, yet our total fuel bill is twice as high. Looking at it another way, in comparison to FY 1973, we plan to purchase 28 percent less fuel in FY 1976, a significant measure supporting the national effort to reduce energy consumption. However, this reduced quantity of fuel will cost over a billion dollars more in FY

1976 than the larger amount consumed in 1973. This enormous increase provides additional incentive for reducing fuel consumption to the absolute minimum consistent with maintaining capability and readiness.

We are looking to savings in other areas as well. Life Cycle Costing techniques examine ownership cost along with procurement cost in making acquisition decisions. This factor weighed heavily in our recent selection of the F-16 Air Combat Fighter. We are pursuing a number of fuel and cost saving innovations in training and instructional technology. For example, we plan to invest significantly in flight simulators over the next few years. Although there is, naturally, an irreducible minimum of actual flying training to be accomplished, over the next decade simulators will allow us to train aircrews faster, more safely, more cheaply, and by the mid-1980s, with nearly 10 million fewer barrels of jet fuel burned every year.

To return to the present, though, our FY 1976 budget request reflects a savings of about 2900 personnel from Air Force management headquarters alone and an additional 8500 spaces will be saved from the combined initiatives I mentioned above and other economies. These actions, along with many other manpower realignments, consolidations, and force adjustments, have made it possible to reduce total manpower requirements in the FY 1976 budget by more than 31,000 below the FY 1975 budget appropriation, while maintaining our combat capability.

From what I have said so far, it must be abundantly clear that I am proud of the record of innovation, resource judgment, and tight management the Air Force has established,

and I am determined to sustain and, if possible, accelerate that momentum. We think we have done a serious job of belt tightening in order to maintain the level of modernization needed to keep us on top, and I am grateful to the members of this Committee, and to your predecessors, for the invaluable support you have rendered over the years. It is for that reason, Mr. Chairman, that I wanted to take this opportunity to reinforce the confidence of the members of this Committee that the Air Force's primary interest is to provide the nation the best defense for the dollars appropriated to us. We have made our mistakes, but we try to minimize them, learn from them, and avoid repeating them.

We realize that the economic and military stakes are too high to permit margin for much error. For, if the present economic straits of our country are the most immediate domestic threat to our national security, there are equally perilous forces abroad which also must engage our attention and influence our defense decisions.

III THE STRATEGIC BALANCE

Strategic nuclear deterrence continues to be paramount among the responsibilities charged to the United States Air Force. As noted by Secretary Schlesinger, "Without a firm foundation of nuclear deterrent forces the rest of our power would not count for much in the modern world."

As a member of the Joint Chiefs of Staff, I fully appreciate that this responsibility is shared with the other Services, and particularly with the Navy whose submarine launched ballistic missiles (SLBMs) form an essential element of the Nation's strategic power.

The criteria for structuring strategic forces derive directly from national policy and are transmitted to the Military Departments by the Secretary of Defense. This guidance prescribes that strategic forces must retain an assured retaliatory capability in the event of a massive surprise attack; provide for a wide range of options appropriate to differing levels of provocation and to control escalation; promote crisis stability and stability with respect to arms levels; and ensure essential equivalence in the indicators of strategic power and the capability to implement and maintain a full range of alert and survivability postures that are responsive to political circumstances. Providing forces which satisfy these exacting standards presents an unparalleled challenge.

The fundamental conclusion which emerges from our constant re-evaluation of strategic posture is that the TRIAD of land-based ICBMs, long range bombers, and SLBMs best meets these requirements in light of current strategic tasks and presently perceived threats. It is, of course, impossible to predict with precision what particular combination of systems and capabilities will be required in the future, as present trends develop, new technologies emerge, or new forces come into being. The only certainty is that deterrence will take on broader dimensions.

Hopefully, progress in SALT and other arms limitation negotiations will serve to limit the deterrent burden. In this respect, we can hope that future negotiations will lead to mutual reductions which result in a stable strategic balance at equal, but significantly lower, aggregate levels. However, equal aggregate numerical limits alone, although a

necessary first step which I fully endorse, are not sufficient to ensure equivalence between United States and Soviet strategic forces. Other vital indices of effectiveness, such as throw weight, accuracy, and yield, must be taken into account in measuring relative capabilities. Hence, while completely symmetrical forces are not required, not all asymmetries should favor the other side in the balance. Some balancing of capabilities is necessary to offset the potential represented by the large throw weight of Soviet missiles. Consequently, it is essential that we continue with the Advanced ICBM Research and Development program and the Air Launched Cruise Missile program in order to preserve our options for achieving increased throw weight capability and alternative basing and penetration modes.

For the foreseeable future, the mutually supporting elements of the TRIAD provide an essential hedge against uncertainty. A key aspect of the TRIAD is that it provides the flexibility essential for selective, measured options in response to aggression below the level of general nuclear war. These options are required to deter serious intimidation, coercion, overwhelming conventional aggression, or a limited nuclear attack against our deployed forces or those of our Allies. We are presently taking a number of actions to improve this flexibility, to include the development of highly discriminate targeting packages; improvements in command, control, and communications; and improvements to the MINUTEMAN force such as Command Data Buffer. Let me stress that these efforts simply refine the capabilities which our strategic forces have always had. These improvements promote stability by reassuring our allies and by

signalling to potential adversaries that our response will always be commensurate with the provocation.

Beyond the immediate task of maintaining options for flexible and discriminate response lies the more difficult problem of developing forces which will keep those options viable in the uncertain strategic nuclear environment of the future. Two factors weigh heavily in our force planning. The first is that despite the associated costs, present and prospective limitations on strategic nuclear arms place a premium on maximizing effectiveness through technology, thereby helping to ensure that deterrence can be maintained. The second is the scope and vigor of the strategic programs of the Soviet Union, the most important nuclear power confronting the United States.

Taking into account, therefore, the prospect of future arms limitations, our assessment of prospective Soviet capability, the strategy which our forces must support with respect to that capability, and tradeoffs among the size, readiness, and modernization of our forces, I am convinced that our strategic programs are moving in the proper direction.

Of these programs, the most urgent is the continued development of the B-1 bomber. I recognize the controversy surrounding this program, so I believe it is appropriate to take this opportunity to enunciate the Air Force rationale in supporting the B-1. To appreciate the need for the B-1 -- indeed for any manned bomber -- one must begin with the conceptual premises implicit in our TRIAD strategy.

The cornerstone of this strategy is credible deterrence, guaranteed by maintaining an assured "second strike" capability which would render a successful Soviet surprise

attack impossible. The complementary characteristics of our strategic systems, particularly the bomber/ICBM interaction, deny the Soviets any option for a successful knock out blow against our land-based forces. An apparent enemy ICBM launch would be detected in time to launch the bomber alert force under positive control well before any possible impact on our bomber bases. Moreover, substantial numbers of our hardened ICBMs would survive even a large scale attack. Somewhat less warning time would be available in case of a submarine launched ballistic missile (SLBM) attack, but our bomber alert posture would still deny the Soviets the assurance that the bomber threat could be neutralized. More important, our ICBM force is even less vulnerable to the Soviet's comparatively less accurate SLBMs than to their ICBMs.

Finally, if the Soviets were to contemplate a simultaneous ICBM/SLBM attack, these same considerations would combine to cancel the element of surprise and insure our second strike capability. For example, a simultaneous launch of hostile ICBMs and SLBMs would be ineffective because earlier nuclear impacts from the shorter flight-time SLBMs would provide unambiguous proof of an attack, allowing retaliatory launch of our land-based missiles and surviving bombers. On the other hand, timing an attack for simultaneous arrival of hostile ICBM and SLBM warheads would be equally flawed because the longer flight-time ICBMs would have to be launched first. Here again, the warning provided by our launch detection systems would allow ample time for the National Command Authorities to direct appropriate actions. Moreover, our own SLBM force, the third essential

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leg of the TRIAD, would always remain a further complication for an enemy bent on a first strike.

Complications of a different sort, but equally intractable, are created for a potential attacker by introducing the penetrating bomber into his problem of air defense. The prospect of coping with manned bombers, penetrating on a variety of unpredictable routes toward multiple targets, in a degraded and confused air defense environment, with human intelligence brought to bear over enemy territory, poses extreme difficulties for an enemy planner.

Equally significant is the impact of the bomber threat on military spending of a potential opponent. As observed by Secretary Schlesinger on occasion of the roll-out of the B-1 development aircraft, "The Soviet Union will continuously be faced with the choice of allowing a free ride for bombers. . . Otherwise it must face up to the continuation of very substantial expenditures on air defense. . . .Air Defense is that aspect of the Soviet military posture that this country finds least disquieting and least threatening." Over the past decade Soviet air defense expenditures have exceeded those of the U.S. many times over, and the current disparity, on the order of $5 billion annually, is likely to continue. No one can maintain with absolute assurance that, if the U.S. reduced or eliminated the manned bomber leg of the TRIAD, the Soviets would divert these resources to other capabilities or to the civilian sector of their economy, as the U.S. has done. But the essential points are two, as I see them. First, a continued credible U.S. bomber capability, together with a strong Soviet predilection for massive air defenses, "freezes" significant resources in an area of no

direct threat to U.S. national security, either militarily or economically. Therefore, second, a sophisticated assessment of the utility of the bomber in our strategic arsenal must include not only the capabilities and costs of the system, but also the costs to a potential enemy for defending against it--and the additive capabilities he is thereby denied.

In sum, while land-launched and submarine-launched missiles are essential elements of our strategic forces because of the mutual perception of their deterrent capabilities, their utility (beyond the fact of possessing them in quantity) can only be measured in their use or non-use. In the case of the ICBM, in particular, their deterrent value is static, in the sense that they are always on full alert and the next step above their normal peacetime posture is to launch their warheads irretrievably toward an enemy. The bomber force, on the other hand, has a high degree of military flexibility and political utility short of actual conflict. It can be used actively to influence or discourage a hostile power while minimizing the risk of miscalculation or escalation, even in an extreme crisis. For example, bombers can be generated within a broad range of ground and airborne alert and survivability postures to provide a visible, unmistakable signal of national resolve. Launch of strategic bombers toward their positive control line in a crisis, while clearly an act with grave implications for an adversary, still provides him a margin for reflection on objectives and risks, a margin which could be decisive in averting a nuclear war.

Moreover, the human element gives the bomber the additional capabilities for recall, diversion, and immediate target damage assessment and reporting. Also, while a missile is literally a "one shot" vehicle, the aircraft can be recovered, reloaded and used again if necessary, thereby sustaining deterrence against reattack, encouraging termination, and multiplying its combat potential beyond the mere numbers that impose a finite upper limit on missile targets.

Finally, without in any way casting doubt on the overall missile reliability of either side, I would remind the members of this Committee that the bomber is the only element of the strategic TRIAD which has proven itself in actual combat. Since we are without experience in missile warfare--and I fervently hope we never will reach the point of having to gain such experience--there are many risks and uncertainties in actual performance which no amount of component testing or extrapolation can completely dissipate. Such scientific variables as warhead "fratricide," weather effects, etc., are uncertainties which we have to live with or accommodate. As the one "known quantity" in the strategic equation, the manned bomber provides an irreplaceable measure of assurance in our total strategic posture.

Taken singly, none of the above points argues decisively for a manned bomber. Taken together, however, the unique advantages I have mentioned lead logically and, in my judgment, inexorably to the conclusion that the bomber must remain an integral part of the U.S. strategic deterrent for the foreseeable future. Since the top civilian and military leadership in the Air Force is unanimous on this point, I felt it appropriate to articulate the logic which produced this

judgment. Also, I wanted to assure this Committee that the Air Force has thought through the strategic and resource implications of our position, rather than succumbing to the "follow-on syndrome" which argues that possession of a system automatically produces the requirement for a replacement.

Nevertheless, reasonable people may accept the logic of the TRIAD and still harbor reservations about the B-1. Thoughtful questions are raised which require answers. Since the cost of the B-1 is usually the primary issue, let me address that point first.

To deal with the cost issue in proper context, it seems to me we have to answer two fairly fundamental and interrelated questions: Can we afford the system, and is it worth the cost?

In addressing whether we can afford the B-1, the easy answer would be that we can't afford to not buy it, but that begs the question. A more thoughtful response might be that there is no more important area in which national resources should be invested than maintaining U.S. security. The degree to which one supports the national position of free world leadership, accepts the burden of military capability which that role imposes, and appreciates the relationship of the TRIAD to that capability will largely decide each person's assessment of the affordability of this system. As Secretary Schlesinger pointed out in the speech cited earlier, "These strategic forces are acquired, not for their specific, cost-effective contribution to target destruction narrowly defined, but for their broader contribution to that panoply of power that maintains deterrence."

So in an objective sense, dependent upon the price tag one attaches to national security, the answer must, of course, be, "Certainly we can afford it," so long as we are convinced of its irreplaceable contribution to that "panoply of power" or, in other words, if the return is appropriate to the investment.

We believe it is. The B-1 exploits the practical advantages of the manned bomber with much improved speed, range, payload, accuracy, pre- and post-launch survivability, and modern technology which will sustain a credible manned bomber capability beyond the end of the century. The first aircraft is now flying and will provide the Congress with hard evidence of these improvements. I am convinced that the B-1 program is based on a sound R&D effort, that the flight test program will produce the results we expect, and that the aircraft will be ready to enter production in 1977. My personal involvement in this program has strengthened my conviction that the B-1 will provide a return appropriate to the investment.

One other key question ought to be addressed before turning to other matters. Although related to cost, it is really a separate issue, namely, the cost-capability implications of the SALT negotiations, and particularly the Vladivostok understanding.

Three factors are pertinent here. First, a very large percentage of our equivalent megatonnage is carried by our bomber force. In addition, the understandings would provide an upper limit on equal aggregates of weapons carriers. Finally, the lower number of U.S. missiles vis-a-vis the Soviets is implicitly compensated for by a larger number of

bombers. Several significant conclusions derive from these three factors.

First, given a fixed number of land-launched ICBMs, and the projected changes in the SLBM force, we cannot build a large number of new bombers, each of which is, of course, counted as a "carrier," without exceeding the equal aggregate limit. On the other hand, each B-52 we phase out represents a disproportionate reduction in numbers of effective weapons and in megatonnage unless replaced by a carrier of equivalent or greater capacity. Therefore, if we are indeed to maintain essential equivalence within the SALT guidelines, and until hoped-for lower limits can be negotiated, prudence dictates moderate numbers of a follow-on bomber with high unit performance. In fact, as ceilings are imposed on quantity of systems, the qualitative features of remaining systems assume even more importance for credible deterrence. If future negotiations are productive, reassessment of these imperatives will certainly be appropriate. Notwithstanding a quantitative reassessment, I am convinced that the B-1 will provide a very critical part of our strategic force for many years.

Turning to the role of Strategic Defense, we are taking maximum advantage of all air defense capable assets, in part, by augmenting our dedicated interceptor force with tactical fighters and by transitioning to a joint use FAA/USAF radar network which phases out the costly SAGE system.

It is clear that an absolute prerequisite to a strategy of flexible response is the ability of our strategic defensive systems to provide adequate and timely warning, attack and damage assessment, and command, control, and communications.

Improved Air Force space systems will continue to play a vital role in satisfying these requirements. Further, improvements underway to the E-4 Advanced Airborne Command Post and the Worldwide Military Command and Control System, to which the Air Force is a major contributor of resources, are designed to improve significantly the responsiveness and survivability of this vital link between the National Command Authorities and our military forces.

In concluding this portion of the Posture Statement, let me reaffirm that the Air Force does not confuse the ends and means of the strategic balance. We are wedded to no "pet" programs. Rather, we are recommending a level of capability which in our judgment is sufficient to assure that this Nation will never be forced to bend to a superior force in protecting its vital security interests.

IV REGIONAL PERSPECTIVES AND GENERAL PURPOSE FORCES

Turning to an assessment of the regional objectives which our forces must support, my thoughts are drawn immediately to Europe, which, for me, means NATO. The primacy of the Atlantic Alliance in my personal thinking stems from two major influences. First, and most important, is the priority given to the defense of Western Europe in sizing Air Force general purpose forces, assessing the likely scenarios for their employment, and the linkage of other NATO forces to United States strategic nuclear forces. The second is my service experience in Europe dating back to 1965 and culminating in my previous assignment as both a U.S. and NATO commander.

After long association with the Alliance, I am convinced that the strategy of flexible response, based on a strong conventional forward defense, is both credible and well

within the collective capabilities of the Alliance members. This conclusion is based on the following convictions.

First, the true capabilities of currently available allied resources are sometimes not given full weight in quantitative evaluations of the NATO/Warsaw Pact balance, evaluations which are themselves subject to interpretation and honest disagreement. Second, NATO capabilities, which are already substantial, can be markedly improved, without dramatically increased budgets, through restructuring, standardization, specialization, and improved interoperability. And third, anticipated modernization in the worldwide capability of United States air forces, will, at the same time, significantly enhance the Alliance defense posture to which we contribute, and thereby help to reinforce Allied confidence, both in the U.S. commitment and in NATO's conventional defense capability.

In a war in Central Europe the initial and principal task of Allied Air Forces must be to assist friendly forces in halting the Pact ground offensive. This requires that NATO air power become immediately and heavily engaged in close air support operations, while attaining local air superiority as necessary. Less immediate critical objectives, such as achieving theater-wide air superiority, must await a reduced need for close air support. I believe that NATO air power is well suited to these requirements. The capability of NATO aircraft is, and will remain, superior to comparable classes of Warsaw Pact aircraft. Moreover, NATO's air power provides an essential hedge against the Pact option of choosing the time and place for opening

hostilities, an effective means for blunting the initial shock of multiple air and armored thrusts, and the capability for rapid augmentation and resupply during the critical early stages of a war.

As I mentioned a few moments ago, before returning to the U.S. to take over the job of Air Force Chief of Staff, I was assigned to a "dual hatted" position in Europe, as Commander in Chief of USAFE and Commander of Fourth Allied Tactical Air Force. A short time before my departure, I had been designated commander of Allied Air Forces Central Europe, responsible for wartime command of all the NATO committed air forces of the six nations contributing to the defense of the Central Region. In both my NATO and national hats, there was no problem which engaged more of my attention and energy than Tactical Command and Control. The twofold irony of the situation is that, first, qualitatively speaking, the NATO air forces are a far more potent combat force than their Warsaw Pact counterparts, and second, rapid, flexible employment of airpower is the potential keystone for successfully countering an armored attack by the numerically superior Pact ground forces. Yet the "central nervous system" for controlling air--NATO's Command and Control System--has deficiencies which prevent the most effective application of the force. The system in Europe consists of surveillance, control, and communications facilities which were designed and deployed during a period when NATO's strategy was a "tripwire" nuclear response to aggression.

Deficiencies in command and control--and my conviction that they must be remedied--are in large measure responsible

for my strong support of the Airborne Warning and Control System (AWACS). Not that AWACS should be considered exclusively, or even primarily, a European-oriented system. On the contrary, its greatest strength lies in its worldwide capability to provide timely support to U.S. and allied forces wherever warning and control may be needed. Nevertheless, the European theater has the most obvious immediate need for AWACS and also represents the most demanding yardstick for measuring the system's potential.

As you know, AWACS has been subjected to the most rigorous examination by authorities within and outside the Department of Defense. While recognizing that no system is completely immune to countermeasures, my experience in Europe and my study of test results convince me that AWACS can make a unique and vital contribution to NATO's conventional capability. Even if the Warsaw Pact forces were to exert the maximum effort to counter AWACS using all possible techniques in the high intensity European air environment, the system's warning, detection and control capabilities would still remain a quantum jump beyond the current ground based systems.

We plan to augment the basic configuration of AWACS with an improved data link system and other modifications in later procurements, but I cannot overemphasize the urgency with which I view early production and deployment of the first generation model. We have given serious thought to the relative merits of providing the large margin of increased capability in the near term versus delaying until all production aircraft can be configured with the second generation improvements. All my experience within the

European theater convinces me it would be a mistake to delay production.

In the future, the many benefits from the improved system will accrue to air and ground forces alike. In a European scenario, better flexibility in employment of air resources benefits the ground forces directly because of our heavy close air support involvement, especially against hostile armor. Beyond this, AWACS has further inherent potential for providing near-real time intelligence, force status and disposition, and a wide variety of currently fragmentary critical information needed by air and ground commanders. The improved AWACS will not be a replacement for today's systems in Europe, but will make all the other systems better by serving as the "connective tissue" integrating these components into a coherent, mutually reinforcing instrument of surveillance, warning, and control. Meanwhile, the immediate leap forward obtainable from early deployment of the core model strongly supports our proposal for continued acquisition this fiscal year.

Turning to other tactical systems, as you are well aware, we are producing the F-15, the most capable air superiority fighter in the world, which was designed specifically to counter the high performance portion of the Soviet threat through the 1980s. The F-15 was introduced into the Tactical Air Command last fall, after demonstrating truly outstanding reliability, maintainability, and performance during test and evaluation. Last month its climb performance exceeded previous world records in a series of demonstrations conducted under international supervision. This fine aircraft results from a highly efficient development and production

program, and we are most pleased with all aspects of the aircraft.

To complement the F-15, we are requesting funds this year to initiate full scale engineering development of the F-16 Air Combat Fighter (ACF), a follow-on of the highly successful Lightweight Fighter prototype development program. I was delighted with the success of this program for two important reasons. First, both Northrop and General Dynamics produced superb prototypes. Although the YF-16 was clearly the better selection for the Air Force, each aircraft was a credit to U.S. initiative, technology, and enterprise. The Air Force was fortunate to have two such highly capable aircraft from which to select our proposed Air Combat Fighter.

Second, the keen competition and the high quality achieved further validate the efficacy of our emphasis on prototypes and of our "fly before buy" approach to major system procurement. These concepts have produced a system of comparatively low cost, high reliability, and high confidence--features all of us like to see in development and procurement programs.

I am confident that the development of the F-16 will produce a highly effective complement to the F-15 in our "high-low" mix force. The resulting combination of sophisticated aircraft and highly capable but more austere fighters will enable us to maintain a larger force for equivalent budget expenditures. This larger force will serve to minimize any quantitative advantage of the Warsaw Pact without sacrificing our overall qualitative edge.

You are aware also of the strong interest of our Allies in replacing their F-104 and other aircraft with the

ACF. This promising aircraft can provide an unusually versatile multi-mission addition to their air forces. Its procurement in quantity will improve substantially the combat capability of the Alliance as well as standardizing and integrating allied forces more closely with our own.

As I have already pointed out, the crucial task of blunting a massive onslaught of armor is a principal concern for NATO planners. The A-10 close air support aircraft is optimized for that role, not only in NATO, but wherever required. It represents a vast improvement over present capabilities. And, not only does it carry antiarmor ordnance of proven effectiveness, but it also can deliver up to eight tons of general purpose or specialized ordnance. The A-10 has been designed specifically to survive when pitted against the high intensity defenses over the modern battlefield. Morever, all of these capabilities have been combined into one system that is reliable, easy to maintain and repair, and very low in procurement and life cycle costs.

Our experience in Vietnam and assessments of air operations in the 1973 Mideast War underscore the need for effective tactical electronic warfare systems. There is no doubt that the military force which fails to keep abreast of the "state of the art" in this dynamic technology risks decisive defeat at the hands of a modernized force. Therefore, our budget request includes the resources to improve our airborne jamming and warning systems and to develop remotely piloted vehicle systems for saturation, confusion and decoy missions. Later witnesses will elaborate on these requirements.

The systems I have discussed are products of the most advanced aerospace technology base in the world. Our future security will depend in large measure upon maintaining technological superiority. Clearly then it is in our interest to support a dynamic research and development program.

Before turning to other subjects, I want to bring to your attention an essential improvement in our tactical forces combat capability. Although we are deploying highly capable aircraft, present crew resource limitations prevent us from achieving full system efficiency in terms of a capability to meet the high sustained sortie rates we would encounter in combat. Now, support savings will enable us to make marginal increases in tactical aircrew ratios to maximize the capabilities of our deployed systems. The increase in trained aircrews and associated maintenance personnel will greatly expand capability for rapid engagement with enemy forces and mean greater staying power for units in combat. I hope to make further improvements in tactical air readiness and operating capability during FY 1977.

The Air Force programs highlighted above serve not only to bolster our capability to contribute to the security of the NATO Alliance, but also and more importantly, to greatly strengthen U.S. conventional forces in their worldwide capabilities. Before turning to other areas of interest, I would like to reaffirm my confidence in the efficacy of the NATO TRIAD, which links U.S. strategic capability, tactical nuclear weapons, and a stalwart allied conventional defense as inseparable elements of NATO security. We are improving our capability in all three areas, with particular emphasis

on sustaining allied confidence in U.S. commitment and in the credibility of successful conventional defense.

For at least the past year and a half, world attention had been focused on the Middle East. As you know, Air Force airlift and supplies supported the national effort to maintain a balance and restore peace to the region. We continue to be keenly interested in the military situation there.

It is recognized that, in the event of a European conflict, the ability to reinforce rapidly from the United States will be critical. Thus, our airlift operations to the Middle East in 1973 served as a useful test of our capability to support the more demanding requirements we would encounter in a NATO conflict. The conflict highlighted the need for improvements in our strategic airlift forces. Accordingly, as I mentioned earlier, we are undertaking a major program to enhance our airlift capability. We are providing inflight refueling training for C-5A aircrews and increasing the utilization rate capability of our strategic airlift force. At the same time, we are recommending modification of C-141 aircraft to increase their load capacity and proposing improvements in the capacity of the Civil Reserve Air Fleet. In related efforts we are continuing the development of the Advanced Medium STOL Transport and the Advanced Tanker/Cargo aircraft. These improvements will substantially compress the time required to move combat forces anywhere in the world while minimizing dependence on en route bases.

Referring again to the October 1973 war, the relative tactical air strengths and weaknesses of the principal adversaries bear striking resemblance to those of NATO and

Warsaw Pact forces in Central Europe. The value and importance of proper logistics management, electronic warfare capabilities, refueled ferry flights, aircraft sheltering, modern munitions, and command and control were convincingly demonstrated. These are old lessons reaffirmed and, like the need for airlift enhancement, are directly applicable to a contingency in any overseas location. Our budget request appropriately reflects these considerations.

I would like to turn now to the Western Pacific, another area where the Air Force maintains a presence in support of national objectives. The Air Force has followed a policy of reducing our presence as tensions in the area diminish. We have removed all combat forces from the main island of Japan and have only two major bases in that country and two in Korea. In Thailand, substantial reductions also have been made.

Notwithstanding these reductions, the Pacific region retains a high potential for sudden crises. The United States has significant interests and commitments in this area, obligations that no other nation can assume. Additionally, should global deterrence fail and U.S. forces become involved in a NATO conflict, we could expect the Soviet Union to be an adversary in the Pacific as well as in Europe. Consequently, we cannot foreclose our options to augment our forces rapidly in the Pacific. Hence, we support retention there of relatively modest forces, necessary bases, materiel storage facilities, rights of transit and access, and an operating command and control structure.

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V THE TOTAL FORCE

Having addressed our interdependence with allied air forces and U.S. Air Reserve Forces, I would like now to touch upon an equally important element of the Total Force Policy, and that is the support we receive from and provide to the other three Armed Services.

For years, strategic planning has been conducted jointly with the Navy, and multi-Service contingency planning is a way of life in the unified headquarters worldwide. Beyond that, however, there are other examples of cross-service cooperation which deserve more recognition. For example, Air Force B-52s long have had a collateral mission of aerial mine laying. More recently we have been exploring ways to assist the Navy in their difficult task of sea surveillance and sea lane defense. To that end, those aircraft capable of mine laying also will be configured for employment of the Navy's anti-ship HARPOON missile. The extended range, endurance, and payload capability of those aircraft make them especially suitable for such a mission. In addition, we have exercised our tactical aircraft in maritime surveillance operations and found that these weapon systems, particularly the F-111 and RF-4, possess an inherent capability to perform this mission. On the other side of the coin, plans are being developed for Navy and Marine tactical fighters to join our air defense interceptors and tactical fighters in an air defense pool for responding to worldwide emergencies. Airspace control in a combat zone is another subject receiving cooperative inter-Service consideration. We intend to work closely with the Navy in the ACF/Navy ACF development program, as we presently are doing in selected

missile development and other programs. The mounting demands and complexity of modern warfare and the reality of limited resources have produced a new era of mutual Service understanding, cooperation, and support.

Turning to a third aspect of the Total Force Policy, we have made great strides toward modernizing and integrating our Air Reserve Forces (Air National Guard and Air Force Reserve) with the active force. They are being equipped with more modern weapon systems to complement the active component, and priority for support resources has now been assigned to units on the basis of mission in the total force, regardless of active or reserve identity. Well over half of our tactical airlift aircraft are assigned to the Reserve components, and approximately 40 percent of our Military Airlift Command C-141 aircrews are provided by the Air Force Reserve Associate program.

During FY 1976 we will begin transferring KC-135 tanker aircraft to the Air Reserve Forces. Thus, in addition to their continuing refueling support of tactical forces; for the first time, reserve units will augment active strategic offensive forces in support of our strategic integrated war plan.

In the area of general purpose forces, by the end of FY 1976, six Air National Guard squadrons will be equipped with the A-7, and half of the AC-130 gunship aircraft will become the responsibility of the Air Force Reserve. By the end of FY 1980, Guard and Reserve forces will be modernized with A-10, A-7, F-4, and RF-4 aircraft.

VI PEOPLE

I said at the beginning of my presentation that people are our most important resource and I would like to close on the same theme. We are proud of our all-volunteer record and of our reputation for good management and sensitive leadership; we are even more proud of the quality of the young men and women joining the Air Force. Frankly, in an age when many people express concern about the so-called "alienation" in our society, I find very little evidence of this problem among our people. On the contrary, I have been deeply impressed with the intelligence, motivation, open-mindedness, and sense of involvement among the people joining and remaining in the Air Force. Most of the "people problems" which we face, fortunately, are the sort which yield to sound leadership, proper discipline and competent management.

Our continuing goal is to maximize force capability by improving individual initiative, morale, and productivity. I believe our record in achieving this goal during a period of high social and economic turbulence attests to our success in striking a happy balance between good discipline and good human relations and in carrying out the letter and intent of the Equal Opportunity Program. Our people make up a well-motivated, competent, and well-disciplined force of professionals of which you and the country can be justly proud.

VII CONCLUDING REMARKS

Mr. Chairman, the foregoing statement is not intended to be a comprehensive description of Air Force systems or programs. Rather, I have regarded it as an opportunity to present my views on selected subjects which concern me as the Air Force Chief of Staff and which I believe will also interest this distinguished Committee. Secretary McLucas and I are the first of a series of Department of the Air Force witnesses who will provide you with program details and answer your questions relating to their specific responsiblities.

Since this meeting initiates our budget justification process, it should be useful to summarize the major Air Force elements to be supported by this budget. In FY 1976 the Air Force will operate about 400 bombers, over 1000 missiles, and 600 plus tankers in our strategic offensive forces. The strategic defensive force includes fighters, space and warning systems, and other defensive elements, augmented from tactical fighter forces. Our general purpose forces number more than 2300 fighter aircraft in the active and Air Reserve Force. Airlift support for all four Services will be provided by some 300 strategic airlift aircraft. This lift capability is reinforced by about 600 active and Air Reserve Force tactical airlift aircraft. The budget includes over half of all DOD intelligence costs, a

major portion of DOD communications costs, and substantial direct support for the National Command Authorities. It also embodies the research and development funds so essential to our future security, and includes the procurement dollars to continue selectively the vital force modernization process. Over one-third of our dollars represent the rising costs to maintain 590,000 military and approximately 270,000 civilians in the force.

Mr. Chairman, as I noted at the outset, despite a full menu of challenges my statement today is one of confidence and realistic optimism. When I assumed my present position, I joined with the Secretary in responsibility for an Air Force whose people, equipment, and capability are second to none in the world. It is my solemn pledge to dedicate my every effort to keeping the U.S. Air Force second to none through the economical and efficient management of the resources which the country provides. I have outlined for you today the priorities and the resources which we believe are essential to maintaining that preeminent position, as well as our approach to managing them. I earnestly solicit the support of this Committee and of the Congress for the Air Force programs in the Department of Defense Budget.

Thank you.

ACCOMMODATING BUDGET CUTS

General JONES. Mr. Chairman, and gentlemen, it is a pleasure to be with you for the first time since taking over as Chief of Staff of the Air Force.

General JONES. In terms of people, airplanes, and bases; our fiscal year 1976 budget supports the smallest Air Force since the beginning of the Korean war.

You mentioned cuts. We are moving to a position in the military somewhat like the Federal Government in entitlements, in that the cuts in any one year, immediate cuts, have a far greater impact than the percentage would indicate.

For example, if our $30 billion budget were cut 10 percent or $3 billion, the money would come mainly from our modernization and research and development programs because other expenditures are relatively fixed. For example, if we close an airbase, it usually costs us more money the year we close it than if we had kept it open.

Chairman MCCLELLAN. For that one year?

General JONES. For that one year.

If we close something in 1976, especially later in the year, often we either break even or it costs money.

Our retirement budget goes up as our personnel level comes down. I would say the actual impact would be for more than a 10-percent cut. You may have to cut R. & D. and procurement far, far in excess of that in order to absorb a 10 percent cut.

Chairman MCCLELLAN. Are you saying that an across-the-board cut may end up affecting different programs disproportionately?

General JONES. That is right.

The Air Force at 590,000 people obviously has less firepower in the general purpose area than the 905,000-man Air Force we had in 1968. We have been able to offset some of that reduction through better management combined with the improved technology in some of our weapons. But, we are down very substantially in manpower.

We would hope that the country would see fit to have an Air Force of about 590,000 people and allow us, within that total, to try to get a greater capability and greater effectiveness out of that force.

We think there are things we can do over time. Most of the manpower reductions in the fiscal year 1976 budget in the Department of Defense have come from within the Air Force, with 32,000 military and civilian people cut in the Air Force in fiscal year 1976, compared to 39,000 in all of the Department of Defense; 32,000 out of 39,000 are Air Force.

Chairman MCCLELLAN. The Air Force situation seems to parallel the one I described earlier wherein the Department of Defense had to absorb the major portion of the total budget cuts. You are taking the brunt of it.

General JONES. Yes, sir. I am not saying that in any way as a complaint, but just to state the facts. We are trying to keep down our military personnel costs to help us with some of the force modernization that we need. In fact, our fiscal year 1976 military personnel request is slightly less than our fiscal year 1975 appropriations despite the cost increases in personnel.

We are doing what we can. I have outlined a number of things in my statement on some of the actions we have taken to reduce support. I will touch on one briefly, not only to illustrate the savings, but our willingness to change how we do business. Sometimes they say we are not willing enough to change.

We had three types of airlift aircraft: strategic, tactical, and support. The big aircraft, the C–5 and the C–141, are for intercontinental operations, the C–130 for forward support, and a third category of support aircraft consisting primarily of the military counterpart to the Douglas DC–6's and Convair 340's. They had been decentralized in assignment, with the Military Airlift Command having the strategic airlift aircraft, the Tactical Command having the C–130's, and almost every base in the Air Force having support aircraft.

We are putting all aircraft together under single management of the Military Airlift Command. By integration we get better conrol and efficiency.

We are now phasing out 400 of the support type aircraft. About half are phased out already. The rest will be out by this summer. This alone will save us more than 6,000 people, 150,000 gallons of fuel a day, and overall annual savings approaching $100 million.

We have other changes. In the fiscal year 1976 budget for the first time we provided a role to the reserve forces in the strategic field. They have been excluded from this before. What we are doing is starting the transfer of some KC–135 tankers. Ultimately up to 128 will go to the Air National Guard and the Air Force Reserve.

We have other good modernization programs for our reserve forces.

You mentioned priorities and, Mr. Chairman, I would say that, from my personal viewpoint in the strategic field our priority is the B–1. In the general purpose field, our number one priority would be the AWACS, airborne warning control system. We have gone into pretty good depth on AWACS.

B–1 REQUIREMENT

I would like to take a few minutes to discuss the B–1, the need for it, and alternatives to it, in a little different perspective, and try to clear up some misunderstandings. First, with regard to program management: there could be the question that since the cost has risen so much there must be something wrong with management.

We have touched on this. To summarize, in 1970 we estimated the program would cost $9.9 billion. In 1973, in constant 1970 dollars, taking out inflation, it was $11.1 billion, it is now $11 billion in 1970 dollars. That is a real program growth of only 2 to 3 percent per year. We submit that is one of the best records in the Federal Government in terms of controlling true program growth. The difference between $11 billion and the $20.6 billion is caused primarily by inflation occuring since 1970 and projected for the remaining years of the program through 1985. It is difficult for us to predict future inflation. If it is higher than we predict, the program cost will be higher. If it is lower, the program cost will be lower, at least if we continue to manage as we think we can.

Chairman McClellan. You have projected the anticipated inflation in the years ahead?

General JONES. Yes, sir. In the early years inflation is based on current contracts, the visibility we have on existing contractual arrangements. Then, for the later years we use the standard DOD factors.

The airplane is flying well. I talked to the crew immediately after the first flight and they said it was amazing how similar it was to the simulator, how it flew just like the initial simulator we have for it. No. 2 and 3 aircraft are on schedule.

My point is that I believe the program has been consistently well managed. But, that good management has been obscured by this great inflation that we have experienced.

Now the second point relates to cost also, with the question, isn't this the most costly strategic program we have ever had, and isn't $84 million too much to spend for one aircraft?

I would like to put this in perspective. In doing so I don't want to imply that the B–1 is anything but expensive; $84 million, even in "then year" dollars, is a lot of money. But, we would hope that the B–1 would be judged on its total contribution to national security as opposed to $84 million for one airplane, or well in excess of $1 billion for one submarine. We don't think that is the appropriate way to address it.

To put this in perspective, compare the B–1 program with the B–52 program in constants—constant effort, constant amount of work, or constant dollars. In those terms the B–52 acquisition cost is more than 50 percent greater than the acquisition cost of the B–1 program. I grant we are buying fewer B–1 aircraft, but they are far more capable aircraft.

In my judgment, we should also pay more attention to annual operating and support costs when we procure aircraft or any system. If you look at the B–52 force versus the B–1 force, you see at its peak 744 B–52's. The operating support costs were more than three times what we project for the B–1, again for a lesser number of more capable aircraft.

Or even compared to 330 operational B–52's we have today, we project for many reasons, such as advanced simulators and other factors, lower operating and support costs for the B–1.

Now, the B–52 is an illustration of a system that is well designed. It had growth built into it. It is not so small that you can't do things and add things to it. It has great flexibility for accommodating to changes in its mission.

If you look back at the B–52 in the early days, it was designed in the late 1940's, rolled out in 1951, and flew first in 1952. It has had a long life span. The Department of Defense expects it to have good effectiveness in the 1980's and into 1990 as part of the strategic force. As we build up the B–1 there may be an adjustment in that program.

STRATEGIC SYSTEMS

Compared with other strategic systems during that same period, the bomber business has been limited to the purchase of a handful of B–58's, and a handful of FB–111's, and some work on bomber missiles such as the SRAM. You see a different picture if you look at what has happened to the other missile program; we have seen the Atlas D, E, and F, come and go, Titan I, Titan II, Minuteman I, II, and III. Now we

are working on advanced technology in the M–X program. Polaris A–1, A–2, and A–3 missiles, and Poseidon, have been deployed and the Trident I and II are on the horizon. Over this entire time period, the B–52 has had and continues to have a very major part of the strategic role.

Certainly the B–52 has provided an opportunity to amortize its costs over at least 30 years in the program and possibly closer to 40 years. The modern strategic bomber is a long term capital investment as opposed to the purchase of a car which is a short-term investment. We ought to look at that $84 million program unit cost in a much broader context than is usual for aircraft.

A third point is the level of strategic effort we are making and showing in the budget. The appropriate amount.

I think to put this into perspective, we should look back to the early 1960's. Many of you will recall that for the first time the United States published a 5-year defense program. It projected out a 5 year force structure, and from the composition of the R. & D. program, anyone could see the character of the force far beyond that.

The defense program in the 1960's had a moderating trend in the strategic field. There was a shift in emphasis from the strategic to the general purpose forces. I am not questioning whether that was right or wrong.

In the early 1960's there was a large strategic program, B–52 high production rate buildup, B–58's coming in, and the start of the F–111. We also had the B–70 and Skybolt in development. We had the Atlas in development, the Titan, the Minuteman coming on, and the Polaris submarines. But from year to year, as succeeding 5-year defense programs were published, the projections for the strategic force kept coming down and down.

Minuteman started in the program at 2,000 missiles. Then it went down to 1,600, and finally down to 1,000. So, if somebody was comparing last year's program with this year they would say, well, their objectives had diminished.

I believe we had an objective of 56 nuclear powered Polaris submarines originally. That came down to 41. The B–70 was canceled. The Skybolt was canceled. We were starting to phase down our bombers.

Also, when the force projection showed only 54 Titan II's it was clear to the Soviets and to the world that we were not developing large missiles with large throw weight; we were going for the smaller Minuteman and Polaris missiles which have relatively low throw weights.

This was before MIRV, the multiple warheads. So, the period showed a shift in the strategic field. I am convinced that up until that time the Soviets felt that there was no way they could achieve even strategic parity. When they started off with Sputnik they saw how the United States cranked itself up. We were going all out in almost every field to maintain this advantage.

Once we gave them this very precise road map—the FYDP—as to what we were going to do, I believe they could have calculated what it would take to achieve parity with the United States, and they embarked on very ambitious programs. You have been briefed on some of these: Many new ICBM developments, a new bomber. They have a

lot of activity going on that concern us in advanced technology, and engineering technology behind the systems that we see being developed.

Some of the programs are a little exotic. I don't know what they are doing. It is very difficult to say. I am not saying they are out for strategic superiority, or what that would mean to the world. But, some of their capability lines have crossed ours sharply in the recent past, in terms of numbers of missiles, in throw weight, and so forth. I believe that we have, at least in the eyes of the world and in my eyes, strategic parity today, or close to it. I think we still have the edge.

I believe, however, it is due to some foresight and fortuitousness of circumstances. I believe we have maintained in about essential equivalence or parity at least in the eyes of the world today through a number of circumstances, but primarily due to our technology and the ingenuity of our people and our society.

We have maintained it in two areas. One is in missiles, particularly in efficiency of warheads and in accuracy. But very importantly, we have a great edge with the strategic bomber force today. We have the finest bombers in the world.

Now the advantages or the asymmetries on our side tend to be transitory while theirs tend to be fixed. In numbers of missiles they have more than we do. And, of course, in throw weight, we don't have programs to match them.

One of our asymmetries is greater missile accuracy which is a fleeting or transitory asymmetry, because they are working hard on accuracy. Someday they will be able to match us in accuracy, or nearly so. With higher accuracy, than efficiency of warheads is not such an important point.

Now there is one area that the United States has absolute clear-cut superiority——

Chairman McClellan. May I interrupt? I am very sorry I have to leave. I had an appointment at 12 o'clock, and I must go. I apologize.

Senator Inouye, will you take over, please.

Senator Inouye [presiding]. Please continue, General Jones.

U.S. SUPERIORITY IN AIRCRAFT DESIGN AND PRODUCTION

General Jones. In one area we have clear-cut superiority, and in my judgment we are even widening the gap. That is in our ability to design and to build airplanes. Most of the world flies American-built airplanes, whether commercial or military.

As a matter of fact, and this information is classified, but the [deleted].

Now they are improving a lot. But our technology and our ability to put avionics on aircraft is an area where we have a great advantage. Nowhere, in my judgment, can we demonstrate that more than with our strategic bomber force. We are the only nation in the world that has a first-class bomber force.

The RAF had a good one during World War II, but they have a small one now. The Soviets have tried to improve, and they are improving, but I doubt if they will be able to reach us in capability. One reason is flexibility: flexibility in concept, in management, in deployment. Flexibility is a commodity that is lacking in the Soviet society. I

would foresee they will continue to have problems even if they solve the technological problems.

ALTERNATIVES TO THE B–1

This leads me to my last point. Somebody might say, "All right, I can understand the need for a strategic bomber force, but isn't there a cheaper alternative?" There are normally three alternatives that are discussed, although not necessarily in this order of priority.

First, there is a standoff missile launcher now usually referred to as an air launch cruise missile. The missile would cruise in after launch from an airplane. It could be a bomber. It could be a 747 or another wide-body transport.

We do have money in the fiscal year 1976 budget for an air launched cruise missile, which may confuse things a little bit. This cruise missile is being developed to be carried on the B–52 or B–1 bombers and would be used to complement their primary weapon, the shorter range SRAM missile. The range of this cruise missile in our budget, [deleted] nautical miles: is sufficient to complement the penetrating B–52's and B–1's. The range of a pure standoff missile which would be launched from a standoff missile launcher, which I referred to earlier, is considerably greater, about [deleted] miles. We don't think that this last missile is cost effective. The DOD Joint Strategic Bomber Study has outlined this in detail and it has been submitted to you. We urge your perusual of it and the forthcoming GAO report on the subject.

Although this is an oversimplification, I think one of our former Secretaries of Defense was fairly accurate when he said that standoff missiles combined the limitation of the missile with the limitation of the bomber. It does not take the advantage of both, but rather the disadvantages.

The second alternative that is talked about is an updated B–52. If you put new wings on it, new engines, and rework it, you can extend its life almost indefinitely. From a technical standpoint we can rework airplanes so that they can remain viable for a long time.

In our judgment this is not a cost-effective approach because of various other reasons which I will mention.

Finally, there is a stretched FB–111. The F–111 we are building today is a fighter. We did build an interim fighter-bomber version previously. The problem is that we have lots of types of F–111's and we have to be very careful which ones we are talking about.

Many tend to talk about the cheaper F–111 in cost, and the expensive F–111's in capability. The most recent F–111 proposal is a stretch-stretch FB–111—it has been stretched twice in concept. When you look at the total program cost, and exclude what we have spent on the B–1 and on the F–111 to date, that is start right now to compare new money requirements, it is estimated that the program cost for an equal number of aircraft would be about half as much for the stretch-stretch FB–111 H per airplane, as for the B–1.

But we don't believe, and the DOD study demonstrates that it is not half as effective an airplane. We would be far more capable with the United States having fewer B–1 aircraft for the current price rather than having additional planes with less capability.

All three of these alternatives have one thing in common. They are attempts to have cheaper alternatives by not taking full advantage of available American technology in airplanes. You take the standoff airplane, it really does not use advanced technology. It does a little bit in the missile, but it does not in the standoff sense. On the B–52 there is one interesting thing. As currently planned now, when the last B–52 flies its last operational mission, its design will be as old at that time as military aviation history was when the B–52 was designed.

Now the B–52 has shown great flexibility. It is a great airplane. We think it has very great effectiveness today and will have for many years to come. But to start over again, with a whole new wing and engines, we don't think is the right way to go. The F–111 was designed in the late 1950's.

Although I am the first one to say we should not buy an airplane just to take advantage of technology, but we recognize that technology can give us more than we may conclude from a simple comparison of how far an airplane can go, how fast, and with what load capacity.

B–1 IS COST EFFECTIVE

We believe that the DOD cost effectiveness study demonstrates the B–1 is the best choice by a clear margin. My last point on the B–1 is that we think there are many other reasons beyond cost effectiveness to support it, and Secretary Schlesinger has talked about these.

It relates partially to Vladivostok. We in the Air Force strongly support and applaud what the President was able to achieve at Vladivostok with equal aggregates of 2,400 because this puts a ceiling on quantities of offensive weapons.

Some have said we are happy because it allows us to proceed with our programs. This is not true. Hopefully in subsequent negotiations we can come up with lower equal aggregates on both sides. If this means a smaller Air Force, I applaud that also. But as you bring numbers down, whether it is the cap at 2,400 or wherever you go, then quality becomes even more important.

We have every indication from the Soviets that they are going to pursue quality to the maximum extent. They are working very diligently in this area.

One other factor to remember about Vladivostok is that the Soviets end up with more missiles than we do. This is implicitly compensated for by our far better bomber force. We suggest that we continue to preserve that edge.

Now the last consideration on this point relates to the Minuteman force and questions as to the potential vulnerability of the Minuteman force. I would submit that continuing with the B–1 development and the ultimate decision for procurement will lessen the stress on the Minuteman force and lessen the urgency to go ahead with programs to reduce its vulnerability.

Mr. Chairman, this is how we feel about our priority program for the B–1. There are many other factors involved, but these are the key considerations. I appreciate your indulgence.

Senator INOUYE. In capsule, the alternatives you mentioned are not acceptable to you?

General JONES. Well, I would put it this way. In our judgment there is no good alternative. There is none that really provides the capability we need. I think as time goes on, we would regret selecting another alternative, especially if SALT reduces strategic weapons. We will see later that they are not acceptable alternatives to the Nation, not just to the Air Force.

B–1 COST IN CONSTANT DOLLARS

Senator SCHWEIKER. General, I didn't quite follow your inflation figures. You said in 1970 it was $9.9 billion.

General JONES. All my numbers were in constant 1970 dollars.

Senator SCHWEIKER. $11.1 billion was what?

General JONES. In 1973 we estimated the B–1 program would cost $11.1 billion in 1970 dollars.

Senator SCHWEIKER. What was the figure after that?

General JONES. $11 billion is our most recent estimate, again in 1970 dollars.

Senator SCHWEIKER. You went back? I haven't heard of a program yet that went back like that.

General JONES. I hate to say that that is a downward trend, although it is $11.1 to $11 billion.

Senator SCHWEIKER. What caused that? That is unheard of in the 10 years I have been on the Armed Services Committee.

General JONES. We have simplified the airplane a little bit in going from a crew escape capsule to ejection seats, but that was a small change. One thing is that we have built an airplane and our data on what it takes us to build the airplane, in man-hours, is slightly lower than what we had projected.

Senator SCHWEIKER. Because of your prototype work?

General JONES. Yes, sir, our building one airplane and Nos. 2 and 3 in assembly.

Senator SCHWEIKER. We never have had that experience.

General JONES. We are not trying to say it has been a perfectly managed program, and that we have not had perturbations and problems. We are saying, in a relative sense, it is doing well when you exclude inflation.

Senator SCHWEIKER. That puts $9 billion on inflation. We haven't had an 80-percent inflation rate since 1970, have we?

General JONES. We are talking 1983 and 1984 dollars in these estimates.

Senator SCHWEIKER. Our figures here are $20.5 billion for the total program. You are up to $11 billion. You say the rest is inflation, which is almost 80 to 90 percent for inflation.

General JONES. That is from 1970, spending money out to 1983 and 1984. We have projected inflation. Part of that money is money that is worth maybe 50 percent of today's dollar or less.

Senator SCHWEIKER. What is the presumption of inflation until you complete the program?

General JONES. From 1970 to today, let us say $11 billion in 1970 dollars equates to $15.5 billion in 1975 dollars. To the mid-1980's, we estimate it is $20.6 billion, in "then year" dollars.

Senator SCHWEIKER. I see the difference.

General JONES. We have $5 billion inflation yet to go in this program as we see future inflation.

Senator INOUYE. It might be helpful, General, if you could prepare a memo for us, because this matter is going to be brought up, if not in the committee, on the floor. There are forces out to terminate the B–1 program. You gave some comparisons on the B–52 and the B–1 on costs.

General JONES. Yes, sir.

Senator INOUYE. Not just the construction and procurement but also operational costs.

Senator SCHWEIKER. That was my next question. You talked about the acquisition cost of the B–52 being 50 percent higher than the B–1?

General JONES. But I am talking about total program cost for new airplanes in the "same year" dollars and buying more B–52's than we could buy B–1's.

Senator SCHWEIKER. What do you mean by acquisition costs?

General JONES. R. & D. and the procurement. I am not including modifications. Compared to the $20.6 billion to develop and buy the B–1, we compare the costs to develop and buy the B–52's we acquired, in "like-year" dollars.

Senator SCHWEIKER. That is total program?

General JONES. Yes, sir.

Senator SCHWEIKER. You have how many B–1's you are buying?

General JONES. 244.

Senator SCHWEIKER. How many B–52's do you have?

General JONES. We procured 744, but currently have only 425 in the total active inventory, and a force of only 330 UE.

Senator SCHWEIKER. You made the same point on your support cost. On the support cost what are you talking about, maintenance, flying personnel?

B–1/B–52 COST COMPARISONS

General JONES. Yes, sir, flying hours, fuel, maintenance of the airplane, depot repair, that sort of cost. Normally when we give costs we don't include the fixed cost of running the bases, but that would be the same in a relative sense, for either the B–52 and/or the B–1.

Senator INOUYE. Will you submit that memo for us?

General JONES. Yes, sir.

[The memo follows:]

Life Cycle Costs (LCC) of aircraft forces are a combination of acquisition (Research & Development and Procurement) and Operating and Support (O&S) costs. O&S costs are the variable costs of operating and supporting a force over a period of time, normally 20 years for a bomber aircraft, and include the costs of:

(a) *Manpower.*—principally command staff (Wing and below), aircrews, aircraft maintenance, munitions, security, medical, recruit and technical training, permanent change of station (PCS), depot maintenance, and base services.

(b) *Material.*—principally aviation fuels, base and depot supplies, medical, replenishment spare parts, recurring (Class IV) modifications, aerospace ground equipment (AGE), and training munitions.

The planned B–1 basing, operating, and logistics support concept minimizes operating and support costs while maintaining operational effectiveness. It is based on advanced simulation techniques which allow for flight crew training to be accomplished primarily on the ground, thus substantially reducing the peacetime flying requirements, the prime driver of O&S costs. Additionally, centralized maintenance facilities for logistics support will minimize manpower and supply requirements.

The following cost estimates are based on the foregoing acquisition and O&S factors.

The B–52 force at its peak a decade ago included 630 Unit Equipped (UE) aircraft and the estimated cost of operating and supporting that force was about $1.48 billion annually in today's dollars.

Computed on the same basis, operation and support of today's B–52 force of 330 UE aircraft costs approximately $740 million per year.

The B–1 force of 210 UE aircraft is planned to operate on a basing and O&S concept, not readily adaptable to the existing B–52 force, which will allow significantly reduced cost of operations while maintaining operational effectiveness. Calculated in today's dollars, it is estimated that the annual cost to operate and support the B–1 force will be approximately $420 million.

PREPARED STATEMENT

Senator INOUYE. We have a statement here by Brig. Gen. Charles C. Blanton, Director of the Budget, USAF. Without objection, it will be inserted at this point in the record.

[The statement follows:]

Mr Chairman and Members of the Committee: I am pleased to have the opportunity to appear before this committee to present the Fiscal Year 1976 and 7T (transition year) Air Force Budgets and the Fiscal Year 1977 Authorization Request. My statement consists of three parts. First, forces and resources in the budget request; second, the background for the development of the Air Force Budget; and third, a summary of special interest subjects and analyses.

CHART 1

THE AIR FORCE BUDGET PROVIDES FOR:

FORCES

STRATEGIC	TACTICAL & MOBILITY	R&D-TRAINING-LOGISTICS
- OFFENSIVE	- FIGHTER & ATTACK	- TECHNOLOGY
- DEFENSIVE	- RECONNAISSANCE	- TRAINING
- COMMAND, CONTROL & SURVEILLANCE	- AIRLIFT	- MEDICAL
	- TACS (AIRBORNE) & DRONE	- LOGISTICS

FY 76 RESOURCES

- 1054 STRATEGIC MISSILES
- 9422 ACTIVE AIRCRAFT
- 3.6 MILLION FLYING HOURS
- 143 MAJOR BASES
- 13 MAJOR AIR COMMANDS
- 11 SEPARATE OPERATING AGENCIES
- 861 THOUSAND ACTIVE AND 148 THOUSAND SELECTED RESERVE PERSONNEL

TOA

$30,196 MILLION

The forces shown on chart 1 include 1,054 strategic missiles and 9,422 active and reserve aircraft that will fly 3.6 million hours. There are 143 major USAF installations throughout the world, manned by 861 thousand active military and civilian personnel and 148 thousand military in the selected reserve, and organized into 13 major air commands and 11 separate

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operating agencies, the Air National Guard and the Air Force Reserve. The Total Obligational Authority requested in the FY 76 budget for these defense resources is $30,196 million.

CHART 2

USAF STRATEGIC FORCES

ORGANIZATIONS: Strategic Air Command (SAC)
Aerospace Defense Command (ADC)
Alaskan Air Command (AAC)

PRIMARY STRUCTURE:

AIRCRAFT

SQUADRONS	75	76	7T
B-52D/G/H Composite	1	1	1
B-52G/H	17	16	16
B-52D	5	5	5
FB-111	4	4	4
KC-135	38	35	35
F-106	6	6	6
EB-57	1	1	1
EC-135	3	3	3
SR-71	1	1	1
EC-121	1	0	0
AIRCRAFT (UE)	1184	1146	1138

MISSILES

SQUADRONS	75	76	7T
MINUTEMAN III	11	11	11
MINUTEMAN II	9	9	9
TITAN	6	6	6
MISSILES	1054	1054	1054

MAJOR INSTALLATIONS			
SAC, ADC & AAC	39	38	37

COMMAND, CONTROL AND SURVEILLANCE

EC-121
NORAD
DEW RADAR
BMEWS
SPACETRACK
SLBM RADAR
SURVEILLANCE RADARS

Chart 2 lists the Strategic Forces which consist of the USAF Strategic Offensive and Defensive Forces, which are assigned to the Strategic Air Command (SAC), the Aerospace Defense Command (ADC), and the Alaskan Air Command (AAC).

Only the major active forces are shown. The largest command, SAC, provides two legs of the strategic triad for the U.S. nuclear deterrent force. SAC also is responsible for strategic reconnaissance and air refueling for strategic bombers, strategic airlift, and Air Force tactical fighter and reconnaissance aircraft on a world-wide basis. There are 22 B-52 squadrons and 4 FB-111 squadrons in FY 76. An FY 76 planned reorganization results in a decrease of one B-52 squadron from FY 75. There is no change in the number of B-52 Unit Equipment (UE) aircraft. Active force KC-135 squadrons total 38 in FY 75 and decrease to 35 in FY 76 as a result of realignment actions and transfer of aircraft into the reserve components.

The Aerospace Defense Command provides forces to the combined U.S. and Canadian North American Air Defense Command (NORAD). ADC's active force operates interceptor aircraft, long range surveillance radars and early warning systems. There are six active F-106 squadrons and six ANG F-106 squadrons.

Command, control and surveillance is an integral part of our strategic defensive forces. Included are 16 control centers, 22 ballistic missile warning installations, and 122 ground environment radar sites which are assigned to ADC and the Alaskan Air Command. The only remaining active EC-121 airborne early warning and control squadron will be phased out in FY 76.

CHART 3

USAF TACTICAL & MOBILITY FORCES

Primary Structure:

	FY 75	FY 76	FY 7T
Tactical Squadrons			
F-4	45	44	44
F-111	12	12	12
F-15	-	2	3
F-105	2	2	2
A-7	10	8	7
EC-135	3	3	3
F-5E (Aggressor)	-	3	3
RECON	13	9	9
TACS (Airborne) & DRONE	13	12	13
SOF	5	3	3
Tactical Airlift (UE)	2018	1992	1992
Rescue/Airlift/Aeromed Squadrons			
C-5	4	4	4
C-141	13	13	13
C-130	17	15	15
C-9	3	3	3
Rescue	9	6	6
Rescue/Airlift/Aeromed Aircraft (UE)	710	645	648
Major Installations	60	58	58

Chart 3 shows the USAF Tactical and Mobility Forces assigned to the Tactical Air Command (TAC), the Pacific Air Forces (PACAF), the United States Air Forces in Europe (USAFE), United States Air Force-Southern (USAFSO), the Alaskan Air Command (AAC), and the Military Airlift Command (MAC). The major active Air Force forces are shown on this chart.

Fighter and attack aircraft perform the missions of counterair, close air support, interdiction, and augmentation for air defense.

The budget provides for an active force consisting of the squadrons depicted on Chart 3. Force modernization of the

fighter forces will continue with the phase in of two F-15 squadrons in FY 76. One more F-15 squadron will be added in FY 7T. Concurrently, from FY 75 through FY 7T, aircraft assigned to five active A-7 squadrons will be transferred to the Air National Guard. Included within the tactical forces are two F-105 Wild Weasel squadrons and two Air Defense dedicated F-4 squadrons, one each in Alaska and Iceland. Additionally, combat training will be enhanced with the activation of three F-5E tactical fighter training (aggressor) squadrons in FY 76.

The major active mobility Air Force forces are also shown on Chart 3. The C-5, C-141, and C-9 squadrons have Air Force Reserve associate units consisting of personnel who fly active force aircraft in association with active duty personnel.

The Military Airlift Command (MAC) provides strategic and tactical airlift deployment of military personnel and equipment throughout the world. In FY 76 MAC will operate the domestic and overseas aeromedical evacuation system, special air missions, the Aerospace Rescue and Recovery Service, the Air Force Communication Service, the Air Weather Service, and the Aerospace Audio-Visual Service.

Active tactical airlift forces, which provide intra-theater airlift for deployed forces, consist of 15 C-130 units in FY 76. Twelve are located in the CONUS, two in the Pacific and one in Alaska. Two CONUS based tactical airlift units are rotated to Europe, and one half of a unit is rotated to USAFSO. These forces are being consolidated under MAC as the single manager for DoD airlift.

CHART 4

R&D, TRAINING AND LOGISTICS FORCES

ORGANIZATIONS: AIR UNIVERSITY (AU), AIR TRAINING COMMAND (ATC),
AIR FORCE SYSTEMS COMMAND (AFSC),
AIR FORCE LOGISTICS COMMAND (AFLC),
U.S. AIR FORCE SECURITY SERVICE (USAFSS),
and SEPARATE OPERATING AGENCIES

PRIMARY STRUCTURE:

12 AIR FORCE LABORATORIES
4 TEST CENTERS
2 TEST RANGES
3 SYSTEM ACQUISITION DIVISIONS

5 AIR LOGISTICS CENTERS

COMMUNICATIONS

AUTOMATIC VOICE NETWORK (AUTOVON)
AUTOMATIC DIGITAL NETWORK (AUTODIN)
AUTOMATIC SECURE VOICE NETWORK (AUTOSEVOCOM)

TRAINING AND EDUCATION

8 PILOT TRAINING BASES
5 TECHNICAL TRAINING CENTERS
NAVIGATOR TRAINING BASE
PROFESSIONAL EDUCATION CENTER
AIR FORCE ACADEMY

95 HOSPITALS

ACCOUNTING & FINANCE CENTER
MILITARY PERSONNEL CENTER
RESERVE PERSONNEL CENTER
DATA AUTOMATION AGENCY

Chart 4 summarizes the organization and structure of the Research and Development, Training and Logistics Forces. These forces provide for the modernization and readiness of the operational forces including personnel training and education.

The Air Force Systems Command (AFSC) manages the Air Force Research, Development Test and Evaluation Program and major procurement programs. It operates 12 Air Force laboratories, 2 missile test ranges, 4 test and development centers, and 3 system acquisition divisions.

The Air Force Logistics Command (AFLC) provides logistic support of all forces from 5 Air Logistic Centers (San Antonio, Oklahoma City, Sacramento, Ogden, and Warner-Robins).

The USAF Security Service (USAFSS) collects intelligence data from electronic and other sources.

The Air Training Command (ATC) provides the initial military, technical, and flight training for Air Force personnel. During FY 76, the Air Training Command will train 77,631 new recruits, 158,957 technicians, 2,329 pilots and 973 navigators. These training levels include requirements for the active military, ANG, and AFR as well as civilian, Army, Navy, other government agencies, and foreign students.

The Air University is dedicated to the professional education of Air Force personnel.

There are 95 hospitals in FY 76, which is a decrease from 99 in FY 75. The Air Force also has 11 Separate Operating Agencies (SOAs). Examples are: The Air Force Accounting and Finance Center, the Air Force Military Personnel Center, the Air Reserve Personnel Center, the Data Automation Agency, and the Air Force Test and Evaluation Center (AFTEC), which manages the Air Force's Operational Test and Evaluation (OT&E) program.

CHART 5

USAF AIRCRAFT & FLYING HOURS

	FY 73	FY 75	FY 76	FY 7T
Number of Active Aircraft by Type				
Fighter/Interceptor	2146	1985	2166	2199
Trainer	2407	1896	1880	1878
Cargo	1020	937	902	899
Tanker	660	660	628	620
Reconnaissance	717	591	492	488
Attack	385	323	313	302
Bomber	505	499	500	499
Other	627	428	371	372
TOTAL USAF ACTIVE AIRCRAFT	8467	7319	7252	7257
USAF Flying Hours (000)	4368	3277	3005	785
Flying Hours % of FY 73	100%	75%	69%	N/A

Chart 5 shows the USAF active aircraft and flying hours provided for in the FY 76 budget. Also shown is the distribution of aircraft, by type. As shown, the flying hours reflect a steady decline over the period FY 73 - 7T.

To enhance the effectiveness of the USAF flying hour program, the Designed Operational Capability (DOC) concept was introduced. This program defines specific training objectives. For example, the F-4 weapon system is capable of accomplishing many tactical missions. But program priorities limit the extent of training in some of these missions. The DOC Program allows us to optimize and train our tactical squadrons into four specific tactical areas; air-to-air superiority, air-to-air defense, air-to-ground

conventional delivery, and air-to-gound nuclear delivery. Within these specific DOC programs, each tactical unit trains to a specific level of proficiency. These proficiency levels: basic proficiency, mission capable, and mission ready, each require varying degrees of allocated resources in terms of required sorties and flying hours. These different proficiency levels also define the unit's ability to be deployed in a tactical situation. A mission ready aircrew is available for immediate deployment into combat. A mission capable aircrew requires some additional training prior to deploying to a combat arena. An aircrew maintaining a basic proficiency level of training will fly at a level designed to allow for safe operation of the aircraft.

Each unit optimized under the DOC Program reports its training accomplishments under the Unit Capability Measurement System (UCMS). Thus the UCMS, which replaces our current C-rating system, identifies the capability of each unit's assigned mission against its training objectives.

CHART 6

MAJOR INSTALLATIONS

	75	76	7T
UNITED STATES (INCLUDING ALASKA & HAWAII)	113	110	110
ALLIED COUNTRIES	36	33	32
WESTERN EUROPE	(20)	(20)	(20)
PACIFIC	(11)	(9)	(9)
OTHER	(5)	(4)	(3)

Chart 6 indicates that, of the 143 major installations in FY 76, 110 are located in the United States (including Alaska and Hawaii), and 33 are in 16 allied countries.

CHART 7

ACTIVE FORCE

MANPOWER SUMMARY (000)

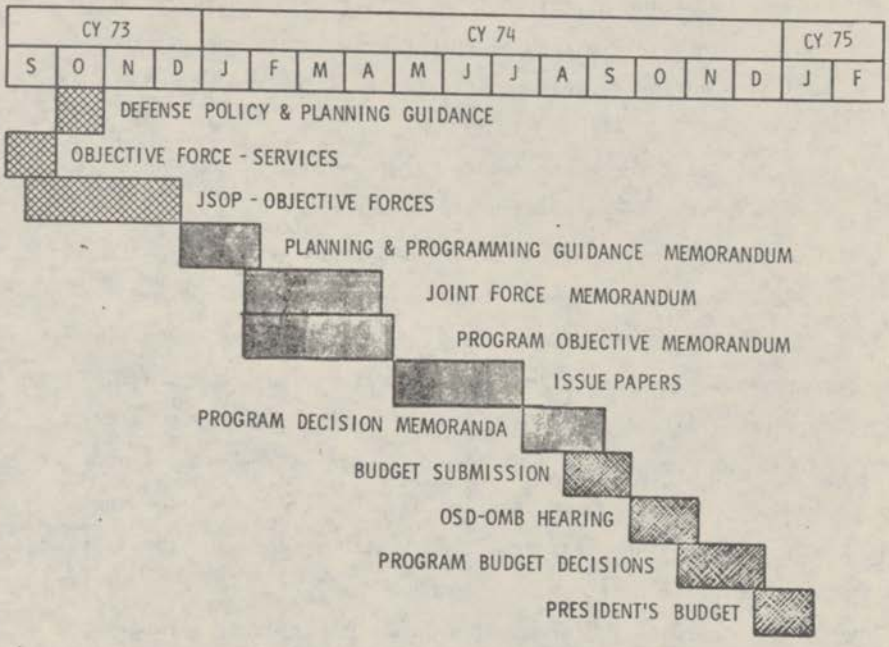
	FY 75	FY 76	FY 7T
Military	612	590	590
Civilian	281	271	273
Total	893	861	863

Chart 7 summarizes the manpower to operate and support the active Air Force forces. This program reflects a decline of 21,534 military and 9,898 civilians between FY 75 and 76 continuing the trend that has prevailed since the Southeast Asia peak in 1968 (-401,343/32%). Within this declining manpower program we have incorporated several combat enhancement initiatives that will significantly improve the overall Air Force combat posture.

The reduction of 21,534 military and 9,898 civilians in FY 76 can be attributed primarily to support reduction initiatives such as headquarters reductions and base realignment and closure actions (-18,000); force reductions such as the transfer of KC-135 aircraft to the Reserve Components (- 800); reductions in alert rates for B-52, FB-111 and KC-135 (-4,300); and other force reductions such as C-130, RF-4, EC-121, T-29, C-131, and C-118 (-5,400). These major reductions were partially offset by combat enhancement initiatives (+6,400) consisting of increases in Tactical Fighter crew ratios from 1.1 to 1.25, activation of three F-5E Tactical Fighter Training (Aggressor) squadrons, increase in C-5 crew ratio from 2.0 to 2.25 and by providing additional flying hours to provide surge aircrews training in their aircraft of wartime assignment.

CHART 8

PLANNING, PROGRAMMING AND BUDGETING



FORMULATION OF THE AIR FORCE BUDGET

Before presenting the Air Force Budget by Appropriation, the next two charts describe the Budget Formulation Process.

Chart 8 outlines the Planning, Programming and Budgeting System (PPBS). This system features numerous in-depth reviews and extensive dialogue between the OSD Staff, the Military Departments, and the Office of Management and Budget (OMB).

In an early stage of this process, OSD issues Policy and Planning Guidance--this occurs some 15 months prior to the submission of the Federal Budget to Congress. The Policy and Planning Guidance provides the conceptual basis for development of the Services' Objective Force and the JCS's Joint Strategic Objective Plan. These documents describe the force levels required to respond to the threat.

OSD issues Planning and Programming Guidance approximately eleven months before a budget is due to Congress. The Guidance Memorandum includes: (1) Defense Policy and Planning Guidance, (2) Planning and Programming Guidance including specific RDT&E, Logistics manpower, Telecommunications, Intelligence and fiscal levels.

The Joint Force Memorandum (JFM) proposes a JCS force structure that complies with OSD Guidance.

The Program Objective Memorandum (POM) proposes an Air Force force structure that complies with OSD Guidance.

After analyzing the JFM and the Service POM's, OSD first prepares for the Secretary of Defense Issue Papers which the Services critique in draft. Specific changes to the Service Submissions are directed by Program Decision Memoranda (PDMs). The PDM process is characterized by extensive discussion among OSD, JCS, and the Services. The final PDM's provide the basis for submission of the Budget to OSD.

The Service Budget Submission to OSD in early October prices the PDM's, and it is at this time that the extensive OSD and OMB reviews begin.

The OSD-OMB Budget reviews provide the basis for changes to a Service Budget Submission. The changes are documented in Program Budget Decisions (PBDs). The Services have the opportunity to appeal the tentative decisions in the PBD's. The final step in the PBD process is a Major Budget Issue meeting between Service and OSD leadership to resolve differences before the final Budget Decisions are made.

After final PBD's are received, the changes are made and the resulting program is incorporated in the DoD Budget which is sent by the President to Congress.

The heart of PPBS is a system of detailed analyses, dialogue on key issues, documentation, and discipline.

CHART 9

BUDGET CONSIDERATIONS

- RESEARCH AND DEVELOPMENT
- FORCE STRUCTURE AND MODERNIZATION
- FORCE READINESS
  - ACTIVITY LEVELS
  - TRAINING
  - SUPPORT
- MANPOWER

Chart 9 lists the major areas that are considered in formulating a budget.

A prime concern is to provide sufficient R&D resources to develop the technological base for Air Force weapon systems the nation will need 5 to 10 year from now. Closely related is the need to support the current force structure and maintain readiness while modernizing the force.

Decisions on the size of the force structure and readiness levels, dictate the manpower required to operate and maintain forces.

CHART 10

USAF BUDGET COMPARISON

	TOA $ MILLIONS			PERCENT		
	FY 75	FY 76	FY 7T	FY 75	FY 76	FY 7T
USAF						
RDT&E	3,298.9	3,903.2	1034.0	12.6	12.9	14.7
PROCUREMENT						
Aircraft	3,060.0	4,575.5	1087.1	11.7	15.2	15.5
Missile	1,542.7	1,791.4	277.4	5.9	5.9	3.9
Other	1,656.0	2,342.8	383.6	6.3	7.8	5.5
MILITARY CONSTRUCTION	444.9	703.6	14.0	1.7	2.3	.2
TOTAL INVESTMENT	10,002.5	13,316.5	2796.1	38.2	44.1	39.8
OPERATIONS & MAINTENANCE	7,327.7	7,956.3	2020.3	28.0	26.4	28.8
MILITARY PERSONNEL	7,500.0	7,400.6	1816.3	28.6	24.5	25.8
TOTAL O&M and Mil Pers	14,827.7	15,356.9	3836.6	56.6	50.9	54.6
TOTAL	24,830.2	28.673.4	6632.7	94.8	95.0	94.4
AFRes						
OPERATION & MAINTENANCE	298.0	343.8	87.7	1.1	1.1	1.2
MILITARY PERSONNEL	147.9	160.7	51.1	.6	.5	.7
MILITARY CONSTRUCTION	16.0	18.0	1.0	.1	.1	.1
TOTAL	461.9	522.5	139.8	1.8	1.7	2.0
ANG						
OPERATION & MAINTENANCE	669.1	723.5	189.2	2.5	2.4	2.7
MILITARY PERSONNEL	204.7	213.2	61.1	.8	.7	.8
MILITARY CONSTRUCTION	35.5	63.0	1.0	.1	.2	.1
TOTAL	909.3	999.7	251.3	3.4	3.3	3.6
TOA	26,201.4	30,195.6	7023.8	100.0	100.0	100.0

Chart 10 summarizes the FY 76 and the Transition budgets by appropriation. Shown are the Total Obligational Authority (TOA) dollars in millions and the percent that each Appropriation comprises of the total Air Force TOA. Comparable data are shown for FY 75 to show the relative change. There are shifts in the details and a modest increase in the total request. Much of this increase can be attributed to inflation.

In order to moderate the impact of inflation, the program includes reductions in force levels, manpower and flying hours. These reductions contribute to the decrease in the percent of the TOA requested for operations and maintenance and military personnel from approximately 57% of total Air Force TOA to 51% in FY 76.

The investment appropriations increase both in TOA and percent of the AF Total TOA. This change is due to inflation in the program and program growth.

Each of these appropriations and the changes from FY 75 will be addressed individually in the remainder of this presentation.

CHART 11

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

($ Millions)

Budget Activity	FY 75	Change	FY 76	FY 7T	FY 77
Military Sciences	132	+ 12	144	38	152
Aircraft	1,098	+332	1,430	362	1,158
Missiles	370	- 12	358	108	515
Astronautics	454	+106	560	134	698
Ordnance	149	+ 40	189	58	280
Other Equipment	634	+ 86	720	205	796
Management and Support	462	+ 40	502	129	512
TOA	3,299	+604	3,903	1,034	4,111

As shown on Chart 11, the Air Force FY 76 request for Research, Development, Test and Evaluation is $3.9 billion, which is an increase of $604 million above the amount appropriated for FY 75. Funding requested for the transition period (FY 7T) to convert to the new fiscal year (1 Oct - 30 Sep) is $1.0 billion. An authorization of $4.1 billion is requested for FY 77.

The Military Sciences budget activity includes basic and applied research tasks and projects of potential military application in the physical, environmental, engineering, mathematical, biomedical and behavioral sciences. This budget activity provides for the Air Force Research Program, the general Exploratory Development programs of Environment and Materials, and Selected Studies in Advanced

Development. Military Sciences increases $12 million in FY 76 and an additional $8 million in FY 77. The major portion of these increases are associated with Defense Research Sciences ($74M to $82M in FY 76; $82M to $83M in FY 77) and is attributed to higher price levels and increased emphasis by the Department of Defense.

Aircraft covers RDT&E efforts for aircraft systems and related equipment including airframes, engines, armament, communications, weapons, and other equipment.

Funding requested in this budget activity will provide for major aircraft programs such as the B-1, A-10, F-15, F-16 and Advanced Medium STOL Transport. In addition, a range of programs dealing with avionics, flight dynamics, propulsion, materials and aerial target technology are included here. Aircraft development increases by $332 million in FY 76 to $1430 million, and then declines to $1,158 million in FY 77. The major portion of the increase in FY 76 is identified with the B-1 ($445M to $672M); Air Combat Fighter (F-16) ($32M to $273M); and the Advanced Medium STOL Transport ($56M to $84M). FY 76 decreases in programs such as the F-15A ($183M to $40M) and A-10 ($81M to $52M), which have substantially completed the R&D phase, partially offset the FY 76 increase. The decrease in FY 77 from FY 76 is due primarily to funding for the B-1 ($672M to $433M), reflecting the initiation of B-1 production.

The Missiles budget activity consists of RDT&E efforts for all types of missiles, components and related equipment. Air-to-air, air-to-surface and surface-to-surface missiles; training missiles, test vehicles, and specific ground support and training equipment are included in this budget activity. Representative missile systems and missile related programs include MINUTEMAN, AIM-7F, Air Launched Cruise Missile, Advanced ICBM Technology and Advanced Ballistic Re-entry Systems. Missile development decreases by $12 million in FY 76 and then increases by $157 million to $515 million in FY 77. Slightly lower amounts

are requested in FY 76 compared to FY 75 for the Air Launched Cruise Missile ($66.5M to $51M) and the Advanced Ballistic Re-entry System ($112M to $101M). Decreases in these two systems are partially offset in FY 76 by the initiation of two new advanced development programs, the Short-Range attack Missile ($3M) and an Advanced Short-Range Air-to-Air Missile Technology Program ($4M). Increases in FY 77 over FY 76 occur in the Air Launched Cruise Missile ($51M to $104M); Advanced ICBM Technology ($41M to $70M); MINUTEMAN Squadrons ($123M to $138M); Advanced Ballistic Re-entry Systems ($101M to $125M); and Strategic Bomber Penetration ($8M to $21M). Increases in these programs will permit pursuit of key items of technology which will assure qualitative improvements in strategic and tactical forces.

Astronautics includes RDT&E programs directed toward improvement of space technology for military purposes and the development of military applications of space vehicles and related equipment. Funds requested in this budget activity will support important programs such as the Defense Support Program, satellite communication systems, and Technology Space Shuttle, NAVSTAR Global Positioning System, and Space and Missile Surveillance Technology. The Air Force request for Astronautics increases by $106 million in FY 76 and by an additional $138 million to $698 million in FY 77. Increased funding in FY 76 is requested for Special Activities as well as the NAVSTAR Global Positioning System program ($24M to $75M) which will require additional satellites and boosters in FY 76. Programs requiring increased funding in FY 77 are the Space Test Program ($16M to $41M); Defense Satellite Communication System ($12M to $40M); Space Surveillance Technology ($14M to $37M); Missile Surveillance Technology ($9M to $25M); and the Space Shuttle ($23M to $58M). Increased funding for these astronautics programs provides for several new development tasks as well as a number of continuing efforts.

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In the Ordnance, Combat Vehicles, and Related Equipment budget activity funds are requested for a variety of efforts involving development, test and evaluation of munitions, weapons, fuzes, flame and incendiary devices, weapons delivery systems, laser devices and supporting technology. Programs included in this activity are Advanced Weapons, Advanced Radiation Technology, Close Air Support Weapon System and Air Delivered Land Mines.

The Other Equipment budget activity provides for development, test and evaluation of equipment which is not separately provided for under other budget activities.

Over 60 separate programs are included within the scope of this budget activity and are identified with general categories such as surveillance, communications, aircraft control and warning, electronic systems, detection systems, protective systems and personal equipment. Representative programs in this activity are the Joint Tactical Communications Program, Ground Electronics, Human Resources, Electronic Warfare Technology, Side Looking Airborne Radar, Reconnaissance/Electronic Warfare Equipment, Advanced Airborne Command Post and Airborne Warning and Control System. The increase of $86 million in FY 76 over FY 75 is associated with programs which will reach a peak funding level or for which a higher level of effort has been established. Increases in these programs are partially offset by decreased funding for the Advanced Airborne Command Post (FY 76 $42 million versus FY 7T $8 million) which has substantially completed engineering development. This budget activity increase in FY 77 is attributed to generally higher funding levels for most programs.

For example, Electronic Warfare Technology, from $8 to $15 million, recognizes the need to accelerate survivability of aircraft in sophisticated hostile air defense environments; Side Looking Airborne Radar (SLAR), $4 to $29 million, reflects

joint development effort with the Federal Republic of Germany for an all-digital, integrated airborne/ground processor; and Drone/Remotely Piloted Vehicles, from $14 to $35 million, to conduct full scale development of Compass Cope and to initiate Engineering development of their Drone Control and Data Retrieval System.

Management and Support provides for operating and maintaining installations whose primary mission is research and development or test support. This includes Air Force Systems Command and certain subordinate units and testing centers. This activity covers normal operation and maintenance type costs such as civilian pay, TDY, transportation, utilities, rent, supplies and equipment. The Management and Support area provides funds for operations of the Air Force Systems Command Acquisition Divisions (3) (including the Space and Missile Systems Organization (SAMSO)), and test centers (4), plus Headquarters AFSC. This funding increased $40 million from FY 75 to FY 76 and an additional $10 million to $512 million in FY 77. This is due primarily to increase for civilian pay, health benefits, POL, utilities, materials and services.

CHART 12

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

($ MILLIONS)

Program Category	FY 75	Change	FY 76	FY 7T	FY 77
Research	80	+ 8	88	22	89
Development					
Exploratory	278	+ 27	305	79	320
Advanced	484	+ 63	547	171	888
Engineering	1,236	+490	1,726	453	1,538
Operation Systems	710	- 29	681	166	710
Management and Support	511	+ 45	556	143	566
TOA	3,299	+604	3,903	1,034	4,111

Chart 12 presents the RDT&E appropriation by Program Category.

Research is scientific study and experimentation directed toward increasing knowledge and understanding in those fields

related to long-term national security needs. It provides fundamental knowledge for the solution of potential military problems and provides part of the base for subsequent exploratory and advanced development.

Exploratory development is applied research and includes the solution of specific military problems, short of major development projects. The dominant characteristic of this category is that it is pointed toward specific military technology problem areas with a view toward developing and evaluating proposed solutions.

Advanced development is directed toward the development of test hardware and prototypes. A characteristic of this category is the design of such items for test or experimentation as opposed to items designed and engineered for eventual service use.

Engineering development includes programs that are being engineered for service use, but which have not yet been approved for procurement

Operational system development is the development of weapon systems which have been approved for operational deployment.

Management and Support, which varies from the Budget Activity with the same title because of different defined coverage, e.g., MITRE is in this category here, but in the "Other" Budget Activity, is effort directed to the support of installations or operations required for general research, development, and test and evaluation. Included are test ranges, military construction, laboratory support, operation and maintenance of test aircraft, and analyses in support of the R&D Program.

The following table and narrative illustrate significant Advanced, Engineering and Operational Development Programs.

CHART 13

SELECTED DEVELOPMENT PROGRAMS

($ Millions)

		FY 75	FY 76	FY 7T	FY 77
	Advanced				
ABRES	Advanced Ballistic Re-entry System	112	101	29	125
NAVSTAR	Global Positioning System	24	75	13	54
	Advanced ICBM Technology	37	41	15	70
	Space Shuttle	10	23	8	58
AMST	Advanced Medium STOL Transport	56	85	11	45
	Engineering				
B-1	Strategic Bomber	445	672	168	433
ACF	Air Combat Fighter (F-16)	32	273	83	245
AWACS	Airborne Warning and Control System	202	199	54	124
A-10	Specialized Close Air Support Aircraft	81	52	1	2
ALCM	Air Launched Cruise Missile	67	51	13	104
AABNCP	Advanced Airborne Command Post	63	42	8	16
EF-111A	Tactical Electronic Warfare System	37	5	5	37
ATCA	Advanced Tanker/Cargo Aircraft	2	5	1	50
	Operational Systems				
MM II/III	Ballistic Missile	124	123	34	138
F-15	Air Superiority Fighter	183	40		
SDS	Satellite Data System	37	30	4	10
DSP	Defense Support Program	34	16	5	23

Chart 13 lists selected Advanced, Engineering, and Operational Development Programs.

Advanced

Development of Re-entry Vehicle Technology continues in the Advanced Ballistic Re-entry System (ABRES) program. A decrease in effort in the Ballistic Re-entry Vehicle Preprototypes area accounts for the majority of the funding decrease in FY 76. An increase in emphasis on Maneuvering Re-entry Vehicle Preprototypes is planned for FY 77.

The NAVSTAR Global Positioning System, a joint service program to develop a second generation navigation satellite system, will continue through FY 77. During this time period, development of user equipment, satellites, and control station equipment will reach a peak of activity.

The Advanced ICBM Technology Program provides the technology for improving the capability of the ICBM system, and expanding the technology base. The program goal is development of a system concept for the advanced ICBM (M-X). Fabrication and testing of representative subsystem designs will take place during this period, and basing concept selection will be made in FY 77.

The Air Force is the executive agent for the DoD Space Shuttle development program, and is responsible for assuring that critical national defense missions can be supported by the program. NASA has overall development responsibility for the Space Transportation System. The DoD will modify an existing launched vehicle upper stage for initial use with the system, and will provide launch facilities at Vandenberg Air Force Base. FY 76 through FY 77 efforts include a detailed review of NASA Shuttle Vehicle and support systems, hardware validation for the interim upper stage, and development of design criteria for the Vandenberg facility.

The Advanced Medium STOL Transport (AMST) prototypes are scheduled for first flight during FY 76 and FY 7T. Source selection and initiation of engineering development are scheduled for FY 77.

Engineering

Flight testing of the B-1 aircraft will continue during this period. The $672 million is requested for the FY 76 program. Three RDT&E aircraft are included in the B-1 development and initial operational flight demonstration test phase, due for completion in FY 77. After almost two years of flight testing, a production decision will be made in November 1976.

The funds requested for the Air Combat Fighter will continue the full-scale development of the F-16 which was initiated in January 1975.

The Airborne Warning and Control System (AWACS) successfully completed the systems integration demonstration phase of testing during FY 75, and the first of three DT&E aircraft was completed. During FY 76, the second and third DT&E aircraft are scheduled for completion. Air worthiness, flight load, technical order verification and fully integrated mission avionics flight testing will begin.

A-10 Special Close Air Support Aircraft research and development program is nearing completion. Twenty-two production aircraft procured in FY 75 will begin the initial equipage of the first operational wing. The 61 aircraft in the FY 76 program will also be assigned to the first wing.

Funding for the Air Launched Cruise Missile decreases in FY 76 because the program will continue in advanced development on a schedule that closely parallels the Navy Sea Launched Cruise Missile Program. The program will enter full scale development in FY 77 if the results of the advanced development program warrant it.

Development of the advanced command, control and communications (C^3) equipment for the Advanced Airborne Command Post will continue in FY 76 with testing being accomplished in the ground mockup through FY 7T. Development and initial operational test and evaluation on the advanced C^3 equipment in the test bed aircraft is scheduled to be completed in FY 77. Automatic Data Processing (ADP) development, initiated in FY 75, will continue through FY 77.

Funding for the EF-111A will permit development of a capability to suppress the effectiveness of enemy radars by barrier/standoff and escort jamming. A full-scale engineering development contractor was selected in January 1975 to being a 38-month program for two EF-111A prototypes.

Funding requested for the Advanced Tanker/Cargo aircraft will enable the release for the request for proposals (RFPs) for initiation of full-scale engineering development.

Operational

The Minuteman funding remains level in FY 76 and increases through FY 77. Development of the Missile Performance Measurement System and Improved Guidance will be completed. The Upgrade Silo at Wings I and IV, and the MK-12A Re-entry Vehicle programs will continue. Minuteman III procurement for flight test assets will also continue.

The F-15 Air Superiority Fighter research and development program is nearing completion. TAC received the first production aircraft 14 Nov 74. The 72 aircraft in the FY 75 program will complete the first wing. The 108 aircraft in the FY 76 program will sustain a nine per month production rate.

Satellite Data System funding continues to decrease because the program has transitioned from the design and development stage to the subsystem/system qualification test stage. Engineering support will continue and preliminary design to improve follow-on satellites will be initiated.

Defense Support Program funding continues to decrease as many major developments are completed. Satellite improvements and development of the simplified Processing Station hardware will continue.

CHART 14

AIRCRAFT PROCUREMENT
(QUANTITY/TOA $ MILLIONS)

AIRCRAFT	FY 75	CHANGE	FY 76	FY 7T	FY 77
B-1		+77.0	77.0	31.0	6/1160.0
F-15	72/756.9	+36/+680.9	108/1437.8	27/319.5	108/1225.2
AWACS (E-3A)	6/370.7	+59.8	6/430.5	30.0	6/340.1
A-10	22/166.9	+39/+193.8	61/360.7	33/87.0	221/781.5
C-12		+16/+11.8	16/11.8		
F-111	82.6	-82.6			
A-7	70.5	-70.5			
F-5E	71/69.2	-71/-69.2			
F-16					72.0
E-4B				3/175.0	
C-130 Simulator	/15.0	/-15.0			
Subtotal	171/1531.8	+20/+786.0	191/2317.8	63/642.5	341/3578.8
Initial Spares	253.4	+97.9	351.3	68.0	422.5
Replenish Spares	472.8	+277.6	750.4	122.1	705.1
Modifications	525.8	+134.9	660.7	126.3	916.9
Support Equip & Facilities	276.2	+219.1	495.3	128.2	632.5
TOTAL	3060.0	+1515.5	4575.5	1087.1	6255.8

Chart 14 shows that in FY 76, the Air Force requests $77 million for B-1 long lead procurement to complete design of production tooling and to order material for tooling and the early aircraft.

F-15 procurement increases to 108 aircraft, 36 more than FY 75, for a budget increase of $680.9 million. The 108 aircraft requested for FY 76 will provide an F-15 production rate of 9 per month in lieu of the 6 per month previously planned. This increased production will yield lower total program costs and will equip the last three F-15 wings earlier than currently scheduled.

The FY 76 AWACS request is $430.5 million for 6 aircraft, an increase of $59.8 million over FY 75. This increase results primarily from a production rate change from one aircraft per month to one aircraft every other month. There is $30.0 million in FY 7T for AWACS advanced procurement, and $340.1 million in FY 77 for the procurement of 6 aircraft.

The A-10 FY 76 program is for 61 aicraft, an increase of 39 aircraft. The procurement schedule is structured to allow for an orderly transition from low rate production of one aircraft per month in FY 75 to full production of 20 aircraft per month by September 1978. The total production program buy of 733 aircraft will continue through FY 79.

The FY 76 C-12 procurement of 16 aircraft for $11.8 million completes a total program buy of 30 aircraft. The aircraft will be used by the Defense Attache System (DAS), Military Assistance Advisory Groups (MAAGs), and Military Groups (MILGPs). It replaces obsolete C-54s, C-47s, and a few C-131s and T-29s.

The FY 75 F-111 program of $205.5 million for 12 aircraft and the 24 aircraft A-7 program of $100.1 million were authorized and appropriated. The President proposed a rescission of $122.9 million of F-111 funds and $29.6 million of A-7 funds.

Procurement of 71 F-5E aircraft in FY 75, formerly earmarked for South Vietnam, will provide three squadrons for Dissimilar Air Combat Training (DACT) for the USAF.

Advance procurement for the F-16, selected in the Air Combat Fighter (ACF) prototype competition, is $72 million in FY 77. This authorization request will provide advanced procurement funding to meet both the planned initial operational capability and related commitments to the European Consortium.

The Advanced Airborne Command Post (AABNCP) aircraft will provide survivable platforms for the National Command Authorities and the Command-in-Chief, SAC (CINCSAC). The procurement of the last three of seven AABNCP aircraft is in fiscal year 7T ($175.0 million).

The FY 75 C-130 funding begins the procurement of ten flight simulators and 2 cockpit procedural trainers to replace older C-130 simulators which have exceeded their operational life, are expensive to maintain, and are approaching obsolescence. The new C-130 flight simulators will incorporate state-of-the-art visual and motion systems providing the visual and kinesthetic cues necessary to accomplish visual take-off and landing, emergency procedures, and tactical airdrop maneuvers.

The initial spares request of $351 million in FY 76 is required to support the initial operations of aircraft being procured. The FY 76 increase of $98 million is primarily for the support of the F-15, AWACS and A-10 deliveries.

The replenishment spares request of $750 million is to maintain pipeline quantities, base and depot peacetime and wartime stocks, and to replace attrited spares. The basic determinant of spares level requirements is the time the item will operate before it must be removed and repaired, referred to as Mean Time Between Failure (MTBF). The MTBF is applied to the weapon system operating program to determine the quantity of reparables that will be generated. The FY 76 increase of $278 million is primarily the result of procurement of previously

deferred WRM spares and WRM spares for additional aircraft being added to the inventory. The major systems requiring procurement of WRM spares are the C-5A ($162 million), F-15 ($65 million), and F-111 ($43 million).

The FY 76 request of $661 million for modification of in-service aircraft is an increase of $135 million over FY 75. Technological advances make modifications necessary to enable the strike, defense, tactical, and support forces to maintain superiority over hostile forces. Modifications are also necessary to maintain and extend the programmed service life of aircraft, to ensure maximum safety of the aircraft and crews, and to provide increased Civil Reserve Air Fleet (CRAF) capability.

Of the $135 million increase in the FY 76 modification program, $89 million is attributed to RF/F-4 programs. Follow-on programs support the Advanced Wild Weasel capability ($46 million) and Air-To-Air Missile improvement ($10 million). New modification programs initiated in FY 76 include Smoke Abatement ($12 million), replacement of APS-107 Radar Warning Receiver ($13 million), and update of F/RF-4 Avionics ($10 million). The C-5A FY 76 modification program includes an increase of $15 million attributable mainly to improvements in navigation equipment plus a series of structural beef-ups to keel beam, ramp, nose landing gear, upper deck floors and cargo doors ($12 million). The Civil Reserve Air Fleet (CRAF) FY 76 program increases by $22 million to begin the CRAF modification program which will provide commercial wide body aircraft with nose visor cargo access doors, aft side loading doors and floor strengthening to B-747/DC-10 aircraft.

The request of $495 million for Aircraft Support Equipment and Facilities is an increase of $219 million over FY 75. This budget activity includes items of aerospace ground support equipment which are required to service and test aircraft and their components; component improvement, industrial machinery, equipment, and facilities required in the manufacture of items funded

by this appropriation; war consumable items required to be on hand above the peacetime inventory for immediate use in the event of war; and other production charges such as electronic warfare equipment. This activity also provides for procurement of flight simulation equipment for aircraft no longer in production, which is included in the Common Ground Equipment request. The following paragraphs highlight major increases in funding levels in this activity:

- The FY 76 request of $209 million for support equipment is an increase of $99 million over FY 75. Of this increase, $85 million is for the procurement of simulators, (B-52, KC-135, and C-130). The remainder is for replacement of unreliable, obsolete equipment and procurement of equipment to support new aircraft coming into the operational inventory.
- The request of $66 million for Component Improvement is an increase of $57 million over FY 75. $52 million of the increase is for the F-100 engine (F-15). Prior to the F-15 entering the operational inventory, this effort was funded in the RDT&E appropriation. The remainder is for increases in activity for engines exhibiting maintainability, durability, or reliability problems such as the TF-41 (A-7), TF-30 (F-111), and J-85 (F-5/T-38).
- The request of $39 million for Industrial Facilities is an increase of $10 million over FY 75, with major increases in Manufacturing Technology ($5 million) and Industrial Preparedness ($5 million). Increased emphasis is being given to initiation of new manufacturing processes for metals, composites, and electronics. The new processes will result in improved materials use and lowered production costs. Maintenance of idle plant capacity at AF Plant #4, General Dynamics ($7.3 million), and AF Plant #16,

Lockheed ($2.2 million) is now being funded in the Industrial Preparedness Program.

- The request of $35 million for War Consumables is an increase of $23 million over FY 75. The increase results primarily from the requirement to procure War Reserve Materiel (tanks, pylons, and launchers) for the F-15 as it enters the operational inventory.
- Other Production Charges increases $31 million over FY 75, to $146 million. The increase is due in part for aircraft pods (Pave Spike/Pave Penny) to enhance the capability of tactical aircraft to locate and destroy targets. These systems emphasize the use of lasers to designate targets and guide ordnance delivery.

CHART 15

MISSILE PROCUREMENT SUMMARY
(Quantity/$ Million)

	FY 75	CHANGE	FY 76	FY TT	FY 77
Ballistic Missiles					
MM II/III	61/298.4	-11/-32.6	50/265.8		36.7
MM Force Mod	298.9	+88.8	387.7	70.5	304.9
Other Missiles					
Maverick	5600/72.7	+400/+71.3	6000/144.0	1200/25.0	5250/164.4
Sparrow	300/43.3	+320/+36.8	620/80.1		880/78.4
Shrike	270/11.1	+1048/+34.8	1318/45.9	300/9.6	1337/49.2
Sidewinder (9L)		+710/+39.5	710/39.5		1000/37.3
Sidewinder (9H)		+22.7	22.7		
SRAM					20.3
HARPOON					90/41.0
Target Drone	6.3	+14.5	20.8	2.2	18.9
Tactical Drone		+1.6	1.6		25.5
Modifications	40.9	+8.2	49.1	.3	39.1
Spares	43.3	+43.3	86.6	6.2	67.0
Replenishment Equip	13.3	+9.7	23.0	2.9	15.6
Replenishment Spares	19.5	+35.7	55.2	2.3	38.9
Initial Spares	10.5	-2.1	8.4	1.0	12.5
Other Support Equip & Facilities					
Space Programs	192.0	-74.8	117.2	20.3	166.5
Special Programs	517.0	+.1	517.1	138.3	524.8
Other	18.8	-5.5	13.3	5.0	32.8
TOTAL	1542.7	+248.7	1791.4	277.4	1606.8

The Missile Procurement request, which is summarized on Chart 15, is $1,791.4 million for FY 76, $277.4 million for FY 7T, and $1,606.8 million for FY 77. The MINUTEMAN deployment program is for 450 MINUTEMAN II missiles and 550 MINUTEMAN III missiles. The FY 76 request provides for 50 additional MINUTEMAN III missiles ($265.8M) for flight test assets. Funds are included in FY 76 ($387.7M), FY 7T ($70.5M) and FY 77 ($304.9M) for the continuation of the Force Modernization Program. FY 77 will include funds for initial procurement of the new MK 12A ($+36.7M) reentry vehicle for MINUTEMAN III.

The TV MAVERICK procurement program continues through FY 77 and provides for 11,850 missiles, 4,000 of which will have the new Scene Magnification TV guidance. In FY 77 the Air Force proposes to introduce the LASER and the Imaging Infrared guidance units for MAVERICK procuring 350 LASER missiles and 250 Imaging Infrared missiles.

The SPARROW and SHRIKE procurement programs continue through FY 77 to fulfill War Reserve Material (WRM) requirements. Procurement of the AIM-9L, the new solid state SIDEWINDER, will be initiated in FY 76 to fulfill WRM requirements. Also included in FY 76 is $22.7 million for a one-time procurement of a quantity of AIM-9H missiles.

FY 77 includes a fund request ($20.3M) for SRAM long-lead requirements to reopen the production line for procurement of missiles for B-1 equipage. Funds are also requested in FY 77 to provide for the procurement of an initial quantity of the HARPOON missiles ($41.0M) to be carried by modified B-52 aircraft for sea lane control as a collateral mission with the Navy.

To provide target drones for system development and testing, and for training purposes, the Air Force is requesting funds to procure POM-102 and BQM-34A target drones. The PQM-102, an unmanned aircraft, provides a full-sized, afterburning,

maneuverable target to stimulate enemy fighters. The BQM-34A is a pilotless aircraft which is remotely controlled through normal flight maneuvers. As a complete weapons evaluation system and training device, the BQM-34A also carries target augmentation devices to meet varying mission requirements.

$1.6 million is requested for procurement of long-lead items for the BGM-34C, Tactical Drone, which will enter into full production in FY 77. The BGM-34C is a high altitude, subsonic drone with multi-mission capability. The multi-mission capability is achieved through modular nose sections containing specialized mission equipment (electronic warfare support, reconnaissance, and air-to-ground strike).

"Modifications" provide for the continued update of the MINUTEMAN mission, and the modification of other in-service missiles, as necessary, for operational improvements, safety of flight, or extension of service life. The request for FY 76 is $49.1 million. The $8.2 million increase in modification requirements is due to: (1) an increase in the quantity of SIDEWINDERS being converted from the AIM-9B to AIM-9J configuration ($+7.2M); (2) improving a quantity of -9J missiles to -9J+ ($+3.5M); and (3) a new requirement to modify the Standard Anti-Radiation Missile Ground Support Equipment for use with the F-4 Wild Weasel aircraft ($+2.1M), offset in part by a decrease in MINUTEMAN UPDATE requirements ($-4.4M) and other minor changes ($-0.2M).

The "Spares" request is for initial and replenishment spares and replacement equipment tosupport new missile procurement and missile inventory maintenance. The total amount required is $86.6 million. The increase of $43.3 million is due to a MINUTEMAN "buy-out" requirement related to termination of MINUTEMAN procurement in FY 76 ($+26.2M), the transfer of responsibility to fund for RV related time change items from Other Procurement to Missile Procurement ($+7.7M), repricing to current costs($+6.2M), and other increases ($+3.2M).

"Space Programs" includes satellites for operational space systems and the boosters to place them into orbit. Systems included are the Satellite Data System ($9.6M), the Defense Meteorological Satellite Program ($30.1M), Defense Support Program ($39.1M), the Defense Satellite Communication System ($36.7M), and the Air Force Satellite Communication System ($1.7M).

CHART 16

OTHER PROCUREMENT

($ MILLIONS)

	FY 75	CHANGE	FY 76	FY 7T
Munitions	196.6	+203.2	399.8	32.0
WRM	(107.2)	(+197.2)	(304.4)	(6.6)
Vehicles	63.3	+41.3	104.6	5.6
Electronics & Telecomm	365.8	+260.2	626.0	54.0
Other Base Maint &Support	1,030.3	+182.1	1,212.4	292.0
Selected Activities	(909.1)	(+110.7)	(1,019.8)	(267.6)
Other	(121.2)	(+71.4)	(192.6)	(24.4)
TOTAL TOA	1,656.0	+686.8	2,342.8	383.6

Chart 16 shows the FY 76 request for Other Procurement of $2,342.8 million, an increase of $686.8 million over the FY 75 program. Also shown is the $383.6 million for the Transition Period.

MUNITIONS

The FY 76 request of $399.8 million is $203.2 million over FY 75. $197.2 million, or 97%, of this increase is for WRM. The remainder is to satisfy increased training and base security requirements. $304.4 million, or 76%,

of the FY 76 program is for WRM. $95.4 million is for procurement of weather rockets, training and base security.

The $32.0 million request for the Transition Period is required to support production commitments and reorder lead times.

VEHICLES

The $104.6 million requested for vehicle procurement will provide limited and long delayed acceleration of the Vehicle Replacement Program to update the vehicle inventory to an efficient and economical operating level. Approximately one-third of the present $1 billion Air Force vehicle inventory requires replacement because it is overage, has excessive mileage or is beyond economical repair.

The increase of $41.3 million over FY 75 provides for additional passenger carrying, cargo and utility vehicles, special purpose vehicles, firefighting equipment, and other vehicles such as forklifts, tactical cargo loaders and runway vacuum cleaners.

The $5.6 million requested for the Transition Period is required for the P-4 Crash Truck, the High Capacity Fire Truck, spares and modifications.

ELECTRONICS AND TELECOMMUNICATIONS EQUIPMENT

The FY 76 request of $626.0 million is required to provide electronic and telecommunications systems for command and control of the operational forces and Air Force-wide communications. The increase of $260.2 million is required to upgrade and modernize command, control and communications systems in the Active and Reserve Forces (Tactical Air Control, Traffic Control and Landing, LORAN, AFSATCOM), Detection Systems (SPACETRACK), and improve the security of nuclear munitions (Air Base Defense).

The $54.0 million requested for the Transition Period is needed to exercise contract options and continue required programs during this period.

OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT

The $1,212.4 million requested for FY 76 is an increase of $182.1 million over FY 75. Approximately 61%, or $110.7 million of this increase, is in the Selected Activities program. The remaining $71.4 million of the increase provides for test, electrical, depot modernization, and base support equipment. It also provides for the initiation of production of Tactical Information Processing and Interpretation (TIPI) System (new mobile system to process, analyze and exploit tactical intelligence data).

The $292.0 million requested for the Transition Period is needed to exercise contract options and to continue required programs during this period.

CHART 17

MUNITIONS - HIGH $ ITEMS

	FY 76				FY 7T			
	TOTAL		WRM		TOTAL		WRM	
	QTY	$(M)	QTY	$(M)	QTY	$(M)	QTY	$(M)
ROCKETS & LAUNCHERS								
2.75" Rkt Mtrs & Heads	1,275K	48	1,275K	48	183K	6	183K	6
CARTRIDGES								
7.62M M-13 Link	97,608K	15	97,608K	15	1,271K	*	1,271K	*
20MM Tng/Cmbt	19,269K	40	6,881K	17	4,798K	10	-	-
30MM Tng/Cmbt	1,376K	47	976K	38	-	-	-	-
BOMBS								
Cluster Bombs								
Anti-Personnel	15,472	19	15,472	19	-	-	-	-
Anti-Matl/Anti-Persl	4,800	19	4,800	19	-	-	-	-
General Purpose								
2,000 Lb, MK-84	14,400	16	13,970	15	-	-	-	-
Guided Munitions								
GBU-2 (PAVESTORM)	1,000	11	1,000	11	-	-	-	-
Electro-Optical (E-O)								
Bomb Guidance Kit	240	20	240	20	-	-	-	-
Modular Guided Glide								
Bomb (MGGB)	50	12	25	6	-	-	-	-
Laser Bomb Guidance								
Kit	8,042	51	8,042	51	-	-	-	-
FUZES								
FMU-54A/B Retarded Fuze								
f/General Purpose Bombs	48,150	7	48,150	7	-	-	-	-
TOTAL HIGH $ ITEMS		305		266		16		6
TOTAL PROGRAM		400		304		32		7
Per Cent of Total Program		76%		88%		50%		86%

* Less than $500 Thousand

Chart 17 lists FY 76 High Dollar Munition items. The major portion of the program ($304.4 million) is for procurement of War Reserve Materiel (WRM) to meet specified inventory objectives. The entire procurement of 2.75" Rocket Motors/Heads, cluster bombs and FMU-54A/B Fuze ($93 million) is for WRM. The planned procurement of guided munitions totals $94 million of which $88 million is for WRM. The balance of the funds identified for cartridges

(7.62MM/20MM/30MM) and the MK-84 General Purpose Bomb totals $118 million, of which $85 million is for WRM.

The funds identified for FY 7T are primarily required to sustain procurement of 2.75" Rocket Motors/Heads for WRM and 20MM for training during the Transition Period to the new fiscal year.

CHART 18

MILITARY CONSTRUCTION, AF
($ Millions)

	FY 75	CHANGE	FY 76	FY 7T
Major	365.7	+283.6	649.3	0.0
Major	22.3[1/]	0.0	0.0	0.0
Minor	18.0	+ 6.0	24.0	5.0
Planning	35.9	- 5.9	30.0	9.0
Other Support	3.0	- 2.7	0.3	0.0
TOA	444.9[2/]	+281.0	703.6	14.0

1/ $22.3 million is for specific deficiency authorizations for FY 74 projects for which bid proposals were received and rejected due to costs exceeding authorization limits in FY 74 MCP Act.

2/ Does not include $11.5 million (within the $456.4 million in FY 75 appropriated) to cover cost overruns due to inflation impacting on prior years' programs where deficiency authorization was not required.

FACILITY CATEGORY	FY 76	FY 7T
Support	54.3	14.0
Operational	222.6	
Training	20.3	
Maintenance	31.8	
RDT&E	9.6	
Supply	43.6	
Medical	154.6	
Administration	15.7	
Bachelor Housing	52.9	
Community	12.4	
Utilities	28.1	
Pollution Abatement	10.7	
Energy Conservation	47.0	
Real Estate	.0	
	703.6	14.0

MILITARY CONSTRUCTION, RESERVE FORCES
($ Millions)

	FY 75	CHANGE	FY 76	FY 7T
Air Force Reserve	16.0	+ 2.0	18.0	1.0
Air National Guard	35.5	+ 27.5[1/]	63.0	1.0

1/ To cover aircraft conversions and aircraft transfers from the Air Force.

Chart 18 presents the Construction Program for FY 76. The request for $704 million includes Major Construction projects costing $649 million, or 92% of the Program. The remainder is for Support items; i.e., Minor Construction to meet urgent unforeseen requirements which arise during the course of the year for $24 million, and planning and design for the projects included in the FY 76, FY 77 and FY 78 programs, $30 million.

The Operational facility funding includes $175 million for protective shelters to insure aircraft survivability in Europe.

The Training category contains $10 million to continue the Air Force's program toward optimum use of Flight Simulators.

The Maintenance and Supply categories include $20 million of the $22 million for the Depot Plant Modernization program which was started in FY 72.

Medical facility funding has been increased from prior year levels to $155 million as part of the DOD sponsored program to modernize the ageing/inefficient hospital inventory, included are facilities at Keesler AFB ($43 million), Lackland AFB ($98 million), and RAF Upper Heyford ($13 million).

Administrative facility funding provides $7 million in FY 76 that will permit relocation of the Electromagnetic Compatibility Analysis Center from Annapolis to Ft. George Meade, Maryland.

The Bachelor Housing program to improve living conditions for Air Force personnel includes $32 million to construct 2,640 new dormitory spaces, $9 million for 400 new bachelor officer quarters and $12 million to modernize and upgrade existing airmen and officer bachelor housing. Not included in the Air Force Budget, but in the OSD request, is $6 million to construct 200 new housing units (Clark AFB) for Air Force families.

The amounts included in the Research and Development, Community, Utilities and Pollution Abatement categories are at the same dollar levels as in FY 75. The Energy Conservation category, at $47 million, is the initial increment of a fuel conservation program.

CHART 19

MILITARY PERSONNEL, AF

	FY 75	CHANGE	FY 76	FY 7T
MILITARY PAY (TOA $ MILLIONS)				
Officers	2192.9	-36.6	2156.3	517.5
Airmen	4300.2	-136.7	4163.5	1015.7
Cadets	21.0	+.1	21.1	5.8
Subsistence	411.3	-5.5	405.8	99.4
PCS	568.4	+81.0	649.4	176.9
Other	6.2	-1.7	4.5	1.0
TOTAL	7500.0	-99.4	7400.6	1816.3
END STRENGTHS (INCLUDING REIMBURSEABLES)				
Officers	104,501	-4534	99,967	99,504
Airmen	502,616	-17000	485,616	486,285
Cadets	4,417	-0-	4,417	4,211
TOTAL	611,534	-21534	590,000	590,000

Chart 19 outlines the FY 76 Military Personnel Appropriation request of $7,401 million. Military personnel costs in the active force decreased $99 million from the $7,500 million estimated for FY 75. This net reduction of $99 million considers the end strength adjustment of 21,534 in FY 76 discussed previously which saves $239

million in pay and allowances, offset by other adjustments in the military personnel appropriations such as the cost of the 1 October 1974 pay increase. Full year effect of this pay raise is $334 million; an increase of $76 million over FY 75 when the pay raise was effective for just nine months. In addition, accession and separation costs decrease $18 million, proficiency pay reductions total $10 million, reenlistment bonuses decline $8 million and overseas allowances decrease $3 million.

The Permanent Change of Station Travel Program increase of $81 million includes $28 million for moves deferred from FY 75 to FY 76 in order to stay within available funds and $24 million to implement announced base closures and base realignments in FY 76. Interstate Commerce Commission approval of increased domestic and international tariff rates, effective 1 November 1974 and 1 January 1975, on household goods shipments added $26 million to FY 76 requirements. FY 76 also reflects transportation rate increases effective 1 July 1975 for passenger and cargo movements utilizing the Air Force Airlift Service Industrial Fund and the Navy's Military Sealift Command. In addition, the Military Traffic Management Command, operated by the Army, will increase port handling changes 7.7% on 1 July 1975.

FY 7T permanent change of station travel reflects the seasonal fluctuations which are normal for permanent change of station in the military.

Although not shown on the chart, the following actions impact on military personnel:

Officer accessions (7,735) for FY 76 are programmed to be slightly below FY 75. The Air Force plans to recruit 75,000 non-prior service enlisted men and women compared to 74,155 in FY 75. In FY 7T, 24,673 non-prior service enlistments are programmed.

It is also planned to enlist 3,500 former enlisted servicemen, plus approximately 844 individuals who will enter officer commissioning programs. In FY 7T, 483 individuals are planned to enter officer commissioning programs.

Reenlistment rates are currently meeting Air Force needs. First term reenlistments are programmed at 16,844 in FY 75, 18,600 in FY 76, and 6,209 in FY 7T. Career enlistments are programmed at 54,038 in FY 75, 52,593 in FY 76, and 15,248 in FY 7T. Accession objectives for women in the Air Force (both officer and enlisted) have been established at 10,415 in FY 75, 9,420 in FY 76, and 3,304 in FY 7T.

CHART 20

OPERATION AND MAINTENANCE

- DAY TO DAY OPERATIONS
- SUPPORT OF WEAPON SYSTEMS, BASES AND PEOPLE
- MAINTENANCE OF PHYSICAL PLANT
- WORKING AND LIVING ENVIRONMENT

COMBAT READINESS

Chart 20 indicates the purpose of the Operation and Maintenance (O&M) Appropriation. It provides the resources for the day-to-day operation of the Air Force, including facilities, equipment, supplies, material, and pay of civilians.

The O&M Appropriation provides the support of weapon systems to insure combat readiness of the forces.

The physical plant and the working and living environment of the Air Force are also maintained by Operation and Maintenance funds.

CHART 21

OPERATION & MAINTENANCE, AF

($ Millions)

ELEMENT OF EXPENSE	FY 75	CHANGE	FY 76	PERCENT	FY 7T	PERCENT
CIVILIAN PAY	$2,214.0	$+ 15.3	$2,229.3	28.0	$547.8	27.2
DIRECT HIRE	(2,081.2)		(2,088.5)		(513.7)	
INDIRECT HIRE	(132.8)		(140.8)		(34.1)	
DEPOT MAINTENANCE	1,047.7	+ 11.8	1,059.5	13.3	260.8	12.9
EXCHANGEABLES	(557.1)		(548.2)		(137.0)	
AIRCRAFT	(293.1)		(319.9)		(75.9)	
ENGINE	(113.0)		(112.1)		(28.0)	
MISSILE	(6.2)		(6.5)		(1.6)	
OTHER	(78.3)		(72.8)		(18.3)	
SUPPLIES & EQUIP	1,965.9	+310.7	2,276.6	28.6	592.7	29.3
POL	(1,204.9)		(1,329.1)		(341.3)	
NON-POL	(761.0)		(947.5)		(251.4)	
TRAVEL & TRANS	535.9	+ 25.4	561.3	7.1	144.2	7.1
RENT, COMM & UTILITIES	504.6	+ 20.5	525.1	6.6	132.0	6.6
OTH PURCHASED SVS	768.1	+200.9	969.0	12.2	257.2	12.7
CONTRACT OPERATED INSTALLATIONS	111.8	+ 16.9	128.7	1.6	33.1	1.6
OTHER EQUIP MAINT	114.6	+ 19.6	134.2	1.7	34.3	1.7
PRINTING, INS & INDEMNIFICATION	65.1	+ 7.5	72.6	.9	18.2	.9
TOA	$7,327.7	$+628.6	$7,956.3	100.0	$2,020.3	100.0

Chart 21 summarizes the Operations and Maintenance fund requirements for the appropriation in terms of Elements of Expense. I will briefly describe each element and explain the reasons for changes between FY 75 and FY 76.

CIVILIAN PAY

The pay and other benefits for civilian personnel increases $15.3 million from FY 75 to FY 76. However, civilian end-strengths direct hire and indirect hire, decreased 6,498

from 178,101 to 171,603 as a result of manpower realignments, consolidations and force adjustments. The substantial reduction in fund requirements realized by these actions have been more than offset by the full year cost of pay raises which were effective in FY 75.

DEPOT MAINTENANCE

Depot Maintenance provides for maintenance of aircraft, missiles, engines, command and control systems, weapon system components and other equipment beyond the capability of the operating commands.

The workload is primarily accomplished through the Depot Maintenance Industrial Fund (DMIF) facilities and contracting.

Higher fund requirements ($11.8 million) in FY 76 are for the annualization of DMIF rate increases resulting from civilian pay raises which were effective during a portion of FY 75, partially offset by reductions in workload.

SUPPLIES AND EQUIPMENT

Requirements increase $310.7 million from FY 75 to FY 76 as a result of price increases. The supplies and equipment element includes the POL required for the combat readiness of aircrews. These funds are also for the materials consumed in the maintenance and repair of weapon systems, the operation and maintenance of bases, and the training and the medical treatment of Air Force personnel.

TRAVEL AND TRANSPORTATION

Additional funds ($25.4 million) are required to purchase commercially the transportation previously provided by the 400 support aircraft which have been inactivated. In addition, full year costs of FY 75 price increases plus rate adjustment effective 1 July 1975 are also a significant factor. The funds provide for the transportation and per diem of individuals, freight and expense charges, drayage, and mail transportation.

RENTS, COMMUNICATIONS AND UTILITIES

The increased requirement (+20.5) is primarily for the rental of ADP equipment. This item also includes postage and the rental of real estate.

OTHER PURCHASED SERVICES

An increase of $200.9 million is primarily required in FY 76 for essential flying training for the Military Airlift Command, JCS exercises and real property maintenance. This element covers contract operations for training, maintenance of installations, of ground electronics, engineering and technical services, reimbursable services provided by other government agencies, aircraft refueling, facility repair and alterations.

CONTRACTOR OPERATED INSTALLATIONS

This element provides for base maintenance contracts at selected installations to include such functions as civil engineering, food preparation and service, supply, and vehicle maintenance. The increase of $16.9 million is for cost of living provisions in existing contracts and for renegotiated multiple years contracts.

OTHER EQUIPMENT MAINTENANCE

Certain equipment is maintained by contracts with private vendors rather than with the facilities of the Depot Maintenance Industrial Fund.

An increase of $19.6 million is required for the annualization of FY 75 price levels and for expansion of selected intelligence programs.

PRINTING, INSURANCE, AND INDEMNIFICATION

This element includes command centrally managed contractual printing and reproduction service and reimbursements to the Bureau of Employee Compensation (BEC).

An increase of $7.5 million is required for printing price changes and for the actual billing received from the Bureau for FY 74 injury and death claims.

CHART 22

OPERATIONS & MAINTENANCE, AF

(TOA $ Millions)

	FY 75	CHANGE	FY 76	FY 7T
MAJOR FORCE PROGRAM				
Strategic	1517.1	+134.6	1651.7	418.9
General Purpose Forces	1322.4	+110.7	1433.1	368.2
Intel & Comm	579.1	+44.9	624.0	155.1
Airlift	277.4	+226.8	504.2	146.0
Central Supply & Maint	2534.1	+22.9	2557.0	630.5
Trng, Med & Other	838.7	+74.0	912.7	233.5
Admin & Assoc Act	257.3	+15.1	272.4	67.9
Sup of Oth Nations	1.6	-.4	1.2	.2
TOTAL	7327.7	+628.6	7956.3	2020.3

Chart 22 compares the O&M Appropriation for FY 75, FY 76, and FY 7T by Major Force Program (MFP).

STRATEGIC FORCES

These forces provide the capability for delivering of weapons, warning of any impending attack, and the air defense forces to defend U.S. air sovereignty.

An increase of $135 million is required for fuel, supply and equipment price increases, transfers of funding responsibility for base level reparables, for civilian pay raises, real property maintenance deferred from FY 75, and rehabilitation of Titan II support facilities.

There are offsetting decreases from reductions in the flying hour programs to include the initial transfer of KC-135 aircraft to the Air Reserve Forces.

GENERAL PURPOSE FORCES

General Purpose Forces consist primarily of the Tactical Air Forces which provide air superiority, reconnaissance,

interdiction and close air-ground support through both conventional and tactical nuclear capability.

The increase of $111 million primarily results from increases in the price of aviation fuel and supplies, annualization of General Schedule, Wage Board and Foreign National civilian pay raises, transfer of funding responsibility for base reparables, an enhanced JCS Exercise program to insure the peacetime maintenance of combat readiness among the Unified and Specified Commands, introduction of the F-5 and F-15 into the active aircraft inventory and an increase in tactical fighter crew ratios.

There are offsetting decreases in General Purpose requirements. These reductions result primarily from the transfer of funding responsibility for C-130 tactical airlift forces, including aerial port and supporting bases, to Major Force Program IV, Airlift Forces, the transfer of four RF-4 squadrons to the Air National Guard and the transfer of funding responsibility for C-9 tactical aeromedical evacuation missions to Major Force Program VIIIB, Medical.

INTELLIGENCE AND COMMUNICATIONS

This element provides for National, DOD, and Air Force intelligence and security programs; world-wide communications for National Command authorities and the Air Force; and for specialized functions such as weather, rescue, and traffic control, satellite control and the National Military Command System.

An increase of $45 million is required for fuel, supply and equipment price increases, civilian pay raises, transfers of funding responsibilities for base level reparables and the electromagnetic compatability analysis center, and additional intelligence and communication support.

The intelligence training function will be transferred to Major Force Program VIII effective 1 July 1975. Certain com-

munications programs are being transferred to NSA and aircraft are being substituted for surface recovery ships previously used by the Satellite Control Facility for satellite recovery operations.

AIRLIFT FORCES

The airlift program provides for essential training and support requirements to insure the ready responsiveness of airlift forces during wartime or contingency operations. Several factors contribute to the $226.8 million increase in Major Force Program IV for FY 76. The airlift program has been impacted by the increases in the price of supplies and aviation fuels and the transfer of funding responsibility for base reparables. In addition, in FY 76, the Air Force will consolidate tactical airlift and support aircraft under a single manager, the Military Airlift Command (MAC). Also, beginning in FY 76, local area aircrew training and other essential C-5 and C-141 flying training hours not subscribed by DOD airlift users for cargo movement will be funded in the O&M, AF Appropriation; the same as other air weapon systems training programs.

CENTRAL SUPPLY AND MAINTENANCE

This program provides logistical support for Air Force operations including the distribution of materiel, materiel management, prime procurement, and contract management, depot maintenance, second destination transportation and operation of the Eastern Test Range.

Overall, the program workload is responsive to the total Air Force program including force structure, inventory, flying hours, bases and war reserve materiel requirements.

An increase of $22 million from FY 75 to FY 76 results from increased workload related to intelligence programs; depot maintenance rate increases, transportation tariff in-

creases and increased claims to the Bureau of Employment Compensation. These increases are partially offset by depot maintenance and transportation workload decreases.

TRAINING, MEDICAL AND OTHER GENERAL PERSONNEL ACTIVITIES

Provides for training, medical and other activities for personnel as individuals rather than as members of organizations. Enlisted and officer training loads are relatively level from FY 75 to FY 76. Flying training output will be reduced.

The reduction in medical workload as the active forces decrease has been offset by increases in the number of retired and their dependents.

An additional $74 million is required for FY 76 fuel and supply price increases; civilian pay raises; commercial travel to substitute for support aircraft being eliminated; and for the transfer of funding responsibilities for base level reparables, cryptological training, and overseas intra-theater aeromedical evacuation.

ADMINISTRATION AND ASSOCIATED ACTIVITIES

Funds are for the operation of the departmental headquarters, selected field headquarters and operating agencies.

The ongoing Air Force effort to abolish, realign or consolidate headquarters functions has been applied to this program as well as other programs.

An increase of $15 million is required for commercial travel to offset the loss of support aircraft, and for price increases for fuel, supplies, and equipment, and annualization of FY 75 civilian pay raises.

SUPPORT OF OTHER NATIONS

The funds are for the support of units and activities providing support for international military headquarters and agencies.

CHART 23

AIR FORCE RESERVE

APPROPRIATIONS

	FY 75	CHANGE	FY 76	FY 7T
O&M	298.0	+45.8	343.8	87.7
Personnel	147.9	+12.8	160.7	51.1
Construction	16.0	+2.0	18.0	1.0
TOTAL AFR	461.9	+60.6	522.5	139.8

PROGRAMS

	FY 75	CHANGE	FY 76	FY 7T
Flying Units	53	0	53	53
Aircraft (Active)	446	+40	486	491
Flying Hours	141,932	+191	142,123	38,945
Military Personnel				
End Strength	51,676	+1534	53,210	53,743
Avg Strength	48,336	+3453	51,789	53,642
Civilian Personnel				
End Strength	11,558	-56	11,502	11,502
Avg Strength	11,548	+61	11,609	11,500

Chart 23 addresses the Air Force Reserve Appropriations and Programs.

The Operations and Maintenance, Air Force Reserve appropriation increases by $46 million in FY 76. Significant increases include $16 million related to the Associate C-141/C-5 program (primarily for continuation of the phased increases in crew ratios and flying hours required to produce a greater strategic airlift surge capability); $9.5 million for increased supply costs effective 1 July 75; $5.8 million one-time moving and caretaker costs related to closing of Ellington and Hamilton Air Force Bases. The remaining $14.5 million is for full year annualization of civilian pay increases, conversion of two C-130B squadrons

to an AC-130 and a WC-130 squadrons, depot maintenance and real property maintenance.

The Air Force Reserve Personnel appropriation increases in FY 76 by $13 million with an average strength increase of 3,453. Conversion of the two C-130B units to different weapon systems, the increase in C-141/C-5 manning for the strategic airlift surge capability and the attainment of full programmed manning from an intensive recruiting effort are significant factors in these increases.

The Military Construction, Air Force Reserve appropriation increases by $2.0 million in FY 76. $1.0 million is for Energy Conservation projects designed to reduce energy consumption by 15%. Conversions to new weapon systems support the remaining $1.0 million.

CHART 24

RESERVE MODERNIZATION

Aircraft and Mission Conversion

From	TO	FY 75	FY 76	FY 7T
C-130B	AC-130		1	
C-130B	WC-130		1	
HH-1	HH-1/HH-3	1		
Total		1	2	0

Series Change

From	TO	FY 75	FY 76	FY 7T
A-37A	A-37B	1		
C-130A	C-130B		1	
C-130A	C-130E		1	
C-130B	C-130E		1	
Total		1	3	0

Chart 24 shows the modernization of the Air Force Reserve. The Air Force Reserve is continuing its transition to more modern weapon systems; however, a stable force structure has reduced the pace of conversions. During FY 75, one unit converted to a new type aircraft without a change in mission, and one unit became a composite unit. In FY 76, two units convert to new types of aircraft and missions.

The military airlift units are being modernized with C-130Bs and C-130Es, one A-37A unit modernized with A-37Bs. All airlift units have been reorganized under the Military Airlift Command. Air Rescue units have been equipped with newer helicopters and are now flying the HH-3E, and HH-1 in addition to the HC-130. The three F-105 tactical fighter units previously gained are all combat ready.

CHART 25

Air Force Reserve

Flying Units	FY 75	FY 76	FY 7T
A-37	4	4	4
F-105	3	3	3
C-7	2	2	2
C-123	4	4	4
C-130	16	14	14
EC-121	1	1	1
HH-1	1	1	1
HH-3/HH-1	1	1	1
HC-130	2	2	2
CH-3	1	1	1
AC-130	0	1	1
WC-130	0	1	1
Associate Units			
C-5A	4	4	4
C-9	1	1	1
C-141	13	13	13
Flying Units	53	53	53
Non-Flying Units	136	139	139
Total AFR	189	192	192

Chart 25 indicates the number of flying and non-flying units in the Air Force Reserve.

In FY 76, two C-130B units are replaced by an AC-130 gunship and a WC-130 squadron performing weather reconnaissance. No program changes occur in FY 7T.

CHART 26

AIR NATIONAL GUARD

APPROPRIATION
($ Millions)

	FY 75	CHANGE	FY 76	FY 7T
O&M	669.1	+54.4	723.5	189.2
Personnel	206.7	+ 6.5	213.2	61.1
Construction	35.5	+27.5	63.0	1.0
Presidential Rescission	-2.0	+ 2.0	____	____
TOTAL ANG	909.3	+90.4	999.7	251.3

PROGRAM

	FY 75	CHANGE	FY 76	FY 7T
Units	91	0	91	91
Aircraft (Active	1,692	- 8	1,684	1,699
Flying Hours	420,984	-2,741	418,243	105,913
Military Personnel				
End Strength	96,000	-1,426	94,574	94,519
Avg Strength	95,000	- 121	94,879	94,543
Civilian Personnel				
End Strength	23,567	+ 136	23,703	23,703
Avg Strength	23,438	+ 143	23,581	23,584

Chart 26 indicates that the Operation and Maintenance, Air National Guard appropriation increases by $54.4 million in FY 76. The most significant items include $24.1 million for fuel price increases and flying hour adjustments, and $13.0 million for civilian pay raises. Other program adjustments account for most of the remaining increase of $17.3 million.

The Military Personnel net increase of $6.5 million is for annualization of the October 1974 pay increase and an increase in the basic military training program offset in part by reductions in the ANG's ADC alert mission.

The Military Construction, Air National Guard appropriation increases by $27.5 million. One million dollars is for

energy conservation projects and the remaining $26.5 million is for facilities to support FY 76 and FY 77 conversions and modernization.

AIR NATIONAL GUARD MODERNIZATION
(UNITS)

AIRCRAFT AND MISSION CONVERSION

From	To	FY 75	FY 76	FY 7T
F-100	A-7D	1		
F-100	C-130			1
F-101	KC-135		1	
F-101	RF-4		1	1
RF-101	RF-4		2	
RF-101	KC-135		1	
F-102	O-2	2	1	
F-102	F-106	2		
F-102	A-7D	2		
F-102	HC-130/HH-3	1		
F-102	RF-4		1	
F-102	F-4		1	
F-104	A-7D		1	
C-119	HC-130/HH-3	1		
C-119	C-130		2	
KC-97	KC-135		1	
C-123	C-130		1	
C-124	C-130	3		
C-130	KC-135		1	
TOTAL		12	14	2

SERIES CHANGE

From	To	FY 75	FY 76	FY 7T
C-130A	C-130D		1	
C-130B	C-130E	1		
F-100C	F-100D	1		
	TOTAL	2	1	

Chart 27 shows the continued modernization of the Air National Guard. Fourteen aircraft conversions and series changes are programmed for FY 75, 15 for FY 76 and two for FY 7T. These conversions reflect the complete phaseout of weapons systems such as the C-124, C-119, F-102 and F-104 and their replacement with C-130's, HC-130's, HH-3's, KC-135's, F/RF-4's, F-106's

and A-7's. In FY 75, two units will convert to HC-130/HH-3 systems and assume a new Air Rescue Mission. In FY 76 four ANG units will convert to KC-135's and perform the Strategic Air Refueling mission. These are the first SAC gained units in the ANG's history.

CHART 28

AIR NATIONAL GUARD

	FY 75	FY 76	FY 7T
FLYING UNITS			
A-7	5	6	7
A-37	2	2	2
F-100	18	17	16
F-101	7	4	3
F-102	2	-	-
F-104	1	-	-
F-105	4	4	4
F-106	6	6	6
F-4C	1	2	2
RF-4C	3	7	7
RF-101	4	2	2
C-7	1	1	1
C-123	1	-	-
C-130	13	16	16
HC-130/HH-3	2	2	2
KC-97	9	8	8
KC-135	-	4	5
EC/C-121	1	1	1
O-2	7	7	7
C-119/U-10	2	-	-
EB-57	2	2	2
FLYING UNITS	91	91	91
NON-FLYING UNITS	239	230	230
TOTAL ANG	330	321	321

Chart 28 lists the number of flying and non-flying units in the Air National Guard. The total number of flying units remains at 91 with the force mix changing as a result of the conversions shown on the previous chart. Non-flying units show a minor decrease of nine from FY 75 and then remain stable at 230. The non-flying units are composed primarily

of communications (71 units), tactical air control system units (36), and weather (40 units).

THE AIR RESERVE FORCES

In summary, the Air Force's emphasis on the Total Force is evident in its continuing modernization actions. Air Reserve Force capabilities are being upgraded through equipment conversions, expansions of mission responsibilities, and improved combat readiness.

CHART 29

BUDGET SUMMARY
($ in Millions)

THE AIR FORCE BUDGET CONSISTS OF:	FY 75	FY 76	FY 7T
DIRECT PROGRAM (TOA)	26,201	30,196	7,024
REIMBURSABLE PROGRAM	2,246	2,290	596
TOTAL PROGRAM	28,447	32,486	7,620
THE TOTAL PROGRAM IS FINANCED BY:			
APPROPRIATION ENACTED/ESTIMATED	25,728	30,345	7,024
APPROPRIATION TO LIQUIDATE CONTRACT AUTHORITY		-67	
PROPOSED RESCISSIONS OF APPROPRIATIONS	-195		
PROPOSED TRANSFERS	173		
ANTICIPATED REIMBURSEMENT	2,302	2,208	596
PROPOSED SUPPLEMENTALS	439		
TOTAL FINANCING	28,447	32,486	7,620
OBLIGATIONS	29,163	32,055	8,062
OUTLAYS	24,755	26,554	7,369

The Air Force direct program is shown on Chart 29. For FY 75, the TOA is $26,201 million, $30,196 million is requested for FY 76, and $7,024 million for the transition year FY 7T.

In addition, the Air Force Reimbursable Program is estimated to be $2,246 million, $2,290 million and $596 million in FY 75, FY 76 and FY 7T respectively. The Reimbursable Program is for those items we buy or services the Air Force performs for others.

The Foreign Military Sales, Military Assistance Programs, Army, Navy and other U.S. Government agencies are the customers for whom the Air Force buys or performs services.

Financing falls into six categories which are shown on the Chart. These are:

- First, the Congressional Appropriation which has been enancted for FY 75 or which is being requested for FY 76;
- Second, additional Congressional Appropriation of $67 million is needed to liquidate unfunded FY 72 contract authority under Section 3732, 41 USC 11, for support of surge operations in SEA from 1 April - 30 June 1972. The SecDef notified the President of the Senate and Speaker of the House of Representatives that he was using RS3732, as amended (41 USC 11), authority on 14 April 1972;
- Third, proposed rescissions under the Congressional Budget and Impoundment Control Act of 1974 (Acft Proc $153M; O&M-RPM $40M and ANG End Stregnths, $2.0M);
- Fourth, are transfers to other appropriations; these will be explained on a subsequent chart.
- Fifth, the Supplemental Appropriations. A subsequent chart will provide more detail on this category.

Obligations and Outlays in FY 75, FY 76 and FY 7T continue to show an orderly execution of appropriated funds. This is the result of the emphasis which the Air Force has placed on realistic programming and effective program implementation.

CHART 30

FY 1975

FINANCING TRANSFERS

$ MILLIONS

APPROPRIATION	APPROP LANGUAGE	SEC 834	TOTAL
RDT&E		8.0	8.0
Acft Proc	153.6	-46.3	107.3
Msl Proc	5.0		5.0
Other Proc	12.6	-143.1	-130.5
Mil Con - AF	-11.5		-11.5
O&M - AF		178.5	178.5
O&M - AFR		4.5	4.5
O&M - ANG		12.0	12.0
TOTAL	159.7	13.6	173.3

The FY 75 transfer requirements are as indicated on Chart 30. Transfers specified in the language of PL-93-437 and 93-552 ($159.7 million) coupled with the transfers proposed under authority of Sec 834 ($13.6 million) of PL 93-437 amount to $172.8 million.

- RDT&E FY 74 unobligated funds ($8.0 million) from the GAU-7 program were applied to the FY 75 F-15 funding requirements.
- Aircraft Procurement funds in an amount of $46.3 million under authority of Sec 834 of PL 93-437 are proposed to finance higher priority operational readiness requirements in the O&M - AF appropriation.
- Other Procurement funds in an amount of $143.1 million under authority of Sec 834 of PL 93-437 are proposed to finance higher operational readiness requirements in the O&M accounts of AF, AFR and ANG

- Mil Con - AF funds in an amount of $11.5 million were appropriated in PL 93-552 as an adjustment for prior year's deficiencies.

CHART 31

FY 75 PROPOSED SUPPLEMENTALS

PURPOSE

($ MILLIONS)

PAY RAISES	
OCT 74 MILITARY	261
OCT 74 GENERAL SCHEDULE	86
WAGE BOARD FY 75	80
SUBTOTAL	427
SUBSISTENCE	12
TOTAL	439

Chart 31 summarizes the FY 75 proposed supplementals of $439 million.

The supplemental request provides funding for approved pay raises on 1 Oct 74 for military ($261 million) and Civilian Classified Employees ($86 million). The FY 75 Wage Board increase required $80 million.

Other proposed supplementals include funding for a subsistence ($12 million) increase.

CHART 32

SUMMARY OF PERSONNEL AND RELATED COSTS

	$ MILLIONS		% of TOA	
	FY 75	FY 76	FY 75	FY 76
TOTAL MILITARY PERSONNEL	7,853	7,775	30.0	25.7
TOTAL CIVILIAN PERSONNEL	3,768	3,805	14.4	12.6
AF BUDGET: PERSONNEL & RELATED COSTS	11,621	11,580	44.4	38.3
ADDITIVES (CUMULATIVE)				
PROPOSED FY 76 PAY RAISES AND LEGISLATION		397		39.0
MILITARY FAMILY HOUSING	330	340	45.0	39.7
RETIRED PAY	2,138	2,495	49.1	44.2

Chart 32 illustrates the magnitude of the total costs associated with Personnel including the AFR and ANG for FY 75 and FY 76. The Air Force FY 76 TOA includes 38.3% for personnel and related costs which is a decrease of 6.1% from FY 75.

When the proposed FY 76 military, civilian and wage board pay raises are added, the personnel and related costs are 39.0% of the FY 76 TOA. When the Air Force portion of the OSD accounts for family housing and retired pay are added, 44.2% of the total Air Force Budget is for pay and related costs.

CHART 33

WHY REPROGRAMMING?

- FOCUSES ON CRUCIAL RESOURCE ALLOCATION ISSUES
- PERMITS REALIGNMENT OF PRIORITIES WITHIN AVAILABLE FUNDS FOR FACT-OF-LIFE CHANGES
- AIDS IN THE EFFECTIVE MANAGEMENT OF RESOURCES
- RECOGNIZES CHANGES IN:
  - REQUIREMENTS
  - PRIORITIES
  - OPERATING CONDITIONS
  - SCHEDULES
  - PRICES

CONGRESSIONAL APPROVAL

Chart 33 addresses "why" management requires a system that focuses attention on crucial resources allocation issues. As conditions change, priorities and funding must also be adjusted to the new "Fact-of-Life" position. It is essential for effective management that lower priority programs be adjusted when high priority needs arise after funds are appropriated. The reprogramming process that has evolved provides a firm bases for retention of Congressional control. Without reprogramming, valid and urgent requirements would not be funded whereas other requirements, whose validity had become marginal, would be funded. Reprogramming insures recognition of requirements for funding of urgently needed programs that could not be foreseen at the time the Budget was prepared. Budgeted requirements change as a result of changes in operating conditions, sudden success or failure in a scheduled development program, or because of price changes.

Reprogramming has been recognized by the Congress as a necessary management practice. Based upon agreement with the Secretary of Defense and the cognizant Congressional Committees, approval is obtained in accordance with the existing ground rules which provide for advance approval by or notification to the Committees.

CHART 34

FY 76 BUDGET - PERSPECTIVE

- SMALLER AIR FORCE

  AIRCRAFT
  MANPOWER
  FLYING HOURS

- DECLINING

  PERCENT OF DOD
  PURCHASING POWER

- BALANCED

  TECHNOLOGY
  MODERNIZATION
  READINESS
  SUPPORT

- RESOURCE ALLOCATION

  SYSTEMATIC
  PROGRAMMATIC

- CONGRESSIONAL ACTION

In conclusion, the United States Air Force is now smaller in terms of numbers of aircraft, manpower and flying hours. This smaller force is a declining percentage of the DoD and the Federal Budget. The reduction in real terms is magnified by the effects of inflation upon Air Force purchasing power.

The Air Force assessment is that the forces and resources currently programmed are essential to meet the U.S. Air Force missions which are an integral part of the National Security Objectives.

As a result of the intensive program and budget review process in the Air Force and OSD/OMB, the Air Force Budget supports a carefully balanced force.

The budget provides for a reasonable investment in technology, a paced modernization of weapon systems, essential combat readiness, manpower programs in a no-draft environment. It is a budget which is responsive to changing Air Force needs.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator INOUYE. I am submitting at this point in the record a list of questions which Chairman McClellan had previously requested be answered.

[The questions and answers follow:]

INCREASE TO 26 WING FORCE STRUCTURE

Chairman MCCLELLAN. Secretary Schlesinger has indicated that the Air Force will be increasing its force structure to 26 wings. Would you explain the reason for this increase, and indicate what the new force structure will be when compared with the existing 22 wing structure.

Is the increase in wings to be achieved without increasing the civilian or military manpower authorization of the Air Force?

Secretary MCLUCAS. Sir, as you may know, the Air Force currently has 26 designated tactical fighter wings, some of which are not fully equipped or manned. We intend to pursue fully manning the 26 wing structure while maintaining a stabilized total manpower program at approximately the end of fiscal year 1976 levels. We believe we can do this through reductions in support manpower, organizational changes and reduced maintenance demands projected for our newer, advanced technology aircraft.

Urgent needs both for improving equipment quality through modernization and partially offsetting the numerical advantage of our adversaries make an active Air Force tactical fighter force of 26 fully equipped wings essential for deterrence and defense as we seek to enhance the combat capability of our general purpose forces. This tactical fighter force will consist of a well-balanced mix of aircraft capable of meeting mission demands of counterair, close air support, and interdiction. This mix includes the F–15, F–16, A–10, F–111, and F–4 aircraft. The grouping into 26 wings of the programmed number of these aircraft in the active Air Force inventory will provide the optimum flexibility and effectiveness achievable with the number and types of aircraft to be available.

INCREASED RESPONSIBILITY FOR RESERVE FORCES

Chairman MCCLELLAN. Beginning in fiscal year 1976, KC–135 tankers will be assigned to the Reserve components. Do you anticipate assignment of additional tankers or other new roles and missions for the Reserve forces? Have you considered the feasibility of assigning any other elements of the strategic forces to the Reserves?

General JONES. The transfer of the 218 KC–135 tankers will be phased over several years. At this time, there are no plans to increase this number. An additional mission area has been assigned to the Air Reserve Forces in fiscal year 1976. One Air Force Reserve airlift unit will convert to the aerial weather reconnaissance mission. It will be equipped with WC–130 aircraft. As you are aware, the active/reserve mix is examined thoroughly during each annual budget preparation cycle. We have on several occasions examined the possibility of using the reserve components for other strategic missions and have determined that further assignments are not appropriate in the context of total force capability to underwrite our deterrent objectives.

AVAILABILITY OF KC–135'S IN THE RESERVE FORCES

Chairman MCCLELLAN. Do you expect that the availability of the KC–135s, under Reserve component manning, will be as high as availability under active force manning?

Secretary MCLUCAS. Upon mobilization, the availability of the KC–135s, under Reserve component manning, should be the same as the Active Force. For peacetime operations, the Reserve components, in conference with the Strategic Air Command, have agreed to support a portion of the day-to-day tanker alert, tanker support to normal training missions by SAC and other Commands, tanker task forces on TDY deployments overseas, and tanker support for peacetime contingencies. The Reserve components intend to support SAC fully within their peacetime manning capability. The fiscal year 1976 budget was developed on the basis that the KC–135s transferred to the Reserve components will be flown during peacetime at about the same rate as those in the active force.

Combat Readiness of Reserve Components

Chairman McClellan. Would you describe the combat readiness of the reserve components today—which your statement indicates are 90 percent combat ready—with what it has been over the past five years and is projected to be in the future.

[The information follows:]

The combat readiness of the Air Reserve components for the past five years has been:

[In percent]

	Air National Guard	Air Force Reserve
Fiscal year:		
1970	82	62
1971	52	51
1972	61	62
1973	81	73
1974	89	87

The low readiness status during 1971 and 1972 was due to the impact of conversion and modernization.

Projections for fiscal year 1975, fiscal year 1976 and 7T are:

[In percent]

	Air National Guard	Air Force Reserve
Fiscal year:		
1975	92	98
1976	91	98
197T	90	98

The slight decline in Air National Guard readiness is due to programmed conversions while the Air Force Reserve program is stable for the projected periods.

Situations That Would Dictate Reserve Call-up

Chairman McClellan. If the President were authorized to call up 50,000 selected reservists in situations short of national emergency, would the administration envision call-up of reserves for a Yom Kippur type Middle East war airlift mission? What types of missions vis-a-vis Air Reserve and National Guard could you envision, short of a national emergency, where the President could utilize this new authority?

Secretary McLucas. The Air Force Reserve provided volunteer crews for the 1973 Middle East war airlift and was able to obtain more volunteer crews than were actually needed. Our best estimate is that a short time frame surge airlift requirement can, and will be, handled on a volunteer basis. Call up of strategic airlift crews would be envisioned as required in a situation short of general war for strategic airlift if adequate numbers of crews should not volunteer or if the number of volunteer crews should decline below that required to sustain the effort over a prolonged period.

Situations similar to the Berlin crisis and the Cuban missile crisis are examples of cases where use of this authority might be necessary. Conceivably reservist crews would be called to support strategic or tactical airlift missions, aerial refueling operations or to augment our air defense capability. Further it may be decided in some instances to call up reserve tactical fighter units.

The principal benefit of this new legislative authority is the greater assurance of operational flexibility that it would afford. This legislation would allow for selective augmentation from the Reserve Forces, over and above those who volunteer for activation. Adequate forces could then be made available to agument the active force in meeting a given contingency without the necessity of an unwarranted full mobilization.

EDUCATION AND TRAINING

Chairman MCCLELLAN. To what extent do you believe enlistments are motivated by programs such as the Airman Education and Commissioning Program, and to what extent do you believe officers take Air Force careers based on such programs as graduate education that is fully-funded? Are these programs essential to the mission of the Air Force?

Secretary MCLUCAS. Surveys inquiring into the motivational aspects of service benefits list educational opportunity as one of the most important factors. Our Airman Education and Commissioning Program (AECP) and Graduate Education Programs serve a dual purpose. The primary purpose of both of these programs is to meet specific education requirements. The AECP produces officers who make up shortfalls from other commissioning sources in technical areas at the baccalaureate level. The Graduate Education Program is also predominately technical in nature and it produces officers to meet validated billet requirements. Spin-off benefits of both of these programs are their motivational impacts and service commitments required of those attending. The high degree of career motivation is attested by the fact that 95 percent of the AECP graduates and 85 percent of the officers who attend fully-funded Graduate Education Programs make a career of the Air Force.

Many of these are long and fruitful careers—approximately 25 percent of our current line General officers and 18 percent of our line Colonels have attended fully funded Graduate Education Programs. Both of these education programs are essential to the mission of the Air Force from the standpoint that they meet requirements for education in specific disciplines, primarily in science and engineering, for which off-duty educational choices by our personnel do not, in fact, cover. The high retention of graduates makes both programs extremely cost effective.

BASIC RESEARCH FUNDING

Chairman MCCLELLAN. In light of your concern about declining real funding in the area of basic research, would you indicate what some of the products of Air Force basic research have been over the past few years, especially production from the laboratories. Also discuss the products of the contract research programs.

Secretary MCLUCAS. I will be happy to. Air Force basic research has led to a host of significant development, with applications across a broad spectrum of requirements, both military and civilian. To illustrate, let me cite two examples of in-house work done by the Air Force Cambridge Research Laboratories, and then I will discuss briefly two products which grew out of our contract research programs.

Our people at Cambridge developed a new infrared imaging vidicon tube which was recently demonstrated under contract by General Electric. Those of you familiar with this technology will recall that the infrared imaging technique is dependent upon the uniformity of the retina surface of the tube. Despite considerable skepticism, the requisite uniformity was achieved. The new tube uses direct imaging based on inexpensive silicon and integrated circuit technology. By avoiding the mechanical scanning of a number of independent sensors, it offers promise for relatively inexpensive, low maintenance sensors to help solve night attack problems.

The second example of Air Force basic research work has to do with surface acoustic wave devices, an area of technology which was pioneered some 10 years ago at our Cambridge Laboratories. This technology, which substitutes the properties of acoustic waves for those of electromagnetic waves, led both to enhanced performance in such devices as delay lines and filters, and to significant savings in size, weight, and cost. Further, Westinghouse Corporation has used surface acoustic wave pulse compressors in some of its radar work for the Air Force Electronic Systems Division, not to mention numerous applications in the field of electronic warfare. We are very proud of the fact that today the Microwave Acoustic Handbook published by Cambridge Laboratories has become the standard reference for universities and industry.

Now, turning to our contract programs, I would like to first mention the work done on self-focusing fiber optics by Dr. Macedo of Catholic University. Under sponsorship of the Air Force Office of Scientific Research, Dr. Macedo devised an improved glass which, in conjunction with his technique for making fibers, will transmit light over longer distances at higher frequencies without

severe signal loss. This method is much more reliable and less vulnerable than similar systems using copper wire for signal transmission.

As a final example, I will cite the work on chemical instrumentation systems for extremely fast chemical reactions done in the early 1960's by Dr. Pimentel of the University of California at Berkeley. His pathfinding efforts were a prelude to developments underway today on Hydrogen Fluoride and Iodine lasers. Indeed, Dr. Pimentel fathered the chemical laser some 10 years ago, and he is still pursuing this technology under contract to the Air Force.

In sum, I feel that these examples serve to illustrate the invaluable basic research work flowing from both our in-house and contract laboratories, and I urge your continuing support for these programs.

B–1 Strategic Bomber

Chairman McClellan. Is there any particular reason why a B–1 is preferred, as a bomber element of the TRIAD, over any other bomber—i.e., aren't simply the capabilities inherent in any bomber fleet the most attractive aspect to the Air Force?

Secretary McLucas. Mr. Chairman, the capabilities inherent in today's bomber fleet are indeed very attractive. However, as you know, we did not arrive at this situation by being content with "any" bomber fleet and whatever capabilities we could extract from it. To appreciate that fact, it is useful to recall that the B–52 was originally designed as a high altitude bomber using primarily the technology of the late 1940s and early 1950s. As the Soviets modified their air defense system to counter this threat, we in turn modified both B–52 tactics and equipment to ensure that the force would continue to be equal to its task in face of the growing Soviet defenses. To avoid their medium and high altitude surface-to-air missiles, we converted to a low altitude pentration mode. To counter the low altitude Soviet defenses that appeared following this conversion, we equipped the B–52 with a highly sophisicated electronic countermeasures system and the Short Range Attack Missile (SRAM). To counter the offensive threat to the bomber force posed by the growing Soviet SLBM force, the Quick-Start Modification Program was implemented to reduce reaction time and enhance the prelaunch survivability of the bomber force.

These modifications to keep our bomber fleet modern and viable with respect to the changing Soviet threat account for our advantageous position today. It is my firm conviction that continued modernization of the bomber force is essential; its capabilities will continue to count heavily in our favor when assessing the relative strategic strengths of the United States and the Soviet Union within the limits of the proposed new treaty on the limitation of strategic offensive arms. We cannot expect that the B–52 alone will be able to maintain the required degree of capability against the Soviet threat that is evolving for the future if it is to be our primary strategic bomber. While its original growth potential has already been exploited many times, inherent design limitations, such as its large radar cross-section and modest speed at low altitude, effectively preclude the full range of further improvements which would be required to maintain the B–52 as the sole bomber element of our strategic forces. Therefore, having anticipated and studied this eventuality for many years, and having developed detailed technical engineering and cost data on a variety of alternatives, we are thoroughly convinced that the most cost-effective means of modernizing the strategic bomber force to meet the challenges of the future is through the development of the B–1.

The B–1 has been designed specifically to overcome what we foresee as the future threat. It is robust in design to ensure that it can overcome Soviet offensive and defensive capabilities as they evolve over the B–1's lifetime. Its hardness to nuclear weapons effects, rapid acceleration and high-speed flyout capability, relatively short runway take-off requirements, and its ability to sustain high alert rates should that be required, combine to produce an aircraft with extremely high prelaunch survivability. Its small radar cross section, advanced electronic countermeasures, and ability to fly at lower altitudes and higher speeds than the B–52 ensure a high degree of success in penetrating even the most advanced Soviet defenses projected for the future. Moreover, the B–1 will be able to carry twice the nuclear payload of the B–52 and deliver those weapons with greater precision. Thus, we are confident that the B–1 will be able to continue to make the unique and irreplaceable contribution that the bomber gives to our strategic deterrent.

We have by no means overlooked other aircraft candidates in the development of the B–1 over the years, nor are we now dismissing them in an offhand or doctrinaire fashion as a decision on the aircraft nears. On the contrary, we are expending a great deal of effort in looking at alternative aircraft and force mixes to ensure that the United States will have the most cost-effective strategic force obtainable for the future. One of the most recent such efforts was a major study by the Department of Defense of the cost-effectiveness of alternative strategic bomber forces for the late 1980s—which was forwarded to the Armed Services and Appropriations Committees of the Senate and House in December 1974. This effort, entitled the "Joint Strategic Bomber Study," has also been reviewed by the GAO, which has forwarded to Congress an evaluation of the study. The assessment of alternative bomber forces in the study demonstrated that forces containing the B–1 were significantly more cost-effective than the other alernatives.

Those are the most substantive reasons why the B–1 is preferred over any other bomber. The capabilities inherent in "any" bomber fleet are less than a bomber fleet which would include the B–1—would be less cost-effective as well. As a result, we believe that we are on the right track with the B–1, and that it will be the aircraft that is most needed for our future strategic deterrent.

FB–111 in Lieu of B–1

Chairman McClellan. Congress has added money in the past to keep the F–111 production line open, just in case the B–1 is cancelled. What is the feasibility of the Air Force using the FB–111, or a variant, in lieu of the B–1, if the B–1 is cancelled?

Secretary McLucas. We do not believe that the FB–111, or a variant of the aircraft, is an acceptable alternative as the primary aircraft in the future bomber force. At present, the FB–111 is a very good airplane for its limited role. However, as I mentioned in my last response, we have been examining alternative bomber forces in the context of what Soviet threats they will face in the future. In that context, the FB–111 and its variants do not fare very well.

For instance, in the Department of Defense cost-effectiveness study that I mentioned, the "Joint Strategic Bomber Study," the alternatives to the B–1 included a re-engined B–52 (designated the B–52I), a wide-body jet (similar to the Boeing 747) employing cruise missiles in a standoff rule, and a stretched variant of the FB–111 (the FB–111G). The assessment of the alternatives in the study showed that the FB–111G force was the least cost-effective of the forces examined by a wide margin. Further, to put the results in perspective, the FB–111G force was less than half as cost-effective as the baseline B–1 force in the study.

There are a number of reasons why the FB–111 or its variants do not compare well even with some of the alternatives we have examined. The basic airframe is small, like a fighter aircraft, and presents space limitations that are nearly impossible to overcome. It has the rapid acceleration and high speed flyout capability of the B–1. So it has a very good prelaunch survivability—probably as good as the B–1. It also has a small radar cross-section and the ability to fly at higher speeds and lower altitudes than our current B–52s. Yet every time we have examined the aircraft we run into its inherent size limitation. For example, it cannot carry enough fuel or weapons to give us adequate target coverage. The latest FB–111 variant we have seen (the FB–111H or "916") can carry only half the total weapons that the B–1 will carry. Yet, with a full load of weapons, and a full fuel load at the point where it will have to start its penetration, it cannot complete a reasonable range of SIOP missions. By reducing the weapons load, greater range is available, but more missions would be required to destroy a given number of targets. Other space problems are just as significant. The airframe does not have enough volume for sufficient avionics and electronic countermeansures to defeat many enemy defenses. By contrast, the occupied avionics volume of the B–1 is over three times as large as the total avionics space of any FB–111 variant, and the B–1 has additional space available for avionics growth. The small volume of avionics that the FB–111 variants can carry to employ against the increasingly more sophisticated Soviet defense system of the 1980s causes them to suffer significant mission degradation throughout their penetration.

Those are some of the reasons why the FB–111G variant fared so poorly in the Joint Strategic Bomber Study that I mentioned. The latest variant, the FB–111H,

is stretched to provide room for more fuel, and allow carriage of a few more weapons (12 SRAM versus 8 SRAM for the FB–111G), but it still gives us the inherent limitations of complete tanker dependency, small payload, and low avionics volume. Although the FB–111H would perform somewhat better than the other FB–111 variant we have examined, it still will not meet mission performance requirements.

In basic terms, although the latest FB–111 variant costs approximately one-half that of a B–1 aircraft, we do not think they are half as capable. If we were to accept its limitations of range and heavy attrition, we would need over twice as many of them to cover the targets. We would also need a proportionately larger number of bases to launch them from, and a larger force of aerial tankers to refuel them. Hence, accepting an FB–111 variant in lieu of the B–1 as our primary strategic bomber would be a much more costly proposition than the B–1 The FB–111G and the FB–111H are not cost-effective alternatives to the B–1.

Cost To Reopen Line To Produce F–111 or FB–111

Chairman McClellan. If the F–111 line is closed, what would be the cost to reopen it to produce F–111s or FB–111s?

Secretary McLucas. We can't give a very precise estimate of production start-up costs since the actual costs would vary widely when the line closed, the rate of inflation, and how long it remained closed. These costs would also depend upon the amount of other production activity within the plant as well as whether or not F–111 peculiar tooling jigs and fixtures are retained or salvaged, and, if retained, at the state of readiness they are maintained. To further complicate such an estimate, it must be emphasized that not only are prime contractor facilities involved, but also those of a multitude of sub-contractors and suppliers. However, we can place these costs in an approximate range. For example, with all tooling retained, an eight to ten-month gap in production in the 1976–1977 time frame would probably cost 30 to 35 million dollars. On the other hand, start-up costs after completely closing the production line for a year to year-and-a-half could be on the order of 200 million dollars or so. Costs of restarting F–111 production are independent of the version of F–111 that might be bought—even though the actual aircraft procurement cost would vary from model to model.

B–1 Unit Procurement Cost/1970 Dollars

Chairman McClellan. Suppose the Congress placed a ceiling of $25 million per B–1 on the unit procurement cost—in 1970 dollars. How would Air Force modify the plant in order to live within that ceiling?

Secretary McLucas. At program initiation, we estimated the unit procurement cost in fiscal year 1970 dollars to be $30.8M and today we estimate that cost to be $34.3M. Based on the cost reduction study just completed, I would have to conclude that redesigns necessary to achieve a unit cost of $25M in fiscal year 1970 dollars would result in an aircraft that would not have the capability to perform the strategic mission adequately. In the context of this question, I believe some pertinent comments Secretary Schlesinger made at the B–1 Rollout Ceremony bear repeating. He said that SALT negotiations impose, and future negotiations will impose, reasonably stringent limits on the numbers of strategic delivery vehicles. This implies bomber forces far smaller than those maintained by the United States in an earlier period. Given these limitations, there is less relevancy to the cost-quantity trade-off that would automatically apply were the procurement decision to be inherently less limited in numbers, and there is a powerful incentive to achieve high unit performance. We believe this is a very important observation. With the high cost of modern technology and manufacturing today, and the consequent need to make the B–1 a system which can live for many years in the growing threat environment it will face, the compromise of performance and potential to meet future threats, beyond a certain point of judgment, would not be wise or in our best interests. However, we are exploring all feasible means to control costs while maintaining a mission essential aircraft.

B–1 Long Lead Funding

Chairman McClellan. Suppose Congress approves the $77 million long lead funding for the B–1 but then cancels the program in fiscal year 1977 when first production funding is requested. What part, if any, of the $77 million can be recovered? What would we get for the funds?

Secretary McLucas. Our specific requirements in the $77 million request consist of about $27 million for production tooling including planning, design, and fabrication of tool masters, forging dies, diffusion bonding and detail tools, the planning and design of subassembly tools, assembly jigs and fixtures and special test equipment; about $29 million for production material for the airframe and engine, including material for some of the major structural members of the aircraft; and about $21 million for subcontract work including vendor capability surveys, preparation of statements of work and requests for proposal, source selection and negotiations, as well as long lead materials and set up activities for some subcontractors with a lead time exceeding 30 months.

The $77 million is to protect an option for a production decision in November 1976. Should this funding not be approved, our ability to proceed into production in an orderly fashion after the production decision would be impaired. We estimate that the schedule would slip approximately one year with an increased loss of learning in manufacturing and a greater exposure to inflation. We estimate the cost of such a schedule slip, including escalation, to be about $1 billion. We believe that the expenditure for long lead items is a cost-effective decision and is justified in view of program progress to date.

As you can appreciate from my explanation of the long lead requirements, most of the funds are being used for planning, design, and contractual actions. Such expenditures are not recoverable. About $10 to $15 million in material could be recovered for use by other government programs should a decision not to produce the B–1 be made in November 1976.

F–15, F–16, and F–4 Comparison

Chairman McClellan. Would you provide a comparison of the F–15, F–16, and the latest model F–4 in terms of speed, range, combat capability, and payload and counterair capability.

Secretary McLucas. The F–15 and F–16 were designed to a differing set of objectives which resulted in different performance specifications for these fighter aircraft. A comprehensive comparison of the F–15 and F–16 turning and acceleration performance would indicate there are areas where each aircraft excels.

The F–15 was designed for the complete spectrum of air combat to include all weather conditions. The F–16 was designed for close-in maneuvering air combat under visual conditions with a pulse doppler radar less powerful than that in the F–15. The F–16 is about one-half the size of the F–15 and therefore presents a less prominent target, a distinct advantage in regard to both visual and radar acquisition. The F–16 requires considerably less fuel for the conduct of similar missions, an important factor in a dynamic war situation where fuel could be limited. The F–16 has a greater radius of action with its design payloads, a night/adverse weather ground attack capability with its radar ground mapping feature and the capability to employ the Maverick air-to-ground missile. In general, the F–16 has better subsonic and transonic turning performance giving it more agility in the classical "dogfight" arena below 30,000 feet between 0.6 and 1.4 Mach; beyond 1.4 Mach, the automatic/variable inlet ramps of the F–15 provide an advantage by optimizing engine performance. The F–15 has greater top speed than the F–16 as well as more rapid acceleration especially beyond 1.4 Mach, giving it greater utility for combat against very high altitude, high speed penetrators such as FOXBAT. It also has a longer range radar, beyond visual range missile (AIM–7) kill capability, greater air-to-air armament payload, and, in general, an advantage in supersonic turning capability. It has the ability to defeat the enemy in air-to-air combat in any environment regardless of weather conditions.

The F–15 and F–16 represent a dramatic increase in air combat capabilities compared to other contemporary fighter aircraft and both are needed to provide a margin of superiority over the current and anticipated threat.

With its lower total cost of ownership, the F–16 will complement the F–15's capability, and permit an expansion of the tactical fighter force, thus reducing the quantitative fighter aircraft advantage of the Warsaw Pact.

Recognizing that meaningful quantitative comparisons are often difficult to achieve among aircraft designed for differing performance points and mission profiles, the following comparison strives toward objectivity by referencing specific mission profiles but is useful only as a first estimate. The F–16 performance reflects recent configuration refinements and is displayed as a range of values within which we expect the production aircraft to perform.

Aircraft and performance figures reflected below represent current configurations and could change as a result of on-going or future engineering change proposals (ECPs).

MISSION DESCRIPTIONS

F–15 Design Air Superiority Mission

Best climb/cruise out [deleted].
Dash in at .85M and 10,000 ft.
Combat at Max power to gain [deleted] of maneuver energy.
Dash out at .85M and 10,000 ft.
Best climb/cruise home [deleted].
20 min SL fuel reserve.

F–16 Design Air Superiority Mission

Best climb/cruise out.
Start combat with full internal fuel (external fuel tanks jettisoned).
Combat fuel allowance at 30,000 ft for [deleted].
Fire two missiles and ½ 20mm.
From 20,000 ft, best climb/cruise home.
20 min SL fuel reserve.

F–16 Design Air-to-Ground Mission

Best climb/cruise out to [deleted] from radius point (jettison ext fuel tanks when empty).
[Deleted] penetration at .85M and 15,000 ft.
Combat fuel allowance at 5,000 ft for [deleted].
From 5,000 ft, best climb/cruise home.
20 min SL fuel reserve.
Configuration: 2MK–84s, 2 AIM–9s (retained for entire mission), 1 ALQ–119–3 ECM Pod, 500 rds 20MM (retained for entire mission), external fuel.

COMPARISONS

	F–15	F–16 range of values	F–4E leading edge slats (LES)
Missions:			
F–15 Design Air Superiority Mission:			
Radius (Cruise/Dash)(N. Mi)(Requirement: [Deleted].	[Deleted]		
Payload: Missiles	4 AIM 7's	2 AIM 9s[1]	4 AIM 7's.
Gun	940 Rds/20 mm	500 Rds/20 mm	639 Rds/20 mm.
F–16 Deisgn Air Superiority Mission:			
External Fuel (gal)	1,220	740	1,340.
Radius (N. Mi) (Requirement: 500)	[Deleted]		
Payload: Missiles	2 AIM 7's[2]	2 AIM 9's	2 AIM 7's.
Gun	500 Rds/20 mm	500 Rds/20 mm	500 Rds/20 mm.
F–16 Design Air-to-Ground Mission: Radius (N. Mi.)(Requirement: 400).	[Deleted]		
Performance:			
P_s (F–15 Air Superiority Design Points):[3]			
0.9 at 10K—max—1g (FPS)	[Deleted]		
0.9 at 10K—max—5g (FPS)			
0.9 at 30K—max—5g (FPS)			
1.2 at 30K—max—5g (FPS)			
1.5 at 30K—max—1g (FPS)			
Max Mach at S/L			
Max Mach at ALT			
Sustained Turn Rates (F–16 Design Air Superiority Mission):[4]			
0.9 at 30K (deg/sec)	[Deleted]		
1.2 at 30K (deg/sec)			
1.6 at 30K (deg/sec)(not a design pt)			
Acceleration (F–16 Design Air Superiority Mission):[4]			
0.9 to 1.6 at 30K (sec)	[Deleted]		
Ferry Range (N. Mi)	[Deleted]		
Avionics/weaponry:			
RADAR (Detection Range Against 2 M² Tgt In N. Mi):			
Head Aspect look-up	[Deleted]		
Head Aspect look-down			

See footnotes at end of table, p. 196.

COMPARISONS—Continued

	F-15	F-16 range of values	F-4E leading edge slats (LES)
Avionics/weaponry—Continued			
Armament:			
Missiles	4 AIM-7's, 4 AIM-9's.	6 AIM-9's	4 AIM-7's, 4 AIM-9's.
Gun	940 Rds, 20 mm, M61	500 Rds, 20 mm, M61	639 Rds, 20 mm, M61
Air-to-Ground	Carriage of numerous combinations of guided and unguided weapons—for example: 18 MK-82's. Max external store carriage is 18,740 lb or 13,849 lb with full internal fuel.	Carriage of numerous combinations of guided and unguided weapons—for example: 16 MK-82's and 1 AN/ALQ-119 ECM pod; two 370 gal fuel tanks, 6 AGM-65's, and 1 AN/ALQ-119 ECM pod. Max external store carriage with full internal fuel is 10,400 lb. Provisions for nuclear weapon carriage.	Carriage of numerous combinations of guided and unguided weapons—for example: 24 MK-82's. Max external store carriage with full internal fuel is 13,000 lb. Nuclear weapons capability.

[1] Note that the F-16 carries only two missiles as opposed to four missiles for the other aircraft. While this choice benefits the F-16, the decision to provide this configuration was driven by available data.

[2] The F-15 configuration (two AIM-7's and 500 rounds 20 mm) for this mission was chosen to permit direct "apples to applies" comparison with the F-16, whose design mission specifies two missiles and 500 rounds of ammunition. It does not represent a typical or probable combat mission load for the F-15. If the F-15 design missile load of four AIM-7's and 940 rounds of 20 mm (as originally furnished) were used, it would be reflected by a very slight reduction in radius and sustained turning capability of the F-15.

[3] Ps calculated @ 50% full internal fuel for a clean aircraft with full ammunition load.

[4] Calculated at a mission radius of 500 NM for F-15 and F-16.

Note: Shown at radius of [deleted] N. Mi which is max capability of F-4E (LES).

ADDITIONAL COMPARISONS: F-16 WITH F-4

Approximately half the weight.

Presented area of 20 to 40 percent less.

About one-half the vulnerable area.

Fuel required for equal deployment range is 35 to 40 percent.

Three times the Combat Air Patrol mission radius carrying four missiles and using approximately 35 percent less fuel.

Hi-Lo-Hi ground attack mission radius 45 percent greater with the same payload and using one-half the fuel.

Approximately twice the sustained turn rate capability throughout the majority of the flight envelope.

Can sustain [deleted] where the F-4 can sustain only [deleted].

Sustained [deleted] envelope is greater than the [deleted] envelope of the F-4.

Approximately twice as rapid acceleration capability supersonic or subsonic.

However, a portion of the F-4 force will be modified for a unique night/adverse weather/precision attack capability not possessed by the F-16; i.e., PAVE TACK, PAVE SPIKE.

NAVSTAR GLOBAL POSITIONING SYSTEM

Chairman MCCLELLAN. What is the total cost of the NAVSTAR system if developed and procured to the fullest extent you envision?

Secretary MCLUCAS. The NAVSTAR joint services program is currently in phase one of its development. The preferred design of both common and user equipment, as well as their associated costs, are still subject to change as we learn more during the development. Reduction of total system life cycle cost is a key goal. Total life cycle costs associated with the development, production, operation, and maintenance of all elements of the NAVSTAR system will depend on phase one results. They will also depend on the size and composition of the DOD user population; current estimates run up to 27,000 sets of user equipment. For all of DOD, the total life cycle costs could range from $2.6 to $3.7 billion, in then year dollars through the tenth year of system operation, based on our present projections of escalation. User equipment for all Services accounts for most of this estimated cost. Phaseout of duplicative, less capable positioning and navigation equipment and systems is expected to represent a net savings to the Department of Defense. We will further refine these cost estimates during phase one of the development program.

Airborne Warning and Control System

Chairman McClellan. Would you summarize for the Committee the conclusions of Dr. Smith's report and, in particular, delineate those areas where Dr. Smith felt there were tactical weaknesses and susceptibilities inherent in the Airborne Warning and Control System.

Secretary McLucas. Mr. Chairman, the conclusions of the Smith Report on the ECM resistivity of the AWACS radar can be summarized as follows:

1. AWACS (Block I or Core) will be substantially less vulnerable to ECM than the present air surveillance network.
2. The present ECM equipment of the Warsaw Pact forces should not seriously degrade AWACS performance in support of defensive oeprations.
3. Such equipment could degrade AWACS performance in support of offensive operations.
4. Early implementation of the Smith Panel's electronic counter countermeasures recommendations should insure that postulated Warsaw Pact ECM deployments will have no greater effect than the present situation.

As regards jamming from enemy airborne platforms, the report concluded, and the Air Force agrees, that reasonable modification to and deployments of U.S. ECCM equipment as recommended by the Panel would lead to an inconclusive and lengthy series of electronic warfare moves and countermoves.

With regard to deception jamming the panel found that it is possible and serious, but the likelihood of its deployment is small. They found that a cleverly designed, sophisticated, deception jammer could exploit specific deficiencies of the current AWACS radar that arose from design compromises to reduce radar cost. In their view these compromises are not suitable; they can be overcome with hardware and software modifications that are essential, straight forward and modest in cost.

The report recognizes effectiveness of the descent tactic ,which puts ground based jammers below the radar horizon. The Air Force would note that the low altitude coverage lost beyond the Forward Edge of the Battle Area (FEBA) due to use of this tactic has a finite but limited impact on AWACS operational effectiveness.

Dr. Smith's panel concluded that communication jamming of the critical AWACS data links is not primary consideration with regard to AWACS procurement.

Dr. Smith's panel did not examine the utility of nonradar AWACS sensor capabilities—specifically beacon interrogation and tracking capabilities and the interoperability with external sensors such as SIGINT and the radar inputs such as another AWACS. Data from the additional sources and the mobility of AWACS all contribute to minimizing effects of enemy ECM.

The panel studied and agumented the AWACS test program and found it, in their opinion, to be adequate for a production decision.

Fuel Consumption

Chairman McClellan. Provide estimates of total fuel consumption by the Air Force in fiscal year 1974, fiscal year 1975, and fiscal year 1976, and the total cost. The estimates should be broken down by appropriation.

[The information follows:]

The total Air Force fuel consumption and cost for fiscal year 1974 and the estimates for fiscal year 1975 and fiscal year 1976 are as follows:

Account	Fiscal year 1974 actual (millions)		Fiscal year 1975 estimates (millions)		Fiscal year 1976 estimates (millions)	
	Barrels	Cost	Barrels	Cost	Barrels	Cost
O. & M., Air Force	80.0	$745.5	78.6	$1,204.9	75.3	$1,329.1
O. & M., Air National Guard	7.7	83.5	8.5	132.8	8.8	158.2
O. & M., Air Force Reserve	1.9	19.2	2.3	35.7	2.3	42.0
Industrial fund	19.5	177.6	20.9	321.5	22.5	400.7
R.D.T. & E., Air Force	1.7	16.7	1.6	25.2	1.5	27.5
Aircraft procurement	.5	5.3	.5	7.9	.3	4.8
Total	111.3	1,047.8	112.4	1,728.0	110.7	1,962.3

The cost estimates for fiscal year 1975 and fiscal year 1976 do not include the cost impact of the President's program to tax foreign crude oil imports nor his intent to de-regulate the price of "old" crude oil and thus let the domestic crude oil price float with the market. However, the budget of the United States Government for fiscal year 1976 provides an allowance for energy tax equalization payments which will cover the effects of the estimated increases.

Fuel Consumption/Average Price

Chairman McClellan. What is the average price per gallon of each of the major types of fuel purchased by the Air Force in fiscal year 1974, fiscal year 1975, and fiscal year 1976?

[The information follows:]

The average price of each grade of fuel used by the Air Force in fiscal year 1974, and the projected prices for fiscal year 1975 and fiscal year 1976 are as follows:

Grade of fuel	Fiscal year average price per gallon—		
	1974	1975	1976
JP-4	$0.22	$0.37	$0.42
AVGAS	.29	.41	.49
MOGAS	.25	.37	.44
Distillates	.23	.34	.39
Residuals	.15	.31	.36

Life Cycle Costs

Chairman McClellan. Provide estimates of ten-year life cycle cost estimates for each of the following systems. The estimates should split investment and operating costs and identify the number of military and civilians required in the costing of each squadron, plus total manpower in the force by year: F-15; F-16; A-10; B-1; AWACS; AABNCP; A-7; F-111; F-5; and AMST.

Secretary McLucas. Life cycle cost estimates are used in the Air Force primarily for general planning and relative comparison purposes. To arrive at a life cycle cost estimate for any program we add an estimate of operating and support (O&S) costs to development, procurement, and military construction costs. These latter three costs have been provided to the Congress for years. The appropriation structure for these appropriations makes it relatively easy to isolate costs by weapons systems. However, operating appropriations are subdivided by program purpose rather than by weapon system and accounting data is related to type of organization (e.g., maintenance, training, depot operations, etc.) rather than to the specific weapons systems being supported. Consequently, attempts to relate O&S costs to weapons systems must be done primarily on a statistical basis and the projections are not as susceptible to audit as actual data become available. Further, it is important to note that O&S costs are more subject to change over time than are estimates of development or procurement costs. The reason is that O&S costs are additionally subject to policy variables which determine how a given weapon is employed. O&S costs are very sensitive to variables such as flying hours, frequency of routine maintenance checks, where the equipment is based, etc. Without detailed knowledge of existing policies, data on O&S costs provide little understanding of the meaning of these costs. Therefore, the following estimates must be viewed only as best estimates considering the techniques available and the preliminary nature of operating parameters. Presented are ten year life cycle costs. However, our experience with existing aircraft, and our planned program life cycles for the aircraft listed, indicates that life cycles considerably more than ten years are more appropriate. Therefore, the cost of buying these aircraft has been amortized over the following time periods: fighters—15 years, bombers—20 years. Deployment and operational parameters for the AABNCP, AWACS, and AMST programs are still being refined, therefore those estimates are not included. The information follows:

WEAPON SYSTEM LIFE CYCLE COSTS

[In billions 1975 dollars]

Aircraft	Quantity	Total program investment	10-year life cycle cost [1]			Typical annual squadron manning [2]		
			Investment	Operating and support	Total	Unit equipage	Military	Civilian
F-111	478	11.1	7.4	3.9	11.3	24	940	33
F-5	71	.1	.1	.3	.4	18	328	11
F-15	749	[3] 9.3	6.2	4.0	10.2	24	[4] [Deleted]	[4] [Deleted]
F-16	658	[3] 4.2	2.8	3.0	5.8	24	[4] [Deleted]	[4] [Deleted]
A-7	435	2.6	1.8	1.6	3.4	24	666	26
A-10	743	[3] 2.3	1.5	2.7	4.2	24	[Deleted]	[Deleted]
B-1	244	[3] 15.5	7.8	4.2	12.0	[Deleted]	[Deleted]	[Deleted]

[1] The investment costs for fighters and attack aircraft are amortized over 15 years, for the B-1, 20 years. This amortization is representative of the Air Force planned program life cycles. The 10 year life cycle costs represent 10 years of amortized investment costs plus 10 years of typical O. & S. costs. Since programs are in the process of change, flying hour programs for fighter aircraft are normalized to 300 flying hours per unit equipage per year for purposes of O. & S. costing.

[2] Manpower represents "typical" operational squadron manning and support manning (through wing level), however, it should be understood that actual squadron manning may vary along with actual squadron configurations.

[3] Fiscal year 1975 and prior years are actuals, fiscal year 1976 and beyond are in constant fiscal year 1975 dollars.

[4] In a typical squadron, the F-16 maintenance manpower requirement is estimated to be 8 percent less than the F-15, i.e., 23 versus 25 maintenance man-hours per flying hour or [deleted] manpower authorizations. The maintenance man-hour per flying hour estimates are those predicted for a mature operational system. Since these systems are not mature, the above estimates are necessarily based on development data for the F-15 and preliminary prototype aircraft data for the F-16. As more experience is accumulated, there is a reasonable likelihood that the spread between the F-15 and F-16 may be greater than 8 percent due to the F-16's single engine and simplified avionics.

PROGRAMED MANPOWER FOR ABOVE WEAPON SYSTEMS

Fiscal year—	Total manning
1974	13,573
1975	13,536
1976	16,198
197T	16,198
[Deleted]	

Note: Manning from fiscal year 1974 to fiscal year [deleted] reflects phase-in of the F-15, F-16, A-10, and B-1 and does not consider offsets resulting from systems which are phased out.

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, 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.

[The information follows:]

Partially funded educational programs are conducted through the tuition assistance aspect of the Air Force Education Services program. As limited by the DOD Appropriation Act, up to 75 percent tuition assistance for voluntary, off-duty study is provided. The 75 percent applies to tuition fees; it is not provided for student activity fees, textbooks, or materials. The individual officer or airman pays 25 percent of the tuition and 100 percent of all other costs associated with the study (books, materials, etc). The tuition assistance program is provided for both officers and airmen. Tuition assistance, by itself, would be of significant help only to personnel who are stationed at locations where civilian educational opportunities for the fully employed part-time student are broadly available in the local community. The program has been made meaningful for officers and airmen at many more locations through the work of Air Force Education Services Officers who arrange, with the cooperation and assistance of civilian schools, for the conduct of on-base programs. These civilian school programs are conducted to support completion of high school studies, occupational and undergraduate levels, and graduate study. Tuition assistance is paid from

the Air Force Operations and Maintenance (O&M) portion of the DOD Appropriation Act. The costs for fiscal years 1974, 1975, and 1976 follow:

Tuition Assistance for part-time voluntary study (Air Force education services program)

Fiscal year:	
1974	$8,100
1975	10,300
1976	11,000

Tuition assistance is provided on a course-by-course basis. The following data show participation, with tuition assistance, in courses for the three fiscal years. This does not include numbers of personnel receiving in-service VA educational benefits at the high school/remedial and graduate levels. At the beginning of fiscal year 1975, reporting systems were revised to show the numbers of individuals participating in the courses.

PARTICIPATION IN CIVILIAN SCHOOL PART-TIME PROGRAMS, TUITION ASSISTED (COURSE ENROLLMENTS [1])

Program area level	Fiscal year— 1974 (actual)	1975 (estimated)	1976 (projected)
High school/remedial	180	100	100
Undergraduate	116,661	134,000	142,000
Graduate	9,351	11,500	12,000
Technical/occupational	28,178	33,150	34,600
Total	154,370	178,750	188,700
Individuals participating (estimated)	95,000	114,000	120,000

[1] Approximately ⅓ of each year's enrollments represent new entrants.

EDUCATIONAL PROGRAMS/INCENTIVES TO INDIVIDUALS

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).

Secretary MCLUCAS. The primary incentive to use partially funded education derives from the fact that we provide realistic and feasible program opportunities for our people. The Air Force Education Services program has established positive cooperative relationships with civilian educational institutions. Through these arrangements, programs leading to on-base completion of certificate, associate, baccalaureate, and master's degrees are conducted on Air Force installations throughout the United States and overseas. Almost all major bases have full programs at each of these levels—completely feasible through off-duty, part-time, voluntary study. Since tuition assistance is authorized for off-duty study, individuals are not normally released from their duty week to participate. Courses, however, are scheduled during both evening and day hours to accommodate shift workers. The emphasis is on program completion on the installation. The most important incentive to participate is the realization by both officers and airmen that educational growth is significant to their careers in the Air Force.

EDUCATIONAL PROGRAMS/FULL-TIME PROGRAMS AVAILABLE

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 appropriation, fiscal years 1974, 1975 and 1976. Also indicate the number of new entrants programmed for each fiscal year, split by officers and enlisted personnel.

[The information follows:]

The Air Force is requesting funds for four categories of full-time college level education programs for active duty personnel. They are described as follows:

(a) *Graduate Education for Validated Officer Billets.*—The objective of this program is to educate officers to perform jobs in the Air Force validated as requiring graduate degrees for optimum performance. Air Force Advanced Academic Degree Management System (AADMS) implements DOD Directive 1322.10,

"Policies on Graduate Education for Military Officers." The AADMS establishes controls over the development of requirements for graduate education within the Air Force and the use of the graduates of these programs. The AADMS requires advanced academic degree requirements to be validated and placed on manpower data files and be reviewed semiannually. New inputs are determined by comparing resources with requirements and considering projected gains and losses over a five year period into the future. Programmed entires are 798 for fiscal year 1974, 1065 for fiscal year 1975, and 916 for fiscal year 1976. Data are for AF active duty personnel only.

(b) *Lawyer Education.*—The objective of this program is to provide education leading to the degree of bachelor of laws or juris doctor as authorized by Public Law 93–155. Eligibility for participation in this program is restricted to career officers in pay grade of O–3 or below who have served on active duty for a period of not less than two years nor more than six years upon entry into law school. Programmed entries are 25 per year for fiscal years 1974–1976.

(c) *Medical Education.*—This program provides education in the health and allied sciences for individuals already on active duty or who are commissioned and placed on active duty for the purpose of receiving medical education. In either case, graduates serve as active duty physicians, dentists, veterinarians, nurses, or biomedical scientists. Programmed entries total 578 for fiscal year 1974, 407 for fiscal year 1975, and 407 for fiscal year 1976.

(d) *Airman Education and Commissioning Program (AECP).*— The objective of this program is to provide: a source of officers in specialized skills who have an expected high rate of retention; an avenue whereby enlisted personnel with known qualifications can augment the commissioned ranks; and a measure of motivation and upward mobility for the enlisted ranks. The program provides for undergraduate education (if necessary) at civilian educational institutions, followed by officer training and subsequent commissioning of carefully screened, career-minded airmen. This program has been a key means of meeting shortfalls in the procurement of officers in critical engineering and science disciplines, and the Air Force requests its reinstatement for fiscal year 1976. Programmed college entries are 432 for fiscal year 1974, 158 for fiscal year 1975 (program terminated by Congress), and 400 for fiscal year 1976.

Following is funding information for the four programs described above:

[In millions]

Appropriation	Fiscal year—		
	1974	1975	1976
MPA	$51.9	$58.9	$56.9
O. & M	8.6	9.3	9.7
Total	60.5	68.2	66.6

Educational Programs/Enlisted Personnel

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?

Secretary McLucas. Enlisted personnel are eligible for the AFROTC Airman Scholarship and Commissioning Program (ASCP). Scholarships are available for two to four academic years, depending on the amount of credit required for degree completion, and provide tuition, fees, and $100 monthly subsistence allowance for up to ten months per academic year. A production objective of up to 300 graduates per year has been established. In fiscal year 1974, 185 airmen entered the program, 154 entered in fiscal year 1975, and approximately 250 new enrollees are expected in fiscal year 1976. Both the production objectives and the funding for the ROTC ASCP are part of the total AFROTC Scholarship Program. Scholarship and subsistence costs for the ASCP portion of the enrollees are $.4 million in fiscal year 1974, $.7 million in fiscal year 1975, and $1.1 million in fiscal year 1976.

In comparison to the Airman Education and Commissioning Program (AECP) as a means of commissioning enlisted personnel, the ASCP has the following advantages and disadvantages:

Advantages

Lower cost, since ROTC ASCP enrollees are discharged from the Air Force and receive only $100 monthly subsistence allowance. AECP students receive full pay and allowances at pay grade E–5.

Completion of Officer Training School is not necessary, since officer training is received on campus.

Disadvantages

ROTC ASCP candidates must be under 25 years of age on 30 June of the calendar year in which they are commissioned, while the corresponding age limit for AECP students is 35 (27½ for pilot and navigator candidates). Many enlisted personnel exceed the age limitation for ROTC ASCP by the time they become interested and/or competitive for it.

Many enlisted personnel, particularly those who are married, find the $100 monthly subsistence allowance inadequate or insufficiently attractive. The AECP program, on the other hand, permits students to approximate their previous standard of living while attending college.

The ROTC ASCP program suffers a relatively high attrition rate (19 percent to date for the fiscal year 1974 entries, none of whom have yet been commissioned), caused in large part by the financial constraints mentioned above. The attrition rate since 1962 for the AECP program is only 3.9 percent for the college phase and 5.3 percent through the final commissioning.

The ROTC ASCP will provide relatively few graduates with baccalaureate degrees in engineering and physical sciences. The AECP program is designed specifically to offset the "technical shortfall" of the other commissioning sources. The requested fiscal year 1976 AECP program of 400 entries will include 264 in engineering and physical sciences, with the remainder entirely in "technical management" fields such as computer sciences, engineering management, and systems management.

SIMULATORS

Chairman McCLELLAN. How many simulators does the Air Force now have, and what is programmed, by type of simulator (aircraft or otherwise), for the next five years?

[The information follows:]

The Air Force currently possesses 203 operational flight simulators/trainers. In addition we have 185 procedures trainers for Undergraduate Pilot Training, 21 missile trainers, 69 bomb/navigation trainers, 31 electronic warfare trainers, and 26 gunnery trainers. The following programs for simulator acquisition or modification are planned in the next five years.

Weapon system	Quantity	Comments
A–7D [1]	2	New simulators.
A–7D [2]	5	Visual mod.
F–4E [2]	16	Visual/motion mod.
FB–111 [3]	3	Visual mod.
F/FB–111 [3]	11	Digital radar landmass mod.
F–111F [3]	1	New simulator.
B–52G/H	18	Do.
KC–135	29	Do.
C–130 [2]	10	Do.
C–130 [2]	2	Cockpit procedures trainers.
T–37/T–38 [1]	136	New simulators.
A–10 [2]	4/training wing, 2/operational wing	Do.
E–3 [1]	1 flight simulator, 1 mission simulator	Do.
F–15 [1]	2/wing	Do.

[1] Funding start prior to fiscal year 1975.
[2] Fiscal year 1975 start.
[3] Presently unfunded.

SIMULATORS/USE OF OFFSET FLIGHT HOURS

Chairman McCLELLAN. Are simulator hours being used to offset actual required flight hours or merely as additive hours?

Secretary McLUCAS. Simulator hours are being used to offset actual required flight hours. The degree to which this reduction is possible depends on the quality of the simulators. For example, our old KC–135 simulators, which are actually

little more than procedures trainers, are programmed for about 42,000 hours of utilization in fiscal year 1976. If these devices were not available, about 25,000 additional flying hours would be required. To further reduce flying hours without degrading operational capability, we plan (1) to procure new simulator systems with digital computers, visual and motion capability and advanced instructional features and (2) to modify our current digital systems with improved capabilities. The program has already been initiated and will continue through fiscal year 1981. At full program implementation the anticipated additional annual flying hour avoidance is about 360,000 hours which equates to a saving of about 11 million barrels of aviation fuel per year.

Simulators/Equivalent to Flight Hours

Chairman McClellan. Do simulators count toward hours each pilot is required to fly each month in order to retain his proficieny?

Secretary McLucas. Simulator training has traditionally been considered a supplement to flying training requirements. However, this concept has changed and we do now count flight simulator training accomplishments toward pilot proficiency. The Air Force has recently converted to a training proficiency concept based on sortie/event criteria rather than on an hourly basis. The event oriented concept takes into consideration, and allows for, the determination of those events, or portions thereof, that can be trained in a simulator. The Air Force is embarking on an ambitious flight simulator program for the realization of dollar and energy savings. An investment of over a billion dollars is projected over the next six years. Industry now requires approximately 30 months from contract award to delivery of the first article. Therefore, investments are needed now for the realization of future benefits.

Maintenance Control Systems

Chairman McClellan. What is the total cost of the maintenance management information control system, and what is the funding history?

Secretary McLucas. Including a projection of requirements five years beyond the budget year, the system will require $33.7 million through FY 81. Requirements beyond FY 1975 are based on existing price levels or known price increases at the time the FY 1976 budget was prepared (October 1975–January 1976).

However, the system has eliminated 469 enlisted manpower authorizations with offsetting reductions which total $24.3 million for the same period.

The $33.7 million includes the development and installation of the system, plus the recurring operating costs of $4.7 million a year for system maintenance and rental of automatic data processing equipment. This system is part of the Base Level Data Automation Standardization Program which supports many base level requirements.

The funding history and projection is $2.7 million for FY 74 and prior years; $2.9 million for FY 75; $4.6 million for FY 76; and $4.7 million for each year from FY 77–81; for a total of $33.7 million.

Management Control Systems/Cost of Customer System

Chairman McClellan. What is the total cost of the customer integrated automated procurement system, and what is its funding history?

Secretary McLucas. The customer integrated automated procurement system total costs are approximately $718,000 for a four-year systems development period fiscal years 1973–76. The implementation of this system has resulted in the reduction of about 150 Air Force manpower spaces. This system is part of the base level data automation standardization program which supports many base level requirements. These costs are incremental to the existing airbase system. The funding history and projection is $222,000 for fiscal year 1973; $243,000 for fiscal year 1974; $191,000 for fiscal year 1975; and $62,000 for fiscal year 1976; for a total of $718,000.

Strength Reductions

Chairman McClellan. How many enlisted personnel were involuntarily separated in fiscal year 1975?

Secretary McLucas. Aside from separations "for cause", no airmen have been involuntarily separated thus far in fiscal year 1975 and no such actions are anticipated. The fiscal year 1975 enlisted end strength objective is being met by reducing accessions and providing voluntary early releases on a moderate scale.

Airman Education and Commissioning Program

Chairman McClellan. How many entries are the Air Force programming for Airman Education and Commissioning Program in fiscal year 1976? What is the total cost in fiscal year 1976 of this program? Explain how this program is a necessary source of technical degree holders. Are not these technical degrees available from other commissioning sources?

Secretary McLucas. The Air Force programmed fiscal year 1976 input into the Airman Education and Commissioning Program is 400 of which 17 percent will be in computer sciences, 17 percent in technical management (including engineering management, systems management, industrial production and procurement, and aviation management), 44 percent in engineering, and 22 percent in physical sciences. The total fiscal year 1976 costs are $7.6M of which $1.0M is O&M and $6.6M is MPA. Our inputs into the program are based upon officer procurement objectives which take into consideration projected retirements, separations, attrition and gains from other commissioning sources from one to four years into the future. Airman Education and Commissioning Program inputs are planned to fill shortfalls in accessions of people with technical degrees from other commissioning sources which provide us insufficient numbers to meet all requirements. For example, we attempted to get 200 civilian electrical engineering inputs into Office Training School in fiscal year 1975, but we were able to attract only 37.

Medical Services

Chairman McClellan. Describe the expansion in the use of physician assistants and nurse practitioners, fiscal years 1974–76. What is programmed through fiscal year 1980? What types of services can be performed by such paramedical personnel that formerly required doctors?

Secretary McLucas. Senator McClellan, in fiscal year 1974 we had 23 Physician Assistants (PAs) practicing in our medical facilities. At that time we instituted programs to train nurse practitioners especially to provide primary care in family medicine, pediatrics, obstetrics and gynecology and mid-wifery. We expect to reach our goals to 253 PAs by fiscal year 1976 and 587 Nurse Practitioners in all disciplines by fiscal year 1978. Physician Assistants and Nurse Practitioners provide limited primary diagnosis and treatment under direct supervision of physicians, thus to extend the effectiveness of our physicians and the overall quality and scope of treatment to their patients.

Bombers in Crisis Situations

Chairman McClellan. Explain how bombers are uniquely useful in crisis situations. In particular, explain how placing a B–1 force on alert in such a situation would have a gerater effect than placing a larger B–52 force on alert.

Secretary McLucas. The United States acquires strategic nuclear forces for a variety of reasons, the goal being to contribute to deterrence across the spectrum of conflict, whether the international situation be quiescent or in crisis. The principal contribution of the strategic force is to deter strategic attack on the U.S. and its allies. To do so requires a force which offers strong incentives for an adversary not to launch a preemptive strike, because he realizes the U.S. will retain, under any scenario, the capability to survive a nuclear first strike and inflict unacceptable damage in retaliation on the attacker.

No one part of our strategic TRIAD has all the characteristics required of an effective deterrant strategic force. It is, and has been, our bomber force which has those qualities uniqely useful during times of high international tension and crises. It is in these times our bomber force can be quickly and efficiently generated to an advanced readiness status, at their home stations, dispersal bases, or on airborne alert. This generation to an advanced readiness posture can be accomplished virtually without detection. On the other hand, as demonstrated during the Cuban crisis and recently during the Mid-East crisis, our advanced readiness can be made highly visible to a potential adversary as a demonstration of national resolve. Should the situation further deteriorate, bombers can be launched under "positive control." This unambiguous signal to an adversary could place more than half of our nuclear megatonnage in a secure airborne status, allowing additional time for negotiation, while we are secure in the knowledge that the force can be withheld, recalled, or if directed by the National Command Authorities, sent to targets.

As you know, the Air Force currently plans for a bomber force consisting of B–1s, B–52s, and FB–111s in the 1980s. Normally we would not contemplate increasing the readiness or alert posture of only a portion of this force. Rather we would bring the total force to the desired posture simultaneously. However, there are characteristics of the B–1 force which increase its value over the other aircraft.

For instance, the B–1 is our first bomber designed specifically to attain and sustain high alert rates. Features such as automated sub-system maintenance checks permit rapid force generation and high confidence in the ability to sustain a "ready" condition.

Should the force be subjected to attack, the B–1 provides a significant reduction in "safe escape time" over the B–52. This results from its fast take-off, rapid acceleration and fly-out speed, and increased resistance to over-pressure and other nuclear effects.

The shorter take off distance required by the B–1 permits operation from a far greater number of airfields in a dispersal option than are usable by the B–52. This compounds an attackers' problem and improves the reaction time of the force as a whole. We also believe we can deploy safely a force of B–1s outside the deep interior of the U.S., allowing the interior bases to be used by B–52s and KC–135s with their longer escape times.

Finally, the B–1, flying at higher penetration speeds and lower altitudes than the B–52, presenting a lower radar cross section and carrying more ordnance in its compact airframe, assures us a higher degree of penetration survivability and thereby increases the potential threat to an adversary.

Our potential adversaries are even now well aware of these facts concerning B–1 capability. Therefore, logically, we can presume they would preceive in an "alerted" B–1 force a greater retaliatory capability than would be present in an even larger B–52 force.

Our bomber force, B–1s, B–52s and FB–111s alike, provides the National Command Authorities with a most valuable crisis management asset—time—time to consider alternative courses of action. During crises, the strategic bomber force can demonstrate a strong, visible, controlled intent whatever the nature or level of the crisis, or the manner of response which may be called for by national authorities.

B–52/HARPOON

Chairman McClellan. Describe the specific missions that the B–52 equipped with HARPOON would provide.

Secretary McLucas. Equipping the B–52s with the HARPOON will allow the B–52s to be used in an anti-ship mission against the Soviet sea-borne surface-to-surface missile threat. This modification will allow the B–52s to perform this mission from a stand-off position outside the range of enemy terminal defenses.

Chairman McClellan. What Navy ships will this capability be replacing?

Secretary McLucas. The B–52 equipped with HARPOON is not intended to replace any Navy ships. The system will be used in conjunction with the Navy systems.

Chairman McClellan. How many B–52s are planned for modification to carry HARPOON?

Secretary McLucas. [Deleted] B–52Ds are planned for modification to carry HARPOON.

Chairman McClellan. Will those B–52s also retain a strategic nuclear mission?

Secretary McLucas. The modified B–52s will retain, and continue to be used in, the strategic nuclear mission.

Minuteman Testing

Chairman McClellan. What is the annual rate of consumption of Minuteman missiles for testing purposes? Will there be additional Minutemen procured that will not be used for the test program or for evaluating accuracy? What will be done with any such missiles?

Secretary McLucas. Currently there are three testing programs under way for Minuteman III missiles: the Phase I Operational Test, Phase II Operational Test, and testing of systems improvements not yet introduced into the force. Phase I Operational Test consists of a fixed number of launches (40) to establish a data base for operational planning factors. In this program, 13 missiles remain to be launched; these will be completed by the end of fiscal year 1977. Phase II

Operational Test is a continuing program to validate and update the planning factors established in Phase I. These missiles are launched at an annual rate of seven per year. The third program, to test improvements to the weapon system, is conducted by Air Force Systems Command. There are currently 18 additional flights planned, continuing into fiscal year 1978. Thus, through fiscal year 1977, we will be launching about 20 Minuteman III missiles a year until we come to the end of the two major test programs. Beyond that point, we will be launching seven per year, with the exception of the two final development test missiles in fiscal year 1978. Without the procurement of 50 additional Minuteman III missiles in fiscal year 1976, we will exhaust all our test assets in fiscal year 1984. The additional 50 missiles would extend our Phase II Operational Testing until we can be assured that a follow-on replacement for Minuteman III is available, and would provide additional test missiles with which to evaluate potential improvements or modifications required during the life of the system. All Minuteman missiles to be procured in fiscal year 1976 are for test purposes. However, they would also provide an option to deploy additional numbers of Minuteman III, should that be deemed necessary.

Oversize and Outsize Cargo

Chairman McClellan. Explain the types of equipment that the C–5 can carry compared to the C–141 and the distinction between oversize and outsize cargo.

Secretary McLucas. The terms outsize and oversize are functionally defined as follows:

Outsize.—Outsize cargo is that air cargo which exceeds the loading capabilities of the C–130/C–141 aircraft and requires the use of C–5 aircraft.

Oversize.—Oversize cargo is air cargo of such size and weight that it requires the loading capabilities of a C–130 or C–141 aircraft. Currently available commercial aircraft, in particular, cannot load oversize cargo. A principal purpose of the proposed "CRAF modification program" is to modify a number of commercial 747 aircraft to accept oversize cargo.

Typical outsize cargo items include the Army M60 tank, 155M Howitzer, aircraft shop semitrailer, vehicle loading ramp, bridge launcher, and CH–53 helicopter. Only a C–5 can airlift these items. Typical examples of oversize items include the UH–1B helicopter, standard Army 6 ton truck, 10 ton tractor, 6,000 lb forklift, and 2½ ton wrecker. They can be carried on the C–141. The above are representative items of an extensive list in each category.

War Reserve Materiel Spares

Chairman McClellan. Describe in greater detail the request for $332 million for War Reserve Materiel spares. Is this in addition to the normal spare parts being requested for the fiscal year 1976 aircraft buy? Why was the decision made to request this large amount in fiscal year 1976? Why has the spare buy in previous years been insufficient to meet war reserve requirements?

Secretary McLucas. Mr. Chairman, the request for $332 million is for war reserve materiel spares which, together with peacetime stock, are required to support the full potential of our combat aircraft and crews in combat activity. These dollars are a portion of the total fiscal year 1976 replenishment spares request of $750.4 million and are in addition to the normal operating spare parts being requested for the fiscal year 1976 aircraft buy and those that are required to replace condemned items in existing systems. This large dollar request is due primarily to the deferral of war reserve spares in prior years caused by continuing price escalation which has dictated that those funds previously identified for war reserve be used for normal peacetime operating stocks. In view of the gradual depletion of existing wartime stocks and the requirement to provision for new aircraft entering the inventory, we cannot continue to defer this requirement. As a result, to obtain a balanced program we are now placing a priority on procurement of these items. I must emphasize that full funding of the $332 million request would still result in a deficit of $185.3 million for WRM being carried over to fiscal year 1977. It is our intent to fund this deficit in fiscal year 1977 and to fund any new or increased requirements resulting from additional aircraft entering the inventory. I make this point since, once full WRM support is attained, additional requirements would be largely confined to procurement of WRM for additional aircraft or support for systems which are changed by modification.

INCREASED CAPABILITY AIRCRAFT

Chairman MCCLELLAN. Your statement indicated that as F–4s and F–111s replace F–100s, combat capability in Europe increased substantially, but so did the need for additional maintenance personnel. As the Air Force replaces each of its existing aircraft with new planes, aren't there going to be further substantial increases in combat capability? If this is true, why is an increase being proposed in the number of tactical air wings—why not a decrease in order to hold capability constant?

General JONES. Our program is not a constant capability program—nor should it be. First, the capabilities of potential aggressors are not standing still, not in numbers nor in quality. Second, the fruits of our prior investments in research and development now bring within our grasp conventional air power of unprecedented deterrent power. Third, thanks to management efficiencies, simulators, use of a high-low mix and reduced maintenance on our newer aircraft, we can accomplish this program within projected manpower levels. Fourth, while the nation will continue to maintain and improve nuclear forces as an integral part of our overall deterrent posture, the strengthening of airpower now within our grasp would greatly improve our conventional capabilities, thus broadening the scope of our deterrence with conventional forces.

Since this judgment as to the propriety and desirability of increasing our conventional air power is crucial to the Air Force program, I would like to take some care in laying out the factors that led to it.

In NATO our forces, combined with those of our Allies, still face a numerical imbalance with projected Warsaw Pact forces both on the ground and in the air. We have documented proof that the Soviets are concentrating on qualitative improvements of their ground forces, air defenses, and tactical air forces. They currently possess one of the most formidable armor capabilities in the world. Their technological efforts toward further improvements of this force are continuing. As technological improvements are increasing the effectiveness of Warsaw Pact armor, the Soviets are also continuing to build the size of this force. The Warsaw Pact armor threat in our opinion, is most significant to the security of the NATO alliance.

The character of Warsaw Pact tactical air is also changing significantly and rapidly. Not only are they numerically superior to the combined NATO tactical air forces but they are changing their concepts of employment. We are reasonably certain that they have a high speed, low altitude penetration capability and an all weather ground attack capability which has not been evident in the past, and are improving the overall versatility and flexibility of their fighter/attack aircraft. This is a marked departure from former Soviet trends toward relatively austere aircraft capable of performing specified missions with rather limited versatility to perform others. We also expect an increase in the size of Warsaw Pact Frontal Aviation and air defense fighter forces in the foreseeable future.

Another area in which the Soviets are not standing still is air defenses. An example of the headway they are making was demonstrated against the Israelis during the October 1973 Mid-East war. The surface-to-air missile threat complicated the Israelis' effective employment of tactical air. Although Israeli airpower was a key factor in the outcome of the war, enemy surface-to-air missiles and concentrated anti-aircraft guns were effective, and demonstrated impressive technological gains in Soviet built air defense weapons.

In the last year we have seen the Soviets begin routine export of their very latest and best equipment. Thus we must plan for deterrence and defense against the best Soviet aircraft, armor and air defenses throughout this troubled world.

Mr. Chairman, with the development and procurement of the weapon systems we have identified to equip the 26 wing force, we expect to have a very significant level of conventional capability in relation to the Soviet initiatives. Through our efforts to reduce non-combat force levels we will accomplish this within projected fiscal constraints and manpower levels. The mix has been carefully planned to combine prudent development and procurement practices with practical operating and management policies resulting in a cost effective deterrent force posture.

The substantial increases in air power embodied in our overall program, when combined with similar improvements in the Army, will produce forces that can deal effectively with the very capable threat I have just described. These forces when combined with those of our allies in NATO and elsewhere should leave no

question remaining in the minds of potential adversaries about our ability to provide a strong conventional deterrent and defense across the range of our world-wide commitments and interests.

Consolidation of Other Commands

Chairman McClellan. You indicate that the Military Airlift Command and the Air Force Communications Service had been merged. Are there any other commands which have similar type responsibilities and which are potential targets for a similar type of consolidation? Would you describe each major command and service in the Air Force and its mission.

[The information follows:]

The merger of the Air Force Communications Service with the Military Airlift Command is expected to be completed by 30 June 1976. We are also implementing another consolidation involving two other major commands, i.e., Pacific Air Forces and Tactical Air Command. With the elimination of Headquarters Pacific Air Force, at Hickam AFB, Hawaii, which was announced on 10 December 1974, the majority of the tactical air forces in the Pacific will be reassigned to the Tactical Air Command. The Military Airlift Command and the Aerospace Defense Command will assume command of the airlift and air defense forces respectively. This action will provide for an overall reduction of approximately 2400 manpower spaces in Hawaii and further streamline the management headquarters structure in the Air Force.

The consolidation of all tactical airlift units under the Military Airlift Command that was announced last year is proceeding on schedule and has been completed for the forces in the Continental United States. The transfer of the tactical airlift forces in the overseas theaters to the Military Airlift Command will be completed by the end of this fiscal year.

There are also some actions involving the unified commands which could be considered as consolidations with Air Force major commands. Reference is made to the recently announced disestablishment of the Continental Air Defense Command at Colorado Springs, Colorado, and the Alaskan Command at Elmendorf AFB, Alaska. In the case of the Continental Air Defense Command, the Air Force Aerospace Defense Command will assume these responsibilities and become a United States specified command. The physical consolidation of the Headquarters, Continental Air Defense Command and the Headquarters, Aerospace Defense Command was accomplished in 1973 with considerable economies (a savings of 930 manpower spaces) and the current action is primarily a change in designations. In Alaska, the unified command will be eliminated and the Air Force Alaskan Air Command will become the senior military headquarters in the state.

There are 15 major commands in the United States Air Force today. These commands are organized on a functional basis in the United States and on an area basis overseas. The commands are given the responsibility for accomplishing certain phases of the worldwide activities of the Air Force. They are responsible for organizing, administering, equipping, and training their subordinate elements for the accomplishment of assigned missions.

Aerospace Defense Command

The Aerospace Defense Command is a major command of the United States Air Force and is the Air Force component in the North American Air Defense Command/Continental Air Defense Command structure. Its primary mission is to discharge Air Force responsibilities for the aerospace defense of the United States.

Air Force Logistics Command

The Air Force Logistics Command provides worldwide logistics support to the Air Force. This includes procurement, storage, and distribution of supplies and the performance of, or arrangement for, the performance of depot level maintenance on materiel.

Air Force Systems Command

The responsibility of the Air Force Systems Command is to advance aerospace technology, adapt it into operational aerospace systems, and acquire qualitatively superior aerospace systems and material needed to accomplish the United States Air Force mission.

Air Training Command

The Air Training Command provides individual training for Air Force officers and airmen. Thus includes basic training and indoctrination for all Air Force recruits; flying training; and technical field, special, and such other training as directed. It is also charged with the recruiting function for the Air Force.

Air University

The Air University is primarily concerned with the higher education of Air Force officers. It is responsible for the supervision and operation of such activities as the War College, the Command and Staff College, the Institute of Technology, the Extension Course Institute, and the Air Force Reserve Officers Training Corps.

Headquarters Command, USAF

The Headquarters Command provides administrative and logistics support for Headquarters, USAF and for those Air Force units stationed within the Washington, D.C., area on a permanent or temporary duty basis that are not capable of providing self-support. This includes the USAF Band, air attache and air mission units, and other special mission personnel located in the Continental United States and overseas.

Military Airlift Command

The Military Airlift Command provides air transportation for personnel and cargo for all the military services on a worldwide basis. In addition, it furnishes weather, rescue, and audiovisual services for the Air Force.

Strategic Air Command

The Strategic Air Command is a major command of the United States Air Force and a United States specified command. Its primary mission is to organize, train, equip, administer, and prepare strategic air forces for combat, including bombardment, missile, special mission, and strategic reconnaissance units and to conduct strategic air operations.

Tactical Air Command

The Tactical Air Command's mission is to organize, train, and equip forces to participate in tactical air operations. This includes tactical fighter, tactical air reconnaissance, special operations, close combat air support, tactical air control, and joint amphibious and airborne operations. It is the Air Force component of U.S. Readiness Command and U.S. Atlantic Command. It participates with other services in developing doctrine, procedures, tactics, techniques, training and equipment for joint operations. It provides combat ready air elements to U.S. Readiness Command.

U.S. Air Force Security Service

The United States Air Force Security Service monitors Air Force communications in all parts of the world to insure compliance with established communication security practices and procedures. Additionally, USAF Security Service units occasionally conduct research in communication phenomena in support of various elements of the U.S. Government.

Air Force Communications Service

The Air Force Communications Service provides base and point-to-point communications, flight facilities, and air traffic control services primarily to the Air Force but also other agencies, governmental and civil, national and foreign.

Overseas Commands

The United States Air Forces in Europe, Pacific Air Forces, Alaskan Air Command, and United States Air Forces Southern Command constitute the overseas commands of the USAF. They are responsible for the offensive,

defensive, transport, and logistics functions in their areas of operation. They provide the air elements for the unified force to which they are assigned and assist Air Force of other countries.

Military Airlift Command

Chairman McClellan. What command previously had responsibility for tactical airlift forces? What reductions were made in that command as the responsibility for tactical airlift was transferred to MAC?

General Jones. The tactical airlift forces have been assigned to the Tactical Air Command, Alaskan Air Command, Pacific Air Forces, U.S. Air Forces in Europe, and U.S. Air Forces Southern Command. Support aircraft were assigned to individual air bases throughout the Continental United States. All these forces are being consolidated under the Military Airlift Command. This consolidation permits the elimination of two Air Division Headquarters and approximately 400 support aircraft.

Manpower savings resulting from the consolidation of tactical and strategic airlift forces have totalled about 170, which includes 100 at Major Command management headquarters level, about 50 from the Air Division headquarters, and some 20 or so at squadron level. Those resulting from the phase out of the support aircraft will be approximately 6,400.

Stabilizing the Force Structure

Chairman McClellan. The Army is proposing that its force be stabilized at 785,000 per year. Does the Air Force plan to select a number and request a stable manpower authorization over the next few years—and if so, how large a force do you feel you need to stabilize on?

General Jones. After an extended period of continual reductions in manpower, we are seeking stabilization of our strength levels. Today's Air Force is the smallest since the Korean War in bases, aircraft, and manpower. We believe it is now time to stabilize our military strength at about 590,000 and improve our combat capability by internal realignments within that number.

Bombers Versus Missiles

Chairman McClellan. You indicate that the strategic bomber is the only "known quantity" in the strategic equation. Has the Air Force ever flown strategic bomber sorties against targets that are as heavily defended as Soviet bomber targets in our strategic nuclear war plans? What is your estimate of the number of bombers and the percentage of the total force that would make it through and hit their assigned targets in a bomber attack?

General Jones. The capability of the manned bomber was clearly and unquestionably demonstrated most recently during the Linebacker II operations conducted over North Vietnam in the closing days of 1972. From 18–29 December of that year over 700 B–52 sorties were flown against one of the most heavily defended areas of the world, Hanoi/Haiphong. The B–25 loss rate was slightly over 2 percent of the sorties flown in the face of a concerted effort by the enemy to inflict a maximum loss rate on this force with both surface-to-air missiles and fighters. None of our other strategic systems has been so tested, nor are their capabilities so clearly evident to our friends and potential adversaries. Employment of the bomber in a nuclear environment, due to major contrasts in the nature and scope of the conflict, would require somewhat different tactics than were used in Linebacker II. Although the defenses would be more sophisticated and include equipment not used in North Vietnam, we are convinced that the penetration capability will remain high through the use of different tactics and suppression of defenses. We calculate that more than [deleted] will successfully penetrate this most severe defensive environment.

NATO Improvements

Chairman McClellan. In your judgment, what improvements can be made by the NATO-European members of the Alliance that will markedly improve, without increasing their budgets, their combat capabilities in Europe?

General Jones. I believe that major improvements in combat capability will have to come from a closer integration of the defense effort of the Alliance. Current standardization efforts are aimed at realizing maximum benefits from

each expenditure. Ongoing programs in this regard include efforts to standardize NATO weapons, equipment and servicing capabilities; and programs to improve interoperability through consolidated training. Each of these programs should serve to improve NATO functionally while resulting in cost savings for the Alliance. Aside from this, some relatively low-cost efforts such as establishing a common line of communication in Central Europe, and increasing the capability of reception facilities to process reinforcements, would increase the collective combat capability and effectiveness of the Alliance.

A–10's and F–16's for NATO Allies

Chairman McClellan. Would you recommend that our Allies buy A–10's and F–16's?

General Jones. Both of these aircraft possess capabilities which would make them attractive additions to the forces of our NATO Allies. The A–10, which was specifically designed for employment in a close air support role, possesses a lethality and survivability which render it extremely effective in an anti-armor role. The F–16, while it packs less anti-armor punch than the A–10, excels in an air superiority role and possesses excellent air-to-ground capabilities. As you know, we have actively promoted the adoption of the F–16 by the European consortium as a logical replacement for the F–104.

The performance of these aircraft, in complementary roles, renders them especially well-suited to the European environment. Their procurement by other NATO member nations would represent a significant advance in the standardization of logistic support, inter-operability and overall capability of the Alliance.

Airborne Warning and Control System

Chairman McClellan. You mention that NATO's Air Command and Control System has significant deficiencies. If the Europeans agreed to buy AWACS, would there be a phaseout of the current Command and Control System? Would you describe these deficiencies in the current NATO system, and explain how they would be overcome simply by the addition of AWACS—or would other actions be required?

General Jones. The major deficiencies in the current NATO command and control structure and associated air surveillance elements are rooted in history. The NATO structure was designed and built to serve an earlier "trip wire" strategy for deterrence and defense of Western Europe. This strategy, which was keyed to a nuclear response, could manage with little more than early warning. The current flexible response strategy, on the other hand, emphasizes capabilities for a sustained conventional defense, for which much more than early warning is needed. Further, since the current system was built, there have been steady improvements in Warsaw Pact capabilities, particularly in Tactical Aircraft flying at low altitude.

The deficiencies in air surveillance stem in large part from the inherent restrictions imposed on ground-based radars by terrain and line-of-sight limitations The limited number of radar sites, in conjunction with their limited low altitude range, does not permit contiguous coverage over friendly territory and very limited low altitude coverage of enemy territory. In addition, the current radars, products of now outdated technology, have an unsatisfactory susceptibility to electronic jamming. Those radars in forward locations are vulnerable to physical interdiction, in some cases even by hostile artillery fire. The rearward sites are also vulnerable, notwithstanding their location in underground bunkers, because the associated radar antennas are in a fixed, soft, above ground configuration.

The degree of interconnection among air surveillance radars, surface-to-air-missile sites and command centers is quite uneven. As a result, no one place has all the relevant data in a timely fashion. Many of the interconnecting communication links are themselves vulnerable to jamming aand physical damage.

The introduction of AWACS into the European command and control environment will greatly alleviate the major deficiencies outlined above. It provides a survivable, airborne radar platform that is highly resistent to jamming. It can look down over the battle area to collect and integrate a vast amount of desperate information from its own radar and from other sources. This integrated, coherent picture can be displayed in AWACS and sent instantly to a number of ground command centers and radar control sites throughout the Central European theater.

This solves what is perhaps the greatest problem of senior NATO commanders, that is, getting a good picture of what is going on in order to make timely decisions as to the proper allocation of available resources. From its aerial vantage point, AWACS introduces a whole new range of command and control capabilities which extends far beyond direction of the air battle. Technology is available which will enable the AWACS to provide track data to the Army SAM sites and to monitor the disposition of ground units, whether in the rear or directly engaged at the FEBA. The Army has shown great interest in using the AWACS integration function to aid their own command and control structure.

I should, however, caution that AWACS is not a panacea for all command and control problems in Europe. NATO has suffered from organizational and doctrinal deficiencies in this area as well, and these must be remedied before the vast new capabilities made available by AWACS can be fully exploited. Last June, NATO took a major step toward resolving these problems with the establishment of Allied Air Forces Central Europe (AAFCE) and the designation of a single air commander to head this organization.

Equally important was the corollary decision to establish a hardened, underground wartime command post from which both the Commander-in-Chief, Central Europe, and the Commander of AAFCE will exercise command and control of air and ground forces.

This facility represents a vital first step in building a backbone of ground control centers to combine the information available from AWACS with other critical information areas such as intelligence and logistics.

In concluding, I would note that if our NATO Allies decide to buy the AWACS, the ultimate disposition of the diverse elements of the current command and control system would in many cases be theirs to decide. For example, many of the ground radars belong to the European nations and serve national functions as well. However, we would expect that some changes would be made.

Maintenance Personnel Per Aircraft

Chairman McClellan. The transition to F–4s and F–111s in Europe improved combat capability, but increased maintenance personnel. Of the planned systems currently in RDT&E, what effort is being made to reduce the number of maintenance personnel required? Provide a comparison showing number of maintenance personnel required for F–4, F–111, F–15, F–16, C–130 and Advanced Medium STOL Transport squadrons. What incentives are being given to contractors to reduce maintenance personnel requirements?

General Jones. The F–15 was one of the first major Air Force Systems to benefit from the Integrated Logistics Support (ILS) Concept. Although this aircraft is a complex system, the number of maintenance personnel should be reduced from F–4 requirements due to features such as quick access to avionics bays, aircraft mounted accessories and simplified engine change procedures. The ILS concept is also being applied to the F–16 program. Service engineering, logistics technicians and TAC maintenance personnel participated in the prototype competition between the YF–16 and YF–17. Their participation led to early identification of a need to increase the number of maintenance access panels and to move several of the existing panels. Both contractors were provided the lessons of Air Force support experience learned on other fighter aircraft and were made aware of the Air Force objective to minimize the maintenance requirements consistent with the operational mission. The same AF individuals who were involved in the prototype effort provided inputs to the source selection evaluation process to insure that logistics support aspect of the two competing aircraft received full consideration. Tradeoff studies on the Advanced Medium STOL Transport are just beginning. The objective of these analyses will be to strike a balance between investment and annual recurring costs. Included in these analyses will be realistic goals for reliability and maintainability and a lean maintenance manning structure complementary to the operational employment concepts.

This chart addresses the requested comparison of maintenance personnel among the aircraft systems.

Approximate base level maintenance manpower requirements for a typical U.E. squadron

Weapon system	
Fighters:	
F–4E	380
F–111	500
F–15 (planned)	320
F–16	(1)
Airlift:	
C–130	336
AMST	(2)

[1] Being determined (will be well below the F–15).
[2] Being determined (should be below the C–130).

Reliability of systems on the aircraft is a driving factor in developing base level manpower requirements; high reliability requires less manpower. To reduce the manpower required, contracts have included incentive options such as the Reliability Improvement Warranties and Target Logistics Support costs. These relatively new contract techniques are currently being applied to the F–16. Based on lessons we learn from our F–16 experience, those techniques will be reviewed and tailored for application to the AMST.

Transfer of Aircraft to Military Airlift Command

Chairman McClellan. Provide the increases and decreases associated with the transfer of all airlift aircraft and support aircraft to MAC control. How much is MAC projected to increase as a result of this transfer (military and civilian)? Where are the offsetting decreases being made, by command and base?

General Jones. The tactical airlift resources currently assigned to the Tactical Airlift Command, Alaskan Air Command, Pacific Air Forces, US Air Forces in Europe, and US Air Forces Southern Command will transfer to the Military Airlift Command (MAC). Upon completion of the transfer MAC will increase by 15,600 manpower authorizations, (14,400 military, 1,200 civilians) and the losing commands will reduce accordingly. This transfer will save approximately 90 management headquarters authorizations, eliminate two tactical air divisions with a savings of some 60 authorizations, and another 20 more or less will be saved at squadron level for a total of about 170.

With regard to support aircraft, they were heretofore assigned to individual air bases throughout the Continental United States and overseas. Over 400 of these older model reciprocating engine aircraft are being removed from the active inventory, with resulting savings of approximately 6,400 military and civilian personnel at worldwide locations. The jet powered T–39 airframes we are retaining in the Continental United States will be based at 15 locations to furnish residual support aircraft functions and will be pooled under MAC control. The T–39 aircraft assigned to overseas locations will continue operations under enhanced management to obtain maximum utilization.

Discriminate Targeting Packages

Chairman McClellan. What types of highly discriminate targeting packages are being developed? Would you describe the different options that are being developed? How do these options differ from what is now available to our strategic forces in terms of targeting options?

General Jones. A wide range of limited nuclear employment options are being developed. They are structured to be militarily and politically effective when used in conjunction with appropriate conventional forces and mutually supporting political measures. They are designed to discourage and control escalation in order to contain and terminate aggression at the lowest possible level consistent with U.S. objectives. They are designed to deter, or, that failing, to cope with serious intimidation, coercion, overwhelming conventional aggression, or a limited nuclear attack against our deployed forces or those of our Allies. In short, the primary purpose of this planning is to provide a clear and evident connection between the strength of our nuclear forces and our overall deterrent objectives.

To put it in proper perspective, this elaboration of nuclear planning must be viewed against the backdrop of U.S. national security policy which seeks political and military stability worldwide, and the overall U.S. military effort which continues to emphasize and support conventional capabilities to deter aggression wherever that is possible.

Within these essential guidelines, targeting packages are being developed that discriminate with respect to number, type, and location of targets, number and types of weapons employed, types of delivery systems utilized, and timing of weapons delivery. An especially critical feature of these packages is the avoidance of designated nontargets, particularly urban areas. Within these parameters, the particular form and degree of discrimination, as well as the appropriate supporting conventional force actions and supporting political measures, will depend upon the contingency situation envisioned and a thorough appraisal of relevant U.S. objectives and interests.

This ability to respond as best suits our interests denies a potential attacker the prospect that this nation could be self-deterred for want of an appropriate response to his attack. Further, if an attack should come, for whatever reason and at whatever level, limited response options allow us to pose an aggressor with the prospect of no net gain, thereby removing his incentive to continue and creating the conditions for negotiating a settlement.

In regard to your third question, I should stress that the designation of these options does not represent a major departure in U.S. nuclear strategy. Rather, it is an elaboration of existing policy which stresses the fundamental mission of U.S. nuclear forces to deter nuclear war. Previous strategies to deter nuclear attacks provided the U.S. with some options short of massive retaliation. We have now expanded the capability to strike back, and thus to deter, by providing options for responding in a manner appropriate to the nature and seriousness of the provocation and to our own objectives and interests.

NATO Force Improvements

Chairman McClellan. You indicate that NATO capabilities can be markedly improved without dramatically increased budgets, through restructuring, standardization, specialization, and improved inter-operability. Describe the specific kinds of improvements and restructuring that you believe would accomplish this capability improvement. Who would bear the cost of each such improvement, the U.S. or the European members of NATO or some joint arrangements?

General Jones. The answer lies in the "rationalization" of NATO's forces and efforts, which simply means getting maximum mileage from existing assets. In light of current economic problems and resultant pressures to reduce defense expenditures, such efforts have been given renewed impetus. The establishment of HQ Allied Air Forces Central Europe (AAFCE) is an example of a restructuring effort which should improve cross-tasking and inter-operability in the Central Region. Ongoing efforts to standardize NATO weapons systems are exemplified by the recent U.S. decision to procure the French/German Roland missile, and we are currently looking into the possibilities for increased aircraft cross-servicing equipment and capabilities. The USAF has also taken steps to improve training standardization. For example, a recent Air Staff feasibility study demonstrated that NATO undergraduate pilot training (UPT) could be successfully conducted at CONUS UPT bases. This program would contribute to the standardization of NATO's forces, while resulting in substantial savings to participating member nations.

Each of these measures should serve to improve the interoperability of NATO forces by eliminating redundancy and inefficiency. Furthermore, there is no reason to assume that these measures should involve an overall cost increase. On the contrary, the concept of rationalization logically leads to opportunities for specialization, which, in turn, can result in many opportunities for cost avoidance for the Alliance.

F–15 and F–16

Chairman McClellan. Describe the specific Soviet and Warsaw Pact aircraft each of the new fighters, F–15 and F–16, is capable of countering. Delineate which aircraft the F–16 is incapable of countering. You describe the F–16 as multi-mission capable for the NATO allies fleets. Is it the Air Force's intention to use it in multi-mission roles? Describe them.

General JONES. The F–15 is capable of defeating all Pact aircraft in any scenario. The F–16 will be capable of defeating all Pact aircraft in close-in maneuvering air combat; however, the F–16 will not be able to counter the MIG–25 (Foxbat) when it is flying at high speed at altitudes above 50,000 feet.

The F–16 will not be a "multi-mission" aircraft in the same sense as the F–111 was in its conceptual phase. Instead, the F–16 is intended to provide a lower cost addition to the tactical fighter force capable of providing a flexible response to a variety of postulated threat scenarios. In air-to-air combat the F–16 will be an effective complement to the F–15 and will be capable of performing creditably in the direct ground attack role supplementing the F–4, F–111, and A–10. The introduction of the F–15 and F–16 into the US inventory and possibly the latter into Allied inventories will assist NATO in achieving local air superiority earlier in a conventional conflict with the Warsaw Pact. Thereupon, F–16 aircraft used initially for air-to-air combat could be shifted to the support of ground forces to supplement the efforts of US and allied aircraft specializing primarily in air-ground operations. Thus, a multi-mission F–16, although primarily an air-superiority weapon, would enhance chances of achieving air superiority, and also would provide the "swing force" permitting more effective exploitation of the crucial advantages won thereby.

PACIFIC FORCE STRUCTURE

Chairman MCCLELLAN. Describe the specific force structure in the Pacific that you consider must remain in terms of bases, storage facilities, deployments, command and control structure, and deployed weaponry. Explain which locations you consider most significant for this mission.

General JONES. Except for possible changes in Thailand, we envisage keeping generally the same base structure in the Western Pacific as at the present which, as you know, has been reduced significantly over the past several years in order to reach a balance between minimum overseas costs and an adequate base structure from which to respond effectively during contingencies. We do plan some additional reductions in our presence in Taiwan. However, this will consist mostly of relocations within the area and not provide for any significant reduction in the theater. I consider the future of bases and forces in Thailand uncertain at this time as it depends upon a number of interconnected and evolving considerations.

I find it most difficult to prioritize our locations according to the most significant for the mission. I am sure you will agree that Korea is one of our most important locations; however, maintaining a US presence in the Southwestern Pacific is also important. Guam is necessary for SAC operations and our Japan locations are essential for support of operations in the area. By noting these specific locations I do not wish to imply that other locations are unimportant. Each plays a part in maintaining a minimum base structure that should be stabilized for the foreseeable future or until policies and defense alliances in East Asia are changed.

TRANSFER OF TANKER AIRCRAFT TO RESERVES

Chairman MCCLELLAN. How many personnel in the active force and how many civilians were operating the tankers now being transferred to the reserves? Where were they located? What will happen to these personnel? Are they part of the overall Air Force reduction in personnel in fiscal year 1976, or are they being given new missions?

General JONES. There were 945 military and 51 civilians associated with operating the 40 tankers being transferred to the reserves through 30 September 1976. The tankers were located at Fairchild AFB, Washington; at Pease AFB, New Hampshire; and at Rickenbacker AFB, Ohio. Personnel assigned to the KC–135 squadrons will be redistributed in several different ways. Those eligible for release from active duty will be encouraged to join the Air National Guard and Air Force Reserve units receiving KC–135s. Others will be permitted to transfer to an Air National Guard or Air Force Reserve unit prior to the end of their active service obligation. Most will be assigned to fill current or projected vacancies on the same base within the Strategic Air Command, or to fill other Air Force-wide requirements. While the transfer of KC–135 units to ANG/USAFR will reduce Air Force manpower requirements, the personnel assigned to those systems will not be singled out for termination of active duty.

Although emphasis will be placed on recruiting eligible members of the squadrons for positions in the ANG/USAFR, the cumulative force reduction for the Air Force will be spread throughout USAF on an equitable basis.

Performance and Cost Comparison of Aircraft

Chairman McClellan. Provide an aircraft performance and cost comparison between the F–15, the F–4E, and the F–16, using the attached form. You may include other data points if you wish, but please do not omit any item on this table.

General Jones. Recognizing that meaningful quantitative comparisons are often difficult to achieve among aircraft designed for differing performance points and mission profiles, the following comparison strives toward objectivity by referencing specific mission profiles but is useful only as a first estimate. The F–16 performance reflects recent configuration refinements and is displayed as a range of values within which we expect the production aircraft to perform.

Aircraft and performance figures reflected above represent current configurations and could change as a result of ongoing or future engineering change proposals (ECPs).

MISSION DESCRIPTIONS

F–15 Design Air Superiority Mission

Best climb/cruise out [deleted].
Dash in at .85M and 10,000 ft.
Combat at Max power to gain [deleted] of maneuver energy.
Dash out at .85M and 10,000 ft.
Best climb/cruise home [deleted].
20 min SL fuel reserve.

F–16 Design Air Superiority Mission

Best climb/cruise out.
Start combat with full internal fuel (external fuel tanks jettisoned).
Combat fuel allowance at 30,000 ft for [deleted].
Fire two missiles and ½ 20MM.
From 20,000 ft, best climb/cruise home.
20 min SL fuel reserve.

F–16 Design Air-to-Ground Mission

Best climb/cruise out to [deleted] from radius point (jettison ext fuel tanks when empty).
[Deleted] penetration at .85M and 15,000 ft.
Combat fuel allowance at 5,000 ft for [deleted].
From 5,000 ft, best climb/cruise home.
20 min SL fuel reserve.
Configuration: 2MK–84s, 1 ALQ–119–3 ECM Pod, 2 AIM–9s (retained for entire mission), 500 Rds 20 MM (retained for entire mission), External fuel.

COMPARISONS

	F–15	F–16 range of values	F–4E leading edge slats (LES)
MISSIONS			
F–15 design air superiority mission:			
Take-off gross weight	41,491	22,619–22,187	47,265.
Combat weight	23,882	18,812–18,380	39,416.
Radius (cruise/dash) (nautical miles) (req)	[Deleted]	[Deleted]	[Deleted.]
Payload:			
Missiles	4 AIM 7's	2 AIM 9's[1]	4 AIM 7's.
Gun	903 rounds per 20 mm.	500 rounds per 20 mm.	639 rounds per 20 mm.
F–16 design air superiority mission:			
Take-off gross weight	50,118	28,383–27,881	56,105.
Combat weight	36,987	20,698–20,245	42,418.
External fuel (gallon)	1,220	740	1,340.
Radius (nautical miles) (required: 500)	[Deleted]	[Deleted]	[Deleted.]
Payload:			
Missiles	2 AIM 7's[2]	2 AIM9's	2 AIM 7's.
Gun	500 rounds per 20 mm.	500 rounds per 20 mm.	500 rounds per 20 mm.
F–16 design air-to-ground mission: Radius (nautical miles) (required: 400).	[Deleted]	[Deleted]	Deleted.]

See footnotes at end of table.

COMPARISONS—Continued

	F–15	F–range of values	F–4E leading edge slats (LES)
PERFORMANCE			
Maximum take-off gross weight: Design	53,300	33,000	58,000 lb.
Wing span	42.81 ft.	31 ft. w/o missile	38.4 ft.
Wing loading			
Combat weight (F–16 air support at 500 nautical miles): Wing area.	60.6	66.5–64.0	80.3.
Engine uninstalled thrust (S/L, Std. Day)	[Deleted] lb. each	[Deleted] lb.	[Deleted] lb. each.
Thrust to weight ratio:			
Uninstalled thrust: T.O. gross weight (F–16 air support mission).			
Uninstalled thrust: T.O. gross weight (clean)			
Uninstalled thrust: maximum design take-off gross weight.			
P_s (F–15 Air Superiority Design Points):[3]			
0.9 at 10K—max—1 g (FPS)			
0.9 at 10K—max—5 g (FPS)			
0.9 at 30K—max—5 g (FPS)			
1.2 at 30K—max—5 g (FPS)			
1.5 at 30K—max—1 g (FPS)			
Max Mach at S/L			
Max Mach at ALT	[Deleted.]		
Sustained turn rates (F–16 design air superiority mission)[4]			
0.9 at 30K (deg/sec)			
1.2 at 30K (deg/sec)			
Sustained turn rate (not an F–16 design point)[4]			
1.6 at 30K at 500 nautical miles (degrees per second)			
Acceleration (F–16 design air superiority mission)[4]			
0.9 to 1.6 at 30K (seconds)			
Ferry range			
(Nautical miles)			
Maximum sortie length			
Unrefueled			
Refueled			
AVIONICS/WEAPONRY/STRUCTURE			
Radar (detection range against 2 M^2 target in nautical miles):			
Head aspect look-up	[Deleted.]		
Head aspect look-down			
Armament:			
Missiles	4 AIM–7's, 4 AIM–9's.	6 AIM–9's	4 AIM–7's, 4 AIM–9's.
Gun	940 rounds, 20 mm, M61.	500 rounds, 20 mm, M61.	639 rounds, 20 mm, M61.
Air-to-ground	Carriage of numerous combinations of guided and unguided weapons—for example: 18 MK–82's. Maximum external store carriage is 18,740 lb or 13,849 lb with full internal fuel.	Carriage of numerous combinations of guided and unguided weapons—for example: 16 MK–82's and 1 AN/ALQ–119 ECM pod; two 370 gal fuel tanks; 6 AGM–65's, and 1 AN/ALQ–119 ECM pod. Maximum external store carriage with full internal fuel is 10,400 lb. Provisions for nuclear weapon carriage.	Carriage of numerous combinations of guided and unguided weapons—for example: 24 MK–82's. Maximum external store carriage with full internal fuel is 13,000 lb. Nuclear weapons capability.
Typical ordnance load:			
Air-to-air mission	4 AIM–7's		3 AIM–7's.
	4 AIM–9's	2–6 AIM–9's	4 AIM–9's.
	(Internal ECM)	1 ECM Pod	1 ECM Pod.
	2–600 gal tanks	2–370 gal tanks	2–370 gal tanks.
	M61 (940 rounds)	M61 (500 rounds)	M61 (639 rounds).
Air-to-ground mission	1–600 gal tank	2–370 gal tanks	2–370 gal tanks.
	4 AIM 7/9's	2 AIM–9's	2 AIM–7's.
	M61 (940 rounds)	M61 (500 rounds)	M61 (639 rounds).
		1 ECM Pod	1 ECM Pod.
	2 MK–84's or 12 MK–82's.	2 MK–84's or 12 MK–82's.	Pave Spike/2 MK–84 LGB or 12 MK–82's.
Structures:			
Design "g"	[Deleted]	[Deleted]	[Deleted.]
Maximum "g"			

See footnotes at end of table.

COMPARISONS

	F-15	F-16 range of values	F-4E leading edge slats (LES)
COSTS			
Unit flyaway cost (fiscal year 1975 dollars/then year dollars in millions)	8.4/10.3 [6]	4.7/6.7 [7]	N/A[8]/3.5.[9]
Unit procurement cost (fiscal year 1975 dollars/then year dollars).	10.1/12.3 [6]	5.6/8.1 [7]	N/A/3.7.
Unit program cost (fiscal year 1975 dollars/then year dollars).	12.4/14.6 [6]	6.3/8.8 [7]	N/A.[10]

[1] Note that the F-16 carries only 2 missiles as opposed to 4 missiles for the other aircraft; while this choice benefits the F-16, the decision to provide this configuration was driven by available data.

[2] The F-15 configuration (2 AIM-7's and 500 rounds 20 mm) for this mission was chosen to permit direct "apples to apples" comparison with the F-16, whose design mission specifies 2 missiles and 500 rounds of ammunition. It does not represent a typical or probable combat mission load for the F-15. If the F-15 design missile load of 4 AIM-7's and 940 rounds of 20 mm (as originally furnished) were used, it would be reflected by a very slight reduction in radius and sustained turning capability of the F-15.

[3] P_s calculated at 50 percent full internal fuel for a clean aircraft with full ammunition load.

[4] Calculated at a mission radius of 500 nautical miles for F-15 and F-16.

[5] Shown at radius of [deleted] nautical miles, which is maximum capability of F-4E (LES).

[6] Costs are for approved 729 aircraft buy. TY dollars based on negotiated plus estimated escalation rates.

[7] F-16 costs based on 650 aircraft buy for USAF. AF Independent Cost Analysis modified for configuration requirements. TY dollars based on OSD escalation rates.

[8] Last USAF procurement occurred in fiscal year 1974.

[9] Fiscal years 1973, 74 used to reflect late block number aircraft and recent low production rates.

[10] Minimal USAF development funds in F-4E program as F-4 was USN development.

NOTES

F-15 No. 729 delivered December 1981. F-16 No. 650 delivered August 1983.

Procurement Buy Period: F-15, fiscal year 1973 to fiscal year 1980, F-16, fiscal year 1977 to fiscal year 1982.

Additional comparisons: F-16 with F-4:

Approximately half the weight.

Presented area of 20 to 40 percent less.

About one-half the vulnerable area.

Maintenance manhours per flying hour lower by 50 percent.

Fuel required for equal deployment range is 35 to 40 percent.

Three times the combat air patrol mission radius carrying four missiles and using approximately 35 percent less fuel.

Hi-lo-hi ground attack mission radius 45 percent greater with the same payload and using one-half the fuel.

Approximately twice the sustained turn rate capability throughout the majority of the flight envelope.

Can sustain [deleted] where the F-4 can sustain only [deleted].

Sustained [deleted] envelope is greater than the [deleted] envelope of the F-4.

Approximately twice as rapid acceleration capability supersonic or subsonic.

However, a portion of the F-4 force will be modified for a unique night/adverse weather/precision attack capability not possessed by the F-16; i.e., Pave Tack, Pave Spike.

Comment: Maneuverability and radius comparisons are not the full measure of effectiveness for fighter aircraft, although they are useful for a first estimate. The F-15's ability to employ AIM-7 missiles in a beyond visual range engagement significantly increases overall combat effectiveness in certain scenarios.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator INOUYE. Senator Thurmond was unable to be with us today, however, he has requested that a number of questions which he has submitted be answered for the record.

[The questions and answers follow:]

AWACS COST, QUANTITY AND REQUIREMENT

Senator THURMOND. Mr. Secretary, briefly describe for the Committee the planned program for the Airborne Warning and Control System as to cost, number of aircraft, and the requirement.

Secretary MCLUCAS. The currently planned USAF program for the Airborne Warning and Control System is 34 aircraft. Three of the 34 are being funded in the R&D appropriation; the rest in procurement. The total acquisition cost for these 34 systems is $3777.2 million in then year dollars, including development and procurement. The procurement unit cost for 31 aircraft is $73.8 million in then year dollars. If the development effort to obtain this critically needed system is also included, the program unit cost, based on 34 systems, becomes $111.1 million in then year dollars. Any future NATO buy can result in production line efficiencies with subsequent unit cost decreases. The program is conservatively funded in that costs are carried for potential, as yet not approved, "enhance-

ments" in the event an evolving threat requires such improvements. The first twelve production AWACS, in the fiscal year 1975 and fiscal year 1976 program, will be the core configuration which is adequate for the present time frame.

The AWACS provides previously unavailable capabilities in terms of: (1) wide area, contiguous low altitude radar surveillance; (2) airborne processing and display of air battle data from the AWACS radar and other radars integrated with location and status of friendly ground force elements: (3) direct, high capacity, secure, ECM resistant data link over extended ranges to and from friendly aircraft, SAM defense sites, and ground based command centers; and (4) ability to deploy and concentrate this unique set of capabilities rapidly wherever it is needed. In addition, AWACS provides greatly increased resistivity to electronic warfare and physical survivability over current ground based systems for both radar surveillance and communications.

As an adjunct to the existing command and control systems as well as an integrator of their many parts, AWACS will materially assist responsible high-level force commanders to obtain accurate and timely information with which to make force allocation decisions—to choose the proper quantitative and qualitative responses to enemy actions.

Such force commitment decisions are crucial from both military and political considerations. For example, in a major campaign, where air combat resources are stressed, over allocation can divert and squander scarce resources; whereas under allocation would fail to exploit our investment in combat aircraft. Similarly, in a crisis or low level contingency, over reaction, or the wrong reaction, could send an inappropriate political signal and tend to exacerbate rather than temper and control the situation as we would perfer.

In a central Europe conventional conflict both the military and political aspects are present. Air combat resources and ground forces will be stressed and the ability to properly allocate and control the use of our forces could well turn the tide of battle. The most crucial decision in such a campaign relates to the potential employment of nuclear weapons. We must make every effort to avoid their use if they are not absolutely necessary for effective defense. The comprehensive overview and unambiguous detail provided by the data collection and integration capabilities of AWACS would serve well, in this connection, to help guard against a premature or ill-advised shift to nuclear warfare that might otherwise be tempting on the basis of fragmentary reports of battle reverses.

In considering the cost of AWACS in relation to its benefits there is a certain irony. The strengths of AWACS—providing previously unavailable capabilities and providing thereby the means to better utilize the whole of the combat power of U.S. and allied forces—are just the type of strengths that we need most but are the type that are most difficult to value in dollars.

Force Structure

Senator Thurmond. Could AWACS be used in the initial stages of a NATO war when air superiority for our forces may not yet be achieved?

General Jones. It most certainly can. AWACS employment in the initial stages of a NATO war would be critical in gaining air superiority. The AWACS surveillance capability would provide earlier detection of enemy aircraft. This data would be downlinked to the ground based command elements. This information would give the commanders, air and ground, the "big picture" and allow them to better allocate forces to meet any attack. AWACS would also provide track data to NATO surface-to-air missile units, allowing their acquisition radars to remain silent until just prior to actual missile launch. This capability enhances their effectiveness and survivability.

Anticipated early losses to some elements of our ground radar systems will require AWACS to assume increased surveillance, warning and control responsibilities. AWACS could be the only radar providing coverage of some areas. In conjunction with the ground radars, AWACS would vector fighters against penetrating enemy aircraft.

Our studies and testing show AWACS to be highly survivable, even in the initial stages of a NATO war. Pact interceptors would have to penetrate many miles of heavily defended airspace and try to locate an aircraft that can evade in three dimensions at jet speeds while using electronic and other countermeasures.

AWACS Vulnerability to Ground Jamming

Senator Thurmond. What is your reaction to the GAO raised question as to the vulnerability of AWACS from the standpoint of ground jamming by the enemy?

Secretary McLucas. I believe that the GAO has failed to consider the extent of the operational mission areas of AWACS. By concentrating on one mission, that of directing friendly forces at low altitudes over hostile territory, as well as not considering the maneuverability of AWACS, I feel the report presents an unbalanced picture of AWACS' capabilities.

Let's look at the mission areas. These can be classified as intelligence by surveillance, warning of attack, assessment of raids, an adjunct to the ground based authority's command control system, and control of air movement. These functions are applicable to a range of contingencies and campaigns as well as a possible Central European conflict.

I mention the full range of AWACS missions because the issue of ground based jammers relates only to one part of one of the missions. And even here, AWACS inherent maneuverability permits a straightforward tactical counter. Ground based jammers, even if high power and even if distributed over enemy territory in large numbers, can be rendered ineffective by reducing the altitude of AWACS so as to put the ground jammers below the line of sight from AWACS.

Admittedly this tactic does reduce low altitude coverage at extended ranges over hostile territory. However, with this tactic AWACS would still be able to carry out all of its functions over friendly territory, including wide area, contiguous coverage of low altitude aircraft. Moreover, coverage over enemy territory does not cease. AWACS would still provide the same medium and high altitude coverage over enemy territory as a friendly ground based radar located at the limit of friendly territory, but with the survivability and communication diversity of AWACS.

Thus, ground jammers, if deployed against AWACS, will not be as effective as postulated by the GAO. Moreover, they can be defeated by a simple AWACS maneuver tactic with a finite but limited reduction in AWACS' capabilities in only one of its functional missions.

NATO Allies Opinion of AWACS/Cost Sharing

Senator Thurmond. Since this system is mainly aimed at a NATO environment, what do our NATO allies think about it and have we approached them from the standpoint of sharing some of the cost?

Secretary McLucas. We have been working with the NATO Conference of National Armament Directors since 1971 in evaluating means of eliminating the European surveillance and command, control and communications deficiencies. The effort focused on AWACS with establishment of a Special Task Group (STG) in early 1974 to define costs and investigate schedules and production sharing opportunities for a NATO AWACS. An STG report is due in April 1975. Also, SHAPE is scheduled to submit a completed AWACS Required Operational Capability document in June 1975. Our NATO allies could make a decision to procure AWACS as early as November 1975, but it could well be later. This decision would include a commitment to share some of the AWACS cost.

AWACS/Fly-Before-Buy Policy

Senator Thurmond. This year the Air Force is requesting $431 million to buy six aircraft in addition to the six funded last year. However, R&D is nearly $200 million for fiscal year 1976, almost 50 percent of the second year procurement costs. Explain for the Committee how this meets the fly-before-buy policy of the Air Force?

Secretary McLucas. As you are aware, the fly-before-buy philosophy is based on actual demonstration of hardware prior to authorizing production. This was the driving philosophy behind the program schedule that was established in 1970. Allow me to expand on that. Since it was recognized that the development of clutter rejection techniques for use in the airborne radar was the most difficult and most critical to the AWACS function, the Brassboard Radar Demonstration Phase was established. The purpose of the Brassboard phase was to demonstrate that radar technology was in hand; technology required to build the needed radar. This radar technology had to be demonstrated, in flight tests, *before* full-scale development began on the lower risk, state-of-the-art equipments that would also

be required on AWACS. Selection of the best radar, based on actual flight demonstrations, was required before full system development began. As we have done all these things. Senator Thurmond, we believe the fly-before-buy concept has been applied properly to this development program.

The program schedule that was developed in 1970 also included a phase called the System Integration Demonstration or SID. As you know, SID was completed last December. Under the fly-before-buy philosophy, SID was designed to demonstrate that the radar and other equipments could be integrated and function together to accomplish the AWACS mission. This technical integration, as well as the operational usefulness and capabilities of AWACS were very successfully demonstrated in flight tests totaling more than 750 hours last summer. All told, considering all flight testing to date, over 1650 hours have been accumulated.

Thus, you can see we have followed our fly-before-buy policy with AWACS; first before entering full-scale-development, and now, before entering production.

However, even though the AWACS has flown a lot and has successfully overcome its areas of greatest risk, development effort still remains. This is low risk effort, such as repackaging the earlier versions of the equipments, in order to improve reliability and maintainability. By no means are these funds required to develop equipment whose design has not been flight tested during Brassboard or SID. Flight testing of the three DT&E systems will begin in fiscal year 1976. Again, this testing is not to demonstrate feasibility of design. It is being done for performance verification, reliability and maintainability measurements and to obtain data for the many handbooks and instructions required for such a complex system.

In summary, the AWACS program was structured to minimize government cost exposure until visibility into areas of risk could be obtained. Brassboard proved out the highest risk, the radar. SID then showed that the complex equipments could work together and meet the requirements of the using commands. The remaining development effort is low risk refinement. We did follow the fly-before-buy philosophy while maintaining a reasonable time schedule from contract award to operational employment.

Use of Excess Airline 707's for AWACS

Senator Thurmond. Has the Air Force considered buying some of the excess 707's owned by the Airlines for refitting rather than buying new ones for AWACS?

Secretary McLucas. Yes. Boeing has recently looked into this option for both the U.S. and the proposed NATO AWACS program. Savings could not be realized because the high flight time on available airframes would make a costly refurbishment program necessary. After refurbishment, the 707 airframes would still have to be modified to the AWACS air vehicle configuration. Added to this is the fact that there is a general scarcity of used 707 airframes and it is likely that the cost of used 707's would climb if it were known that the government wanted to buy used 707's. Therefore, we are no longer considering this option.

Navy E–2C as Substitute for AWACS

Senator Thurmond. The Navy's E–2C serves as their "AWACS" program. Could the Air Force modify this aircraft as a substitute for AWACS?

Secretary McLucas. The E–2C serves very effectively for the Navy in the role of fleet air defense; however, there are many significant differences in the nature of that mission and the mission of worldwide surveillance, warning, and control envisioned for the AWACS.

First, the mission of fleet air defense is essentially one of point defense in which the E–2C serves as an airborne radar sensor for the shipboard command and control system. The radar data derived from the E–2C is provided by data link to the surface based system where virtually all command and control functions are performed. The E–2C radar is optimized for detections over water and has neither the range, ECM resistance, nor detection capability of the AWACS radar over land. In addition, the E–2C radar is not designed to cope with the high density environment that could be encountered over land in a tactical air war in central Europe. It is not designed for autonomous operation in dense environments where surface based facilities are not available and the size of the aircraft is constrained by the requirement for operations aboard aircraft carriers. This constraint effectively precludes expansion of the on-board capability to overcome these deficiencies. In addition, the range and speed of the aircraft are much less than those of the AWACS.

In spite of these limitations the E–2C was examined in 1973 as one alternative to the E–3A AWACS in terms of effectiveness and cost-effectiveness. Even though the E–2C is considerably less expensive than the E–3A, the requirement for a

much larger force size to provide comparable surveillance coverage, plus the limitations described above, showed it to be less effective and less cost-effective than the E–3A. It should also be noted that this analysis assumed a central European environment where extensive surface-based command and control facilities exist. The design limitations of the E–2C could further exacerbate operational effectiveness in other regions where extensive surface command and control facilities do not exist.

In sum, the E–2C is a highly capable aircraft optimized for over water operations for the fleet air defense mission and shipboard operations. It would not be capable of performing the worldwide mission of surveillance, warning, and control envisioned for the AWACS. Moreover, space, range, speed, and the basic radar design features effectively preclude modification of the E–2C to overcome these deficiencies.

AWACS/AABNCP Integration

Senator Thurmond. Could AWACS serve as an Airborne Command Post in any sense? How do the two programs dovetail, if at all? If they were integrated, how would it be done?

Secretary McLucas. Questions such as these are quite understandable in that the names, Airborne Warning and Control System (AWACS) and Advanced Airborne Command Post (AABNCP), suggest to some that there could be an overlap of functions. Although in a sense the AWACS can perform command post-like functions, in reality, the functions of the two systems are distinct and quite different. In attempting to answer these questions, I would first like to provide a brief overview of the two functions.

AWACS is being developed as a highly mobile and flexible national military resource and is designed to provide presently unavailable, all-altitude radar surveillance and data exchange for air defense and tactical forces across a wide spectrum of possible conflict. It will materially assist responsible, high-level force commanders in obtaining accurate and timely information essential for making force allocation decisions, identifying appropriate quantitative and qualitative responses, and insuring against premature escalation of hostilities. It will support counter-air, interdiction and close air support operations. In its CONUS Air Defense role, AWACS will constitute a key surveillance element in support of defensive operations operating in a crisis environment. In summary, it can serve as an all-altitude radar surveillance platform and an airborne control center for effective worldwide deployment/employment of our air defense and tactical forces.

The Advanced Airborne Command Post is being developed to provide a survivable command and control facility for the National Command Authorities and the Commander-in-Chief of the Strategic Air Command (CINCSAC). It will provide for high level direction of strategic nuclear (TRIAD) forces during the pre-, trans- and post-attack phases of a general war. It is designed to provide for accomplishment of critical, crisis management functions in a real time mode and also provide for effective monitoring, controlling and direction of the strategic offensive forces of the Single Integrated Operational Plan (SIOP) in a survivable platform.

I see no way in which a single aircraft system could perform the functions of both the AWACS and the AABNCP. There is virtually no overlap in functions nor commonality of equipment to perform the respective functions. The AABNCP aircraft could not house the radar, associated equipment and specialized personnel to accomplish the AWACS mission. Conversely, the AWACS aircraft could not house the battle staff, data base and varied, high power communications necessary to direct long range, nuclear capable strategic forces.

In conclusion, the AWACS does provide capabilities to exercise control of air operations, and in that sense, command from an airborne platform, but in no way does its capability overlap the functions we plan for the AABNCP. The programs dovetail in the sense that both play their own role in our overall command, control and communications structure. The AWACS and AABNCP functions and equipment are so totally dissimilar and each uses so much of its respective airframe capacity that their staff and equipment could not be physically integrated onto a single aircraft.

A–10/Program Unit Cost/Latest SAR

Senator Thurmond. General Jones, what is the program unit cost for the A–10, based on the latest Selected Acquisition Report?

General JONES. The A–10 program unit cost in then year dollars, as reflected in the 31 December 1974 Selected Acquisition Report, is $4.27 million. In today's dollars the program unit cost is $3.3 million. These unit costs are based on procuring 733 A–10 production aircraft, six RDT&E and four (two A–9, two A–10) prototype aircraft.

A–10/GAU–8 GUN TESTS

Senator THURMOND. General Jones, when will the GAU–8 gun on the A–10 be tested from the aircraft with the high penetrator round?

General JONES. Flight tests of the 30mm armor piercing incendiary round in the GAU–8/A–10 are scheduled to be conducted in the September–October 1975 time period.

A–10/PRODUCTION BEFORE PRINCIPAL SYSTEMS ARE PROVEN

Senator THURMOND. Is it customary to be this far into production before viability of the aircraft's principal weapons system has been proven?

General JONES. The Development, Test, and Evaluation program for the A–10 has been designed to reduce program risk in an orderly manner to insure that sufficient testing has been completed prior to any commitment to full production. This can be viewed as the natural consequence of the "fly-before-buy" philosophy as applied to the A–10 program. Our A–10 flight test experience is now over 1000 hours. The TF34–100 engine has successfully passed the military qualification testing. The GAU–8 gun has fired in flight over 31,000 rounds of 30mm ammunition from the A–10. These test accomplishments confirm our previously expressed confidence that program risk is sufficiently low to support low rate production for 52 aircraft. Further refinement of the A–10 aircraft is continuing in order to complete those test milestones that will be considered prior to a full production go-ahead. Some of the related milestones to be completed prior to a decision to proceed with full production include:

Demonstrate ultimate static load;
Complete one lifetime of fatigue testing;
Initial evaluation of reliability and maintainability; and
Final flight qualification of GAU–8 gun and 30mm ammunition.

Thorough testing has been accomplished on the aircraft system in support of its development and the production decision.

A–10/PRODUCTION PROBLEMS

Senator THURMOND. What production problems are forecast for the A–10 in fiscal year 1976?

General JONES. The Air Force has been concerned with Fairchild's readiness to proceed with production of the A–10 since they have not been a prime contractor on a fighter type aircraft since production of the F–105. We completed an extensive production readiness review prior to DSARC IIIA in July 1974 and again in September 1974. These reviews concluded that Fairchild is capable of low-rate production for the initial option for 52 aircraft. However, these readiness reviews identified deficiencies that require resolution prior to transitioning to full-rate production (20 aircraft per month) in calendar year 1978. Of particular management concern was the percentage of in-plant A–10 work (23 percent) at Fairchild. This low percentage of in-plant work would have made Fairchild overly dependent on the performance of its subcontractors for critical production items required to meet the A–10 delivery schedule. The percentage of in-plant work at Fairchild is being increased to approximately 55 percent in order to increase direct control of these critical items. The Air Force is monitoring Fairchild's progress closely in correcting those deficiencies not previously resolved.

A–10 PRODUCTION PROBLEMS STUDY

Senator THURMOND. Has the AF completed its study of the production problems forecasted for the A–10 and if so, what are their findings?

General JONES. Production readiness reviews at A–10 contractor facilities were conducted prior to DSARC IIIA deliberations in July 1974 to consider the initial production option for 52 aircraft and then again in September 1974. Deficiencies were noted concerning the contractor's planning, organization, and production facilities, and corrective action is being implemented by both Fairchild and the Air Force. Subsequent reviews have been conducted and it appears that Fairchild is capable of meeting the present A–10 production schedule.

YF–16/Number of Aircraft

Senator Thurmond. General Jones, what is the current plan for the YF–16 program as to the number of aircraft to be procured by the U.S. Air Force?

General Jones. Our initial program planning calls for procuring a minimum of 650 F–16s.

YF–16 Improvements in Production Version

Senator Thurmond. What improvements do you expect to put on the YF–16 before it is introduced into the Air Force? I have in mind larger radar, improved weather capabilities, new guns and so forth.

General Jones. Before I discuss those improvements planned for the production F–16, I think it would be beneficial to review the character of the YF–16 prototypes. The prototype aircraft were designed to evaluate and demonstrate advanced aerodynamic technology and innovative design concepts, and to determine the potential operational utility of smaller, high performance, lower cost fighters. Minimum emphasis was placed on subsystems and only those required for basic communication, navigation, and gun and Sidewinder missile fire control evaluations were installed. Additionally, the prototypes were designed for a limited structural life and were not missionized aircraft in any sense.

Our approach to missionizing or determining the capabilities and configuration of the F–16 was based on comprehensive trade off studies and analyses to provide the minimum essential capabilities at the lowest life cycle cost. The following is a summary of the more important design refinements and mission-oriented subsystems that will be incorporated in the F–16:

A fatigue life of 8000 hours for a longer useful life span and lower life cycle cost.

A two percent increase in fuselage length and a seven percent increase in wing area which permits a common fuselage for the single and two place models. This also provides an improved internal arrangement with lower production and maintenance costs, and common flying qualities between the two versions.

The size of the horizontal tail will be increased approximately 15 percent to increase aircraft responsiveness at extreme angles of attack and to lower heavy weight takeoff speeds which will also reduce tire and brake wear.

A missionized avionics package including a new multimode radar which will permit optimum exploitation of the air combat capabilities inherent in the F–16. The radar, which is currently in the prototype competition phase, will be based on technology proven in the F–15 program. However, the F–16 radar will be consideraly smaller and less complex and, consequently, will have reduced performance and lower cost. We have established a design-to-cost goal of $750 thousand for the entire avionics package.

The weapons delivery capability will be expanded by an additional external store station on each wing and the missile carriage capability will be increased to six AIM–9s. The internal 20mm cannon will be the same as that demonstrated in the prototype.

F–15 Cost Increase

Senator Thurmond. General Jones, looking at the F–15 costs for fiscal year 1975 and fiscal year 1976, the Air Force figured it could buy 72 aircraft in fiscal year 1975 for $756 million but cost almost doubled and now 108 in fiscal year 1976 will cost $1.4 billion. Why this disparity?

General Jones. The total F–15 program cost estimate has increased by $1.63 billion since the fiscal year 1975 budget submission. As reported in the 30 June 1974 SAR, this increase was due to a higher than forecast escalation rate which, in turn, caused a revision in the estimate for economic escalation in the fiscal year 1976 and the out-years. Financing to cover this escalation was added to the F–15 program beginning in fiscal year 1976. Therefore, if you exclude escalation, the unit cost for the 108 aircraft in fiscal year 1976 is very similar to that of the 72 aircraft in fiscal year 1975.

Higher F–15 Production Rates/Savings

Senator Thurmond. What savings do you foresee if the F–15 is procured at high rates of production through the approved buy?

General Jones. The total F–15 program savings which are attributable to the higher rate of production is estimated at $61 million. These savings are based on producing the 72 aircraft approved for fiscal year 1975 at nine aircraft per month and approval of the 108 aircraft request for fiscal year 1976 to maintain this rate.

F–15 Procurement Unit Cost

Senator Thurmond. What is the procurement unit cost for the fiscal year 1976 buy?

General Jones. The procurement unit cost for the fiscal year 1976 F–15 buy in then year dollars is $15.2 million.

F–15 Procurement Unit Cost in Then-Year Dollars

Senator Thurmond. What do you estimate to be the lowest procurement unit cost for the F–15 in then year dollars based on the program as now structured?

General Jones. The average procurement unit cost for the planned 729 F–15 aircraft is $12.3 million in then year dollars. The lowest estimated procurement unit cost for the F–15 in any one fiscal year is in the last year of procurement which in then year dollars is $9.6 million for the fiscal year 1980 procurement of 55 aircraft.

F–15/YF–16 Cost Comparison

Senator Thurmond. Some feel that since R&D is completed on the F–15, it could be bought at a price close to the YF–16 later in this decade. Would you comment on these comparisons?

General Jones. These comparisons would find their greatest validity if one considers only future development and acquisition costs. However, such comparisons would not take into account the overall costs of ownership, including operations and support, which favor the smaller, less-sophisticated F–16.

The F–16 will not have the total air-to-air capability of the F–15. However, it is optimized as an air superiority fighter and is envisioned as a highly effective complement to the F–15 in the air-to-air role, as well as being broadly capable in the other TacAir missions. The Air Force objective is to achieve that balance between quality of performance and quantity of airframes both of which are necessary to meet the threat. Modernization and expansion of our Tactical Fighter Forces within our known and projected budgetary limitations can best be achieved by the acquisition of the "high-low" mix represented by the unique high technology of the F–15 and the less demanding and less costly technology of the F–16, which has a formidable capability.

F–15/YF–16 Comparisons/Missions and LCC

Senator Thurmond. Compare the F–15 and YF–16 in the two principal roles, air superiority and ground support. Also, compare life cycle costs.

General Jones. The F–15 and F–16 were designed to a differing set of objectives which resulted in different performance specifications for these fighter aircraft. A comprehensive comparison of F–15 and F–16 turning and acceleration performance would indicate there are areas where each aircraft excels.

The F–15 was designed for the complete spectrum of air combat to include all weather conditions. The F–16 was designed for close-in manuevering air combat under visual conditions with a pulse doppler radar less powerful than that in the F–15. The F–16 is about one-half the size of the F–15 and therefore presents a less prominent target, a distinct advantage in regard to both visual and radar acquisition. The F–16 requires considerably less fuel for the conduct of similar missions, an important factor in a dynamic war situation where fuel could be limited. The F–16 has a greater radius of action with its design payloads. In the ground attack role, both aircraft have the capability for visual, direct delivery of general purpose munitions with accuracies equivalent to those of the A–7D. The F–16 will also have a night/adverse weather capability with its radar ground mapping feature and the capability to employ the Maverick air-to-ground missile. In general, the F–16 has better subsonic and transonic turning performance giving it more agility in the classical "dogfight" arena below 30,000 feet between 0.6 and 1.4 Mach; beyond 1.4 Mach, the automatic/variable inlet ramps of the F–15 provide an advantage by optimizing engine performance.

The F–15 has greater top speed than the F–16 as well as more rapid acceleration especially beyond 1.4 Mach, giving it greater utility for combat against very high altitude, high speed penetrators such as FOXBAT. It also has a longer range radar, beyond visual range missile (AIM–7) kill capability, greater air-to-air armament payload, and, in general, an advantage in supersonic turning capability. It has the ability to defeat the enemy in air-to-air combat in any environment regardless of weather conditions.

The F–15 and F–16 represent a dramatic increase in air combat capabilities compared to other contemporary fighter aircraft and both are needed to provide a margin of superiority over the current and anticipated threat.

The F–16, with its lower total cost of ownership, will complement the F–15's full range of air-to-air capabilities, provide the needed night/adverse weather ground attack capability, and permit an expansion of the tactical fighter force, thus reducing the quantitative fighter aircraft advantage of the Warsaw Pact.

We have recently completed a cost comparison which accounts for the completed F–15 development, uses the F–16 program as the baseline to extrapolate F–15 Operating and Support costs, and considers the procurement of 650 F–15s additional to the current 729 aircraft program. The significant savings in fuel consumption/cost achieved by the F–16 contribute to the reduced operating and support costs shown for this aircraft. The fifteen year life cycle cost estimates in fiscal year 1975 dollars (shown in millions) are as follows:

F–15/F–16 COST COMPARISONS—THESE ESTIMATES WILL CONTINUE TO BE REFINED, BUT WE EXPECT THAT FUTURE ADJUSTMENTS WILL NOT MATERIALLY AFFECT THE RATIO OF F–16 TO F–15 COSTS

[Fiscal year 1975; dollars in millions]

	F–16 [1]	F–16 [2]	F–15 [3]	F–15
Quantity	650	650	520	650
Cost:				
R.D.T. & E	$584	$496	0	0
Procurement	3,742	3,663	$3,948	$4,932
O. & S. (15 yr)	4,462	4,539	4,752	5,942
Total	8,788	8,698	8,700	10,874

[1] Based on the F–16 program estimate at source selection.
[2] Based on OSD approved revised F–16 development program (8 R.D.T. & E. aircraft) and efficiency in production achieved through the use of common fuselage for both single and dual seat aircraft.
[3] Reflects required change in quantity to achieve equal total costs.

Notes (reference cols. 2 and 3): (1) Additional O. & S. costs for air-to-air training missiles add $23,000,000 for the F–16 and $113,000,000 for the F–15. The F–15 has both AIM–9 and AIM–7 capability. (2) F–15 with inhanced air-to-ground capability comparable to the F–16 adds $47,000,000 to F–15 costs. This combined with Note (1) would reduce F–15 buy to 511 aircraft. (3) Adding 1 ECM pod per 4 F–16s at $175K/pod adds $28,500,000 to the F–16 procurement cost. Notes (1), (2), and (3) result in a ratio of 650 F–16s to 513 F–15s. (4) War reserve munitions (WRM) not defined for F–16; costs not included for either aircraft.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator INOUYE. Senator Young has requested that a number of additional questions be inserted in the record.

[The questions and answers follow:]

INFLATION/WHICH PROGRAMS MOST CONCERNED ABOUT

Senator YOUNG. Mr. Secretary, the Secretary of Defense provided the Committee with an insight of the effect of inflation on the budget. What programs in the Air Force are you most concerned about because of inflation?

Secretary MCLUCAS. We are concerned about the effect of inflation on the operating budget because the increase in costs can curtail operations and thereby impact on force readiness. In the investment accounts, the effect of greater than anticipated inflation can result in either more dollars required for the same number of systems or the procurement of fewer units. Extending or deferring procurement into future years can result in increased unit costs and a higher total cost to achieve force modernization. Inflation is an across the board concern in maintaining the proper balance between force readiness, modernization and structure.

Major procurement programs reported to you in SAR reports reflected the significant increase in economic escalation. Procurement programs which are scheduled to extend well into the future show the effects of compounding inflation. An example is the B–1 program. In 1970 our estimate of the total program cost was $9.9 billion without any inflation. In the current SAR, it shows an estimated total program cost of $20.6 billion. The difference consists of $1.1 billion increase in real program growth (fiscal year 1970 dollars) and $9.6 billion for

economic escalation that has occurred since 1970 and is calculated to occur through program completion.

Stabilized Manpower Levels

Senator Young. Have the manpower levels stabilized in the Air Force?

Secretary McLucas. Our manpower levels have declined dramatically since the peak in fiscal year 1968. The Air Force, today, is smaller than at any time since the Korean War in terms of bases, aircraft, and manpower. We believe we should stabilize our manpower program and improve combat capability by realigning within the stabilized levels.

Headquarters Reduction

Senator Young. Does the Air Force plan to further reduce headquarters?

Secretary McLucas. Yes sir. Even though the Air Force and Major Air Commands are still working to eliminate the last of the 5,500 manpower spaces forecast for reduction in last year's budget, the Air Force is not relaxing efforts to achieve further economies in headquarters activities.

We have just recently announced the disestablishment of Headquarters, Pacific Air Force, the elimination of the Air Force Communications Service as a major command headquarters, and the consolidation of strategic and tactical airlift forces under the Military Airlift Command. These actions, along with other initiatives, will reduce Air Force personnel assigned to DoD Management Headquarters by over 8,300 spaces by the end of fiscal year 1976, releasing more than 3,600 spaces which can be reprogrammed into combat capability.

The resulting end fiscal year 1976 forecast manning for Air Force Management Headquarters represents over 50 percent reduction since fiscal year 1968, compared to 32 percent reduction in total Air Force strength over the same period.

Number of ANG and AFR Units

Senator Young. In the Total Force Concept, how many Air Guard and Reserve units does the Air Force plan to support?

Secretary McLucas. Present Air Force plans are based on the Air National Guard remaining at the 91 flying unit level and the Air Force Reserve reducing from 53 to 52 flying units in fiscal year 1977, and remaining level thereafter.

Listing of ANG Units Location and Aircraft

Senator Young. Please provide the Committee with an updated listing of Air Guard units, their location, and their aircraft.

[The information follows:]

Abbreviations of Air National Guard Units—By Mission

ARG—Air Refueling Group
CCT—Combat Crew Training
DSEG—Defense Systems Evaluation Group
FIG—Fighter Interceptor Group
SOG—Special Operations Group
TAG—Tactical Airlift Group
TASG—Tactical Air Support Group
TEWG—Tactical Electronic Warfare Group
TFG—Tactical Fighter Group
TRG—Tactical Reconnaissance Group

Air National Guard Flying Units (By State)

State location	Unit	Aircraft (fiscal year March 1975)
Alabama:		
Birmingham	117 TRG	18 RF-4C.
Dannelly Field (Montgomery)	187 TRG	18 RF-4C.
Alaska: Kulis (Anchorage)	176 TAG	8 C-123J.
Arizona:		
Tucson	162 TFG	31 F-100 (CCT).
Sky Harbor (Phoenix)	161 ARG	8 KC-97L.

AIR NATIONAL GUARD FLYING UNITS (BY STATE)—Continued

State location	Unit	Aircraft (fiscal year March 1975)
Arkansas:		
Fort Smith	188 TFG	18 F-100.
Little Rock	189 TRG	18 RF-101C.
California:		
Ontario	163 TASG	24 O-2A.
Fresno	144 FIG	15 F-106.
Hayward	129 SOG	8 C-119G/6 U-10/D
Van Nuys (Los Angeles)	146 TAG	6 C-130B/8 C-130E.
Colorado: Buckley (Denver)	140 TFG	18 A-7D.
Connecticut: Bradley (Windsor Locks)	103 TFG	18 F-100.
Delaware: Greater Wilmington	166 TAG	6 C-130A.
District of Columbia: Andrews	113 TFG	24 F-105DF.
Florida: Jacksonville	125 FIG	15 F-106.
Georgia:		
Dobbins	116 TFG	18 F-100.
Savannah	165 TAG	8 C-130E.
Hawaii: Hickam	154 FIG	18 F-102A.
Idaho: Boise	124 FIG	18 F-102A.
Illinois:		
Greater Peoria	182 TASG	24 O-2A.
Capital (Springfield)	183 TFG	18 F-4C.
Chicago-O'Hare	126 ARG	8 KC-97L.
Indiana:		
Baer (Fort Wayne)	122 TFG	24 F-100.
Hulman (Terre Haute)	181 TFG	24 F-100.
Iowa:		
Des Moines	132 TFG	24 F-100.
Sioux City	185 TFG	24 F-100.
Kansas:		
McConnell	184 TFG	21 F-105 (CCT).
Forbes	190 DSEG	9 EB-57.
Kentucky: Standiford (Louisville)	123 TRG	18 RF-101C.
Louisiana: New Orleans	159 TFG	18 F-100.
Maine: Bangor	101 FIG	18 F-101B.
Maryland:		
Martin (Baltimore)	135 TASG	24 O-2A.
Martin	175 TFG	24 A-37B.
Massachusetts:		
Barnes (Westfield)	104 TFG	18 F-100.
Otis	102 FIG	15 F-106.
Michigan:		
W. K. Kellogg (Battle Creek)	110 TASG	24 O-2A.
Selfridge	191 FIG	15 F-106.
Do	127 TFG	18 F-100.
Minnesota:		
Duluth	148 FIG	18 F-101B.
Minneapolis-St. Paul	133 TAG	8 C-130A.
Mississippi:		
Allen C. Thompson (Jackson)	172 TAG	8 C-130E.
Key Field (Meridian)	186 TRG	18 RF-101C.
Missouri:		
Lambert-St. Louis	131 TFG	24 F-100.
Rosecrans (St. Joseph)	139 ARG	8 KC-97L.
Montana: Great Falls	120 FIG	15 F-106.
Nebraska: Lincoln	155 TRG	18 RF-4C.
Nevada: Reno	152 TRG	18 RF-101B.
New Hampshire: Pease	157 TAG	6 C-130A.
New Jersey:		
McGuire	108 TFG	20 F-105B.
Do	170 TAG	16 C-7A.
Atlantic City	177 FIG	15 F-106
New Mexico: Kirtland	150 TFG	24 A-7D.
New York:		
Schenectady	109 TAG	6 C-130A.
Hancock (Syracuse)	174 TFG	24 A-37B.
Niagara Falls	107 FIG	18 F-101B.
Suffolk County	106 FIG	18 F-102A.
Westchester (White Plains)	105 TASG	24 O-2A.
North Carolina: Douglas (Charlotte)	145 TAG	6 C-130B.
North Dakota: Hector (Fargo)	119 FIG	18 F-101B.
Ohio:		
Toledo Express	180 TFG	24 F-100.
Rickenbacker	121 TFG	18 A-7D.
Do	160 ARG	8 KC-97L.
Mansfield Lanham	179 TFG	18 F-100.
Springfield	178 TFG	24 F-100.
Oklahoma:		
Tulsa	138 TFG	18 F-100.
Will Rogers (Oklahoma City)	137 TAG	6 C-130A.
Oregon: Portland	142 FIG	18 F-101B.

AIR NATIONAL GUARD FLYING UNITS (BY STATE)—Continued

State location	Unit	Aircraft (fiscal year March 1975)
Pennsylvania:		
Willow Grove	111 TASG	24 O–2A.
Harrisburg-Olmsted	193 TEWG	8 C/EC–121.
Greater Pittsburgh	112 FIG	18 F–102A.
Do	171 ARG	8 KC–97L.
Puerto Rico: San Juan	156 TFG	18 F–104.
Rhode Island: T. F. Green (Warwick)	143 SOG	8 C–119G/6 U–10D.
South Carolina: McEntire (Eastover)	169 FIG	18 F–102A.
South Dakota: Joe Foss (Sioux Falls)	114 TFG	24 F–100.
Tennessee:		
Nashville	118 TAG	6 C–130A.
Memphis	164 TAG	8 C–130A.
McGhee-Tyson (Knoxville)	134 ARG	8 KC–97L.
Texas:		
Dallas	136 ARG	8 KC–97L.
Ellington	147 FIG	15 F–101 (CCT).
Kelly	149 TFG	24 F–100
Utah: Salt Lake City	151 ARG	8 KC–97L.
Vermont: Burlington	158 TEWG	9 EB–57.
Virginia: Byrd Field (Sandston)	192 TFG	24 F–105DF
Washington: Spokane	141 FIG	18 F–101B.
West Virginia:		
Kanawha (Charleston)	130 SOG	8 C–119G/6 U–10D.
Martinsburg	167 TAG	6 C–130A.
Wisconsin:		
Truax (Madison)	115 TASG	24 O–2A.
Gen. B. Mitchell (Milwaukee)	128 ARG	8 KC–97L.
Wyoming: Cheyenne	153 TAG	6 C–130B.

ANG Units Equipped With F–4, A–7, A–10, KC–135

Senator Young. How many Air National Guard units will be equipped with the following aircraft: F–4, A–7, A–10, and KC–135?

Secretary McLucas. The fiscal year 1976 Budget reflects four KC–135, two F–4 and six A–7 units in the total 91 Guard unit structure by end fiscal year 1976. There are current plans to modernize in the out years, 13 KC–135, 13 F–4, 17 A–7 and four A–10 units out of a 91 unit total. Concurrent with these conversions, F–100s, F–104s, F–105s, RF–101s, A–37s and KC–97s will phase out of the Guard inventory.

Impact of Three Year Enlistments

Senator Young. What do you anticipate will be the effect of the recently announced policy of the Defense Department to require three-year or greater enlistments of new recruits?

Secretary McLucas. Since the Air Force has only two terms of enlistment—four years and six years—we anticipate no direct impact on the Air Force from this change.

Reactions to Change in Commissary Funding

Senator Young. What reactions has the Air Force experienced by the budget proposal to absorb more of the overhead in the commissaries? Will the commissaries survive when 100 percent of the overhead is reflected in the cost of the items sold?

Secretary McLucas. The budget proposal has drawn an immediate and concerned response from both the active duty force and retired personnel. While acknowledging that reduced funding support for commissaries has created this response, we plan to minimize the impact through revised management and operational procedures to reduce the overhead costs. After these changes have had a chance to stabilize, we would still expect to be able to provide a reasonable savings to our patrons. No closure is anticipated. We believe that the savings still provided will continue to attract our people and maintain the commissaries as a definite benefit.

Obligation Authority Increase/Growth Versus Inflation

Senator Young. How much of the almost $4 billion increase in obligational authority requested over fiscal year 1975 is for growth and how much for inflation?

Secretary McLucas. Approximately $2 billion is for growth and about $2 billion is for inflation.

Quality of Air Force Recruits

Senator Young. Is the Air Force able to recruit the quality recruits needed to provide the high skills needed?

Secretary McLucas. Yes. In fiscal year 1974, of the maximum possible aptitude score of 95, the desired average score was 65.9 compared to our recruit average of 66.4. The qualifications of our recruits are very near what we need—however, there is not an excess of quality.

Skill Levels To Support New Aircraft

Senator Young. Will the new aircraft being developed and procured by the Air Force require more and higher skills than in the past or less?

Secretary McLucas. Reliability, and ease of access for maintainability have been criteria of increasing importance in the design of the aircraft we are procuring and developing, since these lead to a reduction in the total number of manpower spaces required to support the newer aircraft. Also, we have focused on modularity concepts, which, along with more "remove and replace" parts and other factors, will result in a reduction in the levels of skills required to maintain the aircraft we are developing and procuring. However, we still need highly skilled technicians for aircraft maintenance, especially at depot level.

Progress in B–1 Cost Reduction

Senator Young. What progress has the Air Force made to attain cost reductions in the B–1 as called for in this committee's report last year?

Secretary McLucas. We conducted a comprehensive evaluation of the B–1 with the objective of reducing the program cost. The major changes which we currently anticipate incorporating into the aircraft are the substitution of ejection seats for the crew module, changing of the engine inlet configuration from variable to fixed, some changes in the avionics systems, some minor material changes and a deletion of the requirement for an external pylon to carry external weapons. Our initial estimate is that the potential development savings associated with these changes will be about $90 million and the potential production savings, based on the current production schedule, are about $1 billion. We have, however, elected not to use this full savings in our current estimate of program costs and have conservatively included only about half this amount.

Simplify B–1/Low Altitude Mission Only

Senator Young. In view of the cost of the B–1, has the Air Force considered simplifying the aircraft to accomplish only the low altitude mission vice both high and low missions?

Secretary McLucas. Yes, as part of our cost reduction study, we looked at an alternative that effectively accomplishes that objective. However, we have concluded that some kind of high altitude capability for the B1 would be valuable. A potential enemy would have a much easier task if he knew that he had to defend against a low altitude pentration only. However, in conducting our cost reduction study, we took the approach that we could relax somewhat the high altitude requirements for speed and range, and base performance of the B1's high altitude mission on a still excellent residual performance that we could achieve. It was from this approach that we decided to change the engine inlet design from a variable to a fixed configuration. While this change does not degrade the low altitude mission performance, it does reduce the maximum speed at high altitude although retaining impressive performance. However, if the higher speed capability at high altitude should be required at a later date by changes to the Soviet threat, the controls and actuators for the variable engine inlets could be procured and installed without major redesign, since the provisions for those items will be retained.

Subsonic, Fixed Wing B–1 Alternative

Senator Young. Has the Air Force studied the alternative of a subsonic, fixed wing B–1? If so, what are the cost comparisons?

Secretary McLucas. As you know, the variable wing on the B–1 is required to enable the aircraft to take off in a relatively short distance and to penetrate enemy defenses at low altitude and high speed. Any fixed wing design requires a compromise of one or both of these two primary mission requirements. We have studied three fixed wing designs for the B–1. The first alternative would use the current wing pinned at a compromise position. This would minimize additional development costs for the design, but would produce a significantly slower penetration speed at low altitude and about a 40 percent longer takeoff roll. The second and third alternatives were fixed wing designs. The second alternative would bring the penetration speed back to an acceptable level, but studied further, would increase the takeoff roll and runway length required. The range of the aircraft would also be degraded in this case. The third alternative would regain the range and keep the required speed, but would further increase the takeoff roll required. The incremental increase in development cost for the first alternative is estimated to be $30 million, with a decrease in unit procurement cost of about $1 million. The incremental development cost increase of the second case is approximately $200 million, with a decrease in unit procurement cost of about $300 thousand. The third alternative would have an even larger development cost increase but only a minor reduction in unit procurement cost. We considered all of these fixed wing designs to be operationally unacceptable since they severely compromised either the prelaunch survivability or penetration capability of the aircraft.

Changed AWACS Employment Concept

Senator Young. Has the Air Force changed the employment concept for the AWACS aircraft? If so, how?

General Jones. The AWACS program, from the first documented requirement in 1963 until today, has been the subject of extensive studies which have resulted in an increased Air Force comprehension over time of the potential for applications of the system. The understanding of the need to provide low altitude radar surveillance is as old as radar itself. This need is not categorically identifiable as defensive or offensive, nor strategic or tactical. Commanders responsible for allocation of resources need timely data; jet speeds dictate near real time requirements. As jet aircraft have developed, low altitude and high speed are increasing in threat significance and the need for AWACS' capability is becoming increasingly apparent and urgent.

From its inception, the need was perceived for AWACS to have the capability to perform in both tactical and strategic air defense roles. The need for AWACS in these dual roles was stated in the 1963 Specific Operational Requirement. This fact is significant because, at that time, the principal anticipated force allocation was for the strategic defense role. Soviet threat developments in the intervening years have borne out the foresight of including a capability to meet the tactical requirements as well as our air defense needs.

The 1966 TAC/ADC Required Operational Capability (ROC) document and the 1969 TAC/ADC agreement on the CORE configuration confirmed the need for the dual role for AWACS. The dynamics of the developing Soviet threat have from time-to-time required changes in emphasis and planned use of many of our systems, which, in support of a defensive strategy, must respond to new threats presented by such changes. However, our planning has been based consistently on AWACS being employed in both the tactical and strategic defense mission areas. Allocation of forces to the strategic defense or tactical role would depend on the priorities of specific crisis situations and the features of future threat patterns.

In summary, the AWACS is based on a long standing, well documented and logically evolved operational requirement. The system is urgently needed now to offset Warsaw Pact combat capabilities and to enhance our present tacitcal and strategic defense surveillance, warning and control capability.

Cost to Develop F–16

Senator Young. What will be the cost of development of the new F–16 lightweight fighter?

Secretary McLucas. Our earlier estimate of the development program, as reflected in the FY 76 President's Budget, was $1,062.5 million in "then year" dollars. That program included fifteen DT&E aircraft and also included provisions for J101 engine development which would have been required had the YF–17 been selected. Elimination of the need for J101 engine development funds resultfrom the selection of the F100 engine powered F–16 and a restructuring of the F–16 development program to eight DT&E aircraft, permitted by configuration refinements made to the F–16 design, reduced the development estimate to $580 million in "then year" dollars or $496 million in fiscal year 1975 dollars. Implementation of the revised development program is awaiting OSD approval.

SUBCOMMITTEE RECESS

Senator Inouye. Gentlemen, I thank you very much on behalf of the chairman.

The subcommittee will stand in recess until 2 p.m.

We will resume our hearings in S–126 to hear from the Director of Defense Research and Engineering.

[Whereupon, at 12:35 p.m., We esday, February 26, the subcommittee was recessed, to reconvene at 2 p.m., the same day.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

TUESDAY, MARCH 18, 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 Hruska.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

AIRCRAFT AND MISSILES PROCUREMENT

STATEMENT OF MAJ. GEN. KENNETH R. CHAPMAN, ASSISTANT DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT

ACCOMPANIED BY:

MAJ. GEN. PAUL F. PATCH, DIRECTOR OF TRANSPORTATION, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

MAJ. GEN. EUGENE L. HUDSON, DIRECTOR OF LOGISTICS PLANS AND PROGRAMS, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

COL. WILLIAM D. BATHURST, DEPUTY CHIEF, INVESTMENT APPROPRIATIONS DIVISION, DIRECTORATE OF BUDGET

BRIG. GEN. HENRY B. STELLING, DIRECTOR OF SPACE, DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT

COL. JOHN L. GILBERT, ASSISTANT FOR REQUIREMENTS, DEVELOPMENT AND ACQUISITION PROGRAMING, DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT

MRS. JOYCE B. LUCKY, AIRCRAFT AND MISSILE PROGRAMS DIVISION, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

LT. COL. CHARLES McCAUSLAND, AIRCRAFT AND MISSILE PROGRAMS DIVISION, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

JUSTIFICATION

Chairman McClellan. The subcommittee will come to order.

Today we have testimony in support of fiscal year 1976 budget requests for Air Force procurement accounts.

Before we receive this testimony, I think it appropriate that information from the justifications appear in the record. Without objection, it will be entered at this point.

[The justification follows:]

AIRCRAFT PROCUREMENT, AIR FORCE

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment, and training devices, spare parts, and accessories therefor; specialized equipment; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to the approval of title as required by section 355, Revised Statutes, as amended; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes, including rents and transportation of things; [$3,062,800,000, and in addition, $153,600,000, of which $106,800,000 shall be derived by transfer from "Aircraft Procurement, Air Force 1974/1976" and $46,800,000 shall be derived by transfer from "Aircraft Procurement, Air Force, 1973/1975"] $4,575,500,000 to remain available for obligation until [June 30, 1977] September 30, 1978.

For "Aircraft Procurement, Air Force" for the period July 1, 1976, through September 30, 1976, $1,087,100,000, to remain available for obligation until September 30, 1978. (5 U.S.C. 3109; 10 U.S.C. 2271-79, 2353, 2386, 2663, 2672, 8012, 8062, 9501-02, 9505, 9531-32, 9741-42; 31 U.S.C. 649c, 718; 50 U.S.C. 451-62; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-7010-0-1-051	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	1,177,200	1,516,800	2,306,000	1,395,177	1,444,408	2,127,368
2. AIRLIFT AIRCRAFT	247,765	15,000	.....	124,906	154,396	28,119
3. TRAINER AIRCRAFT	35	.....	.....	874	2,331	.....
4. OTHER AIRCRAFT	136,300	.....	11,800	146,893	14,309	12,830
5. MODIFICATION OF INSERVICE AIRCRAFT	477,900	535,400	660,700	416,480	613,772	659,962
6. AIRCRAFT SPARES AND REPAIR PARTS	532,600	726,200	1,101,700	523,675	676,185	1,023,336
7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	251,100	276,200	496,300	256,232	276,565	448,025
TOTAL DIRECT	2,821,900	3,060,000	4,575,500	2,864,237	3,182,286	4,300,640
REIMBURSABLE (TOTAL)	1,087,014	550,000	601,000	735,296	1,027,345	611,748
10 TOTAL	3,910,914	3,610,000	5,176,500	3,599,533	4,209,631	4,912,388
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-156,552	-89,000	-99,000	-149,607	-89,000	-99,000
13 TRUST FUNDS	-925,417	-502,400	-500,000	-845,493	-502,400	-500,000
14 NON-FEDERAL SOURCES	-361	-1,000	-1,000	-407	-1,000	-1,000
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-1,592,978	-1,594,863	-995,232
AVAILABLE TO FINANCE NEW BUDGET PLANS	-176,684	-187,200	.....	-176,684	-187,200	.....
REPROGRAMING FROM OP TO PRIOR YEAR BUDGET PLANS	-123,777	.....	.....	.....	.....	.....
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-54,000	-165,800	.....	-54,000	-165,800	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	57,700	187,200	.....	57,700	187,200	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	1,594,863	995,232	1,258,344
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	187,200	.....	.....	187,200	.....	.....
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	8,877	.....	.....	8,877	.....	.....
BUDGET AUTHORITY	2,828,100	2,851,800	4,575,500	2,828,100	2,851,800	4,575,500
BUDGET AUTHORITY:						
40 APPROPRIATION	2,828,100	3,062,800	4,575,500	2,828,100	3,062,800	4,575,500
40 RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-152,500	.....	.....	-152,500	.....
41 TRANSFERRED TO OTHER ACCOUNTS	.....	-58,500	.....	.....	-58,500	.....
43 APPROPRIATION (ADJUSTED)	2,828,100	2,851,800	4,575,500	2,828,100	2,851,800	4,575,500
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET				2,803,626	3,617,231	4,312,388
72 OBLIGATED BALANCE, START OF YEAR				1,494,360	2,232,477	3,459,708
74 OBLIGATED BALANCE, END OF YEAR				-2,232,477	-3,459,708	-5,101,096
77 ADJUSTMENTS IN EXPIRED ACCOUNTS				12,050	.....	.....
90 OUTLAYS				3,077,559	2,390,000	2,671,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-3010-0-1-051	1974 ACT	1975 EST	1976 EST
DIRECT OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	5,900	4,800	5,300
26.0 SUPPLIES AND MATERIALS	358,062	497,988	526,239
31.0 EQUIPMENT	2,500,275	2,679,498	3,769,101
TOTAL DIRECT OBLIGATIONS	2,864,237	3,182,286	4,300,640
REIMBURSABLE OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	20,526	21,672	12,600
26.0 SUPPLIES AND MATERIALS	40,118	40,393	24,105
31.0 EQUIPMENT	674,652	965,280	575,043
TOTAL REIMBURSABLE OBLIGATIONS	735,296	1,027,345	611,748
1.0 TOTAL OBLIGATIONS	3,599,533	4,209,631	4,912,388

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

	IDENTIFICATION CODE 07-15-3010-0-1-051	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	.....	.....	.....	107,409	.....	.....
	2. AIRLIFT AIRCRAFT	.....	.....	.....	1,244	.....	.....
	3. TRAINER AIRCRAFT	.....	.....	.....	584	.....	.....
	5. MODIFICATION OF INSERVICE AIRCRAFT	.....	.....	.....	51,442	.....	.....
	6. AIRCRAFT SPARES AND REPAIR PARTS	.....	.....	.....	9,798	.....	.....
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	.....	.....	9,309	.....	.....
	TOTAL DIRECT	.....	.....	.....	179,786	.....	.....
	REIMBURSABLE (TOTAL)	.....	.....	.....	24,132	.....	.....
10	TOTAL	.....	.....	.....	203,918	.....	.....
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	.....	3,114	.....	.....
13	TRUST FUNDS	.....	.....	.....	119,391	.....	.....
14	NON-FEDERAL SOURCES	.....	.....	.....	-8	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-368,478	.....	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-42,073	.....	.....	.....	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	33,200	.....	.....	33,200	.....	.....
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	8,873	.....	.....	8,873	.....	.....
	BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3010-0-1-051

		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	.....	.....	.....	334,329	76,135	.....
	2. AIRLIFT AIRCRAFT	.....	.....	.....	41,586	2,426	.....
	3. TRAINER AIRCRAFT	.....	.....	.....	255	2,331	.....
	4. OTHER AIRCRAFT	.....	.....	.....	19,810	9,422	.....
	5. MODIFICATION OF INSERVICE AIRCRAFT	.....	.....	.....	103,859	43,303	.....
	6. AIRCRAFT SPARES AND REPAIR PARTS	.....	.....	.....	82,145	15,147	.....
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	.....	.....	50,460	13,113	.....
	TOTAL DIRECT	.....	.....	.....	632,444	161,877	.....
	REIMBURSABLE (TOTAL)	.....	.....	.....	158,500	126,743	.....
10	TOTAL	.....	.....	.....	790,944	288,620	.....
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	.....	3,871	.....	.....
13	TRUST FUNDS	.....	.....	.....	60,143	.....	.....
14	NON-FEDERAL SOURCES	.....	.....	.....	-38	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-1,224,500	-288,620	.....
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-57,000	.....	.....	-57,000	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-81,000	.....	.....	.....	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	24,000	57,000	.....	24,000	57,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	288,620	.....	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	57,000	.....	.....	57,000	.....	.....
	BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

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PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3010-0-1-051

		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	1,177,200	.....	.....	953,439	179,673	44,048
	2. AIRLIFT AIRCRAFT	247,765	.....	.....	82,076	140,120	25,569
	3. TRAINER AIRCRAFT	35	.....	.....	35	.....	.....
	4. OTHER AIRCRAFT	135,300	.....	.....	127,083	4,887	3,330
	5. MODIFICATION OF INSERVICE AIRCRAFT	477,900	.....	.....	261,179	188,669	28,052
	6. AIRCRAFT SPARES AND REPAIR PARTS	532,600	.....	.....	431,732	81,118	19,750
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	253,100	.....	.....	196,463	43,952	12,645
	TOTAL DIRECT	2,823,900	.....	.....	2,052,007	638,419	133,474
	REIMBURSABLE (TOTAL)	1,087,014	.....	.....	552,664	466,102	68,248
10	TOTAL	3,910,914	.....	.....	2,604,671	1,104,521	201,722
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-156,552	.....	.....	-156,552	.....	.....
13	TRUST FUNDS	-825,417	.....	.....	-825,417	.....	.....
14	NON-FEDERAL SOURCES	-361	.....	.....	-361	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-1,306,243	-201,722
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-176,684	-130,200	.....	-176,684	-130,200	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-54,000	.....	.....	-54,000	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	130,200	.....	.....	130,200	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	1,306,243	201,722	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	130,200	.....	.....	130,200	.....	.....
	BUDGET AUTHORITY	2,828,100	.....	.....	2,828,100	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-7010-0-1-051

		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	.....	1,516,800	.....	.....	1,189,000	283,280
	2. AIRLIFT AIRCRAFT	.....	15,000	.....	.....	11,850	2,550
	5. MODIFICATION OF INSERVICE AIRCRAFT	.....	525,800	.....	.....	381,800	101,710
	6. AIRCRAFT SPARES AND REPAIR PARTS	.....	726,200	.....	.....	579,840	133,586
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	276,200	.....	.....	219,500	49,800
	TOTAL DIRECT	.....	3,060,000	.....	.....	2,381,990	570,926
	REIMBURSABLE (TOTAL)	.....	550,000	.....	.....	434,500	93,500
10	TOTAL	.....	3,610,000	.....	.....	2,816,490	664,426
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	-89,000	.....	.....	-89,000	.....
13	TRUST FUNDS	.....	-502,400	.....	.....	-502,400	.....
14	NON-FEDERAL SOURCES	.....	-1,000	.....	.....	-1,000	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-793,510
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-165,800	.....	.....	-165,800	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	793,510	129,084
	BUDGET AUTHORITY	.....	2,851,800	.....	.....	2,851,800	.....
	BUDGET AUTHORITY:						
40	APPROPRIATION	.....	3,062,800	.....	.....	3,062,800	.....
40	RESCISION OF ENACTED APPROPRIATION NOW PENDING	.....	-152,500	.....	.....	-152,500	.....
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-58,500	.....	.....	-58,500	.....
43	APPROPRIATION (ADJUSTED)	.....	2,851,800	.....	.....	2,851,800	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3010-0-1-051

		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	.....	.....	2,306,000	.....	.....	1,800,000
	4. OTHER AIRCRAFT	.....	.....	11,800	.....	.....	9,500
	5. MODIFICATION OF INSERVICE AIRCRAFT	.....	.....	661,700	.....	.....	530,200
	6. AIRCRAFT SPARES AND REPAIR PARTS	.....	.....	1,101,700	.....	.....	870,000
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	.....	495,300	.....	.....	386,540
	TOTAL DIRECT	.....	.....	4,575,500	.....	.....	3,596,240
	REIMBURSABLE (TOTAL)	.....	.....	600,000	.....	.....	450,000
10	TOTAL	.....	.....	5,175,500	.....	.....	4,046,240
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-99,000	.....	.....	-99,000
13	TRUST FUNDS	.....	.....	-500,000	.....	.....	-500,000
14	NON-FEDERAL SOURCES	.....	.....	-1,000	.....	.....	-1,000
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	1,129,260
	BUDGET AUTHORITY	.....	.....	4,575,500	.....	.....	4,575,500

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-15-3010-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
		TRANSITION	TRANSITION
	PROGRAM BY ACTIVITIES:		
	DIRECT:		
	1. COMBAT AIRCRAFT	467,500	531,160
	2. AIRLIFT AIRCRAFT	.....	450
	4. OTHER AIRCRAFT	175,000	151,800
	5. MODIFICATION OF INSERVICE AIRCRAFT	126,300	169,450
	6. AIRCRAFT SPARES AND REPAIR PARTS	190,058	275,540
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	128,242	146,191
	TOTAL DIRECT	1,087,100	1,274,591
	REIMBURSABLE (TOTAL)	200,000	200,500
10	TOTAL	1,287,100	1,475,091
	FINANCING:		
	RECEIPTS AND REIMBURSEMENTS FROM:		
11	FEDERAL FUNDS	-24,500	-24,500
13	TRUST FUNDS	-175,000	-175,000
14	NON-FEDERAL SOURCES	-500	-500
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-1,258,344
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	1,070,353
	BUDGET AUTHORITY	1,087,100	1,087,100
	BUDGET AUTHORITY:		
40	APPROPRIATION	1,087,100	1,087,100
43	APPROPRIATION (ADJUSTED)	1,087,100	1,087,100
	RELATION OF OBLIGATIONS TO OUTLAYS:		
71	OBLIGATIONS INCURRED, NET		1,275,091
72	OBLIGATED BALANCE, START OF YEAR		5,101,096
74	OBLIGATED BALANCE, END OF YEAR		-5,470,187
90	OUTLAYS		905,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-15-7010-0-1-051			TRANSITION
	DIRECT OBLIGATIONS:		
22.0	TRANSPORTATION OF THINGS		1,800
26.0	SUPPLIES AND MATERIALS		147,972
31.0	EQUIPMENT		1,124,819
	TOTAL DIRECT OBLIGATIONS		1,274,591
	REIMBURSABLE OBLIGATIONS:		
22.0	TRANSPORTATION OF THINGS		4,700
26.0	SUPPLIES AND MATERIALS		7,330
31.0	EQUIPMENT		188,470
	TOTAL REIMBURSABLE OBLIGATIONS		200,500
99.0	TOTAL OBLIGATIONS		1,475,091

(In Thousands of Dollars)

Program Requirement - FY 77....$6,255,843
Program Requirement - FY TT.... 1,087,100
Program Requirement - FY 76.... 4,575,500
Program Requirement - FY 75.... 3,060,000
Program Requirement - FY 74.... 2,823,900

PART I PURPOSE AND SCOPE

This appropriation provides for procurement of aircraft, and for modification of in-service aircraft to improve safety and enhance operational effectiveness. It also provides for investment spares and repair parts including spare engines, replenishment spares, and other support equipment to include aerospace ground equipment and industrial facilities. In addition, funds are provided for the procurement of flight training simulators to increase combat readiness. Management of the overall aircraft program is facilitated by collecting, in a single appropriation, all funds for the prime aircraft weapon system and related specialized ground handling and test equipment.

In the activity justifications which follow, additional details are provided by budget activity. The activities are: combat aircraft, airlift aircraft, trainer aircraft, and other aircraft; modification of in-service aircraft; aircraft spares and repair parts; aircraft support equipment and facilities; and the reimbursable program.

Each of the four aircraft activities consists of the following elements as applicable, which together constitute the weapon system cost:

a. Flyaway Cost - This element consists of the complete aircraft ready to be flown away from the manufacturer's plant and includes airframe, engines, communications and electronics equipment, photographic equipment, armament, instruments, auxiliary equipment installed in the aircraft, and certain non-recurring costs for tooling and other start-up costs.

b. Peculiar Aerospace Ground Equipment, Training Devices, and Technical Data - This element includes equipment requirements which are applicable to a specific weapon system such as specialized equipment for maintenance, repair and test of a weapon system, subsystem, or its components; special training devices applicable to a specific weapon system such as mobile training units, flight simulators, instrument trainers, and air navigation trainers; and procurement of engineering handbooks, manuals, and other technical data identified with the specific aircraft being procured. Requirements in these categories are established to provide for scheduled delivery of the support equipment in phase with deliveries of the weapon system.

c. Credits from Advance Procurement Prior Year - This element identifies assets applied to a program from advance procurement provided in a prior year for items having a longer lead time than the airframe.

d. Advance Procurement Current Year - This element identifies requirements associated with follow-on aircraft programs which have a longer procurement lead time than the airframe and which therefore must be procured in advance of the airframe.

JUSTIFICATION OF FUNDS REQUESTED

The program to be financed with the appropriation for fiscal year 1976 includes additional modern aircraft for the combat forces, $2,306.0 million; and other aircraft, $11.8 million. The fiscal year 197T and 1977 programs include $467.5 million and $3,578.8 million, respectively for combat aircraft and FY 197T includes $175.0 million for other aircraft.

The fiscal year 1976 estimate also provides $660.7 million for modification and modernization of in-service aircraft necessary for safety-of-flight, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at minimum cost. The fiscal year 1976 estimate compares with programs of $525.8 million and $477.9 million for fiscal years 1975 and 1974, respectively. The fiscal year 197T and 1977 programs are $126.3 million and $916.9 million respectively.

Aircraft spares and repair parts are also financed under this appropriation. The spares and repair parts activity includes centrally procured and managed, investment-type spare components and repair parts associated with the procurement of new aircraft; the modification program, and peculiar and common aerospace ground equipment programs; and the replenishment spares category which provides for Air Force operational, maintenance, and overhaul programs. For fiscal year 1976, the request amounts to $1,101.7 million compared to $726.2 million for fiscal year 1975, and $532.6 million for fiscal year 1974. The fiscal year 197T and 1977 programs are $190.1 million and $1,127.6 million, respectively.

The aircraft support equipment and facilities activity provides for common aerospace ground equipment, component improvement, industrial facilities, war consumables, and other charges. The program requirements for fiscal year 1976 are $495.3 million as compared to $276.2 million in fiscal year 1975, and $253.1 million in fiscal year 1974. The fiscal year 197T and 1977 programs are $128.2 million and $632.5 million, respectively.

The requirements for the reimbursable program for fiscal year 1976 are $600.0 million; for fiscal year 1975, $550.0 million; and for fiscal year 1974, $1,087.0 million. This program provides for those aircraft and related items which must be procured to satisfy customer orders. The fiscal year 197T program is $200.0 million.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate
Combat aircraft	$1,177,200	$ 1,516,800	$ 2,306,000
Airlift aircraft	247,765	15,000	
Trainer aircraft	35		
Other aircraft	135,300		11,800
Modification of in-service aircraft	477,900	525,800	660,700
Aircraft spares and repair parts	532,600	726,200	1,101,700
Aircraft support equipment and facilities	253,100	276,200	495,300
TOTAL DIRECT PROGRAM	$2,823,900	$ 3,060,000	$ 4,575,500
Reimbursable program	1,087,014	550,000	600,000
TOTAL PROGRAM REQUIREMENTS (Current)	$3,910,914	$ 3,610,000	$ 5,175,500
Less portion of program to be obligated in subsequent fiscal years	-1,306,243	-793,510	-1,129,260
Plus obligations incurred against prior year program funds	994,862	1,393,141	866,148
TOTAL OBLIGATIONS	$3,599,533	$ 4,209,631	$ 4,912,388

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	197T Estimate	1977 Estimate
Combat aircraft	$ 467,500	$ 3,578,800
Airlift aircraft		
Trainer aircraft		
Other aircraft	175,000	
Modification of in-service aircraft	126,300	916,878
Aircraft spares and repair parts	190,058	1,127,575
Aircraft support equipment and facilities	128,242	632,590
TOTAL DIRECT PROGRAM	$ 1,087,100	$ 6,255,843
Reimbursable program	200,000	
TOTAL PROGRAM REQUIREMENTS (Current)	$ 1,287,100	
Less portion of program to be obligated in subsequent fiscal years	-1,070,353	
Plus obligations incurred against prior year program funds	1,258,344	
TOTAL OBLIGATIONS	$ 1,475,091	

MISSILE PROCUREMENT, AIR FORCE

For construction, procurement, and modification of missiles, rockets, and related equipment, including spare parts and accessories therefor, ground handling equipment, and training devices; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to the approval of title as required by section 355, Revised Statutes, as amended; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; [$1,533,700,000, and in addition, $5,000,000, which shall be derived by transfer from "Missile Procurement, Air Force 1974/1976",] $1,791,400,000 to remain available for obligation until [June 30, 1977.] September 30, 1978.

For "Missile Procurement, Air Force" for the period July 1, 1976, through September 30, 1976, $277,400,000, to remain available for obligation until September 30, 1978. (5 U.S.C. 3109; 10 U.S.C. 2271-79; 2353, 2386, 2663, 2672, 8012, 8062, 9501-02, 9505, 9531-32, 9741-42; 31 U.S.C. 649c, 718; 50 U.S.C. 451-62; Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-3020-0-1-051	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	615,400	597,300	653,500	633,982	617,378	673,162
	2. OTHER MISSILES	234,700	133,400	354,600	236,882	167,562	332,383
	3. MODIFICATION OF INSERVICE MISSILES	43,000	40,900	47,100	37,945	52,565	61,838
	4. SPARES AND REPAIR PARTS	37,900	43,300	86,600	43,498	47,278	76,267
	5. OTHER SUPPORT	481,800	727,800	647,600	530,084	783,471	643,892
	TOTAL DIRECT	1,416,300	1,542,700	1,791,400	1,482,391	1,668,254	1,787,542
	REIMBURSABLE (TOTAL)	83,695	62,000	40,000	48,036	75,014	54,742
10	TOTAL	1,499,995	1,604,700	1,831,400	1,530,427	1,743,268	1,842,284
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-314	.....	.....	-964	.....	.....
13	TRUST FUNDS	-83,355	-66,000	-40,000	-101,597	-66,000	-40,000
14	NON-FEDERAL SOURCES	-26	.....	.....	-30	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-507,723	-462,490	-323,922
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-18,400	-13,400	.....	-18,400	-13,400
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-33,697	.....	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-30,000	-5,000	.....	-30,000	-5,000	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	30,000	5,000	.....	30,000	5,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	462,490	323,922	313,038
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	18,400	13,400	13,400	18,400	13,400	13,400
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	3,697	.....	.....	3,697	.....	.....
40	BUDGET AUTHORITY (APPROPRIATION)	1,404,700	1,533,700	1,791,400	1,404,700	1,533,700	1,791,400
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET				1,427,836	1,677,268	1,802,284
72	OBLIGATED BALANCE, START OF YEAR				1,350,062	1,236,820	1,426,088
74	OBLIGATED BALANCE, END OF YEAR				-1,236,820	-1,426,088	-1,648,372
77	ADJUSTMENTS IN EXPIRED ACCOUNTS				-4,010	.....	.....
90	OUTLAYS				1,537,068	1,488,000	1,580,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-3020-0-1-051

		1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
22.0	TRANSPORTATION OF THINGS	2,297	2,588	2,791
31.0	EQUIPMENT	1,480,094	1,666,666	1,784,751
	TOTAL DIRECT OBLIGATIONS	1,482,391	1,669,254	1,787,542
	REIMBURSABLE OBLIGATIONS:			
31.0	EQUIPMENT	48,036	75,014	54,742
99.0	TOTAL OBLIGATIONS	1,530,427	1,744,268	1,842,284

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-3020-0-1-051

		TRANSITION
	DIRECT OBLIGATIONS:	
22.0	TRANSPORTATION OF THINGS	486
31.0	EQUIPMENT	252,691
	TOTAL DIRECT OBLIGATIONS	253,177
	REIMBURSABLE OBLIGATIONS:	
31.0	EQUIPMENT	6,200
99.0	TOTAL OBLIGATIONS	259,377

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 97-15-7020-0-1-051

		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				97,782		
	2. OTHER MISSILES				-1,530		
	3. MODIFICATION OF INSERVICE MISSILES				13,648		
	4. SPARES AND REPAIR PARTS				4,731		
	5. OTHER SUPPORT				6,240		
	TOTAL DIRECT				120,871		
	REIMBURSABLE (TOTAL)				-25		
10	TOTAL				120,646		
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				-72		
13	TRUST FUNDS				-7,749		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR				-140,482		
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	-23,697					
	REPROGRAMING FROM OP TO PRIOR YEAR BUDGET PLANS	20,000			20,000		
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS						
25	UNOBLIGATED BALANCE LAPSING	3,697			3,697		
	UNOBLIGATED BALANCE LAPSING, BUD PLAN						
40	BUDGET AUTHORITY (APPROPRIATION)						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3020-0-1-051

		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	.....	.....	.....	44,477	30,915	.....
	2. OTHER MISSILES	.....	.....	.....	73,428	10,639	.....
	3. MODIFICATION OF INSERVICE MISSILES	.....	.....	.....	3,722	15,333	.....
	4. SPARES AND REPAIR PARTS	.....	.....	.....	14,976	7,772	.....
	5. OTHER SUPPORT	.....	.....	.....	121,997	35,895	.....
	TOTAL DIRECT	.....	.....	.....	258,600	100,554	.....
	REIMBURSABLE (TOTAL)	.....	.....	.....	108	13,014	.....
10	TOTAL	.....	.....	.....	258,708	113,568	.....
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	.....	-578	.....	.....
13	TRUST FUNDS	.....	.....	.....	-14,453	.....	.....
14	NON-FEDERAL SOURCES	.....	.....	.....	-4	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-367,241	-113,568	.....
	REPROGRAMING FROM OP TO PRIOR YEAR BUDGET PLANS	-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	.....	.....	.....	113,568	.....	.....
40	BUDGET AUTHORITY (APPROPRIATION)	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3020-0-1-051

		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	615,400	.....	.....	491,723	83,086	40,591
	2. OTHER MISSILES	238,700	.....	.....	164,984	49,217	23,999
	3. MODIFICATION OF INSERVICE MISSILES	43,000	.....	.....	20,775	12,737	9,488
	4. SPARES AND REPAIR PARTS	37,900	.....	.....	33,791	9,609	4,580
	5. OTHER SUPPORT	481,800	.....	.....	401,847	69,951	10,002
	TOTAL DIRECT	1,416,300	.....	.....	1,103,120	224,600	88,580
	REIMBURSABLE (TOTAL)	83,695	.....	.....	47,953	22,000	13,742
10	TOTAL	1,499,995	.....	.....	1,151,073	246,600	102,322
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-314	.....	.....	-314	.....	.....
13	TRUST FUNDS	-83,355	.....	.....	-83,355	.....	.....
14	NON-FEDERAL SOURCES	-26	.....	.....	-26	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-348,922	-102,322
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-18,400	-13,400	.....	-18,400	-13,400
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-30,000	.....	.....	-30,000	.....	.....
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	.....	.....	.....	348,922	102,322	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	18,400	13,400	13,400	18,400	13,400	13,400
40	BUDGET AUTHORITY (APPROPRIATION)	1,404,700	.....	.....	1,404,700	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-3020-0-1-051

		BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			1975 FISCAL YEAR PROGRAM OBLIGATIONS		
		1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. BALLISTIC MISSILES	.....	597,300	.....	.....	503,377	78,651
	2. OTHER MISSILES	.....	133,400	.....	.....	107,706	28,854
	3. MODIFICATION OF INSERVICE MISSILES	.....	40,900	.....	.....	24,495	12,270
	4. SPARES AND REPAIR PARTS	.....	43,300	.....	.....	29,897	14,525
	5. OTHER SUPPORT	.....	727,800	.....	.....	677,625	42,500
	TOTAL DIRECT	.....	1,542,700	.....	.....	1,343,100	176,800
	REIMBURSABLE (TOTAL)	.....	62,000	.....	.....	40,000	18,000
10	TOTAL	.....	1,604,700	.....	.....	1,383,100	194,800
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
13	TRUST FUNDS	.....	-66,000	.....	.....	-66,000	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-221,600
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-5,000	.....	.....	-5,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	221,600	26,800
40	BUDGET AUTHORITY (APPROPRIATION)	.....	1,533,700	.....	.....	1,533,700	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3020-0-1-051

		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	.....	.....	651,500	.....	.....	553,920
	2. OTHER MISSILES	.....	.....	354,600	.....	.....	279,530
	3. MODIFICATION OF INSERVICE MISSILES	.....	.....	49,100	.....	.....	40,080
	4. SPARES AND REPAIR PARTS	.....	.....	86,600	.....	.....	57,242
	5. OTHER SUPPORT	.....	.....	647,600	.....	.....	591,390
	TOTAL DIRECT	.....	.....	1,791,400	.....	.....	1,522,162
	REIMBURSABLE (TOTAL)	.....	.....	40,000	.....	.....	23,000
10	TOTAL	.....	.....	1,831,400	.....	.....	1,545,162
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
13	TRUST FUNDS	.....	.....	-40,000	.....	.....	-40,000
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	286,238
40	BUDGET AUTHORITY (APPROPRIATION)	.....	.....	1,791,400	.....	.....	1,791,400

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-1020-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)	OBLIGATIONS
		TRANSITION	TRANSITION
	PROGRAM BY ACTIVITIES:		
	DIRECT:		
	1. BALLISTIC MISSILES	70,500	129,147
	2. OTHER MISSILES	36,800	40,163
	3. MODIFICATION OF INSERVICE MISSILES	300	6,240
	4. SPARES AND REPAIR PARTS	6,200	11,335
	5. OTHER SUPPORT	163,600	66,292
	TOTAL DIRECT	277,400	253,177
	REIMBURSABLE (TOTAL)	.....	6,200
10	TOTAL	277,400	259,377
	FINANCING:		
	RECEIPTS AND REIMBURSEMENTS FROM:		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR		
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-313,038
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-13,400	-13,400
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR		
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	331,061
25	UNOBLIGATED BALANCE LAPSING		
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	13,400	13,400
40	BUDGET AUTHORITY (APPROPRIATION)	277,400	277,400
	RELATION OF OBLIGATIONS TO OUTLAYS:		
71	OBLIGATIONS INCURRED, NET		259,377
72	OBLIGATED BALANCE, START OF YEAR		1,648,372
74	OBLIGATED BALANCE, END OF YEAR		-1,534,749
90	OUTLAYS		373,000

PURPOSE AND SCOPE OF APPROPRIATION

The Missile Procurement, Air Force Appropriation provides for fabricating and procuring complete missiles and associated ground support and training equipment. It also provides for the modification of in-service systems; the procurement of replacement equipment, and initial and replenishment spares; the expansion and nonrecurring maintenance of industrial facilities, and machine tool modernization; the procurement of operational space systems; and the support of Special Programs.

1. Ballistic missiles - This activity provides for the procurement of the MINUTEMAN III missile system for operational testing and the necessary hardware and effort required to modernize MINUTEMAN launch and launch control facilities. The MINUTEMAN III production line will close at the end of the fiscal year 1976 funded delivery period and resources for the production close-out costs are included in this budget request.

2. Other missiles - This activity provides for the procurement of: (1) the SHRIKE air-to-ground anti-radiation missile in support of War Readiness Materiel (WRM) objectives; (2) the TV MAVERICK air-to-ground tactical missile for the F-4D/F, A-7, and A-10 aircraft for use against targets such as tanks and armored vehicles; (3) the SPARROW air-to-air missile for the F-4E and F-15 aircraft for use against enemy aircraft; (4) the SIDEWINDER, heat seeking air-to-air dog-fight missile; (5) Target Drones to be used to simulate enemy subsonic and supersonic aircraft for use in testing and evaluating weapon systems, and for the training of aircrews; and (6) Tactical Drones to perform electronic warfare support, reconnaissance, and air-to-ground strikes.

3. Modification of in-service missiles - This activity provides for the modification of in-service missiles to improve operational capability, reliability, and safety of the system. It also provides for updating of MINUTEMAN subsystems.

4. Spares and repair parts - This activity provides for the procurement of replacement equipment and wartime consumables, replenishment spares for missile systems including motors required for the MINUTEMAN Aging and Surveillance program, and investment type spares and provisioning documentation.

5. Other support equipment and facilities - This activity provides for the procurement of spacecraft, launch vehicles, and peculiar ground support equipment in support of operational space programs. It also provides for the modernization and maintenance of Government-owned production facilities, and special activities and programs.

SUMMARY OF REQUIREMENTS (in thousands of dollars)

ACTIVITY	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate
Ballistic missiles	$ 615,400	$ 597,300	$ 653,500
Other missiles	238,200	133,400	354,600
Modification of in-service missiles	43,000	40,900	49,100
Spares and repair parts	37,900	43,300	86,600
Other support	481,800	727,800	647,600
TOTAL DIRECT PROGRAM	1,416,300	1,542,700	1,791,400
Reimbursable program	83,695	62,000	40,000
TOTAL PROGRAM REQUIREMENTS	1,499,995	1,604,700	1,831,400
Less: Portion of program to be obligated in subsequent fiscal years	348,922	221,600	286,238
Plus: Obligations incurred against prior year program funds	379,354	360,168	297,122
TOTAL OBLIGATIONS	1,530,427	1,743,268	1,842,284

SUMMARY OF REQUIREMENTS (in thousands of dollars)

ACTIVITY	FY 197T Estimate	FY 1977 Estimate
Ballistic missiles	$ 70,500	$ 341,600
Other missiles	36,800	435,000
Modification of in-service missiles	300	39,100
Spares and repair parts	6,200	67,000
Other support	163,600	724,100
TOTAL DIRECT PROGRAM	277,400	1,606,800
Reimbursable program		
TOTAL PROGRAM REQUIREMENTS		
Less: Portion or program to be obligated in subsequent fiscal years		
Plus: Obligations incurred against prior year program funds		
TOTAL OBLIGATIONS		

OTHER PROCUREMENT, AIR FORCE

For procurement and modification of equipment (including ground guidance and electronic control equipment, and ground electronic and communication equipment), and supplies, materials, and spare parts therefor, not otherwise provided for; the purchase of not to exceed one thousand three hundred and thirty-eight passenger motor vehicles for replacement only; and expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to Section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein may be acquired, and construction prosecuted thereon prior to the approval of title, as required by section 355, Revised Statutes, as amended; reserve plant and Government and contractor-owned equipment layaway; $1,776,500,000, and in addition, $12,600,000, of which $500,000 shall be derived by transfer from "Other Procurement, Air Force, 1973/1975" and $12,000,000 shall be derived by transfer from "Other Procurement. Air Force, 1974/1976", to remain available for obligation until June 30, 1977:

six
twelve

$2,342,800,000

September 30, 1978

For "Other Procurement, Air Force" for the period July 1, 1976, through September 30, 1976, $383,600,000 to remain available for obligation until September 30, 1978. (5 U.S.C. 3109; 10 U.S.C. 2110, 2353, 2386, 8012; 9505, 9531-32; 31 U.S.C. 638a, 638c, 649c; 718; 50 U.S.C. 491-94, Department of Defense Appropriation Act, 1975.)

Explanation and Justification of Language Changes

1. Language is required to permit purchase of 726 less passenger motor vehicles than required for replacement in FY 1975.
2. Language is required to provide an appropriation for the fiscal year transition period (July 1, 1976 through September 30, 1976).

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-15-0080-0-1-051

		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. MUNITIONS AND ASSOCIATED EQUIPMENT	321,375	136,551	333,430	330,582	186,300	371,479
	2. VEHICULAR EQUIPMENT	63,308	63,326	104,834	51,500	53,297	108,298
	3. ELECTRONICS AND TELECOMMUNICATIONS EQUIPMENT	391,484	355,801	625,956	248,074	395,810	664,297
	4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT	922,133	1,070,322	1,213,380	965,412	1,047,030	1,234,522
	TOTAL DIRECT	1,641,000	1,656,000	2,342,800	1,595,568	1,682,437	2,378,476
	REIMBURSABLE (TOTAL)	91,388	204,000	100,001	48,884	207,564	125,569
10	TOTAL	1,732,388	1,860,000	2,442,800	1,644,452	1,890,001	2,504,045
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-31,167	-40,000	-20,000	-26,995	-40,000	-20,000
13	TRUST FUNDS	-66,708	-171,000	-78,000	-64,287	-171,000	-78,000
14	NON-FEDERAL SOURCES	-713	-3,000	-2,000	13,600	-1,000	-2,000
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-366,692	-394,546	-354,545
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-24,600	.....	.....	-24,600	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-17,126	.....	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-11,000	-12,600	.....	-11,000	-12,600	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	11,000	24,600	.....	11,000	24,600	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	394,546	354,545	293,300
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	24,600	.....	.....	24,600	.....	.....
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	3,826	.....	.....	3,826	.....	.....
	BUDGET AUTHORITY	1,625,100	1,633,400	2,342,800	1,625,100	1,633,400	2,342,800
	BUDGET AUTHORITY:						
40	APPROPRIATION	1,625,100	1,776,500	2,342,800	1,625,100	1,776,500	2,342,800
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-143,100	.....	.....	-143,100	.....
43	APPROPRIATION (ADJUSTED)	1,625,100	1,633,400	2,342,800	1,625,100	1,633,400	2,342,800
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET				1,674,470	1,675,001	2,404,045
72	OBLIGATED BALANCE, START OF YEAR				982,703	806,992	1,058,993
74	OBLIGATED BALANCE, END OF YEAR				-806,992	-1,058,993	-1,685,038
77	ADJUSTMENTS IN EXPIRED ACCOUNTS				19,846	.....	.....
90	OUTLAYS				1,751,427	1,424,000	1,779,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1080-0-1-051	1974 ACT	1975 EST	1976 EST
DIRECT OBLIGATIONS:			
22.0 TRANSPORTATION OF THINGS	32,100	33,043	44,028
26.0 SUPPLIES AND MATERIALS	784,672	817,754	935,922
31.0 EQUIPMENT	778,796	831,640	1,398,526
TOTAL DIRECT OBLIGATIONS	1,595,568	1,682,437	2,378,476
REIMBURSABLE OBLIGATIONS:			
26.0 SUPPLIES AND MATERIALS	13,484	58,948	35,662
31.0 EQUIPMENT	35,000	148,616	89,907
TOTAL REIMBURSABLE OBLIGATIONS	48,484	207,564	125,569
99.0 TOTAL OBLIGATIONS	1,644,452	1,890,001	2,504,045

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1080-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			1972 FISCAL YEAR PROGRAM OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. MUNITIONS AND ASSOCIATED EQUIPMENT				-1,163		
2. VEHICULAR EQUIPMENT				3,867		
3. ELECTRONICS AND TELECOMUNICATIONS EQUIPMENT				14,488		
4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT				12,621		
TOTAL DIRECT				49,803		
REIMBURSABLE (TOTAL)				5,455		
10 TOTAL				54,458		
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS				-625		
13 TRUST FUNDS				15,167		
14 NON-FEDERAL SOURCES				-126		
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS				-72,700		
REPROGRAMING FROM OP TO PRIOR YEAR BUDGET PLANS	-3,826					
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	3,826			3,826		
BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 97-19-1040-0-1-051

		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. MUNITIONS AND ASSOCIATED EQUIPMENT				61,200	18,958	
	2. VEHICULAR EQUIPMENT				8,235	1,339	
	3. ELECTRONICS AND TELECOMUNICATIONS EQUIPMENT				49,555	34,143	
	4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT				35,316	11,972	
	TOTAL DIRECT				154,366	66,412	
	REIMBURSABLE (TOTAL)				15,410	5,964	
10	TOTAL				169,776	72,376	
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS				4,997		
13	TRUST FUNDS				17,254		
14	NON-FEDERAL SOURCES				14,089		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR				-291,992	-72,376	
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS					-500	
	AVAILABLE TO FINANCE NEW BUDGET PLANS		-500				
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-13,500					
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	13,000	500		13,000	500	
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR				72,376		
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	500			500		
	BUDGET AUTHORITY						

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-19-3040-0-1-051

		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. MUNITIONS AND ASSOCIATED EQUIPMENT	321,375	.....	.....	270,545	31,542	19,888
	2. VEHICULAR EQUIPMENT	53,708	.....	.....	40,148	7,758	5,402
	3. ELECTRONICS AND TELECOMUNICATIONS EQUIPMENT	293,684	.....	.....	164,071	107,467	22,186
	4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT	972,033	.....	.....	917,475	54,558	.....
	TOTAL DIRECT	1,641,000	.....	.....	1,392,199	201,325	47,476
	REIMBURSABLE (TOTAL)	91,788	.....	.....	28,019	58,800	4,569
10	TOTAL	1,732,788	.....	.....	1,420,218	260,125	52,045
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-31,367	.....	.....	-31,367	.....	.....
13	TRUST FUNDS	-86,708	.....	.....	-86,708	.....	.....
14	NON-FEDERAL SOURCES	-313	.....	.....	-313	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	-312,170	-52,045
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-24,100	.....	.....	-24,100	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-13,000	.....	.....	-13,000	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	24,100	.....	.....	24,100	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	312,170	52,045	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	24,100	.....	.....	24,100	.....	.....
	BUDGET AUTHORITY	1,625,100	.....	.....	1,625,100	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-3040-0-1-051	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. MUNITIONS AND ASSOCIATED EQUIPMENT	.....	196,551	.....	.....	135,800	60,751
2. VEHICULAR EQUIPMENT	.....	53,326	.....	.....	44,200	19,126
3. ELECTRONICS AND TELECOMMUNICATIONS EQUIPMENT	.....	365,801	.....	.....	254,200	111,601
4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT	.....	1,040,322	.....	.....	980,500	49,822
TOTAL DIRECT	.....	1,656,000	.....	.....	1,414,700	241,300
REIMBURSABLE (TOTAL)	.....	204,000	.....	.....	142,800	51,000
10 TOTAL	.....	1,860,000	.....	.....	1,557,500	292,300
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	.....	-40,000	.....	.....	-40,000	.....
13 TRUST FUNDS	.....	-171,000	.....	.....	-171,000	.....
14 NON-FEDERAL SOURCES	.....	-3,000	.....	.....	-3,000	.....
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-302,500
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-12,600	.....	.....	-12,600	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	302,500	10,200
BUDGET AUTHORITY	.....	1,633,400	.....	.....	1,633,400	.....
BUDGET AUTHORITY:						
40 APPROPRIATION	.....	1,776,500	.....	.....	1,776,500	.....
41 TRANSFERRED TO OTHER ACCOUNTS	.....	-143,100	.....	.....	-143,100	.....
43 APPROPRIATION (ADJUSTED)	.....	1,633,400	.....	.....	1,633,400	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-15-7040-0-1-051

		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. MUNITIONS AND ASSOCIATED EQUIPMENT	.....	.....	399,830	.....	.....	290,800
	2. VEHICULAR EQUIPMENT	.....	.....	104,634	.....	.....	83,700
	3. ELECTRONICS AND TELECOMMUNICATIONS EQUIPMENT	.....	.....	625,956	.....	.....	530,500
	4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT	.....	.....	1,212,380	.....	.....	1,184,700
	TOTAL DIRECT	.....	.....	2,342,800	.....	.....	2,089,700
	REIMBURSABLE (TOTAL)	.....	.....	100,000	.....	.....	70,000
10	TOTAL	.....	.....	2,442,800	.....	.....	2,159,700
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-20,000	.....	.....	-20,000
13	TRUST FUNDS	.....	.....	-78,000	.....	.....	-78,000
14	NON-FEDERAL SOURCES	.....	.....	-2,000	.....	.....	-2,000
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	283,100
	BUDGET AUTHORITY	.....	.....	2,342,800	.....	.....	2,342,800

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 97-15-3080-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
				TRANSITION			TRANSITION
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. MUNITIONS AND ASSOCIATED EQUIPMENT			32,035			48,950
	2. VEHICULAR EQUIPMENT			5,620			14,701
	3. ELECTRONICS AND TELECOMUNICATIONS EQUIPMENT			53,950			125,172
	4. OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT			291,995			304,477
	TOTAL DIRECT			383,600			493,300
	REIMBURSABLE (TOTAL)			25,000			22,350
10	TOTAL			404,600			515,650
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS			-7,500			-7,500
13	TRUST FUNDS			-17,000			-17,000
14	NON-FEDERAL SOURCES			-500			-500
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS			.....			-293,300
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS			.....			186,250
	BUDGET AUTHORITY			383,600			383,600
	BUDGET AUTHORITY:						
40	APPROPRIATION			383,600			383,600
43	APPROPRIATION (ADJUSTED)			383,600			383,600
	RELATION OF OBLIGATIONS TO OUTLAYS:						
71	OBLIGATIONS INCURRED, NET						490,650
72	OBLIGATED BALANCE, START OF YEAR						1,685,038
74	OBLIGATED BALANCE, END OF YEAR						-1,585,688
90	OUTLAYS						590,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-15-1080-0-1-051		TRANSITION
	DIRECT OBLIGATIONS:	
22.0	TRANSPORTATION OF THINGS	9,977
26.0	SUPPLIES AND MATERIALS	242,013
31.0	EQUIPMENT	241,310
	TOTAL DIRECT OBLIGATIONS	493,300
	REIMBURSABLE OBLIGATIONS:	
26.0	SUPPLIES AND MATERIALS	6,347
31.0	EQUIPMENT	16,003
	TOTAL REIMBURSABLE OBLIGATIONS	22,350
99.0	TOTAL OBLIGATIONS	515,650

INTRODUCTORY STATEMENT

DIRECT BUDGET PLAN - OTHER PROCUREMENT, AIR FORCE

($ Thousands)

Budget Activity	FY 1975	FY 1976	Difference
Munitions	196,551	399,830	+203,279
Vehicles	63,326	104,634	+ 41,308
Electronics and Telecommunications	365,801	625,956	+260,155
Other Base Maint & Support Equip	1,030,322	1,212,380	+182,058
TOTAL DIRECT PROGRAMS	1,656,000	2,342,800	+686,800

The Other Procurement, Air Force (OPAF), Appropriation provides the central procurement of all major ground equipment except for that equipment which is peculiar to the support of individual airborne weapon systems. Provision is also made for procurement of the spares and repair parts, supplies and materials, modification, and industrial facilities which are integral to the procurement programs. It also provides for local procurement of equipment items costing $1,000 or more, not centrally procured.

The appropriation consists of four budget activities: (1) Munitions and Associated Equipment; (2) Vehicular Equipment; (3) Electronics and Telecommunications Equipment, and (4) Other Base Maintenance and Support Equipment.

The total direct budget plan for FY 1975, as presented to Congress, was $2,071.8 million. The current direct program for FY 1975 is $1,656.0 million, a reduction of $415.8 million. Congressional reviews amended the request by $272.7 million. This included reductions of $125.8 million in Munitions, $10.9 million in Vehicles, $106.3 million in Electronics and Telecommunications, and $29.7 million in Other Base Maintenance and Support Equipment. The narrative in Pages 175 and 176 elaborates on these reductions. The balance of this reduction results from the transfer of $143.1 million to other appropriations to support current operations and readiness. This action reduced the FY 1975 programs for Munitions by $87.0 million, Vehicles $10.8 million, Electronics and Telecommunications $28.1 million, and Other Base Maintenance and Support, $17.2 million.

The total direct budget plan for FY 1976 is $2,342.8 million, an increase of $686.8 million over the direct budget plan for FY 1975 as shown above. Approximately $279.0 million (or 40%) of the $686.6 million increase is for new requirements, i.e., for requirements that are not now included in the 1975 or 1974 programs. Of this amount, approximately $91.0 million is for Munitions; $8.0 million for Vehicles; $133.0 million for Electronics and Telecommunications equipment, and $47.0 million for Other Base Support items. The remaining $407.8 million (60%) is for on-going programs that have increased over the program requirement for 1975 because of growth in the program requirements, inflation or, in some cases, a combination of both. Of this amount, approximately $112.0 million is for Munitions; $33.0 million for Vehicles; $127.0 million for Electronics and Telecommunications equipment; $24.0 million for Other Base Support requirements, and $111.0 million for Selected Activities.

New obligational authority equal to the amount of the direct budget plan is required to finance the planned FY 1976 program.

The total direct budget plan for FY 197T, the period July 1, 1976 through September 30, 1976, set aside for the fiscal year transition, is $383,600,000. New obligational authority equal to that amount is required to finance this transition program.

FY 1976 HIGHLIGHTS

Program requirements for Munitions and Associated Equipment are $399.8 million, an increase of $203.3 million over the program for FY 1975. The Congress approved $301.3 million for Munitions in FY 1975. The Air Force subsequently reduced the program to $196.6 million, primarily to transfer resources to other appropriations. The specific increase in the FY 1976 program over the 1975 program as approved by the Congress, is $98.5 million. This is primarily for procurement of items for WRM that are not in the programs for FY 1975 or FY 1974. These include 20MM Combat Cartridges, ALA and LUU-2 Flares, the MK-15 Hi-Drag Fin, and the MGGB Bomb.

Program requirements for Vehicular Equipment are $104.6 million, an increase of $41.3 million over the program for FY 1975. The requirement to accelerate the replacement program accounts for most of the increase. Current plans for bringing the Air Force vehicular inventory up to an efficient and economical

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operating level through modernization will require a level program of annual replacement. To do this on an orderly basis will require annual funding levels at amounts rising to approximately $120.0 million by the end of the FYDP period. This rise during the latter years of the FYDP period is primarily due to consideration of estimated inflation rates. Replacements to be accelerated over FY 1975 rates include such items as 4x2 and hi-reach maintenance trucks, 4x2 tank trucks, refuse trucks, various sized fork lift trucks, runway vacuum cleaners, road graders, and scoop loaders. Other replacements not included in the 1975 or 1974 programs are 44 passenger buses, 5 ton cargo trucks, 5 ton wreckers, 4x4 maintenance trucks, size 5 tractors, dollys, snow removal trucks, and oversnow carriers.

Program requirements for Electronics and Telecommunications equipment are $626.0 million, an increase of $260.2 million over the FY 1975 program. New programs in FY 1976 account for more than 50% of the increase. These are secure voice equipment, SPACETRACK, range improvement, AFSATCOM, Tactical Communications equipment, keyboard printers, SEEK SKYHOOK and other items of lesser cost. The balance of the increase is for a variety of on-going programs. These include such items as MARSHLAND, Traffic Control and Landing, Tactical Air Control System improvements, ADPE procurement, air base defense, Joint Surveillance Systems, wideband systems upgrade, UHF/VHF conversion and other items of lesser cost.

Program requirements for Other Base Maintenance and Support Equipment are $1,212.4 million, an increase of $182.0 million over the FY 1975 program. Approximately $111.0 million of this increase is for Selected Activities. New items in FY 1976 account for approximately 65% of the balance. These include such items as TIPI, Imagery Collection, Defense Dissemination System, relocatable buildings, and the fuel accounting systems. Increases to on-going programs are primarily for Anti-G garments, air terminal and base mechanized equipment, Depot Plant Modernization, medical and dental equipment, air cargo pallets and a variety of other items of lesser cost.

The individual budget activity justifications elaborate on the FY 1976 program requirements and provide additional detail on the above outlined increases.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
Munitions and associated equipment.....	321,975	196,551	399,830	32,035
Vehicular equipment.....	53,308	63,326	104,634	5,620
Electronics and telecommunications equipment.....	293,684	365,801	625,956	53,950
Other base maintenance and support equipment.....	972,033	1,030,322	1,212,380	291,995
TOTAL DIRECT PROGRAM.....	1,641,000	1,656,000	2,342,800	383,600
Reimbursable (total).....	91,388	204,000	100,000	25,000
TOTAL.....	1,732,388	1,860,000	2,442,800	408,600
Less: Portion of program to be obligated in subsequent fiscal years.....	-312,170	-302,500	-283,100	-107,054
Plus: Obligations incurred against prior year program funds.....	224,234	332,501	344,345	214,108
TOTAL OBLIGATIONS.....	1,644,452	1,890,001	2,504,045	515,654

PREPARED STATEMENT

The witnesses are Major General Kenneth R. Chapman, Assistant Deputy Chief of Staff, Research and Development, and Major General George Rhodes, Assistant Deputy Chief of Staff, Systems and Logistics.

Our first witness is General Chapman.

Very well, General, you have a short statement here. Would you like to read it?

General CHAPMAN. Yes; I have an abbreviated reading version.

Chairman MCCLELLAN. Your full statement will be made a part of the record, and you may proceed with the summary statement.

General CHAPMAN. Thank you, Mr. Chairman.

[The statement follows:]

Mr. Chairman and Members of the Committee

I am pleased to appear before you to present the Air Force request for Aircraft and Missile Procurement. The Air Force request is for $6.4 billion in fiscal year 1976 and $1.4 billion in fiscal year 197T. In fiscal year 1977, the Air Force is requesting authorization for $7.9 billion. The fiscal year 1976, fiscal year 197T and fiscal year 1977 requests will provide the minimum funds necessary, consistent with the full-funding provisions of the procurement appropriation definition, to sustain the ability of the Air Force to meet operational commitments.

During the past year solutions have been sought to many of the same problems facing the private sector of the economy - escalation, shortages of raw materials, and increasing lead times. These problems severely impact Air Force plans for the procurement of weapon systems needed to maintain our national security.

In the last quarter of 1974, a reestimate of escalation rates to reflect today's prevailing prices was completed.

This escalation, which we have all experienced over the past year, has led to substantial program cost increases. Specifically, escalation reassessment of major programs, as reported to the Congress in the 30 June 1974 Selected Acquisition Reports (SARs), resulted in an approximate $6 billion increase of the estimated total cost to complete all SAR programs.

Another problem concerns the impact of long lead time on production funding. We have actively pursued the application of "fly-before-buy", as I discussed with you last year. The F-16 Air Combat Fighter and the A-10 Close Air Support aircraft are excellent examples of the success we have had with this concept. However, one of our obligations under this concept is to attempt to insure a smooth transition between development and procurement; to minimize interruptions in the contractor's efforts so as not to place him in a position where he must release and then replace his hard core engineering and manufacturing personnel. In attempting to minimize costly gaps between development and production the timely availability of essential material becomes a critical factor.

As you know, there is a general scarcity of basic materials throughout our nation. This scarcity has sharply increased production lead times of critical components for Air Force weapon systems. For example, procurement lead times for aluminum plates have increased from nine weeks to 52 weeks, titanium forgings from 20 to 44 weeks, and bearings from 18 to 60 weeks. These examples are typical of dramatically lengthened procurement lead times. The timely availability of scarce materials is difficult to achieve and has placed an added burden on insuring a smooth transition.

Contractors must order material much sooner than before, which has contributed to the lengthening of system lead time by about six months.

One way to reduce the time between manufacture of development aircraft and production aircraft is to program limited procurement funds in advance of the full production decision. While these funds are held to a minimum, and do not of themselves constitute a production decision, they do allow for a more cost efficient transition period from development to production. Longer lead times may require procurement funds a year or more in advance of the full funding request in order to maintain program efficiencies. Without the availability of long lead funds we would be forced to interrupt the program's continuity and, as a consequence, introduce significant delay and instability.

My purpose in covering these general subjects at the outset of my statement is to put into context some of the real-world constraints facing our program managers. In every instance we have attempted to apply the best management principles in resolving these problems and in programming the acquisition of weapon systems.

AIRCRAFT PROCUREMENT

The Aircraft Procurement request is $4.6 billion for fiscal year 1976 and $1.1 billion for fiscal year 197T. In fiscal year 1977 the Air Force is requesting authorization for $6.3 billion. The fiscal years 1976 and 197T requests include funds for 191 and 63 aircraft, respectively, for the active inventory of the Air Force, and funds for essential aircraft modifications, spares and repair parts, and support equipment and facilities. Authorization is requested for 341 aircraft in fiscal year 1977. I will review briefly each of the items contained in this request.

TABLE I
DEPARTMENT OF THE AIR FORCE
FISCAL YEARS 1976, 197T and 1977 AIRCRAFT PROCUREMENT ESTIMATES
(In Millions of Dollars)

	QTY	FY 76 ESTIMATES	QTY	FY 7T ESTIMATES	QTY	FY 77 ESTIMATES
COMBAT AIRCRAFT						
B-1 Strategic Bomber		$ 77.0		$ 31.0	6	$ 1,160.0
A-10 Attack Aircraft	61	360.7	33	87.0	221	781.5
F/TF-15A Tactical Fighter	108	1,437.8	27	319.5	108	1,225.2
F-16						72.0
E-3A Airborne Warning & Control System	6	430.5		30.0	6	340.1
	175	$ 2,306.0	60	$ 467.5	341	$ 3,578.8
OTHER AIRCRAFT						
E-4B Advanced Airborne Command Post			3	$ 175.0		
C-12A	16	$ 11.8				
	16	$ 11.8	3	$ 175.0		
MODIFICATION OF IN-SERVICE AIRCRAFT		$ 660.7		$ 126.3		$ 916.9
AIRCRAFT SPARES & REPAIR PARTS		$ 1,101.7		$ 190.1		$ 1,127.6
AIRCRAFT SUPPORT EQUIPMENT & FACILITIES						
Support Equipment		$ 209.3		$ 29.7		$ 295.1
Component Improvement		66.2		19.0		54.2
Industrial Facilities		38.9		11.1		49.5
War Consumables		34.6		9.9		48.8
Other Production Charges		146.3		58.5		184.9
		$ 495.3		$ 128.2		$ 632.6
TOTAL DIRECT PROGRAM	191	$ 4,575.5	63	$ 1,087.1	341	$ 6,255.8
FINANCING						
New Obligational Authority						

NOTE: Totals may not add due to rounding

B-1

The B-1 is an advanced manned bomber for United States strategic forces and will be an essential factor in maintaining United States strategic sufficiency through this century. While smaller than the B-52, the B-1 will carry nearly twice the payload and take off in much shorter distances. It will also have a greater capability to penetrate enemy defenses because of its higher speeds at lower altitudes, advanced electronic countermeasures, and smaller radar cross section.

The B-1 completed its initial flight on 23 December 1974. Air Vehicle #2, the proof-loads aircraft, was delivered to the static-load test facility two weeks ahead of schedule, and will fly in mid-1976. Air Vehicle #3, the offensive avionics test aircraft, is about halfway through major assembly and is scheduled to fly in early 1976. The B-1 engine completed Preliminary Flight Rating Test (PFRT) in April 1974 and is now undergoing production qualification.

The fiscal years 1976 and 197T budget requests of $77 million and $31 million, respectively, are for long lead requirements. These funds are required for selected materials for early production aircraft and for production tools so that, given a positive production decision in November 1976, the program will be in a position to proceed without creating a costly gap between development and production. The fiscal year 1977 request is for $1,160.0 million for initial B-1 aircraft production.

A-10

The A-10 aircraft is being procured to improve the Air Force capability to provide highly effective close air

support and battlefield interdiction for friendly ground forces. The need for a dedicated aircraft for ground support is particularly significant in light of the numerical superiority in manpower and armor of Warsaw Pact ground units which confront NATO forces.

The development of the A-10 is now approximately 70 percent complete with over 1000 flight hours on the A-10 prototype and development aircraft. The development program has further reduced program risk which had been minimized by the prototype phase and continues to confirm that the A-10 is a most effective close air support aircraft. A review of the program was accomplished in July 1974 to determine if the aircraft was ready to enter low-rate production. Based on the favorable results of that review, approval was given for release of $39 million in long lead funding for the initial procurement of 52 aircraft. The full production release for fiscal year 1975 procurement was made in December 1974, after a second review confirmed the A-10's readiness for production.

The A-10 procurement schedule is structured to allow for an orderly transition from low-rate production of one aircraft per month in 1975 to full production of 20 aircraft per month by September 1978. While the procurement schedule avoids a rapid increase in production rate, the schedule insures an efficient use of existing production resources.

The Air Force request for the A-10 in fiscal year 1976 is $360.7 million; $303.5 million for procurement of 61 aircraft and $57.2 million for advance procurement. The request in fiscal year 197T is $87.0 million; $72.0 million for the procurement of 33 aircraft and $15.0 million for

advance procurement. The request for fiscal year 1977 is $740.4 million for 221 aircraft and $41.1 million for advance procurement.

F-15

The F-15 "Eagle" is an advanced tactical fighter designed specifically for superiority in air-to-air combat. The F-15 will out-climb, out-accelerate, out-turn and defeat any known or projected fighter through the 1980s. It also has the versatility to be effective in air-to-ground missions.

The F-15 flight test program, scheduled to be completed during fiscal year 1976, has met or exceeded all expectations to date. Along with the excellent performance of the F-15 weapon system, we are extremely encouraged by the prospects for reduced cost of ownership. The airplane is proving to be both durable and highly maintainable, and in terms of assembly manhours we have realized a reduction of approximately 30 percent from original estimates to build the first 20 F-15s.

The fiscal year 1976 and 197T budget requests for the F-15 weapon system are $1,437.8 million and $319.5 million, respectively. This funding is for the procurement of nine aircraft per month, 108 aircraft in fiscal year 1976 and 27 in fiscal year 197T, and for future long lead requirements. The fiscal year 1977 request of $1,225.2 million will procure 108 aircraft and necessary long lead items for follow-on buys.

F-16

The F-16 Air Combat Fighter will be a new tactical fighter incorporating advanced technology features which

significantly improve total system performance. The objective of the F-16 program is to develop a fighter which can perform a wide range of tactical air warfare tasks at reduced life cycle costs, thus permitting procurement of the quantities of aircraft required to meet increased force structure requirements. The F-16 utilizes the same engine as the F-15, exploits advanced aerodynamic features such as blended wing-body technology, a reduced static margin for increased maneuverability made possible by the control configured vehicle concept, a high visibility/high "g" cockpit incorporating a 30° reclined ejection seat and a fly-by-wire flight control system.

The F-16 is currently transitioning from the Lightweight Fighter Prototype program to the full scale development phase. The fiscal year 1977 authorization request as submitted in the FY 76 President's Budget is $72.0 million.

AWACS

The Airborne Warning and Control System, or AWACS, is a modified Boeing 707-320B with an integrated suite of avionics. With its unique ability to detect aircraft flying at low altitude over land or water, AWACS will, for the first time, provide the ability to monitor a large scale battle. AWACS will significantly contribute to a more effective integration of the capabilities of the tactical air forces supporting NATO requirements or those of other contingencies worldwide. AWACS will also be an important element in the defense of the continental United States.

The Core AWACS is needed now and will significantly mitigate existing deficiencies in tactical and strategic surveillance, command and control, and communications systems.

Production of the first six Block I aircraft was authorized in February 1975 following Secretary of Defense certification that "the AWACS is cost-effective and will meet the mission needs and requirements of the Department of Defense, particularly in a NATO tactical environment." The System Integration Demonstration (SID) test data, data from additional ECM testing, and the report of the Ad Hoc Panel on Vulnerability of AWACS to Enemy Jamming formed the basis for the certification. The first production aircraft is scheduled for delivery in November 1976.

The request for AWACS is $430.5 million for fiscal year 1976; $415.5 million for the procurement of six Block I aircraft, and $15.0 million for advance procurement; $30.0 million for fiscal year 197T for advance procurement of six Block II aircraft in fiscal year 1977; and $340.1 million for the procurement of six Block II aircraft and advance procurement in fiscal year 1977.

AABNCP

Advanced Airborne Command Post aircraft will provide survivable platforms for the National Command Authorities (NCA) and the Commander-in-Chief, SAC (CINCSAC). These aircraft will incorporate sophisticated command, control and communications (C^3)) equipment which will permit more rapid analysis of an adversary's actions and intent and will permit direction of the strategic forces consistent with the level of provocation.

The first National Emergency Airborne Command Post E-4 aircraft, configured with communications equipment transferred from the EC-135 aircraft, is now operational at Andrews AFB, Maryland. The Air Force has also accepted delivery of

Aircraft numbers Two and Three, which are now being modified and configured with existing EC-135 communications equipment. These three aircraft will serve as the interim National Emergency Airborne Command Posts to provide operational experience that will assist in design of the advanced C^3 equipment. In fiscal year 1976, we plan to accept and begin modification of the test bed aircraft to accommodate the advanced C^3 configuration.

The Air Force request for fiscal year 197T is $175.0 million to procure three E-4B aircraft in the advanced C^3 configuration. Procurement in fiscal year 197T will allow the Air Force to exercise a firm fixed-price option in the present aircraft contract, which expires in July 1976.

C-12A

The C-12A is an off-the-shelf commercial utility aircraft. The total Air Force buy of 30 C-12As will replace a variety of aging aircraft now supporting the needs of the Defense Attache system, Military Assistance Advisory Groups, and Military Groups. A request of $11.8 million in fiscal year 1976 will provide funds for procurement of 16 aircraft which will complete the Air Force requirement.

Modification of In-Service Aircraft

A request of $660.7 million is made for the Aircraft Modification Program in fiscal year 1976, $126.3 million in fiscal year 197T, and $916.9 million in fiscal year 1977. These funds will provide for increased operational capability of both aircraft and simulators, improved safety of flight, enhanced maintainability and reliability of airborne components, and will extend the service life of aircraft.

A major part of the fiscal year 1976 program is to continue modifications initiated in prior fiscal years. Included in this category is $16.5 million necessary to complete the initial effort to lengthen the C-141 aircraft and provide in-flight refueling capability. Both modifications are designed to increase the overall capability of strategic mobility forces. This effort will be accomplished using soft tooling and does not commit the Air Force to a follow-on production program.

The results of airlift requirements studies clearly support the modification of civil air carriers' wide-bodied jets to provide a needed Civil Reserve Air Fleet (CRAF) capability in the event of a crisis. We are requesting $22.0 million in fiscal year 1976 to initiate this program and $24.0 million to sustain the production effort in fiscal year 197T. The fiscal year 1977 program includes continued support for the CRAF program, initiation of the production phase of the C-141 Stretch and Aerial Refueling Capability Program, initiation of a modification of B-52 aircraft to provide it the capability to carry and employ the Harpoon missile, and continuing support for other modifications.

Aircraft Spares and Repair Parts

The request for Aircraft Spares and Repair Parts is to procure those high-cost, reparable items that must be available to accomplish the required peacetime and wartime maintenance of aircraft and related systems.

In fiscal years 1976 and 197T, the Air Force requests are for $1,101.7 million and $190.1 million, respectively. The fiscal year 1976 request contains $351.3 million for initial spares and $750.4 million for replenishment spares.

A major portion of the fiscal year 1976 initial spares requirement is in support of the F-15 program. The fiscal year 1976 request for replenishment spares will procure War Reserve Materiel (WRM) for major USAF weapon systems which include such aircraft as the C-5, the C-141, and the F-15. The procurement of WRM in fiscal year 1976 is absolutely essential if the Air Force is to improve its ability to respond when necessary.

In fiscal year 1977, the Air Force request is $1,127.6 million. These funds include support for a continuing F-15 initial spares program, the first spares buy for the B-1 aircraft, and new WRM requirements for AWACS and the F-15.

Aircraft Support Equipment and Facilities

The Air Force Support Equipment and Facilities requests of $495.3 million for fiscal year 1976, $128.2 million for fiscal year 197T, and $632.6 million for fiscal year 1977 are for a variety of equipment and facilities.

The Support Equipment request provides for the replacement of worn-out equipment, the purchase of new equipment necessary to operate, test, and maintain aircraft and related systems, and for the acquisition of simulators for in-service aircraft.

In fiscal years 1976 and 197T, the requests for support equipment total $209.3 million and $29.7 million, respectively. The fiscal year 1976 request is composed of $120.6 million for simulators and $88.7 million for support equipment. While the support equipment requirement is only slightly up over last year, the request for simulators has increased substantially. This reflects our continuing effort toward cost and energy savings. The simulators being procured in

fiscal year 1976 are for the B-52, KC-135, C-130 and the Undergraduate Pilot Training (UPT) programs.

In fiscal year 1977, the Air Force request of $295.1 million includes funds to continue support for the acquisition of simulators.

The Component Improvement Program (CIP) provides funds to improve Government Furnished Aeronautical Equipment (GFAE) by correcting operationally revealed problems and improving reliability and durability. The vast majority of CIP effort is applied to aircraft engines. Fiscal year 1976 efforts include continued improvements to engines in the A-7, F-4, F-111, F-5, and F-15. Funds requested in fiscal year 197T continue aircraft engine and equipment support and include the initial CIP for the A-10 engine. CIP efforts in fiscal year 1977 will continue to improve aircraft engines and other GFAE that are in production. The Air Force request for CIP is $66.2 million in fiscal year 1976, $19.0 million in fiscal year 197T, and $54.2 million in fiscal year 1977.

Through the Industrial Facilities Program, Government-owned, contractor-operated plants are maintained in good operating condition and in compliance with environmental standards. Additionally, new manufacturing methods which contribute to more economical and modern production processes are being established through the Manufacturing Methods Program. Also included is Industrial Preparedness Planning to insure the adequacy of a total defense production base for Air Force production requirements during peacetime and in an emergency.

The Air Force requests for Industrial Facilities for fiscal years 1976, 197T and 1977 are $38.9 million, $11.1

million and $49.5 million, respectively. In fiscal year 1976, the Air Force plans to initiate new construction projects at Air Force Plant 42 at Palmdale, in support of B-1 production and at Air Force Plants 50 and 63 to effect compliance with EPA standards.

The War Consumables Program provides for War Reserve Materiel, such as fuel tanks, pylons, and ejector racks, which are jettisoned from aircraft under certain conditions in wartime. A requirement also exists for such jettison during peacetime in-flight emergencies.

In fiscal years 1976 and 197T, the programs total $34.6 million and $9.9 million, respectively. These budget requests are for follow-on procurement of F-15 items as the aircraft phase into the inventory. Fuel tanks for F-5E peacetime operations will also be procured in fiscal years 1976 and 197T.

In fiscal year 1977, the request for $48.8 million reflects the increased requirements for F-15 items as these aircraft enter the active force in greater numbers.

Other Production Charges include requests for procurement of electronic countermeasures (ECM) pods, modification of existing pods, a simulator for electronic warfare training, and several classified projects.

The fiscal year 1976 request for $146.3 million includes $60.0 million to procure new ECM pods, including the ALQ-131, funds to update existing pods, and $50.2 million for several classified projects. The fiscal year 197T request is for $58.5 million. Of this amount, $20.8 million is for procurement and updating of ECM pods, $19.9

million for classified projects and $17.8 million for the continuation of the fiscal year 1976 projects. The fiscal year 1977 requirement for Other Production Charges is $184.9 million.

MISSILE PROCUREMENT

The Missile Procurement request is $1.8 billion for fiscal year 1976 and $0.3 billion for fiscal year 197T. In fiscal year 1977 the Air Force is requesting authorization for $1.6 billion. Funds are requested for additional Minuteman III missiles and for improvements to Minuteman through the Force Modernization Program. Also included in the Missile Procurement request are funds to continue production of the Sparrow, Sidewinder, Shrike, and Maverick missiles, and for procurement of target and tactical drones. In fiscal year 1977, the Air Force is also requesting advance procurement funds for the Short Range Attack Missile (SRAM).

Within the Missile Procurement Program, funds are included for missile modifications, spares and repair parts, and other support equipment and facilities.

I will briefly discuss the individual items in the Missile Procurement request.

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TABLE II
DEPARTMENT OF THE AIR FORCE
FISCAL YEARS 1976, 197T and 1977 MISSILE PROCUREMENT ESTIMATES
(In Millions of Dollars)

	QTY	FY 76 ESTIMATES	QTY	FY 7T ESTIMATES	QTY	FY 77 ESTIMATES
BALLISTIC MISSILES						
Minuteman II/III (LGM-30F/G)	50	$ 265.8		$		$ 36.7
Minuteman Force Modernization		387.7		$ 70.5		$ 304.9
	50	$ 653.5		$ 70.5		$ 341.6
STRATEGIC MISSILES						
AGM-69B SRAM						$ 20.3
B-52/Harpoon (AGM-84A)					90	41.0
					90	$ 61.3
TACTICAL MISSILES						
Sparrow (AIM-7F)	620	$ 80.1		$	880	$ 78.4
Sidewinder (AIM-9H)	800	22.7				
Sidewinder (AIM-9L)	710	39.5			1000	37.3
Shrike (AGM-45A)	1318	45.9	300	9.6	1337	49.2
Maverick (AGM-65A/B)	6000	144.0	1200	25.0	4650	102.0
Maverick (Laser-AGM-65C)					350	26.2
Maverick (Imagery-AGM-65D)					250	36.2
	9448	$ 332.2	1500	$ 34.6	8467	$ 329.3
OTHER MISSILES						
Target Drones		$ 20.8		$ 2.2		$ 18.9
Tactical Drones		1.6				25.5
		$ 22.4		$ 2.2		$ 44.4
MODIFICATION OF IN-SERVICE MISSILES		$ 49.1		$ .3		$ 39.1
MISSILE SPARES & REPAIR PARTS		$ 86.6		$ 6.2		$ 67.0
OTHER SUPPORT EQUIPMENT & FACILITIES		$ 647.6		$ 163.6		$ 724.1
TOTAL DIRECT PROGRAM	9448	$ 1,791.4		$ 277.4		$ 1,606.8
FINANCING						
New Obligational Authority						

Minuteman

The Minuteman force continues to contribute to international stability as an essential part of the strategic Triad. The capability of this formidable weapon system has been continually enhanced over the years by improvements in ground equipment, airborne subsystems, and command and control. This year's request provides for a continuation of the Force Modernization Program and procurement of 50 additional Minuteman III test missiles. The fiscal year 1976 request contains $265.8 million, primarily for procurement of these 50 missiles. In addition, funds are requested to continue the Minuteman Force Modernization Program, which provides improvements to in-silo survivability against nuclear attack and for remote retargeting of Minuteman III through the use of Command Data Buffer. Site improvement work is currently in process at Wing III, Minot Air Force Base, North Dakota. The $387.7 million requested in fiscal year 1976 and $70.5 million in fiscal year 197T will complete site improvement efforts at Wing III and begin improvements at another wing. The fiscal year 1977 request of $304.9 million will support additional modernization efforts.

SRAM (AGM-69A)

The SRAM is an air-to-surface missile armed with a nuclear warhead. The missile range, speed, and accuracy allow the carrier aircraft to avoid terminally defended targets. SRAMs are currently carried by B-52 and FB-111 aircraft, and are programmed to be carried by the B-1.

The Air Force request for fiscal year 1977 is $20.3 million for long lead requirements in support of fiscal year 1978 procurement of SRAMs identified for B-1 equipage.

B-52/Harpoon (AGM-84A)

The Harpoon is a Navy developed air-to-surface and surface-to-surface anti-shipping missile. The Air Force plans to modify a portion of its B-52 force to carry and launch the Harpoon, thus enhancing Air Force capability to execute its assigned collateral mission of contributing to sea-lane control. In fiscal year 1977 the Air Force request is for $41.0 million to procure 90 Harpoon missiles, in a joint Air Force/Navy procurement program.

Sparrow (AIM-7F)

The AIM-7F is the newest missile in the Sparrow family of radar guided air-to-air missiles. This missile provides both increased operational capability and reliability over previous AIM-7 missiles. The AIM-7F is a joint service acquisition program with the Navy to provide an all-weather, all-aspect, day-night missile for tactical employment at medium to short ranges in air-to-air fighter combat. The Air Force request of $80.1 million in fiscal year 1976 will provide for procurement of 620 AIM-7F missiles. The fiscal year 1977 request of $78.4 million is for the procurement of 880 Sparrow missiles.

Sidewinder (AIM-9H & AIM-9L)

The AIM-9H is an infrared seeking, air-to-air dogfight missile. The Air Force request for fiscal year 1976 of $22.7 million will procure 800 AIM-9H missiles.

The AIM-9L is a joint Service program to develop and acquire an improved dogfight missile. The AIM-9L will provide an expanded operational capability in the visual range combat encounters and will result in improved system reliability. The missile is presently scheduled for use

on the F-15 and the F-16, and is under consideration for use on the F-4E.

The Air Force request for $39.5 million in fiscal year 1976 will provide funds for the initiation of full scale production of 710 missiles. The $37.3 million request for fiscal year 1977 is for the continued procurement of AIM-9L missiles required to meet inventory requirements.

Shrike (AGM-45A)

Shrike anti-radiation missiles are designed to suppress enemy ground radars by detecting and homing on radiation sources. The Shrike system is operationally employed with the F-105G Wild Weasel and the F-4C/D, and will be deployed with the F-4E Advanced Wild Weasel aircraft.

The fiscal year 1976 request is $45.9 million for 1,318 missiles. The fiscal year 1976 buy will consist of 700 AGM-45-9 missiles, and initial procurements of 468 AGM-45-10 low band missiles and 150 improved AGM-45-7A missiles. The fiscal year 197T procurement request of $9.6 million is for additional 150 Shrike -7A and 150 -10 missiles. The fiscal year 1977 request of $49.2 million will procure 150 -7A, 719 -9 and 468 -10 versions of Shrike. All programs are structured to support inventory requirements.

Maverick (AGM-65)

The AGM-65A Maverick is an air-to-surface missile equipped with television guidance for use by F-4D/E, A-7 A-10, and F-16 tactical aircraft against fixed or moving hard targets. The Maverick's exceptional accuracy, hitting power, and launch and leave capability provides stand-off employment that will increase aircraft survivability and lower the cost per target destroyed.

The AGM-65B (Scene Magnification) Maverick is an extended range version of the AGM-65A T.V. Maverick. This missile has the capability to lock-on and be launched at slant ranges in excess of the AGM-65A.

The fiscal year 1976 request for $144.0 million will be used to procure 6,000 missiles of which 2,000 are to be AGM-65A and 4,000 AGM-65B. This procurement is on a new contract with a lower production rate of approximately 400 missiles per month. Also included in this amount is $33.3 million in advance procurement funds for missiles planned for production funding in fiscal year 197T and fiscal year 1977. The fiscal years 197T and 1977 requests are $25.0 million for 1,200 missiles and $102.0 million for 4,650 missiles, respectively. The $102.0 million in fiscal year 1977 includes $35.5 million advance procurement funds for fiscal year 1978.

The Air Force request for the Laser and Imaging Infrared Mavericks in fiscal year 1977 is $26.2 million for 350 missiles and $36.2 million for 250 missiles, respectively. The Imaging Infrared Maverick request includes $8.8 million for advance procurement for fiscal year 1978.

Close air support for ground forces will be greatly enhanced with the addition of the Laser Maverick. Using either ground or airborne illumination, this missile will become an effective anti-armor weapon during both day and night.

The Imaging Infrared Maverick will extend beyond the Laser Maverick operating environment by providing an acquisition and strike capability under reduced visibility conditions for both day and night tactical situations. The

Imaging Infrared guidance mode will be highly jam resistant, self-contained and extremely effective at night.

Target Drones

The Target Drone request for fiscal year 1976 is $20.8 million, of which $6.8 million is for Firebee drones, $12.5 million is for PQM-102 drones and $1.5 million is for drone ground launch systems. The Firebee drones are subscale targets which are satisfactory for many missile evaluations. The PQM-102 is an advanced Air Force target for use in test and evaluation of air superiority aircraft and advanced missile weapon systems. The drone ground launch system provides a catapult launch capability for Firebee targets, and will reduce the procurement of expensive Rocket Assisted Takeoff (RATO) bottles.

The target drone request for fiscal year 197T is $2.2 million, of which $1.9 million is for Firebee drones and $0.3 million is for the drone ground launch system.

In fiscal year 1977, we plan to request $18.9 million, of which $6.4 million is for Firebee drones and $12.5 million is for the PQM-102.

Tactical Drones

The BGM-34C is a multi-mission tactical drone which will be designed to fulfill the tactical roles of electronic warfare, reconnaissance and possibly tactical weapons delivery. This drone is ground or air launchable and is recoverable. The BGM-34C can be controlled by Air Force DC-130 aircraft capable of multi-drone/mission control.

The Air Force requests $1.6 million in fiscal year 1976 for long lead items for the new BGM-34C multi-mission

tactical drone, and $25.5 million for initial procurement in fiscal year 1977.

Modification of In-Service Missiles

The missile modification program request for fiscal year 1976 is $49.1 million to improve the safety, capabilities and performance of Air Force missile systems. The transition period requires $.3 million to sustain ongoing programs. The Air Force request for fiscal year 1977 is $39.1 million.

Fiscal year 1976 funds will be used to make improvements to Sidewinder, Titan II, Shrike, Standard ARM, and the BQM-34 target drone; convert BOMARC missiles to high speed aerial targets, and modify AIM-9B missiles transferred to the Air Force from the Navy inventory. Also included are funds to continue modification of the Minuteman launch control equipment. Fiscal year 1976 funds will also be used to complete the upgrade hardening program for Minuteman II and for anticipated operational update and repair of the Mark 12 re-entry systems, the guidance systems, and the post-boost propulsion systems.

Missile Spares and Repair Parts

The Missile Spares and Repair Parts Program provides for the procurement of initial and replenishment spares and repair parts, plus replacement equipment for strategic and tactical missiles and target drones.

The fiscal year 1976 request is for $86.6 million and includes $23.0 million for replacement equipment primarily for Minuteman II and III items originally procured for Minuteman I, which now require replacement because they are no longer economically reparable. $55.2 million is

for replenishment spares and repair parts, Minuteman re-entry vehicle time change items, and normal annual replenishment spares support for Minuteman II and III. Funds are also provided for annual replenishment support of other missiles, such as Sparrow, Sidewinder, and Titan II. The initial spares requirement is $8.4 million, and provides spares for new missile acquisitions.

The fiscal year 197T requirement is $6.2 million and includes $2.9 million for replacement equipment, $2.3 million for replenishment spares, and $1.0 million for initial spares. In fiscal year 1977 the Air Force is requesting $67.0 million.

Other Support Equipment and Facilities

The last segment of the Missile Procurement program contains requests for Missile Industrial Facilities, Space efforts, Classified Drones and USAF Special Projects. The Air Force request in support of this group of activities is $647.6 million in fiscal year 1976, $163.6 million in fiscal year 197T and $724.1 million in fiscal year 1977.

The Industrial Facilities program maintains Government-owned, contractor-operated plants in good operating condition and within environmental standards and establishes new manufacturing processes. In fiscal year 1976, the Air Force request is for $5.5 million. Principal efforts include capital rehabilitation and modernization projects, and establishing pilot production processes employing technical advances resulting from R&D efforts. The fiscal year 197T request of $1.9 million is required to continue the Manufacturing Methods Program and the rehabilitation of

Air Force-owned production equipment. In fiscal year 1977, the Air Force request is $8.3 million.

The Defense Satellite Communications System (DSCS) is a synchronous equatorial communications satellite system. It was developed and procured by the Air Force for the Defense Communications Agency to provide secure, long distance satellite communications capability in support of critical command, control, intelligence, warning, Presidential, ground mobile forces and other special user requirements.

The fiscal years 1976 and 7T procurement requests are $36.7 and $1.1 million, respectively, and include funds for the procurement of one TITAN IIIC launch vehicle and continued program support for the procurement of the six replenishment DSCS II satellites.

The fiscal year 1977 procurement budget request of $63.6 million will procure the remaining two Titan IIIC launch vehicles required to accommodate the six replenishment satellites being procured.

The Defense Meteorological Satellite Program (DMSP) is the DOD's most important single source of weather data. Two DMSP satellites supply U.S. Armed Forces and other agencies with high-quality visual and infrared imagery, and specialized meteorological data.

The Air Force request is for $30.1 million in fiscal year 1976, $2.0 million in fiscal year 197T and $27.4 million in fiscal year 1977. In fiscal year 1976, we will procure two Block 5D satellites with visual and infrared sensors, and the required logistics and launch support services. Fiscal year 197T funds will be used for a

three-month continuation of logistics and launch support services. In fiscal year 1977 the Air Force will buy two more Block 5D satellites, and the required logistics and launch support services.

The Defense Support Program (DSP) satellites contain sensors which provide near realtime data to the National Command Authorities and designated users. Two ground stations receive, process and transmit satellite mission data to the Aerospace Defense Command, Strategic Air Command and National Military Command Center.

The fiscal years 1976 and 197T requests of $39.1 and $3.8 million, respectively, provide funding for completion of the satellite 10-12 retrofit program; support funding for Titan-IIIC boosters maintained in storage; and funding of General Systems Engineering/Technical Direction support. The fiscal year 1977 request of $31.8 million will provide for continued support and will procure DSP program peculiar booster interface equipment.

The Air Force Satellite Communications System (AFSATCOM) is a total system concept which uses the communications capability of several satellite programs, and will provide the National Command Authorities an efficient capability for global command and control of strategic force elements. The AFSATCOM System space segment consists of a part of the communications capability of the Navy Fleet Satellite Communications (FLTSATCOM) satellites, the Air Force Satellite Data System (SDS) Program, and special transponders carried on other DOD host satellites. These various elements of the space segment increase the survivability of the system and provide the required global coverage. The earth segment

equipment required to communicate through the space segment includes terminals installed in strategic aircraft, ICBM launch control centers and key ground sites. The ground terminals and transponders are funded within the AFSATCOM Program.

The FLTSATCOM Program is under the executive management of the Navy and, although the Air Force is developing, procuring and launching the satellites, the required funding is programmed by the Navy and will not be addressed herein.

The AFSATCOM Program fiscal year 1976 funds request of $1.7 million will be used to procure equipment and general systems engineering and technical direction support for transponder operation in the AFSATCOM test and evaluation program. In fiscal year 1977, $34.1 million is requested to procure transponder equipment and a Titan-IIIC booster. The Titan-IIIC booster supports both the integrated Titan Procurement Plan and the planned initial launch of an improved communication satellite program which will incorporate electronic survivability techniques, presently being developed, in support of the evolutionary advancement of the AFSATCOM System.

The SDS Program fiscal years 1976 and 197T requests are for $9.6 and $13.4 million, respectively. These funds are required to procure a Titan-IIIB/Agena launch vehicle launch services and propellants. The fiscal year 1977 request is $9.6 million and provides funds to refurbish the

qualification model spacecraft as a flight spare and for incentive payments.

The Air Force Classified Drones request is $7.8 million in fiscal year 1976, $3.1 million in the fiscal year 197T period, and $24.5 in fiscal year 1977. The Air Force Special Programs request is $517 million in fiscal year 1976, $138.3 million in the fiscal year 197T, and $524.8 million in fiscal year 1977.

SUMMARY

To summarize, the Air Force Aircraft and Missile Procurement request for fiscal year 1976 is $6.4 billion, of which $4.6 billion is for aircraft procurement and $1.8 billion is for missile procurement.

I will be pleased to respond to your questions.

BUDGET REQUEST

General CHAPMAN. Mr. Chairman and members of the committee, I am pleased to appear before you to present the Air Force request for aircraft and missile procurement. The Air Force request is for $6.4 billion in fiscal year 1976 and $1.4 billion in fiscal year 197T. In fiscal year 1977, the Air Force is requesting authorization for $7.9 billion. Initially, I would like to discuss some of the major problems facing the Air Force today.

In the last quarter of 1974, a reestimate of escalation rates to reflect today's prevailing prices was completed. This escalation has led to substantial program cost increases. Another problem concerns the impact of long lead time on production funding.

One of our obligations in pursuing the "fly-before-buy concept" is to attempt to insure a smooth transition between development and procurement, to minimize interruptions in the contractor's efforts so as not to place him in a position where he must release and then replace his hard core engineering and manufacturing personnel. In attempting to minimize costly gaps between development and production the timely availability of essential material becomes a critical factor.

A general scarcity of basic materials has sharply increased production lead times of critical components and has placed an added burden on insuring a smooth transition. Contractors must order material much sooner than before, which has contributed to the lengthening of system lead time by about 6 months.

NEED FOR LONG LEAD FUNDING

One way to reduce the time between manufacture of development aircraft and production aircraft is to program limited procurement funds in advance of the full production decision. While these funds do not of themselves constitute a production decision, they do allow for a more cost efficient transition from development to production. I would now like to address our Aircraft Procurement request.

Chairman MCCLELLAN. Suppose you don't procure after expending all of these lead time funds. What is the loss involved in it?

General CHAPMAN. The loss in general, depending upon whether you are buying tooling or materials with these funds, ranges up to about 85 percent. In other words, if you are buying tooling with the long lead funds that is generally not recoverable. If you are buying materials that generally is recoverable.

Chairman MCCLELLAN. Those materials can be used in some other program?

General CHAPMAN. Yes, sir. It depends exactly on what is involved and what is peculiar to each program. I think the outside figure is 85 percent.

Chairman MCCLELLAN. You can lose as much as 85 percent?

General CHAPMAN. If it is tooling, yes, sir.

Chairman MCCLELLAN. All right. You may proceed.

General CHAPMAN. The Air Force's Aircraft Procurement request is $4.6 billion for fiscal year 1976 and $1.1 billion for fiscal year 197T. In fiscal year 1977 the Air Force is requesting authorization for $6.3

billion. I will review briefly each of the items contained in this request, beginning with the B–1.

B–1 BOMBER

The B–1 completed its initial flight on December 23, 1974, and the engine, which completed preliminary flight rating test (PFRT) in April 1974, is now undergoing production qualification.

The fiscal years 1976 and 197T budget requests of $77 million and $31 million, respectively, are for long lead materials and production tools so that, given a positive production decision in November 1976, the program will be in a position to proceed without creating a costly gap between development and production.

Senator YOUNG. Could I ask a question there?

If the Congress voted to discontinue the B–1, how much would be lost or how much have you spent on the program so far? Do you have the figures?

General CHAPMAN. I have that but not on the tip of my tongue.

Senator YOUNG. You can furnish it for the record. I would be very much interested in knowing. It would be very helpful.

Chairman MCCLELLAN. Will you indicate what would be salvageable if the program was discontinued?

General CHAPMAN. I will get that.

[The information follows:]

B–1 DISCONTINUED/AMOUNT LOST

At the end of fiscal year 1975, we will have spent $2.027 billion on the B–1 Program. Since the money was spent on development, we have both tangible and intangible items to show for this sum. Our major tangible assets are the three airplanes, one currently flying, one essentially structurally complete and undergoing static loads testing, and one in the final assembly process. Other hardware assets include the engines and spare parts required to support both aircraft and engine testing. We also have the engineering and some production plans for the aircraft, engines, and associated equipment.

The major assets that accrue to a large development effort such as the B–1 are not the physical items, but the intangibles—principally the capability represented by the team of trained, experienced contractor and government personnel. This team has demonstrated its capability to design, manufacture, assemble and test a very sophisticated weapon system. The aircraft and the other hardware items are only the physical evidence of this capability which would be lost if the program were discontinued.

PROHIBITIVE COSTS OF B–1 PROGRAM

Chairman MCCLELLAN. We have a problem on this B–1. The cost of it appears prohibitive and I don't know whether we can continue with it. I am sure there will be a heavy loss if we don't proceed, but we must weigh that against the extravagant cost of the entire program, before we can reach a decision.

Senator YOUNG. We have already spent $2 billion?

General CHAPMAN. That is the correct figure.

Chairman MCCLELLAN. What could you salvage out of it? Would you get anything out of it?

General CHAPMAN. First, we would have one aircraft, and another one a test aircraft. I am sure some of the engine work would be applicable to other programs at a later time.

Chairman MCCLELLAN. Engineering work; is that all?

General CHAPMAN. Some engineering work that has been done.

Chairman MCCLELLAN. Why does this plane cost so much, General? Are we building something so super that it is going to be impracticable?

General CHAPMAN. Senator, I think one has to put that in relative terms. If we were to buy a 747 aircraft today, that aircraft costs about $30 million.

Chairman MCCLELLAN. You are talking about the commercial jet airplane.

General CHAPMAN. Yes, so that $25 million or $30 million is in the range of a large high performance modern airplane, even for the commercial side. Inflation aside we still believe that we are within about 11 percent of our initial estimate in 1970 of the cost of the B–1 which is around $45 million in 1970 dollars. Obviously, the B–1 with its bombing capability and navigation equipment and electronic warfare equipment is a more expensive airplane than the 747. It has all of these additional military features.

Chairman MCCLELLAN. I expect there will be strong opposition to continuing with the B–1. That is indicated already. I can say frankly that I have come to no conclusion about it. I want to get the facts and try to evaluate them before making a decision.

May I say to you now, you had better make the very best record you can for this plane, because the appropriation for it is going to be under heavy atack.

General CHAPMAN. Yes, sir.

AGE OF B–52 BOMBERS

Senator INOUYE. How old are the B–52's now?

General CHAPMAN. Well, they were first put in production in the early 1950's. First flight was in 1952. Some are 20 years old.

Senator INOUYE. What is the usual life span of an aircraft of that nature?

General CHAPMAN. Well, it depends on how it is used, but normally it is about 30,000 hours flight time as an outside limit on an airplane of that type. That depends on how you fly them. For 1,000 hours a year it is 30 years.

Senator INOUYE. So whether it is B–1 or some other designation, the Air Force, if it is to maintain its present mission, must have new aircraft?

General CHAPMAN. That is our belief, yes, sir.

General GREENLEAF. The average age of the B–52 in the Air Force now is 15½ years.

Senator INOUYE. If you proceed on schedule, you may have to come out with the B–1's just about the time you are forced to phase out the B–52's.

General CHAPMAN. Unless we have a major modification of the B–52's.

Senator INOUYE. How much would the major modification cost?

REWINGING AND REENGINING PROGRAM

General CHAPMAN. At that point in time we would have to look at rewinging on the G's and H's and reengining the aircraft. I don't have a number for that, but will provide it for the record.

[The information follows:]

COST OF MAJOR MODIFICATION TO B–52s

The estimated cost to re-engine, with 4 engines of the B–747 type, provide a Supercritical Wing, enlarge the weapons bay, reduce to 4-man crew compartment, improve ride control quality, provide Improved Offensive Avionics, and provide B–1 Defensive Avionics for 5 RDT&E Aircraft and 240 Production Aircraft is about $40 million per aircraft program unit cost in then year dollars; total cost of 245 aircraft is estimated to be about $9.7 billion.

EXTENDED LIFE OF B–52

General GREENLEAF. We are now extending the life on the oldest version of that aircraft, the B–52, by modifying the wing. Funds were approved last year that will allow us to operate that aircraft into the early 1980's. Then we start phasing them out and that is when a new aircraft will be necessary.

Senator INOUYE. Would you provide for the record a comparison between the B–52 and the B–1, the range, speed, pay load, capabilities and so on?

General CHAPMAN. Yes, Senator.

I might add in response to your other question that even after we rebuilt the B–52's, there is the question of equal capability and certainly the B–52's do not have the capability of the B–1.

[The information follows:]

	B–1	B–52G/(H)
Take-off gross weight (1,000 lb.)	395	488.
Internal payload (maximum)	24 SRAM/gravity	8 SRAM/4 gravity.
Range with 1 tanker (nm):		
Launch to L/L entry	[Deleted].	
Low altitude distance		
Total range [2]		
Speed (mach):		
High altitude		
Low altitude		
Penetration altitude (ft.)		
CEP (ft.):		
SRAM		
Gravity bombs		
Radar cross section (square meters)		

[1] Design mission is based on nominal 50,000 lb. internal carriage capacity (which equates to 23 SRAM by weight).
[2] Includes [deleted] nm high altitude recovery distance.
[3] Cruise speed indicated. B–1 has supersonic capability at high altitude.
[4] [Delete] Mach to target, [deleted] Mach withdrawal.
[5] Assumes B–52 electro-optical viewing system (EVS) operational.

COMPARABLE SOVIET BOMBER

Senator INOUYE. Do the Soviets have anything comparable to the B–1?

General CHAPMAN. The Backfire is in that class and I am not sure it is exactly comparable. The B–1 is a better aircraft.

BOMBER STUDY

Senator YOUNG. Last year you will recall this committee in its report asked the Air Force to make a cost reduction study and evaluation of the B–1. What ever happened to that study?

General CHAPMAN. That study was completed and it was reported, I believe, by the Secretary of the Air Force about a month ago.

Senator YOUNG. To whom?

Colonel GILBERT. The study was completed and the committee has been notified that a study is available. We can provide that at any time.

General CHAPMAN. It was offered in either briefing form or written form, sir.

Chairman MCCLELLAN. How many of these B–1's do we expect to procure?

General CHAPMAN. We are expecting to procure 240, sir.

Chairman MCCLELLAN. At a cost of what per copy?

General CHAPMAN. In then-year dollars, I think it is about $84 million per copy.

Chairman MCCLELLAN. You may proceed.

FIGHTER AND ATTACK AIRCRAFT

General CHAPMAN. Thank you, sir.

The development of the A–10 is now approximately 70 percent complete with over 1,000 flight hours on the A–10 prototype and development aircraft. Based on the favorable review of the program in July 1974, approval was given for release of $39 million in long lead funding for the initial procurement of 52 aircraft. The full production release for fiscal year 1975 procurement was made in December 1974, after a second review confirmed the A–10's readiness for production.

The Air Force request for the A–10 in fiscal year 1976 is $360.7 million for the procurement of 61 A–10's and advance procurement. In fiscal years 197T the request is $87 million.

The F–15 flight test program is scheduled to be completed during fiscal year 1976. The F–15 is proving to be both durable and highly maintainable, and in terms of assembly man-hours we have realized a reduction of approximately 30 percent from original estimates to build the first 20 F–15's.

The fiscal year 1976 and 1976T budget requests are $1,437.8 million and $319.5 million, respectively. These funds will procure nine aircraft per month and future long lead requirements.

The objective of the F–16 program is to develop a fighter which can perform a wide range of tactical air warfare tasks at reduced life cycle costs. The F–16 is currently transitioning from the lightweight fighter prototype program to the full scale development phase. The fiscal year 1977 authorization request as submitted in the fiscal year 1976 President's budget is $72 million.

AWACS

AWACS, with its unique ability to detect aircraft flying at low altitude over land or water, will provide the capability to monitor a large scale battle, and will contribute significantly to a more effective integration of the tactical air forces supporting NATO or other contingencies worldwide. AWACS will also be an important element in the defense of the continental United States.

Production of the first six Block I aircraft was authorized in February 1975, following Secretary of Defense certification. The system integration demonstration (SID) test data, data from additional ECM testing, and the report of the ad hoc panel on vulnerability of AWACS to enemy jamming formed the basis for the certification.

The first production aircraft is scheduled for delivery in November 1976. The Air Force's requests for AWACS are $430.5 million for fiscal year 1976 for six Block I aircraft and advance procurement; and $30 million for fiscal year 197T for advance procurement.

AABNCP

The First National Emergency Airborne Command Post E–4 aircraft is now operational at Andrews AFB, Md. Aircraft Nos. 2 and 3 are now being modified and configured with existing EC–135 communications equipment.

In fiscal year 1976, we plan to accept and begin modification of the test bed aircraft to accommodate the advanced C^3 configuration. The Air Force request for fiscal year 197T of $175 million is to procure three E–4B aircraft in the advanced C^3 configuration. Procurement in fiscal year 197T will allow the Air Force to exercise a firm fixed-price option in the present aircraft contract, which expires in July 1976.

C–12A

The C–12A is an off-the-shelf commercial utility aircraft. A request of $11.8 million in fiscal year 1976 will provide funds for procurement of 16 aircraft which will complete the Air Force requirement.

AIRCRAFT MODIFICATION PROGRAMS

A request of $660.7 million is made for the aircraft modification program in fiscal year 1976 and $126.3 million in fiscal year 197T.

Under this program, a prototype of the mod to lengthen the C–141 and provide in-flight refueling capability will be completed in fiscal year 1976. Also, modification of civil air carrier's wide-bodied jets will be initiated in fiscal year 1976.

Additional funds for items such as aircraft spares and repair parts, support equipment and facilities, the component improvement program and war consumables amount to $1,597 million in fiscal year 1976 and $318.3 million in fiscal year 197T. These items are discussed in greater detail in my full statement.

MISSILE PROCUREMENT

The missile procurement request is $1.8 billion for fiscal year 1976 and $0.3 billion for fiscal year 197T. I will briefly discuss the individual items in the missile procurement request.

This year's Minuteman request provides for a continuation of the force modernization program and procurement of 50 additional Minuteman III test missiles. Site improvement efforts at Wing VI will be completed in 1976 and with fiscal year 1976 and 197T funds improvements at another wing will be initiated. The Air Force requests are $657.2 million in fiscal year 1976 and $70.5 million in fiscal year 197T.

The AIM–7F is a joint service acquisition program with the Navy to provide an all-weather, all-aspect, day-night missile for tactical employment at medium to short ranges in air-to-air fighter combat. The Air Force request of $80.1 million in fiscal year 1976 will provide for procurement of 620 AIM–7F missiles.

The AIM–9H is an infrared seeking, air-to-air dogfight missile. The Air Force request for fiscal year 1976 of $22.7 million will procure 800 AIM–9H missiles.

The AIM–9L is a joint service program to develop and acquire an improved dogfight missile. The AIM–9L will provide an expanded operational capability in the visual range combat encounters and will result in improved system reliability. The Air Force request for $39.5 million in fiscal year 1976 will provide funds for the initiation of full-scale production of 710 missiles.

Shrike anti-radiation missiles are designed to suppress enemy ground radars by detecting and homing on radiation sources. The shrike system is operationally employed with the F–105G Wild Weasel and the F–4C/D, and will be deployed with the F–4E Advanced Wild Weasel aircraft. The fiscal year 1976 request is $45.9 million for 1,318 missiles.

The AGM–65A Maverick is an air-to-surface missile equipped with television guidance for use by F–4D's and E's the A–7, A–10, and F–16 tactical aircraft against fixed or moving hard targets. The AGM–65B—Scene Magnification—Maverick is an extended range version of the AGM–65A. The fiscal year 1976 request for $144.0 million will be used to procure 6,000 missiles; 2,000 of the A version and 4,000 of the B version and includes advance procurement funds for additional buys in fiscal year 1977. The fiscal year 197T request is $25.0 million for 1,200 missiles.

The Target Drone request for fiscal year 1976 is $20.8 million for Firebee drones, PQM–102 drones and for drone ground launch systems. The Firebee drones are subscale targets which are satisfactory for many missile evaluations. The PQM–102 is an advanced Air Force target for use in test and evaluation of air superiority aircraft and advanced missile weapon systems. The drone ground launch system provides a catapult launch capability for Firebee drones, and will reduce the procurement of expensive Rocket Assisted Takeoff (RATO) bottles. We are requesting $2.2 million in fiscal year 197T for target drones.

The BQM–34C is a multimission tactical drone which will be ground or air launchable and is recoverable. The Air Force requests $1.6 million in fiscal year 1976 for long lead items for this multi-mission tactical drone, leading to initial procurement in fiscal year 1977.

The missile modification program request for fiscal year 1976 is $49.1 million to improve the safety, capabilities, and performance of Air Force missile systems. The transition period request is for $.3 million to sustain ongoing programs.

The fiscal year 1976 missile spares and repair parts request is for $86.6 million and includes $23.0 million for replacement equipment primarily for Minuteman II and III items originally procured for Minuteman I; $55.2 million for replenishment spares and repair parts, Minuteman reentry vehicle time change items, and normal annual replenishment spares support for Minuteman II and III; and replenishment support of other missiles. The initial spares requirement is $8.4 million, and provides spares for new missile acquisitions. The fiscal year 197T requirement is $6.2 million, and provides for replacement equipment, and initial and replenishment spares.

The last segment of the missile procurement program contains requests for missile industrial facilities, space efforts, classified drones, and USAF special projects. The Air Force request in support of this group of activities is $647.6 million in fiscal year 1976 and $163.6 million in fiscal year 197T.

SPACE PROGRAMS

The defense satellite communications system (DSCS) is a synchronous equatorial communications satellite system. It was developed and procured by the Air Force for the Defense Communications Agency to provide secure, long distance satellite communications capability in support of critical command, control, intelligence, warning, Presidential, ground mobile forces, and other special user requirements. The fiscal years 1976 and 197T procurement requests are $36.7 and $1.1 million respectively, and include funds for the procurement of 1 Titan IIIC launch vehicle and continued program support for the procurement of the 6 replenishment DSCS II satellites.

The defense meteorological satellite program request is for $30.1 million in fiscal year 1976 and $2.0 million in fiscal year 197T. In fiscal year 1976, we will procure two block 5D satellites with visual and infrared sensors, and the required logistics and launch support services. Fiscal year 197T funds will be used for a 3-month continuation of logistics and launch support services.

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The Air Force satellite communications system (AFSATCOM) is a total system concept which uses the communications capability of several satellite programs, and will provide the National Command Authorities an efficient capability for global command and control of strategic force elements. The AFSATCOM system space segment consists of a part of the communications capability of the Navy fleet satellite communications (FLTSATCOM) satellites, the Air Force satellite data system (SDS) program, and special transponders carried on other DOD host satellites.

The AFSATCOM program fiscal year 1976 funds request of $1.7 million will be used to procure equipment and general systems enginering and technical direction support for transponder operation in the AFSATCOM test and evaluation program.

The satellite data system program fiscal years 1976 and 197T requests are for $9.6 million and $13.4 million, respectively. These funds are required to procure a Titan–IIIB/Agena launch vehicle services and propellants.

The Air Force classified drones request is $7.8 million in fiscal year 1976, and $3.1 million in the fiscal year 197T. The Air Force special

programs request is $517 million in fiscal year 1976 and $138.3 million in the fiscal year 197T.

To summarize, the Air Force aircraft and missile procurement request for fiscal year 1976 is $6.4 billion, of which $4.6 billion is for aircraft procurement and $1.8 billion is for missile procurement.

I will be pleased to respond to your questions.

NUMBER OF AIRCRAFT PROCUREMENT PROGRAMS

Chairman McCLELLAN. General, how many plane procurement programs do you have going on at this time?

General CHAPMAN. Well, it will take me a second to answer that. We have approval from the Secretary of Defense on a program, for example, like the A–10. Whether you would consider that is a procurement program, I am worried about the definition. We have authority to procure 52 A–10's.

Chairman McCLELLAN. That is a procurement program. In other words, you have reached a stage where you are now beyond the stage of research and development and are beginning procurement.

I would like to have them identified here if we can.

General CHAPMAN. Let me see if I can identify them. We have procurement on the AWACS which uses the 707 airplane. We have procurement on the airborne command post which is the 747 airplane, and we have procurement on the F–15. We have procurement on the A–10 by our definition that we have just used.

I would not say we have procurement on the B–1.

Chairman McCLELLAN. Will you please identify those which are still in the research and development stage.

General CHAPMAN. The F–16 certainly—let me back up, Mr. Chairman, and say the A–7 depending on the decision problem there. We could be procuring these, as I understand the latest event in the Congress, we would procure the A–7 but perhaps not for the F–111.

Chairman McCLELLAN. The F–111 is out. The House voted it out on the floor and the Senate agreed yesterday.

General CHAPMAN. We are still procuring C–130 aircraft. The C–12 aircraft that I reported, we would have some interest in that, 16 of those, and so all of those are still in procurement. And the F–4's—I am sorry, I left that one out.

The F–16, I think, is the one you are most familiar with; it is certainly the one that is getting the greatest attention today.

Then I would put the B–1 as still in the development stage since we do not have a production decision on the B–1. The AMST is the transport that is being done by McDonnell Douglas and Boeing that would be a development aircraft.

Chairman McCLELLAN. That is three in major development.

General CHAPMAN. Yes, and I believe that is all that comes to mind, those three.

Chairman McCLELLAN. Those three are in development?

General CHAPMAN. Yes, sir.

Chairman McCLELLAN. And how many in the procurement stage?

General CHAPMAN. I mentioned about eight.

NUMBER OF MISSILE PROCUREMENT PROGRAMS

Chairman McClellan. Can you identify the missile programs in the same way—how many are now in procurement and how many are still in R. & D.?

General Chapman. We only have in a true sense, in the big missile, one missile in R. & D. and that is our so-called M–X program which is looking at some mobile version perhaps of a Minuteman.

Chairman McClellan. For appropriation purposes, we can say that all missile programs are in procurement?

General Chapman. Yes, there are some modifications of the air-to-air missiles that we are looking at jointly with the Navy, but I would say that we have not defined those so that we have a specified missile program in development. They are all on a procurement basis, basically.

Chairman McClellan. Could you make a determination with respect to priority, indicating which of the weapons or which of the missiles has the highest rating or the highest preference for procurement?

General Chapman. No, I am afraid I couldn't do that, Senate McClellan. It is a very tough question.

Chairman McClellan. I know it is. But who in the Department would do that for us? Would it be your Secretary?

General Chapman. I think that the Secretary would have to do that, the Secretary of Defense. We would then debate at the Secretary of Defense level whether the B–1 was more important than the Trident. It is a difficult question, as you know.

Chairman McClellan. Well, it is difficult but you must be prepared with the necessary information to try to ward off assaults on those. If it is important that a procurement program continue, it is necessary for us to have the best advice you can give us along those lines.

General Chapman. I understand.

Chairman McClellan. You had better take this thing seriously, in view of the fact that we are going to have a $75 billion to $100 billion deficit in the 1976 budget. I think there will be efforts to penalize—that is what it amounts to in my judgment—the Defense Department in order to minimize the size of our deficits. Many Members will want more money for programs other than defense, so it is going to be a hard battle in my judgment.

We need to be reinforced here with factual information. We need to know which program will be damaged least by a reduction—which has the lowest priority. Your Department must counsel us along those lines as best you can.

Let us return to the B–1 a moment. I am concerned about that. I have supported it in the past, but it is going to cost over $80 million a plane. That program alone in the next few years is going to cost $20 billion, or $4 or $5 billion a year.

When we get the plane, what do we have that is so superior? The F–111 has now been cancelled by the Congress, we are not procuring any more of them. The only reason, frankly, that I voted to keep the F–111 line open was because if we did not procure the B–1, I felt it

might provide a source of substitute, even though it might not be near as good.

So tell us about this B–1.

B–1 PERFORMANCE CAPABILITIES

General CHAPMAN. Well, I think the performance capability is very great.

Chairman MCCLELLAN. What are its superior performance features that make it worth $80 million per copy?

Genera CHAPMAN. Well, I think the key performance is its payload. That is probably the most important thing.

Chairman MCCLELLAN. What is its payload?

General CHAPMAN. Well, it is twice the B–52 in round numbers. I am not sure I have a direct comparison.

Chairman MCCLELLAN. It is 25 tons, is that right?

Now, is that in bombs?

General CHAPMAN. That is not the maximum load but it is the design nuclear mission load in bombs or missiles; yes, sir, air-to-ground missiles. I think the second key feature that we would bring out is the penetrativity, to go in against what we project as the defenses that the Soviets will have in the 1980's.

Chairman MCCLELLAN. What are its superiority qualities in that regard?

General CHAPMAN. It has both excellent radar and low radar cross section as compared to the other airplanes.

Chairman MCCLELLAN. That enables it to go down low under the radar?

General CHAPMAN. Yes, and it is more difficult to see than the F–111.

Chairman MCCLELLAN. Why is that?

General CHAPMAN. Because it has been built to try to minimize its radar cross section, so that the radar can't see it as easily.

Chairman MCCLELLAN. So you think you have a plane that can sneak down under radar and get to the target?

General CHAPMAN. Yes, and it has a minimum for that size aircraft, a minimum radar cross section. It is not invisible; it is too big an airplane to be invisible.

Chairman MCCLELLAN. Now, is carrying such a heavy payload all that important? Do you have to have that much bomb destructive power to knock out a target?

General CHAPMAN. It is not just one target, Senator McClellan. Obviously, as you know, the target assignments are made to the strategic missile forces, both the Air Force and Navy, and to the strategic bomber force.

Chairman MCCLELLAN. This would be a strategic bomber, would it not?

PAYLOAD OF STRATEGIC BOMBER

General CHAPMAN. Yes; its payload is allocated against targets assigned to that portion of the force so that it doesn't drop its weapons on just one target. Obviously, if it penetrates the Soviet Union, it has a number of targets.

Chairman MCCLELLAN. It may hit a target in one town and then move on to another one?

General CHAPMAN. Yes, sir.

Chairman MCCLELLAN. And in other words, on one flight it can carry the bombs necessary to destroy several targets located at different areas?

General CHAPMAN. Yes, sir; exactly.

Chairman MCCLELLAN. Is that the big advantage of the payload—that it can do so much more on one mission, and hit so many more targets?

General CHAPMAN. Yes, sir; it is one advantage.

Chairman MCCLELLAN. What other advantage does it have?

General CHAPMAN. We think it has a tremendous advantage in its range and speed. It does have a much longer range, although there are versions of the F–111 which can be structured to have nearly the same range at the expense of payload. The range is a significant advantage over the current bomber force.

The prelaunch survivability is one thing we have been interested in.

Chairman MCCLELLAN. What is that?

B–1 SURVIVABILITY

General CHAPMAN. That means that the B–1 would be capable of getting off the ground and into the air between the time that we think there may be an attack on this country and the time that it occurs. If one imagines that that attack might come from a submarine, with the notion of getting these airplanes airborne so that they are not blown up on the airfield is important. The B–1 can reach a safe escape distance much quicker than our B–52's or F–111. So we will have a significant improvement over the present launch survivability. This is a key feature of the B–1.

Chairman MCCLELLAN. You do have need for a greater protection of them because of their cost?

General CHAPMAN. Yes, sir, but that protection is afforded by the B–1's quick flyout from alert.

Chairman MCCLELLAN. We are putting so much into one plane, if one plane is shot down we have a terrific loss. Half a dozen of the normal bombers could be lost without such a heavy financial loss. That is one thing that concerns me.

General CHAPMAN. I don't think my friend—I don't want to speak against my friend in the Navy, but submarines cost a lot. The problem of putting a lot of money in one system is important.

Chairman MCCLELLAN. They have the same problem with the Trident, I realize that. And that is one reason we are not building any more big battleships, they are too vulnerable. We are relying more on carriers and airpower.

General CHAPMAN. Yes, sir.

Chairman MCCLELLAN. Well, I would like very much to have you give special attention to this B–1. You need to give us every fact, every factor of superiority, why you need it and what it will contribute.

I want to become thoroughly familiar with this plane, because there will be an effort to eliminate appropriations for it. Unless we have something else, the production line will be shut down. I guess it could be reopened, but it would be at a great cost.

Senator Hruska, do you have any questions?

Senator HRUSKA. No, thank you, I am a devotee of the concept and the fact of the B–1 and I come by it honestly, sir.

SAC headquarters are located about nine miles south of my residence in Omaha, and I have become very heavily indoctrinated.

Chairman MCCLELLAN. Does that influence you?

Senator HRUSKA. Only insofar as the facts are concerned, and I deal only in facts.

Chairman MCCLELLAN. That is what I have been asking them for.

Senator HRUSKA. I have no further questions. As we go along and as the arguments of those who would like to dispense with this program and to stultify it, I would like to call on you, General Chapman, and your associates.

B–1 TESTS

Did you go into the more recent tests of the B–1 and have you given an account of it in your testimony?

General CHAPMAN. Not in this testimony. We were speaking of the procurement account only and not speaking of the research and development test account. We will go into more of that tomorrow and we will have testing details of the B–1.

QUESTION SUBMITTED BY CHAIRMAN M'CLELLAN

Chairman MCCLELLAN. General Chapman, I have questions that I would appreciate your answering for the record.

[The questions and answers follows:]

INCREASE OVER FISCAL YEAR 1975 APPROPRIATIONS

Chairman MCCLELLAN. The Air Force's procurement request for fiscal year 1976 is $4.6 billion. This is an increase of $1.5 billion over the fiscal year 1975 funds which Congress made available. How much of the increase is attributable to inflation, and how much is real program growth?

General CHAPMAN. Because of the variance in quantities and types of aircraft and related effort being procured in FY 75 and that which is requested in the FY 76 Budget, the $4.6 billion represents the net effect of both escalation and program change.

An estimate of the program growth between FY 75 and FY 76 was derived by inflating the FY 75 approved program to a projected FY 76 dollar value and then subtracting that amount from the FY 76 Budget request. This procedure produced an estimated program growth of $1,275 million. The remainder of the increase of $1.5 billion in FY 76 over FY 75 is $240 million, which would be the estimate for inflation.

The following are examples of increased quantities and/or funding in FY 1976 versus FY 1975:

[Dollar amounts in millions]

	Fiscal year 1975		Fiscal year 1976	
	Quantity	Amount	Quantity	Amount
A–10	22	$179.8	61	$408.1
F–15	72	913.4	108	1,643.5
C–12A			16	11.8

TRANSITION PERIOD

Chairman MCCLELLAN. You requested $1.1 billion for aircraft procurement in the transition budget period. Will new initiatives be provided within the funds requested for the transition period?

General CHAPMAN. No, sir. There are no new initiatives to be started within those funds requested for the transition period.

B–1 STRATEGIC BOMBER

Chairman MCCLELLAN. The program unit cost during the development estimate of the B–1 strategic bomber program was $45.6 million per aircraft. The currently estimated program unit cost is $84.3 million per aircraft, an increase of 84.9%. Explain the increase with respect to inflation, design changes and other factors.

General CHAPMAN. The information can best be presented in the form of a matrix which shows both total program and program unit costs.

[The information follows:]

[Dollars in billions/unit cost in millions]

	1970 dollars	Allowance for escalation	Then-year dollars
Development estimate:			
R. & D.	$2.431	$0.254	$2.685
Procurement	7.422	1.112	8.534
Total	9.853	1.366	11.219
Program unit cost (246 aircraft)	40.0		45.6
Current estimate:			
R. & D.	2.791	1.083	3.874
Procurement	8.237	8.461	16.698
Total	11.028	9.544	20.572
Program unit cost (244 aircraft)	45.2		84.3

As you can see, the cost of the program in constant 1970 dollars has increased by about 12 percent, while the estimated cost of the program in then-year dollars has increased by $9.353 billion or about 83 percent. Our estimate of the effects of inflation at the beginning of the program was only $1.366 billion, while that actually experienced and now estimated is $9.544 billion, an increase of some 600 percent. So, of the cost increase to the program of $9.353 billion, some $1.175 billion is due to changes in the program or actual cost growth, and $8.178 billion is due to economic escalation.

B–1 LONG LEAD FUNDING

Chairman MCCLELLAN. The Air Force seeks $108 million in this request for long-lead production requirements for the B–1 bomber. Should a negative production decision be made, what portion of the $108 million do you estimate might be recovered?

General CHAPMAN. Most of the funds requested will be used for planning, design, and contractual actions which must be accomplished prior to the production decision in order to reduce lead time. Some of the funds are budgeted for the purchase of material, and about $10 million to $15 million of this material could be recovered for use on other Government programs should an unfavorable production decision be reached.

A–10 CLOSE AIR SUPPORT AIRCRAFT

Chairman MCCLELLAN. The February 1975 General Accounting Office staff study on the A–10 close-air-support aircraft program states that the development program has been adversely affected due to an increase in material flow time which has extended the airframe delivery schedule and increased the airframe cost. The study also reports a heavier gun than originally contemplated which has contributed to the overall aircraft weight problem. Please comment on these matters.

General CHAPMAN. Increases in material flow time have contributed to Fairchild's inability to meet the airframe delivery schedule for the D.T. & E. aircraft. The first development aircraft was flown on 15 February 1975, 6 weeks behind the original schedule of 31 December 1974. The Air Force anticipates that the five remaining D.T. & E. aircraft will be delivered approximately 8 weeks behind

schedule. Examples of changes in lead times for materials used in the A–10 program are provided in the following table:

LEADTIME (WEEKS)

Component	February 1971	February 1973	January 1974
Fairings	22	34	40–45
Bearings	30	38	46–50
Extrusions	14	22	34–38
Plate/bar stock	16	18	28

Concerning the weight increase for the GAU–8 gun, the A–10 contract originally specified a gun system weight of 1,394 pounds. The weight, determined prior to gun source selection, was later increased to take advantage of tradeoffs that increased the gun's weight to achieve a more reliable, low-cost, low-risk design. The specified weight of the prototype gun system, 1,803 pounds, was documented prior to initiating the gun contract with General Electric, Burlington. The production gun system weighs 1,950 pounds, with the increase in weight over the prototype due primarily to the addition of armor plate to the ammunition drum. The drum armor plate increases the survivability of the A–10 aircraft. Incorporating the armor on the ammunition drum rather than to the aircraft's fuselage proved to be the best engineering approach. The A–10 does not have contracted weight requirements for the aircraft's subsystems and components. If the A–10 had an overall weight problem it would be reflected in an aircraft performance degradation. However, the A–10 is currently meeting all flight performance requirements.

A–10 Program Management

Chairman McClellan. Last fall, the committee was advised of an investigation of the A–10 program to include Air Force and contractor management, the financial position of the company, manufacturing capability and facilities, quality assurance procedures, schedules, and flight operations Will you bring the committee up to date as to what changes and improvements may have taken place as a result of the investigation?

General Chapman. The review of the A–10 program last fall resulted in a number of recommendations requiring both Air Force and Fairchild Republic Co. management actions. These recommendations and the actions to date are:

Recommendation.—The Air Force should continue active support of the A–10 program and concurrently take corrective action to resolve identified deficiencies.

Action.—Numerous executive level meetings have been held between senior Air Force officials and the presidents of Fairchild Industries and Fairchild Republic Co. These meetings have emphasized the Air Force support of the A–10 program and concern about Fairchild's ability to produce the A–10 within cost and schedule. Responsibility for managing the required corrective actions has been assigned to Headquarters, Air Force Systems Command.

Recommendation.—The System Program Office must become more deeply involved in production, subcontracting, and manufacturing aspects of the program.

Recommendation.—The System Program Office should establish formal procedures for tasking and follow-up on all cited Procurement Management Review Team and Production Readiness Review deficiencies and ensure that the Air Force Plant Representative Office is an active participant in all phases of the project. This follow-up must ensure that the "root cause" of the deficiency has been corrected.

Action.—The Memorandum of Agreement between the System Program Office and the Air Force Plant Representative Office has been revised to provide a better definition of respective responsibilities to assure optimum involvement in manufacturing operations. Recruiting action has been initiated to obtain a highly qualified individual from industry for the Director of Production in the System Program Office. A formal system was initiated between the System Program Office and the Air Force Plant Representative Office for tracking progress on all items identified in the various production readiness reviews conducted at Fairchild Republic Company.

Recommendation.—The Air Force Contract Management Division should review the manning of the Air Force Plant Representative Office, both skills and numbers, and provide the required capability to administer the A–10 Program. If Air Force Plant Representative Office civilian positions cannot be filled, the conversion to military positions should be accomplished.

Action.—The most experienced Air Force Plant Representative in the Air Force Systems Command has been assigned to the Fairchild Republic Company. The manning in the Air Force Plant Representative Office has been increased to the required level and the positions filled with highly qualified personnel.

Recommendation.—The role and responsibility of the Air Force Plant Representative Office as the initial point of contact with the contractor must be reconfirmed to Fairchild Republic Company by the A–10 System Program Office and the Aeronautical Systems Division Commander.

Action.—The role of the Air Force Plant Representative Office has been reaffirmed by a letter from the Commander, Aeronautical Systems Division, to the President of Fairchild Industries, Inc. This was further reiterated in a meeting between the Commander, Air Force Contract Management Division and the President, Fairchild Republic Company.

Recommendation.—More effective liaison should be established between Air Force Contract Management Division and Aeronautical Systems Division.

Action.—Quarterly meetings are held between the Commander, Air Force Contract Management Division and the various product division commanders. The Air Force Representative participates in all program reviews and a formal tracking system for action items has been established. The Air Force Plant Representative's bi-monthly activity reports are provided to the System Program Offices and the Air Force Plant Representative also provides an input to the quarterly program reviews held at Headquarters, Air Force System Command.

Recommendation.—The System Program Office should make an early decision to either: (1) request a waiver to permit Fairchild Republic Company to acquire certain Defense Industrial Plant Equipment Center type equipment; or, (2) require the contractor to invest company funds for necessary equipment.

Action.—To minimize schedule risk and provide more positive control over critical parts, the Air Force recommended that Fairchild Republic Company perform a larger portion of their critical components work in-house. This recommendation resulted in a change to their planned make/buy structure from approximately 23% in-house to about 55% in-house. The Assistant Secretary of the Air Force, Installations and Logistics, approved a facilities expansion plan to provide certain machine tools from existing Government assets which would enable Fairchild Republic Company to accomplish a greater portion of their critical work in-house. This effort is proceeding satisfactorily toward the desired objectives.

Recommendation.—The Air Force must recognize the lack of Fairchild Republic Company experience in major aircraft manufacturing programs and require the contractor to strengthen his top management.

Recommendation.—Experienced and proven managers should be placed in top positions of the A–10 program through immediate internal reassignments or outside recruitment.

Recommendation.—The Air Force should press Fairchield Republic Company to reorganize as necessary to provide for centralized control over manufacturing operations and quality assurance at both the Farmingdale and Hagerstown facilities at management levels below the company president.

Recommendation.—The Air Force should press the Fairchild Republic Company to establish a more responsive management structure that will surface problems at an early date, identify root causes and effectively resolve them.

Action.—Fairchild Republic Company has taken a number of positive initiatives directed toward improving their overall management organization. Some of the more significant changes are: (1) A top-level executive with extensive weapon system manufacturing experience has been hired as Assistant Director for Operations. (2) Separate organizations for Quality Assurance and Procurement reporting directly to the Fairchild Republic Company President have been established and the Directors for these organizations were hired from other aerospace industries. (3) The Hagerstown manufacturing function has been incorporated as part of the total Fairchild Republic Company manufacturing department. (4) Monthly meetings are held between the A–10 System Program Director, Air Force Plant Representative, and Fairchild Republic Company President to review the contractor initiatives.

Overall, Fairchild Republic Company has taken the initiative to reorganize and streamline their management and organization. Considering the actions that have been taken and those planned for the future, we are confident Fairchild Republic Company can satisfactorily produce the A–10.

Recommendation.—The System Program Office should follow the overall financial condition of Fairchild Industries to assure that adverse financial conditions in other divisions do not degrade the cash position of Fairchild Republic Company to the detriment of the A–10 program.

Action.—A quarterly review of the overall Fairchild Industries, Inc., financial situation is made by the Defense Contract Audit Agency with the results furnished to the System Program Office. In 1974, Fairchild Industries' financial condition improved significantly with increased earnings and a profit for the overall corporation.

In summary, we feel the actions required by the subject review have been accomplished or are satisfactorily underway and the A–10 program is now programmed on an achievable schedule that can be met within the budgeted costs.

F–15 Air Superiority Fighter

Chairman McClellan. Your statement speaks of a reduction of approximately 30 percent from original estimates to build the first 20 F–15 aircraft. I note that the currently estimated unit procurement cost is $12.3 million per aircraft. Does your statement indicate a possible cost reduction in future contract negotiations?

General Chapman. The 30 percent reduction you refer to is in the actual number of manhours required to assemble the first 20 F–15 aircraft versus the original estimate. The resultant cost savings from this reduced assembly manhours requirement has been accounted for in the program cost estimate.

F–15/Total Buy Program

Chairman McClellan. The F–15 aircraft program calls for 729 production aircraft. The manufacturer has indicated a unit procurement price of approximately $6 to $7 million for a large follow-on buy above the 729. Has the Air Force authenticated this estimate? Please discuss the matter.

General Chapman. In August 1974, McDonnell Douglas submitted an unsolicited proposal to build additional F–15 aircraft concurrent with the production of the presently planned 729 aircraft. The incremental unit flyaway price quoted by McDonnell Douglas for 300 additional F–15's in constant FY 75 dollars was $5.8M. As indicated by McDonnell Douglas in their proposal, the $5.8M unit flyaway price is incremental to the cost for Air Force planned 729 aircraft procurement and is vaild only if this planned procurement is consummated. The Air Force estimate of the incremental unit flyaway cost for 300 additional F–15s in constant FY 75 dollars is $6.2M. The McDonnell Douglas proposal of $5.8 million includes estimates for Government furnished engines and the Tactical Electronic Warfare Sets which are below the Air Force estimate.

F–15/F–100 Engine

Chairman McClellan. The F–100 engine which is used in the F–15 aircraft experienced numerous difficulties during the endurance test runs. Apparently, the engine performance in operational flight has been quite satisfactory. Please comment on the engine development and performance.

General Chapman. In October 1973 the F–100 engine passed the most stringent qualification test ever established for a jet engine. To date, the F–100 engine has demonstrated excellent flight performance. Through the flight test and Component Improvement Program (CIP) we have identified areas for improvement early in the program; thus, permitting a timely incorporation of modifications into production engines for the Tactical Air Command. Over 9000 flight hours have been accumulated without a single engine rotating hardware failure and over 40,000 hours of in-flight and ground test running time has been accumulated since development began.

F–16 Air Combat Fighter

Chairman McClellan. I note the first procurement funds for the F–16 air combat fighter will be requested in fiscal year 1977. What is the anticipated monthly rate when full production is reached? What is the estimated unit production cost?

General CHAPMAN. Based on current plans for production of 650 F–16s for the Air Force, the production rate will build to a maximum of 15 per month by late 1981 and the estimate of unit production cost in fiscal year 1975 dollars is $5.6 million.

AIRBORNE WARNING AND CONTROL SYSTEM

Chairman MCCLELLAN. The Current estimated Program Unit Cost for the E–3A AWACS is $111.1 million per aircraft. What was the Development Program Unit Cost Estimate? Explain the increase.

General CHAPMAN. The development estimate for the AWACS program in 1970 was $2,661.6 million or a unit program cost of $63.4 million. This was based on a total force of 42 aircraft, an aircraft configuration employing eight TF–34 type engines and production at a rate of 2 per month. The planned configuration was CORE, a system consisting of surveillance radar, data processor, 9 multi-purpose consoles, communications, IFF, naviagation and guidance, and on-board test maintenance and monitoring subsystems.

The 31 December 1974 SAR reported total program cost is $3,777.2 million or a unit cost of $111.1 million. This is based upon a force size of 34 aircraft, that is, 31 production plus 3 DDT&E aircraft, an aircraft configuration employing four TF–33–100A type engines which will be government-furnished equipment (GFE) and production at a rate of 1 per two months. The estimate for economic escalation has been revised from 4.25% to 6.5%. The total program cost estimate includes funding for development and in-line production changes for "enhancements" which would be added to the CORE configuration. The enhancements will provide increased operational capability, and consist of the following: Time Division Multiple Access (TDMA) data link, Improved Maritime Surface Surveillance, ECCM, Enhanced Communication, Command and Control capability, Self Defense Subsystem, Satellite Communications, and Special IFF. These enhancements are options for future system growth, with TDMA being the only one presently on contract. In-line production effectivity of TDMA and improved Maritime Surface Surveillance are planned to start with production system #13 planned for the FY 1977 buy. Others will be added in FY 1977 and 1978, consistent with lead times required after adequate subsystem development.

The following table provides a summary of the major program changes and cost impact of each. These have been reported to the Congress in greater detail through the Selected Acquisition Reports (SAR) for AWACS.

TOTAL PROGRAM COST TRACK

[Development estimate July 1970 unit cost, $63,400,000]

Event/action	($ in millions) Total dollar impact		Net effect on program unit cost
	Development	Production	
SAR December 1972:			
Reduce risk/ECO estimate due to brassboard experience	−$49.4	−$81.3	−$3.1
Change from 8- to 4-engine configuration	−28.4	−88.1	−2.8
Revised support and spares estimates	−19.7	−9.4	−.7
SAR December 1973:			
Delete 8-production aircraft		−172.3	+8.3
Add enhancements (initial estimate)	+105.5	+102.2	+6.1
Stretch production starts to 1 per month (initial estimate)		+56.2	+1.6
SAR June 1974: Change economic escalation	+52.5	+126.3	+5.3
SAR September 1974:			
Re-estimate enhancements	+116.8	+40.5	+4.6
Re-evaluation of total program requirements	−25.4	+129.0	+3.0
Add maritime enhancements	+29.9	+7.0	+1.1
Stretch production deliveries to 1 per month		+69.4	+2.0
SAR December 1974:			
Add ECCM enahncement	+39.5	+29.1	+2.0
Rephase and Re-estimate enhancements and restructure test program	+52.3	+83.7	+4.0
Stretch production to 1 per 2 month		+497.7	+14.6
Re-estimate spares and peculiar support equipment		+36.5	+1.1
Miscellaneous changes since July 1970: Current SAR program unit cost			111.1

AWACS/CHANGING MISSION CONCEPTS

Chairman MCCLELLAN. The original concept of the Airborne Warning and Control System gave high priority to its air defense role. Now the tactical role is

dominant. I note that a maritime surveillance capability has been added at a program cost of $26 million. Discuss the reasons for the ever changing missions for the program.

General CHAPMAN. The AWACS program, from the first documented requirement in 1963 until today, has been the subject of extensive studies which have resulted in an increased Air Force comprehension over time of the potential applications of the system. The understanding of the need to provide low altitude radar surveillance is as old as radar itself. This need is not categorically identifiable as defensive or offensive nor strategic or tactical. Commanders responsible for allocation of resources need timely data. As jet aircraft have developed, low-altitude and high speeds are increasing in threat significance and the need for AWACS' capability is becoming more and more important.

From its inception, the AWACS was to have the capability to perform in both the tactical and strategic air defense roles. These dual roles are stated in the 1963 Specific Operational Requirement. This fact is significant because, at that time, the principal anticipated force allocation was for the strategic defense role. Soviet developments have borne out the foresight of including a capability to meet the tactical requirements as well as our air defense needs.

The 1966 TAC/ADC Required Operational Capability (ROC) document and the 1969 TAC/ADC agreement on the CORE configuration confirmed the need for the dual role for AWACS. The dynamics of the developing Soviet threat have from time-to-time required changes in emphasis and planned use of many of our systems, which, in support of a defensive strategy, must respond to new threats presented by such changes. However, our planning has been based consistently on AWACS being employed in both the tactical and strategic defense mission areas. Allocation of forces to the strategic defense or tactical role would depend on the priorities of specific crisis situations and the features of future threat patterns.

The maritime surveillance capability you referred to, Senator, already exists and has been demonstrated, even without the modification. That capability is one example of how our comprehension of potential applications of AWACS has expanded. The relatively minor modification offers significant improvements in this area, without risk, and at low cost.

The maritime surveillance modification will complement US Navy capabilities. AWACS can extend detection ranges of airborne and surface threats and provide strategic and early tactical warning to naval forces. This does not represent unnecessary duplication but rather an expanded capability to complement naval operations. There is a great deal of emphasis within the Department of Defense in identifying inherent capabilities of each Service that can enhance the effectiveness of other Services. In addition, several of the NATO nations, particularly the UK, have stressed the importance of an improved maritime capability in assessing a NATO AWACS force.

ADVANCED AIRBORNE COMMAND POST

Chairman MCCLELLAN. What was the development program unit cost for the Advanced Airborne Command Post. What is the current estimated program unit cost? Explain the increase.

General CHAPMAN. The development program unit cost was estimated at $69.2 million. The AABNCP program is now under review and the current program unit cost is not available at this time.

AABNCP/OPERATIONAL CAPABILITY

Chairman MCCLELLAN. The present E–4 aircraft which is at Andrews Air Force Base uses the communications equipment transferred from the EC–135 aircraft. When will a completely updated system be operational?

General CHAPMAN. The AABNCP program is presently undergoing an in-depth review within the Air Force and Office of the Secretary of Defense. The operational date for the updated E–4 will be provided subsequent to this review and decision cycle of events which is now scheduled for completion in early May 1975.

C–12A UTILITY AIRCRAFT

Chairman MCCLELLAN. Your fiscal year 1976 budget request includes $11.8 million for the procurement of 16 C–12A utility aircraft. Will this be a joint buy with the Army as has been the direction of the Congress in the CS–UX program?

General CHAPMAN: Yes, sir. The Army, acting as the procuring agent, is presently on contract with Beech Aircraft Company for 34 C–12 airplanes; 20 for the Army and 14 for the Air Force. At the time the contract was negotiated, an option for 16 additional airplanes for the Air Force was included. The FY 76 procurement request provides the funding to exercise that option in August of this year.

C–141 STRETCH PROGRAM

Chairman MCCLELLAN. How much has been approved and expended in prior years for the C–141 cargo aircraft stretch program? How much is included in the current budget request and for what will the funds be used? What is the estimated total program cost for the program, and what additional airlift capability will it provide?

General CHAPMAN. Congress approved $25 million in FY 75 for the C–141 stretch modification. We are in the process of negotiating a contract with Lockheed to initiate this program. We have requested $16.5 million in FY 76. As we have informed Congress, this will complete the development of a representative prototype. The total cost of the program is estimated to be $666 million. By stretching the fuselage 280 inches with this modification we are increasing the volumetric capacity of the aircraft by 30%. This increase will improve our ability to deploy Army division sized units during an emergecy by increasing the first 30-day oversize capability by about 20,000 tons.

C–141 STRETCH/AIRCRAFT-SERVICE LIFE EXTENSION

Chairman MCCLELLAN. Will modifications, evaluations and tests be conducted on the aircraft while it is torn down to extend the life of the aircraft? If not, why wouldn't this be a cost effective program?

General CHAPMAN. Yes, sir. Service life implications have been an integral part of the C–141 stretch planning from the very beginning. The current prototype test program does include evaluation and test of the modified fuselage structure, as well as flight controls, landing gear and critical peak stress areas to verify that the stretched aircraft will be able to attain the extended service life goal of 40,000 hours. The modification includes a redesigned wing fillet which is designed to reduce aerodynamic drag and cause a favorable shift of the wing center of pressure, thus contributing to improved service life. Service life extension beyond 40,000 hours is being studied by Air Force engineers. However, without more test and operational experience, we will not be in a position to identify the costs or added requirements associated with further extension.

CIVIL RESERVE AIR FLEET

Chairman MCCLELLAN. Last year the Congress denied a request of $132.9 million for a Civil Reserve Air Fleet Modification Program. For fiscal year 1976 you request $22.0 million and in the transition period $24.0 million for a CRAF modification program. Is this a smaller program than you sought in FY 1975?

General CHAPMAN. The total CRAF modification program is essentially the same as defined last year, but the first year effort is reduced. The study directed by Congress to reaffirm our airlift requirements indicates that approximately 110 CRAF modifications will be required. The projected program cost is approximately $800 million. This amount will pay the modification, downtime and increased operating cost that will result from the modifications.

FOREIGN MILITARY SALES

Chairman MCCLELLAN. Do you know of any foreign military sales which might have a dilatory effect on the readiness of U.S. Air Force active and reserve forces?

General CHAPMAN. While there are many benefits resulting from foreign military sales there are also adverse impacts. Principally these are the drain on USAF manpower and unexpected withdrawal of equipment from the Air Force inventory.

Support to foreign air forces, although reimbursable, places a drain on manpower resources available to the USAF. As systems become more complex, foreign users are going to require—and expect—more assistance in the form of technically qualified people, at least in the early stages of their programs. This

assistance is provided from Air Force manpower ceilings. Although the Air Force is reimbursed for the cost of providing these people, money does not replace people. Also people are required to perform the functions associated with the acquisition, delivery, and support of the systems supplied to foreign air forces. If the number of foreign owned U.S. aircraft continues to increase as anticipated, so will the number of people necessary to administer the program. In addition to the manpower impacts, there are comparable impacts associated with the competition for material. Although the majority of foreign military sales are from noninventory procurement and do not impact on the USAF, direct sales of aircraft, other major systems, or spares from the Air Force inventory do have an impact. These direct sales may have been necessary to satisfy urgent needs of foreign air forces, but such action leaves a shortage in the Air Force inventory until procurement and production actions have made the necessary replacements.

Since aircraft, equipment, or spares replacement may be more costly to procure, and in some instances require program and procurement approvals from the Congress, continued withdrawals from the Air Force inventory could impose additional costs downstream for the Air Force and could have an adverse impact on USAF Total Force readiness.

War Reserve Stock for Allies

Chairman McClellan. Does your procurement request include funds for war reserve stocks for allies? If so, identify the potential allies for which the stocks are planned and provide for the record a detailed breakdown as to numbers and types of equipment included in the FY 1976 request.

General Chapman. Yes, sir, the FY 76 budget contains a request for $1.3M to buy 475 each F–5E 275 gallon tanks to be stocked under U.S. control in support of a projected wartime requirement of the Republic of Korea.

Increase Over FY 1975 Appropriations/Missile Procurement

Chairman McClellan. The fiscal year 1976 budget request for Missile Procurement, Air Force, is in the amount of $1.8 billion. The request is $249 million above the amount which Congress made available for fiscal year 1975. How much of the increase is attributable to inflation, and how much is real program growth?

General Chapman. Because of the variance in quantities and types of missiles and related effort being procured in FY 75 and that which is requested in the FY 76 Budget, the $1.8 billion represents the net effect of both escalation and program change.

An estimate of the program growth between FY 75 and FY 76 was derived by inflating the FY 75 approved program to a projected FY 76 dollar value and then subtracting that amount from the FY 76 Budget request. This procedure produced an estimated program growth of $109 million. The remainder of the increase of $249 million in FY 76 over FY 75 is $140 million, which would be the estimate for inflation.

The following are examples of increased quantities and/or funding in 1976 versus FY 1975:

[Dollar amounts in millions]

Quantity	Fiscal year 1975		Fiscal year 1976	
	Quantity	Amount	Quantity	Amount
AIM–7F Sparrow	300	$43.5	620	$81.2
AIM–9H Sidewinder			800	22.9
AIM–9L Sidewinder			710	39.8
AGM–45A Shrike	270	11.3	1,318	46.1
AGM–65A Maverick	5,600	73.1	6,000	144.8

Transition Period/Missile Procurement

Chairman McClellan. The request for missile procurement in the transition period is $277 million. Will any new initiatives be provided within the funds requested?

General Chapman. No, sir. The budget request for the fiscal year transition period provides program continuity for on-going programs.

Minuteman Survivability Program

Chairman McClellan. Discuss the in-silo survivability program for the Minuteman ICBM program.

General Chapman. The Upgrade Silo modification to improve in-silo survivability includes a new missile suspension system, improved launch support equipment suspension and additional protection against electromagnetic pulse resulting from nuclear detonations. These changes provide balanced protection against blast, shock and electromagnetic pulse effects. The protection provided by these modifications is in excess of [deleted] overpressure. This is more than [deleted] times that of the originally designed system.

Minuteman/Command Data Buffer

Chairman McClellan. When will the command data buffer retargeting system become fully operational? What significant readiness improvement will this provide for the Minuteman force?

General Chapman. The command data buffer has been operating in one Minuteman Wing at F. E. Warren AFB since January of this year. The system will be fully operational throughout the Minuteman III force by [deleted]. This improvement, by allowing remote retargeting to be accomplished electronically from the Launch Control Facility rather than through direct access to each silo, reduces our retargeting time by a factor of more than 30. Rapid retargeting saves considerable time and effort in normal operation of the Minuteman III force, and greatly enhances the overall flexibility and responsiveness of this weapon system.

Minuteman/Industrial Capability

Chairman McClellan. I note that funds are included within the fiscal year 1976 request to close down the industrial capability associated with the production of Minuteman III missiles. How much is requested, and what effect will this have on force readiness?

General Chapman. A total of $14.2 million is included in the FY 1976 procurement request for costs associated with closing the Minuteman III production lines. The ultimate effect of halting production is difficult to assess at this time. Although the FY 1976 procurement will satisfy presently known requirements, unforeseen anomalies or changes in the threat could possibly create additional requirements in the future. Production of 50 additional missiles will maintain our industrial capability through part of FY 1976; after this, however, there will obviously be a period of several years at least during which no land-based ICBM will be built in this country. What effect this may have on our future capabilities or strategies, I cannot say.

Minuteman II/III Ratio

Chairman McClellan. Of the total Minuteman force, how many silos will be equipped with the II missile and how many with the III missile? What are the major differences between the two versions?

General Chapman. Our 1000 Minuteman force will consist of 450 Minuteman II and 550 Minuteman III missiles by mid July 1975. This will complete our approved force mix. The major differences between the two missiles are, Minuteman III, the latest version of Minuteman, has improved accuracy, greater range and the capability to carry Multiple Independently Targeted Reentry Vehicles (MIRV) versus the single warhead for Minuteman II.

SRAM/B–1 Equippage

Chairman McClellan. The fiscal year 1976 budget request includes $20.3 million for long lead requirements in support of FY 1978 procurement of SRAM (AGM–69A) missiles identified for B–1 bomber equippage. If a negative production decision is made on the B–1 program, can these missile funds be recovered?

General Chapman. Yes. The $20.3 million is programmed in FY–77. A portion of this money is long lead in support of the SRAM for B–1. DSARC III review for the B–1 SRAM will be conducted concurrent with the DSARC III for B–1. A negative decision for B–1 will preclude obligations of the long lead

portion of the $20.3 million. The remainder is programmed to requalify the facilities of the longer life rocket motor manufacturer, and to qualify a rocket motor case, and a rocket motor nozzle manufacturer. The longer life rocket motor is being developed to retrofit the present B–52/FB–111 SRAM inventory, as necessary, when the current motors age out.

Compare AGM–65A and AGM–65B

Chairman McClellan. How does the AGM–65B (Scene Magnification) Maverick missile differ from the AGM–65A (Television) missile?

General Chapman. The AGM–65B is the AGM–65A with an engineering change to the seeker which doubles the size of the target scene as seen on the TV display. The target scene magnification [deleted] the Maverick stand-off range.

Maverick Production Rate

Chairman McClellan. Why do you plan for a lower production rate for the Maverick missile in FY 1976?

General Chapman. The FY 1975 production rate which peaked at 833 missiles per month was part of the Total Package Contract. This rate was efficient under that contract and was retained because of the significantly low missile cost, approximately $12,000 each, afforded by the contract. The lowest, most economical rate of approximately 400 per month was selected for the FY 1976 buy primarily to extend the duration of the warm production base while building to the AGM–65 (T.V.) and AGM–65B (Scene Magnification) WRM. This permits dovetailing the production line i.e., no costly production gap, with the future AGM–65C (laser) and AGM–65D (Imaging Infrared) production. This can be accomplished while maintaining the capability to accelerate to a higher rate should an emergency arise until the AGM–65A and AGM–65B production is phased out.

Laser and IIR Maverick

Chairman McClellan. Describe the laser and imaging infrared Maverick missile system.

General Chapman. The laser and imaging infrared Maverick are modular seeker expansions of the T.V. Maverick capability which will enhance the ability to counter the worldwide enemy armor threat during night and poor weather operation. Laser Maverick will provide close air support against laser-designated targets for support of ground units. It provides for delivery of Mavericks by using either an airborne or ground designated laser spot as the homing point. The imaging infrared Maverick takes advantage of the infrared signature of the target to provide for self contained, launch and leave, day or night delivery.

B–52/Harpoon Program

Chairman McClellan. Discuss the program to launch the Harpoon missile from the B–52 bomber. How much has been expended in prior years for the program?

General Chapman. The Air Force plans to attain an austere Harpoon carriage and launch capability on B–52s. This is to be accomplished using previously developed Navy P–3C avionics and the air launched anti-ship Harpoon missile. Eighty B–52Ds will be modified for this collateral mission at the U.S. Navy's request for assistance in controlling the growing Soviet naval threat. The B–52D will provide a long range system capable of fast response and with a large payload capability that can provide a significant adjunct to the U.S. Navy. The B–52D will be used in a high altitude [deleted] profile to launch the Harpoon from a stand-off position which avoids the target terminal defenses and presents minimum risk to the aircraft and crew.

Prior year expenditures are $64,000 in fiscal year 1971 under PE63101F, Preliminary Design and Development, for a feasibility study conducted by the Boeing Company (Wichita Division).

Sparrow and Sidewinder/Aircraft Capable of Carry

Chairman McClellan. Which aircraft within the Air Force inventory are and will be capable of providing a platform for the Sparrow missile? For the Sidewinder missile?

General CHAPMAN. At the present time the AIM–7E is operational on all F–4 aircraft, F–4C, F–4D and F–4E. The AIM–7F missile will be operational on the F–15 and all F–4E's. The Sidewinder missiles, or AIM–9E and AIM–9J, are operational on the A–7, F–4, F–15, and F–111. Also, the F–16 aircraft is a planned platform for the Sidewinder missile.

DEFENSE SATELLITE COMMUNICATIONS SYSTEM

Chairman MCCLELLAN. Describe the Defense Satellite Communications System. How many operational satellites make up the system?

General CHAPMAN. The Defense Satellite Communications Systems (DSCS) consists, at this time, of 34 earth terminals and two operational satellites. The satellites are geo-stationary units positioned over the Atlantic and western Pacific oceans. The space subsystem of the current DSCS system, i.e. Stage Ib, Step 2 Phase II, will be completed with the launch of two additional satellites late in calendar year 1975. These satellites, positioned over the eastern Pacific and Indian Oceans, will provide a total earth coverage, four satellite network. These resources will permit the DSCS to provide support to the National Command Authorities (NCA) through the World Wide Military Command and Control System (WWMCCS) to the President, through White House Communications Agency facilities, to DOD customers, and to other agencies of the Federal Government, through support of systems such as the Diplomatic Telecommunications system. The DSCS is being designed and used to capitalize on the specific features of satellite communications which address long-standing operational needs of our government: Contact with isolated areas/locations worldwide; control of mobile combat forces, such as naval units, and support of specialized circuit requirements for the transmission of sensitive, perishable information, including graphics material.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. Mr. Chairman, I also have questions to submit for the record.

Chairman MCCLELLAN. Certainly, Senator.

[The questions and answers follow:]

AIRCRAFT PROCUREMENT/COMPARE FISCAL YEAR 1975 AND 1976

Senator YOUNG. Does the Air Force plan to procure more aircraft in fiscal year 1976 than in fiscal year 1975? If so, how many and what types?

General CHAPMAN. Yes, sir. We are planning to procure 191 aircraft in fiscal year 1976 as compared to 171 aircraft authorized for fiscal year 1975. The following table shows a comparison by fiscal year:

Fiscal year 1975 (type):	*Quantity*	Fiscal year 1976 (type):	*Quantity*
A–10	22	A–10	61
F–5E	71	F–5E	0
F–15	72	F–15	108
E–3A	6	E–3A	6
C–12A	0	C–12A	16

The fiscal year 1975 quantities do not include the A–7 and F–111. At present the Air Force will procure the 24 A–7Ds, but the 12 F–111Fs are pending rescission.

FISCAL YEAR 1976 INCREASE/HOW DISTRIBUTED

Senator YOUNG. How is the $1.5 billion increase over fiscal year 1975 distributed in the budget request?

General CHAPMAN. The $1.5 billion increase is distributed as follows: $.8 billion for procurement of new aircraft; $.1 billion for modifications; $.4 billion for spares; and $.2 billion for other support equipment and facilities.

The following are examples of increased quantities and/or funding in FY 1976 versus FY 1975:

[Dollar amounts in millions]

	Fiscal year 1975		Fiscal year 1976	
	Quantity	Amount	Quantity	Amount
A-10	22	$179.8	61	$408.1
F-15	72	913.4	108	1,643.5
C-12A			16	11.8

Transition Funding/How Utilized

Senator Young. How will the $1.1 billion for the transition period be utilized?

General Chapman. There is $76 million identified to cover our advance procurement requirement for the B-1, A-10 and the E-3A aircraft. During the transition period we will be ordering 33 A-10s, 27 F-15s, and 3 E-4As, which will require $567 million. In addition to aircraft procurements, we are requesting $126 million to support our required modification program, $190 million for spares, and $128 million for our support equipment and facilities.

B-1 Unit Cost Determination

Senator Young. How is the current unit cost of $84 million per B-1 aircraft determined? How much is for research and development?

General Chapman. The current unit cost of $84 million is derived by taking the total program cost of $20.6 billion and dividing it by 244, the total number of aircraft procured. The research and development portion of the program which includes 4 RDT&E aircraft is estimated at $3.9 billion. The estimate for the 240 procurement aircraft is $16.7 billion for a unit procurement cost of $69.6 million. These costs are in "then year" dollars which include the effects of inflation through the middle 1980s.

In today's 1975 dollars, the total program cost is $15.5 billion and the program unit cost is $63.5 million.

B-1/Fourth R. & D. Aircraft

Senator Young. Does the budget request include a fourth R&D aircraft? If so, how much of the funds requested are for that aircraft?

General Chapman. Yes, we have included approximately $91 million in the FY 1976 request and $34 million in TT for the fourth RDT&E aircraft.

B-1/Cost Reduction Programs

Senator Young. What cost reduction programs has the Air Force instituted on the B-1? Please explain and provide the savings in each case.

General Chapman. As a result of the recently completed cost reduction study on the B-1 program, we have decided to accept a substitution of ejection seats for the crew capsule; changing of the engine inlet configuraton from variable to fixed; changes in the avionics systems; a deletion of the logic control units and pylons for the carriage of weapons externally, although the structure of the aircraft itself to carry such weapons has not been deleted; and some minor structural changes to the aircraft. Our initial estimate is that the development investment for these items will be about $90 million and the potential reductions, based on the current production schedule, are about $1 billion. In our current program cost estimate, we have elected to be conservative and have only included about half the estimated reduction.

A detailed briefing on this cost reduction effort is available as I mentioned earlier.

A–10/A–7D/Cost Comparison

Senator Young. What is the latest total program cost and unit cost for the A–10 aircraft? How does this cost compare to the A–7D?

General Chapman. The total program cost in then year dollars for the A–10 is $3,173.9 million with a unit cost of $4.272 million per aircraft. The total program cost in then year dollars for the A–7D is $1,582.8 million with a unit cost of $3.448 million. In FY 1970 base year dollars this amounts to $1,867.3 million and a unit cost of $2.513 million for the A–10, as compared with the A–7D at $1,510.9 million total program and a unit cost of $3.292 million.

The A–10 program is based upon procurement during fiscal year 1975 through 1980. The A–7D procurement is being made during the period from fiscal year 1967 through 1975.

A–10 Program Delays

Senator Young. Are program delays being experienced in the A–10 program?

General Chapman. The A–10 original program schedule was based upon a contract award date of 1 January 1973 with delivery of the first DT&E aircraft in December 1974. When the contract award was delayed to 1 March 1973 to allow the GAO to investigate the A–9/A–10 flyoff and source selection procedures, Fairchild elected to acelerate their efforts to meet the original DT&E schedule. The performance of Fairchild's vendors and subcontractors prevented Fairchild in meeting the DT&E delivery schedule. The first DT&E aircraft was flown on 15 February 1975, six weeks behind schedule. The remaining DT&E aircraft will be delivered approximately eight weeks behind the March 1973 schedule. The Air Force considers the revised DT&E aircraft delivery schedule to have minimum impact on the development program.

Program and Unit Cost of F–15

Senator Young. What is the latest total program cost and unit cost for the F–15 aircraft?

General Chapman. The F–15 total program cost reflected in the President's FY 76 Budget is $10.943 billion for 729 production and 20 Development, Test, and Evaluation aircraft. The program unit cost for the 749 aircraft is $14.6 million.

F–16/YF–17 Competition/F–15 Purchased for Same Funds

Senator Young. Considering the total F–16 program, similar to the F–16, F–17 competitive evaluation, how many F–15's could be purchased for the same amount of money?

General Chapman. The following chart, using a comparison of the F–15 and F–16 life cycle costs, with the life cycle costs for 650 F–16's as a baseline, shows the number of F–15's that could be purchased considering the F–15 program.

F–15/F–16 Cost Comparison

(These estimates will continue to be refined, but we expect that future adjustments will not materially affect the ratio of F–16 to F–15 costs)

Two basic assumptions for this cost comparison were:

(1) F–15 procurement would be additive to the current program. The pricing reflects the cost for these additional F–15s.

(2) The F–16 program was used as the baseline to extrapolate F–15 O&S costs. In other words, operating and support factors such as flying hours per year and rates charged for personnel and fuel are common to both estimates.

FISCAL YEAR 1975

[In millions]

	F-16 [1]	F-16 [2]	F-15
Quantity	$650	$650	$520
Cost:			
R.D. & E.	584	496	0
Procurement	3,742	3,663	3,948
O. & S. (15 year)	4,462	4,539	4,752
Total	8,788	8,698	8,700

[1] Based on the F-16 program estimate at source selection.
[2] Based on USAF approved revised F-16 development program (8 R.D.T. & E. aircraft) and efficiency in production achieved through the use of common fuselage for both single and dual seat aircraft. This program is awaiting OSD approval.

Notes (reference col. 2 & 3):
1. Additional O. & S. costs for air-to-air training missiles add $23,000,000 for the F-16 and $113,000,000 for the F-15. The F-15 has both AIM-9 and AIM-7 capability, whereas the F-16 has only the AIM-9 capability.
2. F-15 with enhanced air-to-ground capability comparable to the F-16 adds $47,000,000 to F-15 costs. This combined with note 1 would reduce F-15 buy to 511 aircraft.
3. Adding one ECM pod per 4 F-16's at $175,000 per pod adds $28,500,000 to the F-16 procurement cost. Notes 1, 2, and 3 result in a ratio of 650 F-16's to 513 F-15's.
4. War reserve munitions (WRM) not defined for F-16; costs not included for either aircraft.

F-15/F-16/Foreign Sales

Senator Young. Has any foreign country ordered the F-15 or F-16 aircraft? If so, which country and how many?

General Chapman. Neither the F-15 nor the F-16 has been ordered by any foreign country.

Belgium, Denmark, the Netherlands and Norway are considering the F-16 as a replacement for aging fighter aircraft. Other aircraft under consideration by the four countries (acting jointly as a consortium) are the French Mirage F-1 and the Swedish Saab Viggen. The four countries are planning to buy 350 replacement aircraft.

Both Israel and Saudi Arabia have expressed interest in the F-15, but no letters of offer for the F-15 have been issued to these countries.

Iran requested a letter of offer for [deleted] F-15's, and the letter was presented in June 1974; however, Iran selected the U.S. Navy F-14 and declined the F-15 purchase.

AWACS/Total Buy for Air Force

Senator Young. What is the total number of AWACS aircraft planned for the Air Force?

General Chapman. We plan to buy 31 production and 3 DT&E AWACS aircraft for a total of 34. The 3 DT&E aircraft will be retrofitted to the production configuration.

AWACS/Unit and Total Program Cost

Senator Young. What is the unit and total program cost of the AWACS program?

General Chapman. The unit cost of the AWACS program is $111.1M and the total program cost is $3,777.2M in "then-year" dollars, which accounts for the effect of economic escalation.

C-141 Stretch/Zero Time Aircraft When Completed

Senator Young. In the plan to "stretch" the C-141 transport aircraft, is the whole aircraft given a new life starting at zero hours? If not why, since the aircraft will be torn apart and under modification for the "stretching"?

General Chapman. No sir, the stretched aircraft will not be given a zero time life. Because the stretch modification only directly affects limited portions of the aircraft, it is essential that we be able to continue to track and evaluate the cumulative effect of all operating time on the unmodified components

Fiscal Year 76 MM Buy/Complete Program

Senator Young. Will the fiscal year 1976 request to procure 50 Minuteman III missiles complete the procurement of these missiles?

General CHAPMAN. Yes, the planned procurement of 50 Minuteman III missiles in FY 1976 will complete our acquisition of this weapon system. Funds are included in our request to close down the production line after this final buy.

SIDEWINDER/SPARROW/LATEST MODELS CERTIFIED

Senator YOUNG. Have the latest models of the SIDEWINDER (AIM–9L) and SPARROW (AIM–7F) missiles satisfied the Navy and Air Force test requirements and been certified for tactical employment?

General CHAPMAN. On 1 March 1975, the AIM–9L completed its Technical Evaluation with excellent results. The Initial Operational Test and Evaluation was initiated in January 1975 with [deleted] successful launches in [deleted] attempts to date. The AIM–9L has not been certified for tactical employment at this time; however, the AIM–9L production decision (DSARC III) is scheduled for sometime later this year. In regards to the AIM–7F, the DSARC III review of 1 October, 1974 resulted in the approval of the FY 75 quantity of 300 missiles and an FY 76 quantity of 620 missiles. The FY 77 and out year procurements were tentatively approved at the FYDP level subject to DSARC review and SecDef approval. Consequently, the AIM–7F has been certified for tactical employment. Naturally, an AIM–7F Follow On Test & Evaluation (FOT&E) managed by AFTEC, will be conducted as a full system evaluation in conjunction with the F–15 FOT&E, using the first production configured missiles.

MAVERICK/RANGE

Senator YOUNG. What is the range of the Maverick missile? Being TV guided what is the effect of reduced visibility and night on missile performance?

General CHAPMAN. The demonstrated capability of the Maverick missile is [deleted] minimum slant range and [deleted] maximum slant range against larger targets. All T.V. systems, including Maverick, are limited to day visual operations. With the T.V. guided Maverick, the pilot visually detects the target, converts to the display where the same target scene appears, places the cross hairs over the target and locks the missile on the target. The addition of the laser and imaging infrared guidance options for Maverick will provide for night and poor weather operational capability throughout the same basic launch envelope with comparable or better performance.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Chairman MCCLELLAN. Senator Thurmond was unable to attend today's hearing, but he did have some questions. Will you also respond to those, General.

General CHAPMAN. Of course.

[The questions and answers follow:]

REAL INCREASE IN BUYING POWER/FY 75 VS FY 76

Senator THURMOND. What is the real increase in buying power of the FY 1976 procurement request over the FY 1975 procurement request?

General CHAPMAN. Because of the variance in quantities and types of aircraft and missiles being procured in FY 1975 versus those requested in the FY 1976 Budget, the difference between the two years is the net effect of both escalation and program change. An estimate of the program growth between FY 75 and FY 76 was derived by inflating the FY 75 approved program to a projected FY 76 dollar value and then subtracting that amount from the FY 76 Budget request. This procedure produced an estimated program growth of $1,275 million in the Aircraft Procurement request and $109 million in the Missile Procurement request.

REAL BUYING POWER INCREASE/FY 76 AIRCRAFT MODIFICATION

Senator THURMOND. Is there an increase over FY 1975 in terms of real buying power, in the modification of aircraft account?

General CHAPMAN. An estimate of the program growth was derived by inflating the FY 1975 approved program to a projected FY 1976 dollar value and then subtracting that amount from the FY 1976 Budget request. This produced an estimated program growth of $94 million.

AIRCRAFT MODIFICATION INCREASE/FISCAL YEAR 76 TO FISCAL YEAR 77

Senator THURMOND. Why is the aircraft modification account request for FY 1977 going to be $916.9 million, a more than $250 million increase over the FY 1976 request?

General CHAPMAN. Senator Thurmond, one of the major causes of the increase is projected economic escalation. You will recall that previous budgets did not include escalation for any procurement account except new production of major weapon systems. As a result of a change in this policy in FY 76, the Department of Defense estimates escalation for all procurement accounts. In the aircraft modification account, this caused an upward adjustment for escalation of $124 million in FY 1977.

Another major factor in the FY 1977 increase is the Cargo Convertible modification to the Civil Reserve Air Fleet (CRAF)—commercial wide-body jets. The $22 million for this program in FY 1976 and $24 million in FY 197T will provide the resources for start-up and initial procurement efforts to move to a full production rate in FY 1977. This has been priced at $123 million, an increase of $101 million over FY 1976.

The other major modification that increases the FY 1977 program is the C–141 Stretch and Aerial Refueling. The prototype effort wil be completed in FY 1976 and it will be necessary to move to a full production release in FY 1977. This represents an increase of $60 m 'on over the $16.5 million in the FY 1976 program.

B–1 LONG LEAD APPROVAL/SAME AS FULL PRODUCTION APPROVAL

Senator THURMOND. In your opinion, does Congressional approval of the $77 million request for long lead items for the B–1 in any way constitute production approval of the B–1 by the Congress?

General CHAPMAN. No, sir, our intention is only to protect an option for a production decision in November 1976. The FY 76 and 7T long lead funds will be used to start the design and development of a set of basic production tools, to purchase those long lead materials which would be required should an affirmative production decision be reached, and to initiate various tasks associated with the procurement of subcontracted items. These activities are limited to those which, if delayed until the production decision point, would cause the entire production schedule to slip. The Air Force will review the program in November 1976 and make a recommendation on production to the Department of Defense. The Congress will have the opportunity to review the progress of the program during the legislative review of the FY 1977 budget request. Should the Air Force, the Department of Defense, or the Congress determine that an affirmative production decision is not warranted, additional production funds will not be expended. We believe that this expenditure is cost-effective and justified in view of program progress to date.

IMPACT OF DENIAL OF B–1 LONG LEAD FUNDS

Senator THURMOND. What would the dollar impact on the program be if these funds were denied?

General CHAPMAN. If the long lead funding were delayed until after the production decision in November 1976, the production program would slip about a year. The impact of this schedule slip would be about $640 million in additional economic escalation. In addition to the schedule factor, the learning loss caused by the gap in manufacturing between the last development aircraft and the first production aircraft would add an estimated $300–325 million dollars to the cost of the program. In summary, the total cost impact would be about one billion dollars.

DENY LONG LEAD FUNDS/B–1 MEET PLANNED SCHEDULE

Senator THURMOND. Would the B–1 meet its now planned production schedule if these long lead items are not funded at this time?

General CHAPMAN. In planning our production program, we balanced the desire to begin production of aircraft as soon as possible after the production decision with the desire to keep preproduction funding commitments to the lowest level possible prior to the production decision. The outcome of this balancing along with other factors such as optimal build-up of the manufacturing team, led us to select 30 months from the production decision date as

the point at which the first production B–1 should be available. To achieve this schedule, production planning and long lead material buy must start 12 months prior to the production decision since the production lead time for the aircraft is 42 months. Should these funds not be made available, the entire production program would slip one year causing the financial impact previously described.

A–10 Performance Objectives

Senator Thurmond. Is the A–10 meeting all performance objectives set by the Air Force?

General Chapman. Yes. The A–10 is currently meeting all flight performance requirements.

A–10 Production Rate

Senator Thurmond. What monthly/annual production rate are you building to for the A–10?

General Chapman. The A–10 will eventually build to a production rate of 20 aircraft per month in late CY 1978. This rate will be maintained through 1979 and most of 1980.

A–10 Peak Production Fund Year

Senator Thurmond. In what fiscal year will the peak procurement dollar request occur?

General Chapman. The A–10 procurment request peaks in Fiscal Year 1977 at $846.7 million.

F–15 Cost Reduction/Assembly Manhour Reductions

Senator Thurmond. Has there been a reduction in the F–15 cost as a result of the approximate 30% reduction in manhours to assemble the first 20 F–15's?

General Chapman. The 30 percent lower than predicted manhours required to assemble an F–15 has been an offsetting factor in some of the rising program costs due to inflation. Therefore, the present program cost estimates include the reduced cost resulting from the lower than predicted assembly manhours.

F–15 Escalation Factor/Contract Award Date

Senator Thurmond. What escalation factor is in the $1,438 million F–15 request? When will the 108 aircraft be placed on contract?

General Chapman. The fiscal year 1976 President's Budget for the F–15 reflects an escalation factor of 8.5 percent for the FY 76 procurement.

The FY 76 request for 108 F–15 aircraft would be placed on contract with McDonnell Douglas in July 1975 pending Congressional authorization and approval of appropriations. If full Congressional authority has not been received by July 75, the F–15 Systems Program Office would authorize McDonnell Douglas to place on order long lead-items within the authority granted under Continuing Resolution.

Fiscal Year 76 Simulator Program Breakout

Senator Thurmond. How much is Air Force requesting for simulators in FY 1976, to include any modification on programs? Provide a breakout, by program, for the funds requested.

General Chapman. The Air Force is requesting $205.5 million in FY 1976 for its flight simulator procurement program. A breakout by program follows:

AIRCRAFT PROCUREMENT (3010 FUNDS)

[In millions of dollars]

Item nomenclature	Fiscal year 1976 amount
Combat aircraft	31.6
A–10	22.2
F/TF–15	8.8
E–3A (AWACS)	.6

AIRCRAFT PROCUREMENT (3010 FUNDS)—Continued

[In millions of dollars]

Item nomenclature	Fiscal year 1976 amount
Modification of in-service aircraft	22.0
F/RF-4	18.9
C-5	.6
C-141	2.5
Aircraft spares and repair parts	6.6
B-52	2.1
KC-135	.8
C-130	1.3
Undergraduate pilot training institute flight simulator (UPT-IFS)	1.9
Simulator for electronic warfare training (SEWT)	.5
Aircraft support equipment and facilities	125.3
Common ground equipment	(120.6)
B-52	42.4
KC-135	16.2
C-130	24.6
UPT-IFS	37.4
Other production charges	(4.7)
SEWT	4.7
Total aircraft procurement appropriation	185.5

R.D.T. & E. (3,600 FUNDS)

[In millions of dollars]

Item nomenclature	Fiscal year 1976 amount
Simulator for air-to-air combat (SAAC)	$0.6
Innovation in training and education simulator technology	.6
Project 1192, advanced simulator for UPT (ASUPT)	1.7
Other operational equipment: Project 1183, digital radar landmass simulation (DRLMS)	.3
Flight simulation development:	
B-52 aerial refueling part task trainer	1.1
KC-135 boom operator part task trainer	.9
Wide field of view	.5
Air to ground visual	.1
Forward looking infrared and low light level television [1]	
Instructor stations [1]	
Human resources: Simulation techniques for AF training	.3
B-52 squadron	3.0
AWACS	1.2
Total R.D.T. & E. appropriation	$10.3
Military construction appropriation (3,300 funds)	$9.7
Total fiscal year 1976 flight simulator program	205.5

[1] Rounds to under 100,000.

B-52/Harpoon-Numbers and Schedule

Senator Thurmond. How many B-52's will be modified to carry the Harpoon missile and is this program coordinated with the expected IOC Harpoon? Provide a milestone schedule for each for the record.

General Chapman. Eighty B-52Ds will be modified for carriage and launch of the Harpoon. The current Navy Harpoon delivery schedule will accommodate the Air Force B-52D-Harpoon FY 78 10C.

Milestones established for the B-52/Harpoon program based on a FY 75 start are:

Configuration and Definition Study Complete—4 Q FY 1975.
DT&E Contract Award—1 Q FY 1976.
System Engineering and Design Complete—2 Q FY 1976.
Begin Flight Test Aircraft Mod—FY 197T.
DT&E Complete—4 Q FY 1977.
First Production Aircraft—3 Q FY 1978.

The current Harpoon milestone schedule is available from Navy sources.

Fiscal Year 75 Reprograming From MOD or Spares Account

Senator Thurmond. Did Air Force reprogram any FY 1975 funds from the aircraft modification or spares account? Are any such actions contemplated for the remainder of this fiscal year?

General Chapman. Yes, the Air Force did reprogram FY 1975 funds from the aircraft modification account but not from the initial spares or replenishment spares account. For the procurement of 71 F–5E, $20.8 million was transferred from the aircraft modification account. This reprograming action has been approved by the Congress. The severe impact of inflation since the submission of the FY 1975 Budget has forced the Air Force to request additional reprograming of funds from the aircraft modifications account. These reprograming requests are now awaiting Congressional approval: $40.1 million to the Operations and Maintenance Appropriation, Air Force, to provide funds to support current operations and readiness; and $12.7 million to the Defense Stock Fund-Bulk Petroleum Appropriation.

The Air Force does not contemplate any additional reprograming actions from the modifications or spares account for the remainder of this fiscal year.

B–1/SRAM Requirements

Senator Thurmond. Referring to SRAM and the $20.3 million for long lead requirements in support of the FY 1978 procurement of SRAMs identified for B–1 equipage, what specifically are these requirements? What is the program impact if this amount was denied?

General Chapman. The $20.3 million for long lead requirements is necessary to requalify the major SRAM suppliers and vendors, including the manufacturers of the computer, control-guidance assembly, rocket motor case, rocket motor nozzle and the facilities of the longer life rocket motor manufacturer. In addition, technical support will be obtained from the Energy Research and Development Administration for timely compatibility checks of the warhead and booster. There is a 24 month or greater lead time to procure each of the major SRAM components and to perform the warhead-booster compatibility tests. Without the requested FY 77 funding to initiate long lead actions, SRAMs will not be available for the first complement of operational B–1s.

AIM–7F Inventory Objectives

Senator Thurmond. What is the Air Force inventory objective for the Sparrow AIM–7F?

General Chapman. The War Reserve Materiel inventory objective for the AIM–7F for FY 80 (end of the current FYDP) is [deleted].

AIM–7F/Fiscal Year 1976 vs Fiscal Year 1977 Quantity vs Fund Requirements

Senator Thurmond. Why is $80 million required in FY 1976 for 620 missiles when $78.4 million will be requested in FY 1977 for 880 missiles?

General Chapman. The Air Force FY 76 procurement of 620 missiles for $80.1 million is based on a Navy procurement of 360 missiles during the same year. In FY 77 the Navy plans a procurement of 700 missiles for $73.1 million to be combined with the Air Force's procurement of 880 missiles at $78.4 million. The benefits of the larger quantity procurement in FY 77 versus FY 76 and the learning curve in the third year of production combine to reduce the missile's unit cost at a greater rate than forecast escalation. The net effect is that the Air Force can procure more missiles for less dollars in FY 77 versus FY 76.

AIM–7F Procurement Rate

Senator Thurmond. Why is it necessary to procure the Sparrow at this annual rate?

General Chapman. The F–15 has been approved for production and will enter the tactical inventory in 1975. The AIM–7F planned procurement rates will provide for missile equipage of these aircraft. In addition, this production rate will allow the Air Force to reduce its present missile inventory shortfall within a reasonable time frame.

AIM–7F AF PROCUREMENT/COMPATIBILITY WITH NAVY

Senator THURMOND. How does the Air Force procurement rate tie with Navy's annual procurement? Is it one contract?

General CHAPMAN. The Navy is the DOD contracting agent for the Sparrow. A single contract is awarded for the yearly procurement for the Navy and Air Force. The procurement rates of each Service have an effect on the other Service's unit price. For example, the Navy's procurement in FY 76 was 360 missiles while the Air Force's procurement was 620 missiles. In FY 77 the Navy procurement is 700 missiles while the Air Force's procurement is 880 missiles; resulting in a lower unit cost to both Services in FY 77 as compared to FY 76.

Other Procurement, Air Force

STATEMENT OF MAJ. GEN. GEORGE RHODES, ASSISTANT DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

ACCOMPANIED BY:

MAJ. GEN. ROBERT L. EDGE, DIRECTOR OF COMMAND, CONTROL AND COMMUNICATIONS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

JACK K. UMPHREY, CHIEF, INVESTMENT APPROPRIATIONS DIVISION, DIRECTORATE OF BUDGET

LT. COL. JOHNNY E. CORMIER, MUNITIONS STAFF OFFICER, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

LT. COL. CHARLES C. HANCOCK, JR., SUPPLY STAFF OFFICER, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

MAJ. RICHARD B. MILLER, COMMUNICATIONS STAFF OFFICER, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

MAJ. RONALD C. PASTOR, CONGRESSIONAL AFFAIRS OFFICER, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

BEVERLY J. HOOPER, CHIEF, MUNITIONS PROGRAM ANALYSIS, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

PREPARED STATEMENT

Chairman McClellan. Our next witness is General Rhodes.

Do you have a prepared statement, General Rhodes?

General Rhodes. I have. I would like my full statement printed in the record and let me present a brief summary now.

[The statement follows:]

BIOGRAPHICAL SKETCH OF MAJ GEN GEORGE RHODES
ASSISTANT DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS
HEADQUARTERS, USAF

Gen Rhodes is Assistant Deputy Chief of Staff, Systems and Logistics, HQ USAF, Washington, D.C. and is responsible for all Air Force logistics support, which includes procurement policy, maintenance engineering, transportation, supply, and foreign military assistance and sales.

Gen Rhodes was born in Corrine, W. Va., on Feb 15, 1923. He attended the University of Maryland and George Washington University. He enlisted in the US Army Air Corps in July 1940 and graduated from Officer Candidate School in July 1943 with a commission as 2d Lt. He then was assigned as instructor engineer, aircraft maintenance officer and flightline officer at Mobile, Al., and later served in the China-Burma-India Theater of Operations. In 1945 he became supervisor of the Air Transport Command C-54 maintenance activity at Topeka Air Base, Kansas. Between January 1947 and September 1952, he served; first, as maintenance production manager with the Fourteenth Air Force, and then at Air Materiel Command headquarters, Wright-Patterson Air Force Base, Ohio, as Chief of Depot Maintenance, Plans and Financial Management. In October 1952 Gen Rhodes was assigned to Headquarters USAF, serving in various positions within the Directorate of Maintenance and Engineering, Office of the Deputy Chief of Staff, Materiel. In July 1956 he entered the Air Command and Staff College, Maxwell Air Force Base, Al. Gen Rhodes was transferred in August 1957 to the US Military Assistance Advisory Group, Taiwan, Republic of China, and became Senior Maintenance Advisor to the Chinese Air Service Command. He returned to the United States in August 1959 to attend the Armed Forces Staff College at Norfolk, Va. In February 1960 Gen Rhodes was reassigned to Headquarters, USAF in the office of the Deputy Chief of Staff, Systems and Logistics, and served in the Directorate of Maintenance Engineering as Chief, Financial Management Branch and later as Chief of the Requirements and Programs Branch. In August 1965 he entered the Industrial College of the Armed Forces in Washington, D.C. In September 1966 Gen Rhodes was transferred to Wiesbaden Air Base, Germany, as Deputy Commander for Materiel, 7101st Air Base Wing, with additional duty as Commander, 7101st Materiel Squadron. In August 1967 he moved to Lindsey Air Station, Germany, as Director of Maintenance Engineering, Deputy Chief of Staff, Materiel, United States Air Forces in Europe. In July 1969 he joined the San Antonio Air Materiel Area at Kelly Air Force Base, Texas as Director of Materiel Management, and in July 1970 became Vice Commander. Gen Rhodes was assigned to Air Force Logistics Command, Wright-Patterson Air Force Base, Ohio, in August 1971 as Assistant Deputy Chief of Staff, Materiel Management; became Deputy Chief of Staff, Materiel Management, in December 1971; and Chief of Staff in November 1973. In March 1975 he was appointed to his present position.

His military decorations and awards include the Legion of Merit, Meritorious Service Medal, Air Force Commendation Medal, Army Commendation Medal, Distinguished Unit Citation Emblem, Air Force Outstanding Unit Award Ribbon, and the Distinguished Unit Badge of China.

STATEMENT OF MAJ. GENERAL GEORGE RHODES

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

As the title "Other Procurement" implies, this appropriation provides for the procurement of a wide and varied array of Air Force ground equipment and logistics support programs. Relatively unglamorous, these programs are absolutely essential to our operational effectiveness. Modern weapon systems are dependent upon readily available munitions to destroy or neutralize targets. Combat forces must have logistics support such as vehicles and base maintenance and support equipment to function properly. Rapid and modern communications and electronics systems are absolutely essential to global operations. This appropriation embraces all of these requirements. I will provide you an overview and the essential background of the budget request in relation to last year's appropriation. Then, I will examine the major program categories in detail, indicating both what is needed and why. As reflected in Table I, the FY 1976 request is for $2,342.8 million, and the request for the Transition budget is $383.6 million.

TABLE I

DEPARTMENT OF THE AIR FORCE, FISCAL YEAR 1976-197T BUDGET
OTHER PROCUREMENT APPROPIATION
(IN MILLIONS OF DOLLARS)

PROGRAM	FY 1974	FY 1975	FY 1976	FY 197T
Munitions	322.0	196.6	399.8	32.0
Vehicles	53.3	63.3	104.6	5.6
Elect & Telecom	293.7	365.8	626.0	54.0
O/Base Maint & Support Equipment	972.0	1,030.3	1,212.4	292.0
TOTAL	1,641.0	1,656.0	2,342.8	383.6

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The program for FY 1976 is $686.8 million greater than the program for FY 1975. The reason for this substantial increase is basically the result of the need to provide for: (1) new programs, (2) reinstatement of deferred programs, and (3) price increases to the on-going programs.

$279.0 million of the increase is for new (those not included in the FY 1974 or FY 1975 programs) requirements and partial restoration of programs deferred from FY 1975. The major portion, $407.8 million, is for on-going programs that have increased in cost because of inflation, increased procurement scope, or in some cases, a combination of both.

A few examples will indicate the extent of the effects of inflation on this appropriation. To date, 715 vehicles valued at $8.9 million have been deleted from the FY 1975 program because of price increases. The unit price of the Air Cargo Pallet has risen from $300 to $430 and is estimated to cost $582 in FY 1976. The BDU-33 Practice Bomb procurement for FY 1975 has increased $4.2 million for the same number of units. In general, industry is extremely hesitant to accept a contract without inclusion of escalation clauses.

The $383.6 million requirement for the Transition Period is tied to a limited number of carefully screened items for which production options and re-order lead times dictate the need for funds to sustain program continuity.

TABLE II

MUNITIONS AND ASSOCIATED EQUIPMENT
(IN MILLIONS OF DOLLARS)

ITEM	FY 1975	FY 1976	FY 197T
Rockets & Launchers	18.5	54.6	8.2
Cartridges	53.6	119.5	14.5
Bombs	78.1	171.1	3.6
Targets	2.5	1.0	0.2
Other Items	28.4	42.6	5.4
Fuzes	15.5	11.0	0.1
TOTAL	196.6	399.8	32.0

The Munitions program in Table II is a $203.2 million increase over FY 1975, of which nearly half is caused by reprogramming $100 million in FY 1975 to cover higher priority requirements. This program is structured to support the following major objectives:

a. Provide an increment of War Reserve Materiel (WRM) stocks to be applied to the total objective based on production considerations and economical phasing.

b. Initiate production of items which have successfully completed development testing and Initial Operational Test and Evaluation.

c. Support training programs needed to insure individual and air crew proficiency.

d. Provide for War Reserve Stocks for Allies and for the Special Contingency Stockpile. The latter requirement ($90.2 million) is included in the FY 1976 request in anticipation of legislative relief to Section 514 of the Foreign Assistance Act. Since enactment of the above legis-

lation on 30 December 1974, no funds have been obligated in this appropriation for support of War Reserve Stocks for Allies (WRSA) nor for the Special Contingency Stockpile (SCS). No action will be taken to obligate funds for these purposes until a legislative decision authorizing obligation is enacted.

ROCKETS AND LAUNCHERS

The $54.6 million required for rockets and launchers is a $36.1 million increase over FY 1975. Most of this increase is for 2.75" rocket motors and warheads, programmed solely for War Reserve Stocks for Allies. Minor amounts are required for meteorological rockets and motors for the MB-1 Rocket.

CARTRIDGES

The FY 1976 request of $119.5 million is an increase of $65.9 million over the FY 1975 approved program. Follow-on procurement of 30 mm cartridges for training and combat, accounts for 45% of the total increase. Other major items included in this increase are 7.6 mm and 20 mm training and combat cartridges, as well as the ALA-17 cartridge flares.

BOMBS

Bombs at $171.1 million, require the greatest amount of funds within the munitions program. This is $93.0 million over FY 1975 primarily because of increases in the Cluster Bomb, MK-20 (ROCKEYE), E-O Bomb Guidance Kit, Modular Guided Glide Bomb, and Laser Bomb Guidance Kit. These are for the Air Force WRM program and will provide a substantial increase in the effectiveness of the munitions

stockpile. The program also provides for BDU-33 and MK-106 practice bombs required for air crew training, and for standard items such as the CBU-58 cluster munition and MK-84 2000 pound general purpose bomb.

TARGETS

$1.0 million is required for target requirements. This is a decrease of $1.5 million below FY 1975 requirements.

OTHER ITEMS

The requirement of $42.6 million includes spares, modifications, and first destination transportation, as well as flares, signals and dispensers. This is an increase of $14.2 million over FY 1975 due primarily to a LUU-2 flare WRM requirement for Allies and an increase in first destination transportation resulting from the overall increase in the munitions program.

FUZES

Requirements for fuzes are $4.5 million below FY 1975 and are limited to two major items -- the FMU-54A/B and the MK-339 mechanical time fuze, both of which are for WRM.

TABLE III
VEHICULAR EQUIPMENT
(IN MILLIONS OF DOLLARS)

ITEM	FY 1975	FY 1976	FY 197T
Passenger Carrying Vehicles	0.9	4.0	0
Cargo & Utility Vehicles	22.6	35.1	0
Special Purpose Vehicles	13.2	19.4	0
Fire Fighting Equipment	11.1	14.2	3.2

TABLE III (Continued)

ITEM	FY 1975	FY 1976	FY 197T
Materials Handling Equipment	8.6	15.0	0
Base Maintenance Support	6.9	16.9	2.4
TOTAL	63.3	104.6	5.6

The $104.6 million requested in FY 1976 for Vehicular Equipment will continue the phased replacement of overaged and obsolescent vehicles. Savings in operating costs, effective energy conservation, and a reduction in environmental pollutants result from this program.

PASSENGER CARRYING VEHICLES

The $4.0 million provides for replacement of 612 vehicles, including light sedans, station wagons, buses, and ambulances.

CARGO AND UTILITY VEHICLES

This is the largest requirement in the vehicle program at $35.1 million. These are the work horse vehicles in the Air Force inventory. Although the quantity of primary vehicles to be procured is 374 less than in FY 1975, the cost will be $12.5 million more.

SPECIAL PURPOSE VEHICLES

Requirements for Special Purpose Vehicles have increased from $13.2 million in FY 1975 to $19.4 million in FY 1976. This increase is primarily for replacement of maintenance and tank (refuelers) trucks.

FIREFIGHTING EQUIPMENT

The $3.1 million increase for FY 1976 over FY 1975 is essentially for follow-on procurement of the Hi-Capacity Fire Trucks.

MATERIALS HANDLING EQUIPMENT

The Materials Handling Equipment requirement for FY 1976 is $6.4 million more than in FY 1975. Planned procurements concentrate on those vehicles that will enhance Air Terminal operations during crises such as occurred in the Middle East. Procurement of 24 Tactical Cargo Loaders for $6.6 million is included in the program.

BASE MAINTENANCE SUPPORT

A $10.0 million increase over the FY 1975 program is required for base maintenance support equipment. Included are new requirements for snow removal vehicles and modifications to equipment such as the 40K loader and P-2 crash truck.

TABLE IV

DEPARTMENT OF THE AIR FORCE
ELECTRONICS AND TELECOMMUNICATIONS
EQUIPMENT PROGRAM

ITEM	FY 1975	PROGRAM FY 1976	ESTIMATE FY 197T
Communications Security Equip	10.6	32.6	1.1
Intelligence Programs	34.1	33.8	3.6
Electronics Programs	101.2	198.0	3.8
Special Communications-Electronics Projects	76.4	101.7	9.6
Air Force Communications	5.5	37.0	1.6
Defense Communications Agency Programs	47.3	44.5	3.4
Organization and Base	73.5	158.6	27.7
Modifications	17.1	19.8	3.2
TOTAL	365.8	626.0	54.0

The $626 million requirement for Electronics and Telecommunications equipment is an increase of $260.2 million over the FY 1975 program. This growth in the program relates to Tactical Secure Voice, data equipment, the Air Force Satellite Communications Program, equipment for the Tactical Forces and Air Natonal Guard, replacement of record terminal equipment, and restoration of program requirements deferred in FY 1975 to transfer funds to O&M.

COMMUNICATIONS SECURITY EQUIPMENT

The $32.6 million COMSEC equipment program provides cryptographic equipment for communications security and increases $22.0 million over FY 1975. The increases are primarily associated with the continuing Space Systems and DOD AIMS programs, new starts for the Tactical Secure Voice and Secure Data programs, and spare parts requirements.

INTELLIGENCE PROGRAMS

Intelligence Programs require $33.8 million in FY 1976. The Signal Intelligence (SIGINT) portion, $25.8 million, provides for the addition of one new intelligence collection system (EXPLORER) and the modernization of existing collection, processing and field station management systems.

ELECTRONICS PROGRAMS

The FY 1976 requirement is $198.0 million, an increase of $96.8 million over FY 1975. These increases are required for several major programs. Procurement of equipment for the Traffic Control and Landing System will eliminate

obsolescent radars and align Air Force precision approach capabilities with existing USAF, FAA and ICAO policies. Increased funding for Tactical Air Control Systems (TACS) improvements will increase capability and result in compatibility and inter-operability between Air Force, Army, Navy and Marine Corp command and control systems. A new radar system consisting of single, long-range, phased array radars on the east and west coasts of the United States will replace the obsolescent Submarine Launched Ballistic Missile Detection and Warning System. Other requirements contributing to the increase include the Defense Support Program, initiation of an acquisition program for SPACETRACK and a procurement program for SEEK SKYHOOK, a low level radar surveillance capability.

SPECIAL COMMUNICATIONS ELECTRONICS PROJECTS

This category totals $101.7 million for FY 1976 an increase of $25.3 million over FY 1975. This increase is associated with several programs. Increased purchases of Automated Data Processing Equipment will allow for the termination of present leasing arrangements and reduce costs. Increased funding for the Eastern Test Range provides for continuing range modernization and improvement. Procurement of two LORAN-D systems provides joint-Service requirements for air transportable, tactical, precision navigation systems required for a common targeting/positioning grid capability over a combat area. The Range Improvement Equipment program provides for overall range safety, real-time control of simultaneous missions,

management of range resources, information for real-time assessment of test and exercise objectives, and conservation of resources. Funds required for the Air Base Defense System respond to the increasing concern over the security afforded nuclear and non-nuclear special weapons. The funds will procure entry control systems, shelter alarms, annunciators, and alarm communications and display systems.

AIR FORCE COMMUNICATIONS PROGRAM

The Air Force Communications Program requires $37.0 million for FY 1976, an increase of $31.5 million over FY 1975. This increase is primarily to purchase equipment needed for access to and use of the Defense Communications and the Air Force Satellite Communications Systems. Of the remainder, $2.3 million is required to implement the recommendations of the House Special Subcommittee on Defense Communications for automation of telecommunications centers.

DCA PROGRAM

This program requires $4.5 million in FY 1976 to comply with tasks assigned to the Air Force by the Defense Communications Agency (DCA). Improvements, augmentation, and upgrade of the Defense Communications System, AUTOVON switches, transmission and technical control facilities and procurement of tactical satellite communications terminals are included. Requirements for FY 1976 are $2.8 million below the amount required for FY 1975.

ORGANIZATION AND BASE

$158.6 million in FY 1976, an increase of $85.1 million over FY 1975, is required to replace and augment communications equipment for organizations and bases, provide initial and replenishment spares, and cover first destination transportation charges for electronics and telecommunications equipment. The increase of $85.1 million over FY 1975 is primarily associated with requirements for training items, radios, communications equipment to upgrade Air National Guard units, replacement of keyboards and printers for the SAC Command and Control System, and other electronics equipment not provided elsewhere in this estimate.

C-E MODIFICATION PROGRAM

The FY 1976 Communications-Electronics Modification Program totals $19.8 million. $8.3 million is required for Class IV modifications to a variety of items for reasons of safety, for correction of deficiencies revealed during the service life of equipment, or to achieve economies by improving logistics support. $3.4 million is required to modify precision approach radars in the Traffic Control and Landing System. Organization and Base requires $5.0 million to provide for the installation of multi-channel radios in mobile equipment and update the capabilities of a radar simulator to those of the current threat. The Eastern Test Range Program requires modifications to

radar, optical and telemetry data collection systems to improve the operational efficiency and equipment reliability.

TABLE V

OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT
(IN MILLIONS OF DOLLARS)

ITEM	FY 1975	FY 1976	FY 197T
Test Equipment	16.3	21.6	1.1
Personal Safety & Rescue Equipment	2.6	3.1	0.6
Depot Plant & Materials Handling Equipment	22.2	33.8	0.3
Electrical Equipment	4.5	7.7	0.6
Base Support Equipment	52.5	70.0	12.9
Special Support Projects	932.2	1,076.2	276.5
TOTAL	1,030.3	1,212.4	292.0

This activity provides the investment equipment for the day-to-day operation of Air Force bases and depot level activities. The FY 1976 requirement for this equipment is $71.4 million over FY 1975. New requirements account for approximately 65% of this increase. These include the Defense Dissemination System, the Tactical Information Processing and Interpretation System (TIPI), and Imagery Collection Programs. Additionally, there is a $110.7 million increase for Selected Activities.

TEST EQUIPMENT

Requirements for test equipment have increased by $5.3 million over FY 1975. This is primarily for calibration packages, oscilloscopes and minor items of equipment.

PERSONAL SAFETY AND RESCUE EQUIPMENT

Requirements for Personal Safety and Rescue Equipment are $3.1 million. The principal item, the Anti-G garment worn by air crews in high performance aircraft, requires $1.1 million.

DEPOT PLANT AND MATERIALS HANDLING EQUIPMENT

Requirements for Depot Plant and Materials Handling Equipment have increased by $11.6 million in FY 1976. Both the depot plant modernization and the base mechanization equipment lines have been increased to enhance the productivity of maintenance and supply facilities.

ELECTRICAL EQUIPMENT

Requirements for electrical equipment in FY 1976 include two major items: the static no-break power supply and the A/E 24 U-8 power plant for $2.8 million and $1.6 million, respectively. The balance of funds required, $3.3 million, are for minor items costing less than $0.5 million.

BASE SUPPORT EQUIPMENT

The $70.0 million for Base Support Equipment for FY 1976 is an increase of $17.5 million over FY 1975. Requirements for medical and dental equipment have increased by $3.0

million and air cargo pallets by $1.8 million. New requirements for relocatable buildings and fuel accounting systems totaling $11.6 million account for most of the balance.

SPECIAL SUPPORT PROJECTS

The Special Support Projects include the Special Activities Program for $1,019.8 million, an increase of $110.7 million over FY 1975. New requirements for these projects, less Selected Activities, result in a net $33.3 million increase over FY 1975. These are the Defense Dissemination System, the NATO Air Weapons Training Center, the Tactical Information Processing and Interpretation Systems (TIPI) and Imagery Collection.

BUDGET REQUEST

Chairman McCLELLAN. You may proceed in that fashion.

General RHODES. It is an honor to appear before your committee and present the budget request for 1976 and the transition period.

As the title "Other procurement" implies, this appropriation provides for the procurement of a wide and varied array of Air Force ground equipment and logistics support programs. Relatively unglamorous, these programs are absolutely essential to our operational effectiveness. Modern weapon systems are dependent upon readily available munitions to destroy or neutralize targets. Combat forces must have logistics support such as vehicles and base maintenance and support equipment to function properly. Rapid and modern communications and electronics systems are absolutely essential to global operations.

This appropriation embraces all of these requirements. I will provide you an overview and the essential background of the budget request in relation to last year's appropriation. Then I will briefly review the major program categories, indicating both what is needed and why.

INCREASE IN OTHER-PROCUREMENT REQUEST

The request for fiscal year 1976 totals $2,342.8 million, an increase of $686.8 million over fiscal year 1975, and the request for the transition budget is $383.6 million. The reason for this substantial increase is basically the result of the need to provide for: (1) new programs, (2) reinstatement of deferred programs, and (3) price increases to the ongoing programs.

Chairman McCLELLAN. That is an extremely large increase. It's about a third larger than last year's, isn't it?

General RHODES. That is correct.

Chairman McCLELLAN. I can understand that costs have increased, but aren't you also launching some new operations?

General RHODES. There are some new items in the program, Mr. Chairman, and, as an example, one of those is the need for purchasing two LORAN ground chains. That is the mobile navigation equipment to provide our tactical forces precise location for flight operations in tactical theaters, and that accounts for a very small portion of this, but it is an example. It is about $14.7 million.

In addition, in the munitions family, we are providing for the modular guided glide bomb and that is about $12 million in this request.

Chairman McCLELLAN. You have only mentioned about $25 million so far, out of some $600 million. That doesn't cover much of it.

General RHODES. In this year's program, Mr. Chairman, there is also a $20.3 million request for the new SPACETRACK site which was deferred last year, the Air Force's satellite communications system—there the request is $27.8 million, as an example. Of course, we have in this program a request for some $90.2 million for war-reserve stocks for allies which I will refer to later in my statement.

Chairman McCLELLAN. All right, you may proceed.

General RHODES. $279 million of the increase is for new requirements, that is, those not included in the fiscal year 1974 or fiscal year 1975 programs, and partial restoration of programs deferred from

fiscal year 1975. The major portion, $407.8 million, is for ongoing programs that have increased in cost because of inflation, increased procurement scope, or in some cases, a combination of both.

A few examples will indicate the extent of the effects of inflation on this appropriation. To date, 715 vehicles valued at $8.9 million have been deleted from the fiscal year 1975 buy program because of price increases. The unit price of the air cargo pallet has risen from $300 to $430 and is estimated to cost $582 in fiscal year 1976. The BDU–33 practice-bomb procurement for fiscal year 1975 has increased $4.2 million for the same number of units. In general, industry is hesitant to accept a contract without inclusion of escalation clauses.

The $383.6 million requirement for the transition period is tied to a limited number of carefully screened items for which production options and reorder leadtimes dictate the need for funds to sustain program continuity.

Now I will make a few comments on each of the programs within this appropriation.

MUNITIONS PROGRAM

The munitions program of $399.8 million is a $203.2 million increase over fiscal year 1975. Nearly half of this increase is caused by reprograming $100 million in fiscal year 1975 to cover higher priority requirements. This program is structured to support the following major objectives:

(*a*) Provide an increment of war reserve material (WRM) stocks to be applied to the total objective based on production considerations and economical phasing.

(*b*) Initiate production of items which have successfully completed development testing and initial operational test and evaluation.

(*c*) Support training programs needed to insure individual and air crew proficiency.

(*d*) Provide for war reserve stocks for allies and for the special contingency stockpile.

The latter requirement, $90.2 million, is included in the fiscal year 1976 request in anticipation of legislative relief to section 514 of the Foreign Assistance Act. No action will be taken to obligate funds for these purposes until a legislative decision authorizing obligation is enacted.

WAR RESERVE STOCKS

Chairman McClellan. How much of our total defense budget is for war reserve stocks for our allies? Does anyone know?

General Rhodes. To my knowledge, this includes all that is in the Air Force appropriation request. I think that I am correct in that.

Mr. Umphrey. In this appropriation, yes.

Chairman McClellan. I would like to have a total figure for the record.

Very well, go ahead.

[The information follows:]

The total FY 1976 Defense Budget for War Reserve Stocks for Allies (WRSA) and the Special Contingency Stockpile is $201.4 million.

VEHICLE PROGRAM

General RHODES. Turning now to the vehicle program the $104.6 million requested in fiscal year 1976 will continue the phased replacement of overaged and obsolescent vehicles. Savings in operating costs, effective energy conservation, and a reduction in environmental pollutants result from this program.

COMMUNICATIONS PROGRAMS

In fiscal year 1976 we are requesting a significant increase in funds for procurement of electronics and telecommunications equipment. The $626 million requirement, an increase of $260.2 million over fiscal year 1975, is part of an ongoing program to modernize communications systems needed for effective command and control of our forces.

This growth in the program relates to tactical secure voice, and secure data equipment, the Air Force satellite communications programs, equipment for the tactical forces and the Air National Guard, replacement of record terminal equipment, and restoration of program requirements deferred in fiscal year 1975 to transfer funds to O. & M.

The last major budget activity in this appropriation is the other base maintenance and support equipment program. This activity provides the investment equipment for the day-to-day operation of Air Force bases and depot level activities. The fiscal year 1976 requirement for this equipment is $71.4 million over fiscal year 1975.

New requirements account for approximately 65 percent of this increase. These include the defense dissemination program, the tactical information processing and interpretation system (TIPI), and imagery collection programs. Additionally, there is a $110.7 million increase for selected activities.

Mr. Chairman, that completes my summary statement. I am ready to respond to any questions from you or members of the committee.

Chairman MCCLELLAN. Senator Hruska, do you have any questions?

Senator HRUSKA. I have no questions, Mr. Chairman.

PRIORITY LISTING

Chairman MCCLELLAN. Could you give us a list indicating the items in your request that are of the highest priority, and those of the lowest priority?

General RHODES. Mr. Chairman, we will be pleased to provide that to you for the record.

Chairman MCCLELLAN. I don't know whether it should come from you, or from the Secretary. But I would like to get that information.

General RHODES. Mr. Chairman, it is my belief that this question should be addressed by the Secretary of Defense, who, quite properly is in a position to assess overall priorities within the Department of Defense.

Chairman MCCLELLAN. Certainly it should be done in consultation with him. I will not ask for it today, but please do submit it for the record. If reductions must be made, it is important for us to know which areas are of the least significance, or which would be harmed the least by a cut.

I assume that this request is what you would like to have, and you could take less if you had to.

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General RHODES. Yes, sir, obviously, it represents our best estimate of what we need.

Chairman MCCLELLAN. I am sure of that, I am not questioning the desirability of it. I am talking about economic realities that we must face.

I have no further questions. Senator, do you have anything more.

LEGISLATIVE RELIEF/SECTION 514

Senator HRUSKA. You have referred in your summary statement to the legislative relief to section 514. Would you describe that to us briefly? What does it embrace?

General RHODES. I am not aware of the details as proposed by the Secretary of Defense or the DOD on that.

General GREENLEAF. That particular provision of the foreign assistance legislation states that procurement of war reserve materials for our allies can only be done under the foreign assistance legislation.

Chairman MCCLELLAN. It must be authorized by that provision?

General GREENLEAF. I believe so, sir.

Senator HRUSKA. Could you verify it and supply it for the record?

MEMO ON SECTION 514 RELIEF

General GREENLEAF. Yes, sir, consequently, on the 5th of February, the Department of Defense General Counsel in writing both to the President of the Senate and the Speaker of the House asked for relief from that particular provision in the statute so that the Department of Defense can continue as it has in the past in the procurement of war reserve material for our allies.

Senator HRUSKA. If you would furnish a little memo on it for inclusion in the record, it would be helpful.

General GREENLEAF. Yes, sir, I will do that.

[The information follows:]

LEGISLATIVE RELIEF TO SECTION 514

Section 703 of Department of Defense Authorization Act for FY 1976, which was submitted by General Counsel of the Department of Defense, amends the recently enacted section 514 of the Foreign Assistance Act of 1961, as amended so as to restore to the Department of Defense the flexibility which is needed with respect to the use of war reserve and other contingency stockpiles in future emergencies. Under the funding restrictions of section 514, as it now reads, the war reserve and contingency requirements of our own armed forces and of our allies would have to be separately computed and financed by different appropriations. As revised by section 703 of the proposed bill, these restrictions would be eliminated, our armed forces would have full title and control of all such stocks and could utilize any part of such stocks for our own requirements should circumstances so require even though acquired in whole or in part based on possible use by allies. As so revised, however, section 514 would continue to require that any future transfer of such stocks to foreign nations be charged against funds authorized by foreign aid legislation or against the limitations specified in such legislation, as appropriate, during the fiscal period in which the transfer occurs. Similar legislation is being requested in the "Foreign Assistance Act of 1975."

WAR RESERVE MATERIAL

Senator HRUSKA. How are these reserves computed, the war reserve material? What factors are taken into consideration in determining these amounts and these quantities?

General RHODES. The war reserves for our forces which I referred to earlier in the statement are computed and we have an annual program review. It is in response to and in support of the forces that are outlined by the Secretary of Defense as those anticipated to be needed in future contingencies.

Using that force as our base line, we then use our projected consumption factors and phased acquisition to meet a preestablished date by which we want to have full support for those forces. That share of the program that pertains to this appropriation is included in this account. That is for our forces.

With respect to the war reserve forces for allies, those are given to us again by guidelines from the same source and we utilize approximate factors for similar equipments that we have in our inventory taking into consideration factors such as cost, aircraft compatability, and expected allied usage preference, and compatability for employment. That is how we arrive at the dollar figures that we have included in this appropriation request.

Senator HRUSKA. As to the allies, would it be correct to say that the type and quantity of equipment they have is the foundation for the quantity you produce for war reserve stocks for them and that the same would be true in our domestic situation?

General RHODES. That is correct, sir. They might differ only slightly in the anticipated utilization rate for the same items. In other words, we might have plans to use ours at a higher rate of utilization. However, those factors are also the utilization rate, the anticipated utilization rate as given to us in the program that is outlined in the Department of Defense guidance.

Senator HRUSKA. What is the difference between the reserve and the current stocks? Are the current stocks used for training and checking?

General RHODES. The current stocks are used to support our peacetime program, which includes all of the training. The reserve stocks are identified as that portion of our inventory which we add to the peacetime inventory, that is in anticipated contingency support.

Senator HRUSKA. What is the imagery collection program? That is an interesting title.

General RHODES. I would be pleased to make arrangements to have a special presentation given to you, Senator, on that subject in a separate briefing.

Senator HRUSKA. What is the nature of it?

General RHODES. It is one of our cartographic source material gathering activities.

Senator HRUSKA. I had some briefings last fall on it.

General GREENLEAF. It is an equipment procurement program for the acquisition of mapping, charting, and geodesy source materials used for the production of maps, charts, point positioning data bases and geodetic positioning of points of special interest to the Department of Defense.

Senator HRUSKA. Thank you.

General GREENLEAF. But the full details of the program as General Rhodes advanced, would have to be covered in a special briefing.

Senator HRUSKA. Now Defense Intelligence handles part of that; do they not?

General GREENLEAF. Yes, Senator Hruska. I spent a couple of days there and so I have some idea of it.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Chairman McCLELLAN. Gentlemen, I do have additional questions for you to answer for the record. If you will please respond to them, they will be inserted at this point.

[The questions and answers follow:]

INCREASE OVER FY 1975 APPROPRIATIONS/OTHER PROCUREMENT

Chairman McCLELLAN. You state that the program requested for fiscal year 1976 is $686.8 million greater than the fiscal year 1975 program. How much of the increase is attributable to inflation, and how much is real program growth?

General RHODES. Mr. Chairman, in analyzing the $687 million fiscal year 1976 growth, I should point out that the actual FY 1976 increase over that which was approved by the Congress for FY 1975 is $544 million. The difference of $143 million is attributable to FY 1975 proposed reprogramming actions which transfer funds from this appropriation to the operating appropriations (O&M, AF, AFR & ANG) primarily to offset the impact of approximately $600 million in additional inflation incurred since the FY 1975 budget was prepared. These reprogramming actions are requested in compliance with the Congressional direction for Services to reprogram within resources rather than submit supplemental budget requests.

Nevertheless, of the $687 million increase, $190 million are increases attributable to inflation and contract escalation, $354 million is program growth, and the remainder, $143 million, was reprogrammed to Air Force operating appropriations.

TRANSITION PERIOD/OTHER PROCUREMENT

Chairman McCLELLAN. The transition period request is for $383.6 million. Will any new initiatives be provided within the funds requested for the transition period?

General RHODES. No, sir.

WAR RESERVE STOCKS FOR ALLIES

Chairman McCLELLAN. How much does the Other Procurement, Air Force, fiscal year 1976 request include for War Reserve Stocks for Allies? Which nations are considered as potential allies and possible users of these stocks? Provide for the record a detailed breakdown as to the numbers and types of supplies and equipment included wihin the request.

General RHODES. Sir, our Fiscal Year 1976 Budget Request includes $78.7 million for War Reserve Stocks for Allies. Assuming the Foreign Assistance Act of 1974 is amended to permit procurement of stocks for Allies, these funds will provide war reserve stocks for the potential future use of the tactical air forces of the [deleted]. War Reserve Stocks for Allies remain under U.S title and control and would not be transferred to an ally unless specifically authorized by Congress. A list of the items for which funds are being requested will be provided for the record.

[The information follows:]

P-1 line No.	Item	Quantity	Amount (millions)
2	2.75 in. rocket motor	754,656	$31.9
3	2.75 in. rocket head, fragmentation	327,656	9.8
4	2.75 in. rocket head, W.P.	192,340	6.0
10	Items less than $500,000		
	2.75 in. rocket launcher, M200	277	.3
13	7.62 mm cartridge	97,608	14.8
26	Dispenser and bomb, CBU-58	6,028	7.3
49	Flare, parachute, LUU-2	72,000	8.6
	Total		78.7

SPECIAL CONTINGENCY STOCKPILE

Chairman McCLELLAN. Explain the Special Contingency Stockpile. How much has been provided for this in previous years, and how much is in the fiscal year 1976 Budget Request?

General RHODES. As part of the Secretary of Defense's planning and programming guidance, the Services are to procure and maintain in their CONUS inventories a special contingency war reserve stockpile of equipment, munitions, and other combat essential consumable supplies (excluding POL), to remain under U.S. title and control, for transfer to any [deleted] client state where circumstances and U.S. interests might dictate. The Special Contingency Stocks (SCS) are not intended as procurement in advance of offers or acceptances of sales to foreign countries. SCS requirements are included in U.S. Service inventory objectives so that, once they are procured and in inventory, they will provide a hedge against our having to drawdown USAF inventories of modern weapons in order to meet unforeseen urgent demands from U.S allies [deleted]. Some munition assets were on hand prior to establishing SCS requirements and have been applied to those requirements. However, within our FY 1976 request we have included $11.5 million which represents our first request for new funds to procure for SCS.

30MM COMBAT CARTRIDGES

Chairman MCCLELLAN. When the Committee considered the fiscal year 1975 budget request for 30mm combat cartridges, the Department had not reached a decision as to which type of cartridge would be selected for procurement. I understand there have been some technical problems with the ammunition. Bring the Committee up to date on the program.

General RHODES. The Critical Design Review of the 30mm training round and the High Explosive Incendiary (HEI) round was completed in August 1974. We completed the Critical Design Review of the Armor Piercing Incendiary (AP–I) round in December 1974. Depleted uranium was approved for use in the manufacture of the penetrator. You may recall that we were experiencing secondary ignition of gun gases. This problem has been solved by adding potassium salts to the propellant to act as a flash suppressant. We have initiated production of 30mm ammunition with the primary objective of supporting the follow-on operational test of the A–10 weapon system, providing initial stocks to support A–10 combat aircrew training and introducing combat rounds into the war reserve inventory.

TACTICAL CARGO LOADERS

Chairman MCCLELLAN. The fiscal year 1976 request includes $6.6 million for tactical cargo loaders. How much has previously been provided for procurement of the loaders? What is the approved acquisition objective, and when will the procurement be completed?

General RHODES. The fiscal year 1974 appropriation includes $4.1 million for procurement of 12 loaders. The fiscal year 1975 appropriation is for $4.2 million for an additional 12 loaders. The acquisition objective is 63 loaders which includes three prototypes which were RDT&E funded. Based on the fiscal year 1976 request for 24 loaders, the Air Force now plans to procure the final 12 loaders in Fiscal Year 1977.

CONTINENTAL OPERATIONS RANGE

Chairman MCCLELLAN. Are funds included in the fiscal year 1976 procurement request for the Continental Operations Range? If so, how much and for what equipment? If not, does the requirement no longer exist?

General EDGE. The Air Force is not requesting funds for the Continental Operations Range in fiscal year 1976. The requirement to improve the Air Force's capability to conduct realistic operational testing and evaluation and combat aircrew training still exists; however, there is no foreseeable need at this time for an integrated tri-service range to satisfy that requirement. Instead, the Air Force will improve select individual ranges. Funds are included in the fiscal year 1976 Other Procurement request for instrumentation and equipment to be installed at the Tyndall AFB/Eglin AFB area in Florida as well as at the Tactical Fighter Weapons Center ranges in Nevada.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I also have some questions for the record.

Chairman MCCLELLAN. Without objection, the questions and answers will appear at this point in the record.

[The questions and answers follow:]

WRM MUNITIONS

Senator YOUNG. How much of the $399.8 million requested is for war reserve munitions?

General RHODES. $304.4 million.

WRM MUNITIONS/STORAGE LOCATIONS

Senator YOUNG. Will war reserve munitions be stored in the United States or overseas or both?

General RHODES. War reserve munitions will be stored in both the United States and overseas. Prepositioned war reserve munitions will be stored overseas, and will remain under U.S. control.

Follow-on support war reserve munitions will be stored in the United States.

NEW MUNITIONS PURCHASED

Senator YOUNG. What new munitions will the Air Force purchase under this program?

General RHODES. Sir, our Munitions Request includes $11.9 million for procurement of the Modular Guided Glide Bomb (MGGB) which is the only new item we are proposing for procurement in FY 1976. The MGGB–II is a 2,000 pound weapon with a range extension system to allow for attack of targets from distances beyond the range of enemy defenses.

VEHICLES PROCURED/COMMERCIAL/AND SERVICE PECULIAR

Senator YOUNG. How many vehicles does this budget envision being procured? How many vehicles are peculiar to the service and how many are standard commercial vehicles?

General RHODES. This budget envisions procurement of 8,244 vehicles. Of this quantity, 6,455 vehicles are commercially available and 1,789 are built to satisfy specific Air Force requirements. Most of the latter are built from commercially available components to Air Force specifications.

AFSATCOM COMMUNICATIONS FOR AABNCP AND AWACS

Senator YOUNG. Does this budget include communications for the Airborne Command Post or the AWACS Aircraft?

General RHODES. No, Sir. This budget provides for development, test and evaluation of terminals to be used in the approved aircraft. Procurement and installation of terminals in aircraft is funded under the aircraft modification account or the new aircraft avionics procurement.

AFSATCOM/DUPLICATION OF OTHER SERVICE PROGRAMS

Senator YOUNG. Is the Air Force Satellite Communications a duplication of programs by the other services?

General RHODES. No sir. The Air Force Satellite Communications System is designed to provide command and control communications between the National Command Authorities and the individual strategic force elements. No other programs provide this capability. The system operates at a low data rate and provides record copy, with some protection against electromagnetic jamming. Because it serves mobile forces and provides anti-jam capability with world-wide coverage, the AFSATCOM System meets the unique requirements of strategic forces and complements the other DOD systems. The AFSATCOM System provides this communications capability through the satellites of the Navy Fleet Satellite Communications Program and the Air Force Satellite Data System.

SUBCOMMITTEE RECESS

Chairman MCCLELLAN. All right, gentlemen. Thank you very much for your testimony.

We will resume tomorrow at 10 o'clock. The subcommittee will stand in recess until that time.

[Whereupon, at 11:10 a.m., Tuesday, March 18, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, March 19.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

WEDNESDAY, MARCH 19, 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. John L. McClellan (chairman) presiding.

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

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

RESEARCH AND DEVELOPMENT

STATEMENTS OF:

DR. WALTER B. LaBERGE, ASSISTANT SECRETARY OF THE AIR FORCE FOR RESEARCH AND DEVELOPMENT

MAJ. GEN. KENNETH R. CHAPMAN, ASSISTANT DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT

ACCOMPANIED BY:

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

BRIG. GEN. HENRY B. STELLING, DIRECTOR OF SPACE, DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT

COL. WILLIAM D. BATHURST, DEPUTY CHIEF, INVESTMENT APPROPRIATIONS DIVISION, DIRECTORATE OF THE BUDGET

COL. JOHN L. GILBERT, ASSISTANT FOR REQUIREMENTS, DEVELOPMENT AND ACQUISITION PROGRAMING, DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT

BUDGET REQUEST

Chairman MCCLELLAN. The subcommittee will come to order.

Today we will receive testimony in support of the fiscal 1976 budget request for the Air Force, for the research, development, test and evaluation accounts.

JUSTIFICATION

Before we begin hearing testimony, I think it appropriate to enter the relevant material from the justifications into the hearing record. Without objection, it will be inserted at this point.

[The justification follows:]

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

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: $3,903,200,000 to remain available for obligation until June 30, 1977.

For "Research, development, test, and evaluation, Air Force" for the period July 1, 1976, through September 30, 1976, $1,034,000,000, to remain available for obligation until September 30, 1977.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-20-3600-0-1-051	BUDGET PLAN (AMOUNTS FOR ROTATE ACTIONS PROGRAMED)			OBLIGATIONS		
	1974 ACT	1975 EST	1976 EST	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:						
DIRECT:						
1. MILITARY SCIENCES	129,332	132,150	143,600	130,873	131,644	143,330
2. AIRCRAFT AND RELATED EQUIPMENT	1,115,250	1,097,485	1,430,200	1,117,813	1,095,490	1,427,177
3. MISSILES AND RELATED EQUIPMENT	238,285	370,485	358,300	236,416	368,756	357,500
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	521,362	453,650	560,500	515,545	453,995	559,365
6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	111,619	149,405	185,700	113,079	145,592	187,832
7. OTHER EQUIPMENT	479,022	633,675	719,900	496,741	627,873	718,191
8. PROGRAMWIDE MANAGEMENT AND SUPPORT	467,023	462,043	502,000	464,972	464,291	501,963
TOTAL DIRECT	3,061,893	3,298,853	3,903,200	3,075,439	3,287,641	3,895,358
REIMBURSABLE (TOTAL)	333,191	372,797	342,216	322,979	373,130	337,965
10 TOTAL	3,395,084	3,671,650	4,245,416	3,398,418	3,660,771	4,233,323
FINANCING:						
RECEIPTS AND REIMBURSEMENTS FROM:						
11 FEDERAL FUNDS	-286,038	-337,400	-321,700	-273,246	-337,400	-321,700
13 TRUST FUNDS	-37,644	-24,400	-18,016	-36,186	-24,400	-18,016
14 NON-FEDERAL SOURCES	-2,409	-2,300	-2,500	-2,264	-2,300	-2,500
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-125,037	-106,532	-117,411
AVAILABLE TO FINANCE NEW BUDGET PLANS	-15,797	-16,697	.....	-15,797	-16,697	.....
REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-776	.....	.....	.....	.....	.....
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-8,000	.....	.....	-8,000	.....
23 UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	8,000	.....	.....	8,000	.....
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	106,532	117,411	129,504
AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	16,697	.....	.....	16,697	.....	.....
25 UNOBLIGATED BALANCE LAPSING						
UNOBLIGATED BALANCE LAPSING, BUD PLAN	776	.....	.....	776	.....	.....
BUDGET AUTHORITY	3,069,893	3,290,893	3,903,200	3,069,893	3,290,893	3,903,200
BUDGET AUTHORITY:						
40 APPROPRIATION	3,069,893	3,274,360	3,903,200	3,069,893	3,274,360	3,903,200
44.10 PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	3,300	.....	.....	3,300	.....
44.20 PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	13,193	.....	.....	13,193	.....
RELATION OF OBLIGATIONS TO OUTLAYS:						
71 OBLIGATIONS INCURRED, NET				3,086,722	3,296,671	3,891,187
72 OBLIGATED BALANCE, START OF YEAR				924,893	765,055	718,726
74 OBLIGATED BALANCE, END OF YEAR				-765,055	-718,726	-869,833
77 ADJUSTMENTS IN EXPIRED ACCOUNTS				-6,994	.....	.....
90 OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL				3,239,566	3,327,500	3,739,007
91.10 OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL				.....	3,000	300
91.20 OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL				.....	12,500	693

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-20-3600-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	340,040	349,662	352,445
11.3	POSITIONS OTHER THAN PERMANENT	1,331	.....	.....
11.5	OTHER PERSONNEL COMPENSATION	6,522	6,410	6,410
	TOTAL PERSONNEL COMPENSATION	347,893	356,072	358,855
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	335,426	336,767	338,320
12.1	PERSONNEL BENEFITS: CIVILIAN	29,921	31,157	32,048
13.0	BENEFITS FOR FORMER PERSONNEL	94	75	75
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	15,771	15,600	15,500
22.0	TRANSPORTATION OF THINGS	5,968	5,900	5,900
23.0	RENT, COMMUNICATIONS, AND UTILITIES	34,456	34,500	34,500
24.0	PRINTING AND REPRODUCTION	1,531	1,600	1,600
25.0	OTHER SERVICES	2,570,863	2,780,742	3,386,115
26.0	SUPPLIES AND MATERIALS	49,113	49,000	49,000
31.0	EQUIPMENT	32,296	32,300	32,300
	TOTAL DIRECT OBLIGATIONS	3,075,439	3,287,641	3,895,358
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	12,467	19,305	20,535
12.1	PERSONNEL BENEFITS: CIVILIAN	518	1,760	1,900
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	9,360	9,500	9,500
22.0	TRANSPORTATION OF THINGS	203	300	300
23.0	RENT, COMMUNICATIONS, AND UTILITIES	4,274	4,400	4,400
25.0	OTHER SERVICES	280,763	320,865	282,330
26.0	SUPPLIES AND MATERIALS	9,580	11,000	12,000
31.0	EQUIPMENT	5,814	6,000	7,000
	TOTAL REIMBURSABLE OBLIGATIONS	322,979	373,130	337,965
99.0	TOTAL OBLIGATIONS	3,398,418	3,660,771	4,233,323

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1973 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-3600-0-1-051

		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	.....	.....	.....	2,345	.....	.....
	2. AIRCRAFT AND RELATED EQUIPMENT	.....	.....	.....	11,438	.....	.....
	3. MISSILES AND RELATED EQUIPMENT	.....	.....	.....	1,603	.....	.....
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	.....	.....	.....	15,118	.....	.....
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	.....	.....	.....	2,400	.....	.....
	7. OTHER EQUIPMENT	.....	.....	.....	39,102	.....	.....
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT	.....	.....	.....	4,691	.....	.....
	TOTAL DIRECT	.....	.....	.....	76,697	.....	.....
	REIMBURSABLE (TOTAL)	.....	.....	.....	33,169	.....	.....
10	TOTAL	.....	.....	.....	109,866	.....	.....
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	.....	12,792	.....	.....
13	TRUST FUNDS	.....	.....	.....	1,458	.....	.....
14	NON-FEDERAL SOURCES	.....	.....	.....	145	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-125,037	.....	.....
	REPROGRAMING FROM OR TO PRIOR YEAR BUDGET PLANS	-776	.....	.....	.....	.....	.....
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	776	.....	.....	776	.....	.....
	BUDGET AUTHORITY	.....	.....	.....	.....	.....	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1974 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-3600-0-1-051

		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	129,332			128,528	804	
	2. AIRCRAFT AND RELATED EQUIPMENT	1,115,250			1,106,375	8,875	
	3. MISSILES AND RELATED EQUIPMENT	238,285			234,813	3,472	
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	521,362			500,427	20,935	
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	111,619			110,679	940	
	7. OTHER EQUIPMENT	479,022			457,639	21,383	
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT	467,023			460,281	6,742	
	TOTAL DIRECT	3,061,893			2,998,742	63,151	
	REIMBURSABLE (TOTAL)	333,191			289,810	43,381	
10	TOTAL	3,395,084			3,288,552	106,532	
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-277,771			-277,771		
13	TRUST FUNDS	-37,276			-37,276		
14	NON-FEDERAL SOURCES	-2,347			-2,347		
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR					-106,532	
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						
	AVAILABLE TO FINANCE NEW BUDGET PLANS	-15,797	-8,000		-15,797	-8,000	
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS		8,000			8,000	
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR				106,532		
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS						
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	8,000			8,000		
	BUDGET AUTHORITY	3,069,893			3,069,893		

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

1975 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-3600-0-1-051

		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	.....	132,190	.....	.....	130,840	1,310
	2. AIRCRAFT AND RELATED EQUIPMENT	.....	1,097,465	.....	.....	1,086,615	10,850
	3. MISSILES AND RELATED EQUIPMENT	.....	370,465	.....	.....	365,284	5,181
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	.....	453,650	.....	.....	433,060	20,590
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	.....	149,405	.....	.....	144,652	4,753
	7. OTHER EQUIPMENT	.....	633,675	.....	.....	606,490	27,185
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT	.....	462,043	.....	.....	457,549	4,494
	TOTAL DIRECT	.....	3,298,853	.....	.....	3,224,490	74,363
	REIMBURSABLE (TOTAL)	.....	372,797	.....	.....	329,749	43,048
10	TOTAL	.....	3,671,650	.....	.....	3,554,239	117,411
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-8,267	-337,400	.....	-8,267	-337,400	.....
13	TRUST FUNDS	-368	-24,400	.....	-368	-24,400	.....
14	NON-FEDERAL SOURCES	-62	-2,300	.....	-62	-2,300	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	-117,411
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-8,697	.....	.....	-8,697	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-8,000	.....	.....	-8,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	117,411	.....
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	8,697	.....	.....	8,697	.....	.....
	BUDGET AUTHORITY	.....	3,290,853	.....	.....	3,290,853	.....
	BUDGET AUTHORITY:						
40	APPROPRIATION	.....	3,274,360	.....	.....	3,274,360	.....
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	3,300	.....	.....	3,300	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	13,193	.....	.....	13,193	.....

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS) — 1976 FISCAL YEAR PROGRAM

IDENTIFICATION CODE 07-20-3600-0-1-051

		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	.....	.....	143,600	.....	.....	142,020
	2. AIRCRAFT AND RELATED EQUIPMENT	.....	.....	1,430,200	.....	.....	1,416,327
	3. MISSILES AND RELATED EQUIPMENT	.....	.....	358,300	.....	.....	352,319
	4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	.....	.....	560,500	.....	.....	538,775
	6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	.....	.....	188,700	.....	.....	183,079
	7. OTHER EQUIPMENT	.....	.....	719,900	.....	.....	691,006
	8. PROGRAMWIDE MANAGEMENT AND SUPPORT	.....	.....	502,000	.....	.....	497,469
	TOTAL DIRECT	.....	.....	3,903,200	.....	.....	3,820,995
	REIMBURSABLE (TOTAL)	.....	.....	342,216	.....	.....	294,917
10	TOTAL	.....	.....	4,245,416	.....	.....	4,115,912
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	.....	.....	-321,700	.....	.....	-321,700
13	TRUST FUNDS	.....	.....	-18,016	.....	.....	-18,016
14	NON-FEDERAL SOURCES	.....	.....	-2,500	.....	.....	-2,500
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	.....	.....	129,504
	BUDGET AUTHORITY	.....	.....	3,903,200	.....	.....	3,903,200

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-20-3600-0-1-051	BUDGET PLAN (AMOUNTS FOR RDT+E ACTIONS PROGRAMED)	OBLIGATIONS
	TRANSITION	TRANSITION
PROGRAM BY ACTIVITIES:		
DIRECT:		
1. MILITARY SCIENCES	38,300	39,488
2. AIRCRAFT AND RELATED EQUIPMENT	362,500	364,360
3. MISSILES AND RELATED EQUIPMENT	107,900	108,700
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	133,700	139,380
6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	57,600	60,045
7. OTHER EQUIPMENT	204,700	210,090
8. PROGRAMWIDE MANAGEMENT AND SUPPORT	129,300	133,212
TOTAL DIRECT	1,034,000	1,055,275
REIMBURSABLE (TOTAL)	85,731	109,750
10 TOTAL	1,119,731	1,165,025
FINANCING:		
RECEIPTS AND REIMBURSEMENTS FROM:		
11 FEDERAL FUNDS	-80,425	-80,425
13 TRUST FUNDS	-4,681	-4,681
14 NON-FEDERAL SOURCES	-625	-625
21 UNOBLIGATED BALANCE AVAILABLE, START OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	-129,504
24 UNOBLIGATED BALANCE AVAILABLE, END OF YEAR FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	84,210
BUDGET AUTHORITY	1,034,000	1,034,000
BUDGET AUTHORITY:		
40 APPROPRIATION	1,034,000	1,034,000
RELATION OF OBLIGATIONS TO OUTLAYS:		
71 OBLIGATIONS INCURRED, NET		1,079,294
72 OBLIGATED BALANCE, START OF YEAR		869,833
74 OBLIGATED BALANCE, END OF YEAR		-1,025,127
90 OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL		924,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-20-3600-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	88,650
11.5	OTHER PERSONNEL COMPENSATION	1,400
	TOTAL PERSONNEL COMPENSATION	90,050
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	84,750
12.1	PERSONNEL BENEFITS: CIVILIAN	8,147
13.0	BENEFITS FOR FORMER PERSONNEL	20
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	4,000
22.0	TRANSPORTATION OF THINGS	1,500
23.0	RENT, COMMUNICATIONS, AND UTILITIES	9,000
24.0	PRINTING AND REPRODUCTION	400
25.0	OTHER SERVICES	927,458
26.0	SUPPLIES AND MATERIALS	12,000
31.0	EQUIPMENT	8,000
	TOTAL DIRECT OBLIGATIONS	1,055,275
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	5,300
12.1	PERSONNEL BENEFITS: CIVILIAN	413
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	2,600
22.0	TRANSPORTATION OF THINGS	100
23.0	RENT, COMMUNICATIONS, AND UTILITIES	1,100
25.0	OTHER SERVICES	95,437
26.0	SUPPLIES AND MATERIALS	3,000
31.0	EQUIPMENT	1,800
	TOTAL REIMBURSABLE OBLIGATIONS	109,750
99.0	TOTAL OBLIGATIONS	1,165,025

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Personnel Summary (in thousands of dollars)

Identification Code 07-20-3600-0-1-051	1974 actual	1975 estimate	1976 estimate	197T estimate
Total number of permanent positions	21,655	21,812	20,634	20,633
Full-time equivalent of other positions	113			
Average paid employment	21,761	21,465	21,300	5,320
Average GS grade	7.40	7.44	7.49	7.51
Average GS salary	$16,450	$17,355	$17,767	$17,767
Average salary of ungraded positions	$11,306	$12,615	$13,251	$13,251

PROJECT LISTING

SUMMARY BY BUDGET ACTIVITY

($ In Thousands)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate	FY 1977 Authorization
1. MILITARY SCIENCES	129,332	132,150	143,600	38,300	152,300
2. AIRCRAFT AND RELATED EQUIPMENT	1,115,250	1,097,465	1,430,200	362,500	1,158,000
3. MISSILES AND RELATED EQUIPMENT	238,285	370,465	358,300	107,900	514,600
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	521,362	453,650	560,500	133,700	698,400
6. ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT	111,619	149,405	188,700	57,600	279,700
7. OTHER EQUIPMENT	479,022	633,675	719,900	204,700	795,900
8. PROGRAM-WIDE MANAGEMENT AND SUPPORT	467,023	462,043	502,000	129,300	512,000
TOTAL RDT&E - DIRECT	3,061,893	3,298,853	3,903,200	1,034,000	4,110,900
REIMBURSEMENTS	333,191	372,797	342,216	85,731	
TOTAL PROGRAM	3,395,084	3,671,650	4,245,416	1,119,731	

PROJECT LISTING

SUMMARY BY PROGRAM CATEGORY

($ In Thousands)

		FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate	FY 1977 Authorization
6.1	RESEARCH.	77,783	79,720	87,800	22,040	88,987
6.2	EXPLORATORY DEVELOPMENT	265,156	278,359	304,703	79,413	319,843
6.3	ADVANCED DEVELOPMENT.	375,238	484,372	547,083	170,713	887,540
6.4	ENGINEERING DEVELOPMENT	934,461	1,235,408	1,725,602	452,586	1,538,527
6.5	MANAGEMENT AND SUPPORT.	520,662	510,630	556,530	143,190	566,430
	TOTAL RESEARCH AND DEVELOPMENT PROGRAM. . .	2,173,300	2,588,489	3,221,718	867,942	3,401,327
	TOTAL OPERATIONAL SYSTEMS PROGRAMS.	888,593	710,364	681,482	166,058	709,573
	TOTAL RDT&E - DIRECT.	3,061,893	3,298,853	3,903,200	1,034,000	4,110,900
	REIMBURSEMENTS.	333,191	372,797	342,216	85,731	
	TOTAL PROGRAM	3,395,084	3,671,650	4,245,416	1,119,731	

BIOGRAPHY AND PREPARED STATEMENT

Chairman McCLELLAN. The witnesses today will be Dr. Walter B. LaBerge, Assistant Secretary of the Air Force for Research and Development, and Maj. Gen. Kenneth R. Chapman, Assistant Deputy Chief of Staff, Research and Development.

All right, Dr. LaBerge, we will hear you first.

Dr. LABERGE. If I may, I would like to submit a formal statement for the record and speak in short form to a few of its principal points.

Chairman McCLELLAN. Very well, your biography and statement will be received and printed in full in the record.

[The biography and statement follow:]

BIOGRAPHY OF DR. WALTER B. LaBERGE

Dr. Walter LaBerge was appointed by the President to be Assistant Secretary of the Air Force (Research and Development) on September 14, 1973. Since 1950 he has been associated with the development of the Nation's space and missile programs for NASA and the Armed Forces as an engineer in electronics, research and development, weapons systems, and management in positions of increasing responsibility. From 1971 to his appointment as Assistant Secretary, he was with the Naval Weapons Center in California, first as Deputy Technical Director then as Director.

Dr. LaBerge was born in Chicago, Ill., on March 29, 1924. He received a bachelor of science degree in naval science, 1944, a bachelor of science degree in physics, 1947, and his doctorate degree in physics, 1950, from the University of Notre Dame. During World War II from 1944, he served as executive officer and then Commander of the YMS 165 that swept more than 200 mines which is believed to be more than any ship of its class in the Pacific area.

After receiving his doctorate degree in 1950, he became a program engineer and then program manager for the Sidewinder missile at the Naval Ordnance Test Station, China Lake, Calif. He participated in the development, production and introduction into the Fleet of the Sidewinder missile, with primary expertise in missile seeker design and kinematics.

From 1957 to 1971, Dr. LaBerge was associated with the Philco-Ford Corporation in various laboratories and operations concerned in research and development, electronics, design, implementation, maintenance, and management, including their programs involved in Gemini, Apollo, and satellites. He first was Director of Engineering, Western Development Laboratories, at Palo Alto, Calif., with engineering and project responsibility for all the laboratories' programs.

In 1963 he became Director of the Philco Houston Operations at Houston, Tex., and was senior technical and operating executive responsible to NASA for design, implementation, documentation and maintenance of the Apollo Mission Control Center from Gemini IV through Apollo XVII. Dr. LaBerge joined the Research and Development Corporate Staff at Philadelphia, Pa., in 1965, as vice president, and was senior defense electronics staff officer for research and development with direct responsibility for the Philco Corporate research program and approval authority for divisional program proposals and discretionary fund application.

Dr. LaBerge became a member of the Western Development Laboratories in Palo Alto, Calif., in 1966 and as vice president was senior operating executive of the division responsible for maintenance and upgrading of NASA Apollo Houston Control Center and the U.S. Air Force remote satellite tracking facilities. From 1967 to 1971 as vice president of the Electronics Group he had senior line supervision of military electronics business with worldwide operations including satellite control facilities, communications satellites, and large antennas for commercial communications satellites.

In 1971 Dr. LaBerge went to the Naval Weapons Center in California as Deputy Technical Director and in June 1973 became Technical Director. In this position, he was responsible for naval weapons development programs conducted at the Center, for research and advanced technology work in support of these programs, and for the technical facilities. He acted as Deputy Program Manager to the Naval Air Systems Command for advanced aircraft weapons systems, and for the Naval Ordnance Systems Command for shipboard point defense weapons systems, antiradiation missile systems, air-to-surface weapons, and shipboard

point defense systems. He also was responsible for joint service programs conducted with the Marine Corps, Army, and Air Force.

Among the awards that Dr. LaBerge has received are the California Legislature Resolution of Appreciation for Sidewinder Contribution, 1957; California Junior Chamber of Commerce Award, one of Five Outstanding Young Men of California, 1957; University of Notre Dame, Centennial Award to 50 Outstanding Scientific Graduates, 1967; and Navy Superior Civilian Service Award, 1972.

He is a member of the Research Society of America, American Society of Professional Administrators, and Chief Naval Operations Advisory Committee on Communications. He has served on the Defense Science Board Panel on Remotely Piloted Vehicles, 1971 - 1972; and the Chief Naval Operations Industry Advisory Committee on Telecommunications, 1972.

His contributions to the United States space and military programs include: designed and implemented for NASA, as industrial prime contractor, the Apollo Mission Control Center at Houston, 1963 - 1964; technically directed the specific Naval Weapons Center 1972 emergency Vietnam support (Chaparral, Shrike-on-Board, MK 83 laser guided bomb (LGB), attack aircraft laser designator, data link Walleye, SA-7 infrared decoy), and integrated overall laboratory community emergency response program; directed the development of the 1972 Chief of Naval Materiel Anti-Ship Missile Defense plan; directed, as prime contractor, implementation of the worldwide remote site U.S. Air Force satellite tracking network, 1961 - 1963. As Vice President of the Philco Corporation, 1968 - 1971, managed, staffed, and planned the conduct of a 150 million dollars a year high technology defense electronics business which was profitable, grew each year, and had excellent customer reputation.

Dr. LaBerge is married to the former Patricia Anne Sammon of River Forrest, Ill. They have five children: Peter Robert, Steven Michael, Jeanne Marie, Philip Charles, and Jacqueline Anne.

STATEMENT OF DR. WALTER B. LaBERGE

INTRODUCTION

Mr. Chairman and Members of the Committee: I am glad to have this opportunity to appear before you again today to discuss the Air Force research and development programs. This is, of course, my second time to testify before you. I will try in this report to describe some of what we have accomplished this last year and what we hope to be able to achieve in this coming year.

Both Secretary McLucas and General Jones have discussed the total Air Force request with you. I intend to highlight those Research and Development policies that have led to the formulation of this year's RDT&E program, as well as to de-

scribe the context in which that formulation was made. Lt. General Evans, who will testify immediately after I conclude, will provide the programmatic details of our 1976 RDT&E request.

As you are aware, the Secretary of Defense provides annual planning and programming guidance to the Services. On the subject of R&D he stated, and I quote:

"A technological base ... which is generally superior to that of our potential adversaries is required in order to insure that the United States can make necessary force improvements to maintain an overall military balance and minimize the chance of technological surprise. Such a base should be maintained by pursuing and demonstrating strong research and advanced development programs. Advanced technologies in the United States provide a relative advantage to the United States in terms of overall military capabilities. Accordingly, the advantages that our technological base provide must be both advanced and protected ..."

I wish to strongly indorse Secretary Schlesinger's statement on the importance of our technology.

More important than my opinion though is the opinion of the young men who will fight for us if need be. I have this year flown in the B-52, FB-111, F-4 Wild Weasel, F-106B, C-5, C-130 gun ship, the F-15, the SR-71, have climbed through the Minuteman silos, and have even flown in the Navy's F-14. The single, clear, consistent, unambiguous position of the marvelous young Americans who fly these aircraft and man these missile sites is that they believe in their equipment,

their ability to use it well, and their ability to accomplish their fighting assignments when need be. They also have an unquestioning confidence that you of the Congress and we of the R&D community will continue to provide them the equipment that will allow them to believe in themselves.

Each year the Department of Defense through its military services compiles jointly agreed upon research and development objectives for approval by the Secretary of Defense. From this approved base evolves technology coordinating papers (TCPs) and decision coordinating papers (DCPs). The TCPs serve to identify:

- Areas of scientific endeavor and specific engineering advances most needed to meet future military requirements or to solve current problems.
- Those programs under way or planned by each Service to fill its identified needs.
- Those important gaps in the technology, if any, which exist at presently projected funding levels.

These plans have served to focus our Air Force program for technology.

The decision coordinating papers are the documented and approved plans for the acquisition and management of major development programs. They are our contracts with DOD which, when totaled, represent the major portion of the FY 1976 RDT&E budget. As we present the Air Force programs, you will see that they respond to many of your, as well as our, previous concerns. For example, as Lt. General Evans describes this year's R&D programs, I hope you will agree that

we have become much more realistic in our allowance for future year inflation.

CHARACTERISTICS OF AIR FORCE RDT&E PROGRAMS

I would like now to highlight some of the key factors that characterize this year's Air Force RDT&E program.

I sincerely believe that we present to you, requesting your approval, a balanced full spectrum RDT&E program, including basic research, exploratory, advanced, and engineering development and the associated operational test. The Air Force management, both uniformed and civilian, has been most concerned that this year we achieve this appropriate balance between far and near term R&D activities.

In 1974, we also intensively reviewed our Air Force R&D organizational structure and, as a result, we are in the process of making changes to it. We have reviewed the effectiveness of our use of Federal Contract Research Centers. We have both reaffirmed our need for these FCRC's and confirmed our desire to continue to use them. We have spent considerable time with industry leaders trying to maximize the efficiency of our contractual work together and have increased the effectiveness of our IR&D program. We have also sought to know and use better the intellectual assets of the university world. And lastly, we have, as an Air Force, and I have personally, spent a great deal of time working with the other Services, with NASA, and with our international allies on programs of technological cooperation of mutual advantage. To a reasonable degree, I believe all of these efforts have been successful and I would like to describe them now.

TECHNOLOGY BASE

The Members of the Congress, after last year's hearings, expressed concern that DOD and the Air Force were allowing an unwarranted and disturbing erosion of our technological base. As we stated to you in our last year's hearings, we too were concerned. As a result of these mutual concerns, in 1974, the Air Force initiated a Laboratory Utilization Study. This study assessed how well our laboratories were serving the Air Force development community as centers of excellence in the areas of technical promise. This study also looked at the interfaces between the Air Force and the outside science and technology community.

One principal conclusion of this study was that an even closer coupling between the Air Force labs and our three Air Force "product development divisions" could enhance our Air Force development effectiveness. A second conclusion from the study was that the ratio of the funding of research work performed within the laboratories to that research work contracted outside the Air Force had slowly become unbalanced in favor of maintaining our in-house organization to the detriment of our outside supported effort.

As a consequence of both the Laboratory Study and a separate summer study by the USAF Scientific Advisory Board, Secretary McLucas re-emphasized the importance of research to the Air Force, directed that funds allocated to research not be eroded by current program pressures, and requested the Chief of Staff to examine the balance of basic research effort between in-house and outside activities, suggesting that the

emphasis in research be shifted from predominantly in-house to predominantly university research.

Subsequent realignment actions developed by the Air Force Systems Command and announced November 22, 1974, were responsive to this direction and to the previously mentioned study results. A decision was made to disestablish the centralized Aerospace Research Laboratories in favor of conducting the somewhat reduced in-house research within each of the Air Force's specialized technology laboratories. In this respect, the Air Force has followed the lead of one of the most successful of the NASA laboratories (e.g. the Langley Research Center). Simultaneously, the Air Force Office of Scientific Research was asked to increase its contractual support of key technologies within the university and private research laboratory community.

Since this is a significant change, I would like to spend a moment on the historical reasons for the organization of research in the Air Force. The two principal Air Force research laboratories (the Aerospace Research Laboratories and the Cambridge Research Laboratories) were established shortly after World War II when Dr. Theodore von Karman, then Chairman of the Air Force Scientific Advisory Board, became convinced that the future of the Air Force lay in its understanding of the implications of technology. Dr. von Karman felt that the Air Force of that day had few, if any, within its ranks who had the training and experience to understand and work with the university and private research world. To promote this understanding within the Service, von Karman argued into being both a small in-house

research capability and an extensive technical educational program. Through the following years, the U. S. Air Force has developed a tremendous appreciation and technical understanding of the potential of science. It now has an outstandingly well trained, technically experienced officer corps. During this same time of growth in technical understanding the in-house Air Force research laboratories have, due to growth in size and to salary inflation, required ever larger fractions of the total funds available for research, thereby reducing drastically those resources available with which to work, as von Karman had hoped, with the universities and private research organizations. We believe the research program resulting from our recent actions will redress that growing unbalance and effectively re-emphasize the recommitment of the Air Force to a broad range of research.

A second important change to our technology base organization this year is the focusing and increased emphasis on the unique environmental capability of the Air Force Cambridge Research Laboratory. This most important segment will be designated the Air Force Geophysical Laboratory and relocated at Kirtland Air Force Base, New Mexico. There the Air Force Geophysical Laboratory will join, in adjacent facilities, the high technology operations of the Air Force Weapons Laboratory. These two laboratories have a great many technological disciplines in common; for example, they each seek theoretical knowledge of the atmosphere at all altitudes, they each rely heavily on similar allied analytical tools such as computer analysis of three-dimensional gaseous phenomena, and, in each

laboratory atmospheric observations are of central importance. Closer ties of the Geophysical Laboratory to one of its principal customers, the Space and Missile Systems Organization in Los Angeles, will be strengthened by this move as well.

Another action this last year responded to the need, sensed by almost everyone within the Air Force, for closer ties between labs and product divisions. To meet these needs, we recently announced that we propose to transfer a major portion of Rome Air Development Center to Hanscom Air Force Base, Massachusetts, where together with the remaining parts of Air Force Cambridge Research Laboratory, the Air Force will form a new technical center to support the Electronic Systems Division. Those portions of RADC not transferred to Hanscom and whose work is more related to the work of the Aeronautical Systems Division are to be transferred to Dayton, the home of the Aeronautical Systems Division. These consolidations, while undertaken to achieve better working efficiency, will also result in the elimination of the need for a number of support personnel and associated costs.

The timing and extent of certain portions of the Air Force Systems Command reposturing reported here is presently under re-examination by the Secretary of the Air Force. This re-examination is now reviewing the equitable balance between the potential economic impact of these actions on the communities involved and the DOD required reduction in Air Force manpower and support costs.

During the summer of 1974, at the direction of the Secretary of the Air Force, I convened a small review group

to examine the Air Force association with those Federal Contract Research Centers with whom we work. This group reviewed the Air Force need for, use of, and satisfactions with, the Aerospace Corporation, the MITRE Corporation, ANSER Corporation, Rand Corporation, and the Lincoln Laboratories. A report of the findings of the small review group is available. Its major recommendations were:

- The Air Force policy regarding FCRC's should remain that of continued requirement for, and financial support of, acquiring the unique and high quality services of the present five FCRC's.

- Such support should remain at approximately the present level of effort.

- The attempt to have Lincoln Laboratory removed from the FCRC status should be continued.

- A review, similar in scope and nature to that of the (1974) Small Review Group, should be conducted bi- or triennially as circumstances dictate to address the continued necessity for the FCRC concept in whole or in part."

INTERSERVICE COOPERATIVE TECHNOLOGY EFFORTS

During this last year there has been a genuine, and I hope perceivable to this Committee, improvement in mutual cooperation in technology programs between the Services. Examples of areas where we are working closely together are: high energy laser technology, inertial navigation components, tactical data links, fuels and lubricants, advanced propulsion systems, solid rocket motor propellants, and solid state devices.

I personally pledge my continued efforts to support this R&D interservice cooperation.

The Air Force has an extensive cooperative program with the National Aeronautics and Space Administration as well. We have cooperative programs in the design of wind tunnel and engine test facilities, hypersonic airframes, stall/spin technology, airframe drag and fuel consumption reduction, materials research and innumerable other areas of mutual interest.

The Air Force strongly supports the use by DOD and NASA of the Space Shuttle. It is our belief this Space Transportation System will provide long term cost avoidance and offer great flexibility to the DOD as well as to NASA. The Air Force is planning to request funds in future years to modify its Vandenberg Air Force Base launching complex to allow polar launch of the Space Shuttle from that facility.

The Air Force has also included in this FY 76 budget funds to modify one of the existing upper stage designs (with its associated payload) to fit within the Shuttle and to transport these payloads from shuttle altitude to operating altitude. These interim upper stages, although potentially usable on some NASA missions, will be modified for Air Force requirements as upper stages to be used in an entirely analogous way to the way they are now used on expendable staged boosters.

Secretary Schlesinger, as part of our national energy conservation policy, has set the goal for the Department of Defense of a 25 percent reduction in flying by 1980, while

still maintaining operational proficiency. Consequently, simulation can be expected to play an ever increasing role in pilot training. The Simulator for Air-to-Air Combat, which will be operational in July, at Luke Air Force Base, Arizona, is a leading example of our efforts. This two aircraft simulator will have six degrees of freedom (i.e. motion in three lateral directions plus roll, pitch and yaw) and full 360 degree out-of-the-cockpit view. Other examples of our recent progress in simulation are the Undergraduate Pilot Trainers which may replace virtually all instrument flight training in the pilot training course except for check rides. The Advanced Simulator for Undergraduate Pilot Training (ASUPT) is a new research simulator by which the Air Force hopes to find the most effective way to utilize simulators.

INTERNATIONAL COOPERATIVE R&D

As mentioned earlier, I would like to comment on our increasing cooperation with other nations, particularly those of our North Atlantic Treaty Organization. The Air Force, like the Congress and members of the NATO Alliance, is vitally interested in international R&D cooperation. Through such cooperation, we hope to find methods of improving weapon system commonality and standardization, operability and the reduction of R&D costs. We pursued these interests vigorously last year through various international forums such as the Advisory Group for Aerospace Research and Development (AGARD), the SHAPE Technical Center (STC), the NATO Air Force Armaments Group (NAFAG), the NATO Industrial Advisory Group

(NIAC), the Air Standardization Coordinating Committee (ASCC) and similar multilateral organizations. Further, we have supported engineer/scientist exchange activities and exchanges of technical teams of visitors, technical information exchange through the Mutual Weapon Development Data Exchange Program (WDDEP), and cooperation in development and test programs accomplished under bilateral agreements.

I recognize that there is much room and need for improvement. With the increasing impact of NATO-wide economic problems, there is now evolving a motivation, previously not present, which is driving all parties into a renewed interest in cooperation.

Associated with these Air Force efforts in R&D cooperation are companion efforts to propose use of Air Force weapon systems by the NATO Alliance. There is significant NATO activity now under way to define a method by which NATO can acquire an AWACS capability. We have also offered the F-16 Air Combat Fighter as a replacement for the F-104G which is nearing the end of its useful combat lifetime. Use of these systems, while making possible a significant increase in operational capabilities of NATO defense forces, will contribute to an increased level of standardization within the Alliance, and will reduce overall system acquisition costs both to them and to us through broader amortization of R&D costs and the benefits to all of quantity procurements.

JOINT SERVICE WEAPON SYSTEMS EFFORTS

Another activity in which I have seen substantial progress in the last year has been the DOD and Service efforts in mutual

interdependence in weapon systems. A greatly improved working relationship exists among the Services and many programs (e.g. AIM 9L, AIM 7, Maverick, liquid guns, laser directed weapons and standardized 20mm ammunition) are benefiting from this cooperation.

The willingness for early involvement by senior service leaders during the conceptual phase of new programs has been a most significant contributing factor in success. For example, our joint efforts with the Army and Navy in the Global Positioning System is an excellent example. Also, our Tactical Weapons, FleetSatCom, and Cruise Missile efforts are making maximum use of the Navy's and Air Force's unique capabilities and thereby, we hope, eliminating unnecessary duplications. I can assure you that General Evans and I, in concert with our Navy and Army counterparts, honestly intend to continue to pursue this productive and necessary cooperation.

B-1 STRATEGIC BOMBER

Let me conclude by asking your strong endorsement and support of the B-1 program requested in this budget submission.

I am both firmly convinced of the need of this next generation strategic bomber and that this B-1 design is by far the most cost effective way to provide that capability.

Unfortunately, the focus of each of us tends to be on what an individual bomber will cost, not what the total force itself must cost. This B-1 aircraft will be far superior to smaller aircraft procured in greater numbers or to any other design which technology will permit today or in the foreseeable future.

The swing wings and F-101 engine allow the B-1 both a low altitude high subsonic speed capability necessary for survival in the years from the mid 80's to the year 2000 and the ability to use present runway lengths without extension. This B-1 aircraft maintains a high altitude supersonic capability which forces a potential adversary to the extreme costs of both low altitude and high altitude defenses.

The B-1 is a very good aircraft; the B-1 program is a very good program. We are continuing to meet our commitments. The aircraft is flying well in the air and meeting its fabrication and assembly labor hour estimates on the ground.

The B-1 deserves your support, more importantly it very much needs your active support now. We need your help to start aircraft number four and we also need your help to allow us to prepare in this budget to take the prudent financial step of budgeting for long lead items against a procurement decision in November 1976.

SUMMARY AND CONCLUSIONS

In summary, let me say these final remarks on the budget. The Air Force FY 76 Authorized Request of $3903.3M, now to be described by General Evans, I believe to be a well balanced program. I personally believe this program is necessary to meet those objectives stated by the Secretary of Defense in his Defense Report for Calendar Year 1975. Upon description of the composition of these Air Force R&D programs by General Evans, I hope he and I can answer those questions you have and can convince you of the appropriateness of the support we request of you today.

TECHNOLOGICAL PROGRAM

Dr. LABERGE. We have tried in this last year to have an examination of our technological base, and have looked at the principal pieces of that base and have made some changes to it. I thought I might sketch what some of them are, and what the request for this coming year emphasizes.

Basically, though, both the Secretary of Defense and the Secretary of the Air Force believe that a strong technological program is important to the Air Force and to the Department of Defense. Therefore, we believe that our research programs and our early exploratory programs should get close attention, and that they should get good support.

We have looked at the pieces of this and have made some changes, as I say, to it.

I have had the opportunity to go to a large number of units and to fly with the personnel in the Air Force and have flown most of the aircraft with more than one seat in them, and have talked to personnel in the alert status. I think that one can say that all of the young men who fly for us believe in the equipment that we together provide them. They believe that the equipment can do the job that it must do, and they ask only that as the years progress that we continue to supply superior technology. I think that is important to them as much as it is, I think, to the senior management of the Air Force.

Chairman MCCLELLAN. It is very understandable that they would want the best, and I think it is our responsibility to try to provide them with the best.

In your judgment, are the programs now being financed calculated to give them the best equipment possible?

Dr. LABERGE. Senator, they are. We may not get them as rapidly as we would like.

Chairman MCCLELLAN. Well, you don't always get breakthroughs in technology as quickly as you might like.

AIR COMBAT FIGHTERS

Dr. LABERGE. But I think that in the F–15, for example, and in the F–16, we have very superior aircraft, and we have not, in the F–16, lessened the capability of the aircraft to a point where it is not a superior airplane. It is a very superior airplane.

Chairman MCCLELLAN. You had some problems with it, did you not?

Dr. LABERGE. Not with the F–16. This is the new air combat fighter.

Chairman MCCLELLAN. Is that for the Navy also?

Dr. LABERGE. The Navy is presently deciding whether or not they wish to use either the F–16 or the YF–17.

Chairman MCCLELLAN. If the Navy doesn't use the F–16, who will?

Dr. LABERGE. We in the Air Force will use it, and we plan to acquire it.

Chairman MCCLELLAN. How does it differ from the F–15?

Dr. LABERGE. It should cost considerably less, like $2 million less in acquisition cost, at a very substantial life cycle cost reduction. It has only one engine of the same kind that the F–15 has two of.

Chairman McClellan. That is one of the planes in the competition between General Dynamics and Northrop, is it not?

Dr. LaBerge. That is correct.

Chairman McClellan. And General Dynamics won the Air Force contract with the F–16?

Dr. LaBerge. That is correct.

Chairman McClellan. What is the status of the F–17 now?

Dr. LaBerge. The YF–17 is the Northrop aircraft. That will not be put into production by the U.S. Air Force. It is, however, being considered as a contender in some form or other by the Navy, and they will make their decision.

Chairman McClellan. Between the F–16 and the F–17?

Dr. LaBerge. They will look to see whether either one is acceptable. They have not yet said that either one is necessarily acceptable.

Chairman McClellan. All right, you may continue.

Dr. LaBerge. But what I think, or mean to say, is that even though we are looking at a less capable aircraft than the F–15, the F–16 is still a very, very good aircraft.

B–1 PROGRAM

The B–1 will, I think, be the aircraft which can live into the late 1990's and beyond. We are not trying to get an unacceptable solution just because it is inexpensive; and although I think we would wish that the inflation were not as bad as it is, I think we still are obligated to design equipment which will do the job. I don't think you can do the job that the manned bomber needs to do in the 1990's any less expensively than with the B–1 force.

Chairman McClellan. You strongly support the B–1?

Dr. LaBerge. Very much so, sir.

Chairman McClellan. What have been the results of the tests on the B–1 thus far? Have they met our expectations?

Dr. LaBerge. They have been excellent. They have gone beyond my expectations. I have spent 20 years developing things and I have not seen an aircraft or a program go as well in its test program as the B–1 has in the first five flights.

Chairman McClellan. We are concerned about the cost of the B–1. Consider the F–111 for example. That is costing about $18 million a copy, I believe, about one-fourth or one-fifth the cost of one B–1 bomber. It seems that four of those planes would have the same fighting power, and the same capability as you would have with one B–1.

Dr. LaBerge. We have spent a great deal of time examining that. There has been a major review by the Department of Defense outside of the Air Force. The answer we come to is that it is more costly to use smaller aircraft than it is to use larger aircraft.

Chairman McClellan. How much more would it cost to operate four of the F–111 than it would the B–1?

Dr. LaBerge. It is more than 2.5 times as much.

Chairman McClellan. 250 percent more?

Dr. LaBerge. To acquire and operate the equivalent bomb delivery capability to do the same job over the life cycle of the program.

Chairman McClellan. You are taking into account the original cost of the plane, the fuel it consumes, the manpower necessary to manage it, and so forth?

Dr. LaBerge. That is what the study tried to do.

Chairman McClellan. For the same delivery capability?

Dr. LaBerge. That is correct.

Chairman McClellan. Is that a pretty reliable estimate?

Dr. LaBerge. I think so. And we would be more than happy to bring over the people who did the study, but I personally believe it.

May I try a different way of explaining it?

Chairman McClellan. Yes, you may.

Dr. LaBerge. If you ask: What is it that a B–1 tries to do?—it tries to do the same thing in long-distance delivery that a number of commercial people do. Everybody comes to the same solution, that you wish in the oil transport business to get the largest ship that you can for economical delivery.

In the trucking business we have gone to large trucks. The biggest trucks that the highway will take is the most economic way to deliver large loads over long distance. The commercial aircraft delivery system with people, as long as you have enough payload, and you have enough people, you go to the wide-body big jets as the economical way to do it. Even though the per aircraft cost is high, the total job cost is lowest. It is the same way with commercial cargo delivery.

You go to the largest aircraft you can economically run in the runways.

Each of these commercial people who do what we are trying to do in the military, namely, deliver to a lot of places at a long distance a heavy payload and choose the largest feasible single vehicle, even though per unit it is the most costly. Per mission total, it is the least expensive way to do it. That is what our study shows.

If you have a total target complex that you wish to deliver ordinance to, you have to have less pilots, less training, less equipment. If you put as much as you can in a single aircraft, there is much industrial precedent that says that you get large tankers, and you get large cargo airplanes, and you get large trucks; and I don't think it should be surprising that the cost-effective way to do this delivery is a large airplane like the B–1.

B–1 COMPARED TO FB–111

Chairman McClellan. Well, I think another question is this: If you have four of the FB–111s loaded with bombs and one B–1 with the same payload, going out on a mission, the B–1 has got to get there to deliver any assault on the target. One of the four FB–111s can get there and probably destroy the target, even if the other three fail to get through. You have more chances to reach the target. You only have one chance with the B–1, but you have four chances with the FB–111. Is that a factor?

Dr. LaBerge. It is a factor. It is balanced by another kind of factor which is: For the FB–111 to be effective for any reasonable penetration, it must have its tanker with it part of the time. If the tanker can't make it, the FB–111 can't penetrate deeply. There are a whole range of target ranges that the FB–111 can't make.

Chairman McClellan. What do you mean by that?

Dr. LaBerge. It has to have a tanker fill it up before it begins its penetration, whereas the B–1 can carry a great deal of internal fuel and go much further between refills by the tanker.

RANGE OF B–1

Chairman McClellan. Well, the document I hold here indicates that the range of the B–1 is much more than the FB–111, but it is less than the B–52. How did that happen?

Dr. LaBerge. Well, we believe that about [deleted] miles is a reasonable range now. That is the full load capacity of the airplane. Where we need to go further we can off-load a few of the bombs and get the additional fuel to permit the longer range.

Chairman McClellan. Suppose your payload is 25,000 pounds instead of 50,000, how much greater range would that permit?

Dr. LaBerge. Perhaps I need to consult with General Chapman on that.

Chairman McClellan. I would just like an estimate.

General Chapman. Depending on whether you are going in high or low, the numbers I show are a load of 24 weapons is about [deleted] miles, and a load of 16 weapons, which is reduced by a third, about [deleted] miles, so it is about a [deleted] mile increase.

Chairman McClellan. Is that long range so important? When you say range, you mean the total, round-trip distance, don't you?

General Chapman. Well, the range is there, yes, we are talking about a total distance of [deleted] miles.

Chairman McClellan. [Deleted] miles is as far as it can go to reach a target and return?

General Chapman. Yes, and return to home base, yes.

Chairman McClellan. That is certainly sufficient distance, is it not? Can we conceive of circumstances where you need to have a greater radius than that?

Dr. LaBerge. I think you really do need about the [deleted] mile range that is in the B–52 for all of the targets. What we have tried to do is not make the aircraft so large. It is designed to reach all of the targets. By off-loading you can get to every place you need to.

Chairman McClellan. That seems like a false economy to me, to build a plane as large as this to carry a heavy payload, and then compromise its capability by reducing the payload in order to get extra range. Is that correct?

In other words, you spend $80 million on an aircraft that will carry a large payload and can hit several targets. If you just had one target, and it didn't require 50,000 pounds of ammunition but only required 10,000, you wouldn't send this plane on that mission, would you?

COST OF B–1 AND FB–111

General Champman. Let me, if I may, address one or two of your points and see if I can clarify them. The best numbers we have on the fiscal year 1975 estimate is $25 million for the FB–111, and modified to give it a strategic capability, a model that General Dynamics has proposed. So the number that we have, and I think it is the best number we have been able to develop is about $25 million per copy for that airplane.

Chairman McClellan. I thought we were buying them now at $18.5 million per copy.

General CHAPMAN. That airplane is not equipped to do the job we are talking about.

Chairman MCCLELLAN. If you use the F–111, you would have to spend more money enlarging its capacities.

General CHAPMAN. We have general agreement with the aircraft company that it will cost about $25 million or $26 million.

Chairman MCCLELLAN. If you undertook to substitute them for the mission of the B–1——

General CHAPMAN. We would have an increased unit cost of $6 million or $7 million.

Chairman MCCLELLAN. Bringing their cost to about $25 million per copy.

General CHAPMAN. Yes.

Chairman MCCLELLAN. That is not generally known.

General CHAPMAN. I think we have tried to make it known here. The B–1 in the same dollars is $55 million, and that includes the inflation that we have absorbed.

Chairman MCCLELLAN. I was told the other day it will cost over $80 million.

General CHAPMAN. It will if you cost it in the dollars of the year that it is actually brought off the line, assuming the inflation rates we are projecting for the future, we expect a $5 billion added program cost, due to inflation alone.

Chairman MCCLELLAN. Is that each year?

General CHAPMAN. No; over the entire time.

Chairman MCCLELLAN. That is the inflation cost increase for the entire program?

General CHAPMAN. That will run the cost up to that, if inflation continues at the same rate. It will run the program unit cost to $84 million.

Chairman MCCLELLAN. That is about 35 percent; is that correct?

General CHAPMAN. It is $30 million to $55 million, or about 50 percent.

Chairman MCCLELLAN. So we are really comparing a $25 million airplane to the $55 million cost of the B–1?

General CHAPMAN. That is the first point that I wanted to make.

Chairman MCCLELLAN. Will that hold true with the F–111, that the $25 million will be taken into account in future programs?

General CHAPMAN. At that point you wish to have an apples and apples kind of comparison where the two airplanes are capable of doing the same job.

Now the next disparity shows up because even that airplane, the stretched FB–111, can only carry something like a fourth of the bomb load, the weapon load that the B–1 can carry, so you are really talking—even if all performance were equal—you are talking about using four airplanes to carry the same bomb load that you do with the B–1.

Chairman MCCLELLAN. As you pointed out a while ago, you have four F–111's loaded, and you have one B–1 loaded.

General CHAPMAN. Yes, sir.

Chairman MCCLELLAN. If they all start out, they have different cargoes. Four have one target, and the B–1 will have another target.

General CHAPMAN. The B–1 will have several targets.

Chairman McClellan. It can have several, but if it doesn't get there, you get no results.

General Chapman. Absolutely right.

Chairman McClellan. But with the other planes, you have four chances to one of getting there.

General Chapmn. Yes. But what the Secretary pointed out is that those four airplanes to keep them in our force cost us roughly 2½ times as much as the B–1 to keep in force.

Chairman McClellan. That is another factor. All of these factors, as you indicated here a while ago, are important. One factor seems to indicate one thing, but it is offset by something else.

Senator Young. Could the F–111 fly as low a level as the B–1.

General Chapman. The FB–111 as we propose, does not have the penetration capability of the B–1. That is basically because it won't have the high performance of electronic countermeasures that the B–1 will have. [Deleted.]

Senator Young. They can fly at a lower level?

Dr. LaBerge. They can fly at [deleted] feet.

BOMBER FORCE STRUCTURE

Chairman McClellan. You want to procure 240 B–1's? Is it necessary to have that many in our arsenal? That seems like an awfully large number.

General Chapman. As we discussed yesterday, we started with the B–52 force of some 700, which seemed like the right number to replace the other airplanes, the B–29 and the B–47. We are now talking about adding 240 B–1 aircraft to a dwindling strategic force of bombers. That is based on the target allocation between the missile forces of the Navy and our Minuteman and the allocation that is made to the bomber force. We think that 240 is an appropriate number of B–1's to do the job that the bombers have been assigned.

Chairman McClellan. The B–1 bomber can drop nuclear bombs?

General Chapman. Yes, sir, absolutely. That is basically their mission. They have no other mission at the moment, no other assigned mission at the moment.

General Greenleaf. The Joint Chiefs of Staff as recently as last fall reaffirmed that in their view of the strategic needs of the country, we need at least 500 heavy bombardment aircraft.

Chairman McClellan. You are only getting 240 here?

General Greenleaf. That is what is proposed for the B–1 program, but we also envisage that the B–52 G and H probably can remain in the inventory until the 1990's.

Senator Hruska. How many B–52's did we have originally?

General Chapman. A total of 744 B–52's were built. This number includes two prototype aircraft, the XB–52 and the YB–52.

Senator Hruska. Is that before we had developed a capability with missiles, the Polaris and the seaborne missile?

General Chapman. Basically, yes. The B–52 came into our inventory before I think we could say the Polaris systems were developed.

Senator Hruska. Is it likely that you would have gone to 744 if we had at that time the same missile capability from other systems of delivery?

General CHAPMAN. Let me answer that question directly. The B–52 was developed in the early 1950's, if you recall, and it was still being produced up into 1960, the early 1960's. Since that time, the development of the Minuteman system and the development of the Polaris system which have reduced it, to bring the proper balance between our missile systems, the ground and——

Senator HRUSKA. You reduced them?

CURRENT TOTAL OF B–52 BOMBERS

General CHAPMAN. The number of B–52's we have now is on the order of 300, and I will get you the exact number, so we have come down in the number of B–52's.

[The information follows:]

CURRENT NUMBER OF B–52'S

There are currently 330 UE B–52 aircraft assigned to active Air Force Squadrons.

PRODUCTION STATUS OF B–52

Senator HRUSKA. You do not manufacture them?

General CHAPMAN. They have been phased out of production.

General GREENLEAF. At the end of this fiscal year, and at the end of fiscal year 1976, we will have 396 strategic bomber aircraft—330 UE B–52's and 66 UE FB–111's—assigned to bombardment squadrons.

General CHAPMAN. There has been a balancing of the relationship between the missile forces and the bomber forces.

Senator YOUNG. You have spent a little more than $2 billion in research and development of the B–1. How much more will you estimate it will cost before it can be put in production and go on the line?

Dr. LABERGE. One more year's work will give us a design which we could put into production, but it will take the time—the elaborate test programs that we together decide we wish to go through to be absolutely sure that the design works.

COST OF B–1 R. & D. PROGRAM

Senator YOUNG. Could you give us an estimate, because this will be important when we get on the debate on the Senate floor? We can argue better with $2 billion. How much more will it cost to put it in production?

Dr. LABERGE. We are asking this year to be allowed to build the fourth aircraft. That will be the one which is the production prototype. Having designed that, we will be prepared to go into production on the fifth and subsequent ones, which would be production tooled and built aircraft, if we choose to. Our present schedule is to wait until the end of 1976 to complete the structural test—two full lifetimes of structural tests of the airframe—before we start production.

Senator YOUNG. How much do you expect to spend in 1976? I am trying to get a figure.

General CHAPMAN. Presuming that we follow the program that we are requesting, we will spend another $840 million in 1976 and 197T

for R.D.T. & E., and then we would begin to produce with the fifth airplane. So we will have $840 million on top of that $2 billion you mentioned.

Chairman McClellan. You are going to spend $3 billion in total research and development before beginning procurement?

General Chapman. Yes; when we begin to buy the first production airplane, the total cost of R.D.T. & E. through the entire program is about $3.8 billion.

Chairman McClellan. You will continue to do some research and development after you begin procurement?

General Chapman. That is right.

Chairman McClellan. And that is included in the $3.8 billion?

General Chapman. It will be a little bit below the $3 billion at production decision, but the total will be about $3.8 billion for development.

Senator Young. You have to do that with any airplane?

General Chapman. Yes. We are still doing some development work on other aircraft in production.

General Greenleaf. That is a paper airplane, the proposal from the contractor.

Chairman McClellan. You mean to expand the F–111 and reevaluate it for this particular mission?

General Greenleaf. Yes, sir. Whereas the B–1 is in the flight-test stage.

Chairman McClellan. The F–111 would have to have a lot of modifications.

Dr. LaBerge. Very substantial modifications in all aspects of it.

Chairman McClellan. That would bring the cost of it up to $25 million.

General Chapman. It is about $25 million per copy .That is the best estimate we have at the moment.

Chairman McClellan. Would the research and development costs of this improvement be included in this figure?

General Chapman. The program unit cost, yes, sir.

FOURTH B–1 AIRCRAFT

Dr. LaBerge. I wish just one more time to make this statement. To me the most important thing we can get is your strong support for the fourth B–1, to the building of the production prototype aircraft. That cannot be delayed. Occasionally we talk about how we can save money in the program. The most expensive thing in the program you could do would be to delay the fourth aircraft because the engineering force which we have, which can do the production design will be gone if we don't go ahead this year and do that.

Senator Young. I can see how important it is, but you notice the other day on the floor, the Senate voted to discontinue the additional F–111, and it will cost us $72 million to terminate the contract. We will just lose $72 million. You can see the problem we have on the Senate floor.

Chairman McClellan. You may proceed.

ALTERNATIVES TO THE B–1

Senator HRUSKA. Is the F–111 considered an alternate to the B–1?

Dr. LABERGE. We do not consider it an alternate to the B–1. There are applications for the FB versions which help the short-range options over there. But the FB–111 is not considered by the U.S. Air Force, or by me as an alternative to the B–1.

Senator HRUSKA. It will take care of certain features of the B–1, is that what I understand you to say?

Dr. LABERGE. It will take a reasonably small portion. What I am really saying is that I believe the Secretary and the Chief of Staff would not consider the FB–111 "stretch" as a replacement program for any appreciable number of B–1's.

Senator HRUSKA. If the B–1 is turned down, what will they turn to?

Dr. LABERGE. I believe there will be a tremendous soul searching. There has not been any program for saying "what if," because we don't believe any of the alternatives are, on the face, clearly worth the money.

Perhaps General Chapman would care to comment, but I don't consider the manufacture of a new aircraft like the FB–111 as a suitable replacement. In the event of the B–1's being canceled, we will probably live with the B–52's and do a little work on them; and then try and convince you at some other time that a B–1-type aircraft—perhaps if the economy is better—is affordable. I don't think we will say that it is worth the money to build the stretched FB–111, even if you say the B–1 can't go.

Senator HRUSKA. If it were done, is there any estimate how many F–111's would be suitable to fill a portion of the void that would be created by cancellation of the B–1?

General CHAPMAN. I think the chairman offered a number of alternatives, and it takes about four of the stretched 111's to carry an equal load to do the job of the B–1. So that number may not be exactly comparable, but it is a comparable load to be carried, presuming that load is a reasonable load to do the strategic job. So that you are talking about four times as many aircraft, which is about twice the cost in our expectation of the B–1.

Senator HRUSKA. Now, this method of following the fourth prototype and going into production on that basis, that is really a money-saver, isn't it? Did you go into production on any of the first three prototypes, you would have had to go into the business of modification to such an extent that there would be quite a wastage of money, would there not, as well as time?

Dr. LABERGE. There would have been. At one time we came in asking to build the fourth aircraft sooner, and I believe that had we started 6 months ago on the fourth aircraft, we could have perhaps been somewhat better off in terms of total cost of the program. But the biggest difficulty will come if we have to wait more than a year from now to build the fourth aircraft.

B–1 FLIGHT TEST

Senator HRUSKA. Is anyone going to tell us about the flight that the B–1 had yesterday?

General CHAPMAN. I am not prepared to describe it in detail.

Dr. LaBerge. I did not get an update this morning. We swept the wings back to the full backward sweep, and had no flying quality problems.

Senator Hruska. Was that the first time that it was done?

Mr. LaBerge. It is the first time that it has been swung back beyond 25 degrees. The wings had been swept partially back, but this is far and away the farthest.

Senator Hruska. How long did it fly?

Dr. LaBerge. We had about a 2-hour and 50-minute flight.

General Chapman. They accomplished a wing sweep as the Secretary said, and they had tanker hookups with no fuel exchange, but just hookups.

Senator Hruska. Is that the first time that was done?

General Chapman. Yes, and there were some minor instrument problems which delayed the flight for a period of time, and those were solved. So they now accumulated an additional 2 hours and 55 minutes of flight time on the flight.

Senator Hruska. What sort of flights are scheduled?

Dr. LaBerge. Within the next month we will go supersonic and we will pass fuel through the tanker hookup. I think we will then know the drag characteristics of the aircraft quite well. At this point, if you will remember, some people said there was a wide range of performance possibilities. We are a little bit better than what they said was the most probable situation, and that is an entirely satisfactory flight performance in terms of weight and drag and engine performance and the like.

On the question of the tanker hookup, the B–1 will be able to be refueled by a conventional KC–135. This has been our position, and it is, in fact, the way we are testing it. We will be testing shortly with the same operational tanker that we had intended to use.

Senator Hruska. It is the same equipment that you use for the B–52's.

Dr. LaBerge. Yes.

General Greenleaf. We have one tanker, the KC–135, which is capable of refueling all models of B–52, the B–1, and the C–5, plus most of our tactical fighters.

Senator Hruska. Is there general satisfaction so far with the performance of the plane?

Dr. LaBerge. Very much so. It is, as I said before you came, far and away the best program to date that I have seen in terms of meeting the objectives of the test program. Frequently you learn to cross your fingers all at one time. We have not had that kind of risky performance. The flight test program has each time gone and done what it said it would. Personally, I am very proud of the program, and I understand the nature of the politics, but I wish to convince you that I think it is a very good airplane, that it is the right size, and its current performance is very good.

Senator Hruska. Thank you.

Chairman McClellan. You may proceed, Mr. Secretary.

LABORATORY STRUCTURE

Dr. LaBerge. We have made some fairly controversial changes in our laboratory structure, and we will wish your support in allowing

us to do some consolidations and some changes so that we can most effectively get our laboratory capability where it can be used by the people who will then take it into the next step.

We have reviewed our reliance on the Federal contract research centers like the Rand Corporation, and the Aerospace Corporation; and we believe very strongly that we wish to continue their use, and we want, if we can, to have your support in that.

We have had a very active program in technical education of our military personnel. I think the single most important thing that the Air Force did in getting a high technology capability that it has now has been many years ago to get an effective educational program for its intermediate and senior officers in technologies. We occasionally look at where we can reduce money. I would very strongly hope we can continue the education program we have. It is high quality. I may smile, but in my industrial background I would be pleased to have a person of General Chapman's ability working for me in industry. The officer corps that we have in the military is first-class as technical managers, and I just plead that we continue the educational program which allows us to do this.

EMPLOYMENT RELATED TO B–1 PROGRAM

Senator YOUNG. And can you give us a figure among the people employed who would be unemployed if the B–1 program was cancelled right now?

Dr. LABERGE. I would like to be exact on that.

Chairman MCCLELLAN. Will you supply that for the record?

[The information follows:]

B–1 CANCELLATION/PEOPLE UNEMPLOYED

Our forecast of employment consists of about 70,000 direct workers in the aerospace industry. These are the people at the prime contractors, the subcontractors, vendors and suppliers. These jobs, of course, generate other jobs to service the needs of the directly employed workers. We estimate that the total number of jobs generated by the B–1 program, both direct and indirect, will be about 190,000 at the peak of the production program.

EMPLOYMENT LEVELS

Dr. LABERGE. We have the forecast, it will be that if the program is not continued, there will be about 190,000 people, who would not have employment. The current levels are considerably less than that.

Chairman MCCLELLAN. You are saying that not that many people are currently employed, but will be eventually.

Senator YOUNG. When will we reach 190,000?

Dr. LABERGE. This is approximately 1980, when the four per month rate is achieved.

Senator YOUNG. What is it now?

Dr. LABERGE. I am sorry, Senator, we don't have it here with us today. We will submit it for the record.

[The information follows:]

B–1 PROGRAM CURRENT EMPLOYMENT

Employment for B–1 work at our prime contractors is currently about 9,800 people. We also have a number of people employed on the program at subcon-

tractors, suppliers and vendors. Although an exact head count is not available on these people, it is in excess of 4,000.

IMPACT OF F–111

Chairman McCLELLAN. Let us have that on the B–1. Also tell us what the impact of the F–111 is going to be, how that is going to affect employment, and how many jobs will be terminated through cancellation of that program.

[The information follows:]

F–111 RESCISSION/INPUT ON UNEMPLOYMENT

The total U.S. employment which could be directly attributed to the completion of the FY 1975 F–111F procurement is estimated at 8,500 personnel. With the rescission and subsequent termination of this procurement, a reduction of about 2,300 of those workers will occur at the General Dynamics Fort Worth facility by November 1976—the date of delivery of the last of the F–111F procured in FY 1974. The balance of the 8,500 personnel represents F–111F subcontractor employment.

JOINT R. & D. PROGRAMS

Senator YOUNG. You are doing something for the future rather than the present. I don't think much of those figures.

Chairman McCLELLAN. Will you proceed, please.

Dr. LABERGE. There were just two other areas that I wish to speak to.

We are trying very vigorously to get the most out of our research programs, working with the other services much more closely than we ever have before. For example, I came from a background first within this program, so it is comfortable for me to work with the Navy people. I think we had throughout the service a real attempt to get the most for our money there.

I was over in Europe last week talking to the people about how we can work much more closely with the Europeans, and talking to them about how they can, in the F–16 program, continue to work with us; and we can get an effective work-back-and-forth where they are not just relying on us, but we are getting some benefit by their purchases, and we are getting some benefit from their technology. I think there is much more of an effort there now.

We are working closely with NASA, and we would like your support for the shuttle. Now, it is very difficult to show the cost savings in a system which hasn't been built yet but I guess I, personally, believe it is to the long-term benefit of the Air Force to support the use of the NASA space shuttle.

We are proposing in this year's budget some money to start making compatible our second stage boosters for our satellites so that they can be used both in the Shuttle—to take you from the altitude of 100 miles or so that the Shuttle will be up to in altitude—to do either that or work with our conventional boosters.

There has been a question within the House and the Senate as to whether this is appropriate. Long-term, I think it is clearly to the advantage of the Air Force. Short-term, I think it will probably be neither more or less expensive.

AWACS PROGRAM

Last, I would just like to comment that the AWACS program is at a critical point in itself.

Chairman McCLELLAN. What program is that?

Dr. LABERGE. That is the airborne warning and control system. AWACS will bring the single-most important contribution to the capability of the NATO forces and will give us, outside of Europe, a major additional capability.

We need in that program to get continuation of the production.

Chairman McCLELLAN. How many do you anticipate procuring in that program?

Dr. LABERGE. We would anticipate 34 aircraft, total.

Chairman McCLELLAN. That would be your program?

Dr. LABERGE. Yes.

Chairman McCLELLAN. What part of those, if any, are the NATO countries paying for?

Dr. LABERGE. The NATO countries are looking at an additional set, and they are looking at numbers between 20 and 30 for NATO.

Next week, General Chapman's associate, General Russell, is going to a NATO Air Force advisory group which is making a presentation on a program for NATO acquisition of essentially a comparable number.

Chairman McCLELLAN. How many do they think NATO needs?

Dr. LABERGE. We would expect that we would supply like a quarter of the aircraft to NATO, and three-quarters of the aircraft would be purchased by NATO. Eventually they would own something like 28 or 30 and we would augment that with [deleted] of our own.

Chairman McCLELLAN. Now, that is the way I like to see these programs work. Part of our purpose with AWACS is to protect Europe, the NATO countries. That is fine. That sounds good, and it identifies our interest and the necessity for us to be concerned and participating.

But when we go into a program like this, if it is primarily for defense of the NATO countries, I want to see them participating in the cost of this. I don't think they have always contributed their fair share in the past. I believe we furnish the nuclear umbrella to protect them, and I think that they ought to pick up more of the tab on these other things.

Here you are building a plane that is basically for the NATO project. Am I correct in the understanding that we will actually pay for, and be responsible for, the ultimate cost of some 8 of about 35 or 40 planes?

Dr. LABERGE. No, I have not said that is the U.S. program.

We would intend for our force to have 32 or 34, of which [deleted] would go to Europe. NATO, themselves, would have a force of about 28 and those plus our [deleted] would be the permanent force in Europe.

Chairman McCLELLAN. Why do we need the others over here?

Dr. LABERGE. Well, we need the force to be able to have the flexibility to move this capability any place we wish, plus to use it as an essentially air defense capability where we can use the AWACS in our own defense.

Chairman McCLELLAN. You were saying our own defense.

We don't expect a direct attack on any country, do we?

Dr. LABERGE. I think we do anticipate it within a reasonable length of time.

Chairman MCCLELLAN. What is that?

Dr. LABERGE. Within the length of time that the Russians need to build the required aircraft. They have the capability to do it.

What we wish to do is to have, as they build their Backfires, the capability to detect them. Rather than a large, long string of new radar developments to ring the country, we believe we can do it with an AWACS capability.

Chairman MCCLELLAN. Do they need 30 planes to do that in our arsenal over here?

AWACS MISSIONS

General CHAPMAN. There are three other missions, Mr. Chairman, in addition to the NATO mission that we would like to have this airplane for. One of these is to cover the North Atlantic regions. One is to cover the northern North America region. The last is the world wide contingency mission.

Chairman MCCLELLAN. That signal indicates a vote.

We will recess for a few minutes. Please excuse us.

[A brief recess was taken.]

Chairman MCCLELLAN. We will proceed.

Dr. LABERGE. Could we continue using the AWACS for the United States?

I want to emphasize that we are not financing a NATO procurement.

What we wish to do is to have NATO buy those aircraft which are predominantly for NATO.

Chairman MCCLELLAN. That is a policy that I support fully. I hope we are pursuing it in these matters.

As I say, we have to take full responsibility for the nuclear deterrent and we are taking that.

A lot of the things like the B-1, the delivery vehicles and so forth are our responsibility and we are taking that responsibility. In these others, which I term the common weapons, like tanks and items like that, I think that they ought to be required to supply those.

Dr. LABERGE. For our own needs, I think we do have a reasonable requirement and I would like General Chapman to talk to that.

Chairman MCCLELLAN. Our needs for this particular weapon?

Dr. LABERGE. This is a requirement for the United States, for its own AWACS, and not for NATO.

General CHAPMAN. The Joint Chiefs of Staff have certified a requirement for 41 AWACS, and the Air Force has been asking for 34 in the current procurement and development program. Those 34 airplanes are split among four missions that we envision. The one in NATO has been addressed. We would supply some assistance. The North Atlantic mission is basically in the Iceland area for surveillance in that area. A mission exists in the northern defense of North America to fill in some gaps in our radar coverage in that region, and then there is a contingency mission requiring movement of these airplanes anywhere in the world that we deploy tactical forces in, to give them eyes through mobile radar platforms.

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So, those 4 missions basically constitute the total requirement of 34 aircraft which includes the 3 development aircraft that the Air Force has requested.

Chairman McClellan. Are there any questions?

AWACS SURVIVABILITY

Senator Young. Wouldn't this plane be possible to be attacked by an enemy, and wouldn't it quite easily be destroyed?

I was wrong in helicopters. I never thought that they would be used as weapons. There were some destroyed, but they proved to be a valuable weapon.

How would these AWACS planes be destroyed by an enemy?

Dr. LaBerge. First, it sees fighters out beyond [deleted] miles, so that you would not have it on the battlefield directly, but you would have it sitting back like [deleted] miles to start with, and it will see all of the aircraft headed toward it. If the enemy wishes to head toward it, it (AWACS) can do one of three things: Either direct fighters to protect it, use the ground Hawk batteries for protection, or it can also retreat back. And since it is a jet airplane itself, it can fly at near supersonic speeds. It can fly at Mach. 8 and can retreat until the other aircraft can be intercepted.

We ran some tests and of 20 interceptor aircraft that were flown, none were able to be vectored to the AWACS and make an interception without themselves having been intercepted by aircraft directed by AWACS. Each and every one that was flown in was intercepted at least once.

Obviously, we didn't shoot the people down. We let them continue to find AWACS and, even of those 20, only 2 were able to make the intercept and these two had been already, in simulation, shot down before they got there. So it is not easy to make the interception and it is not easy to find the AWACS, because the Soviet fighters will not have ground control radars to tell them which way to go.

Chairman McClellan. Would this weapon be of any use in the Mid-East war?

Dr. LaBerge. Yes, very, very much. Possibly it allows you to look in and see what the other person is doing ahead of the war.

Senator Young. I can see the great advantage of it, but how would it survive attack by a Foxbat, flying twice as fast?

Dr. LaBerge. It will fly the same speeds as a commercial airliner, about Mach. 8.

Senator Young. A 707, you mean?

Dr. LaBerge. Yes.

Senator Young. That is the capability, and they only fly about 500 miles an hour?

Dr. LaBerge. They fly 500 miles an hour.

Senator Young. What altitude?

Dr. LaBerge. At the 30,000 feet altitude, the cruise speed is Mach. 6.

The Foxbat will fly much faster, and the F–15 can easily rise to catch it; one could have some small F–15 force in support of the AWACS orbits.

We ran these tests trying to examine how difficult it would be to intercept AWACS and every one of the inbound fighters was detected, forces sent up, and the attackers were intercepted before the AWACS was attacked.

Now, I don't think any of us say it is invulnerable, but it will not be easy for the other person to attack it without committing a very large force. And having more than one, we still can resupply these people.

AIRCRAFT REPLACED BY AWACS

General GREENLEAF. We also envisage once the AWACS enters the inventory, we will be able to retire a number of aircraft that are currently used which have responsibility of only a portion of the mission capability that AWACS will be able to perform.

For example, at Clark Air Base in the Philippines, we have seven airborne battlefield command and control aircraft that the Air Force can take out of the inventory once AWACS is operational. At Seymour-Johnson, we have two EC–135 tactical Deployment and Control aircraft and that mission can be assumed by AWACS. And then at Homestead Fla., we have six EC–121's, an Air Force Reserve Unit, which will be inactivated to when AWACS enters the inventory.

Dr. LABERGE. That is all I wish to say this morning, Senator.

Chairman MCCLELLAN. All right.

PREPARED STATEMENT

General Chapman, do you have a statement?

General CHAPMAN. I have a statement.

Chairman MCCLELLAN. The statement will be printed in the record.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I appreciate this opportunity to appear before you to discuss our research and development programs. The Air Force request for Research, Development, Test and Evaluation funds totals $3.903 billion for fiscal year 1976 and $1.034 billion for the transition period, fiscal year 197T. Authorization requested for fiscal year 1977 is $4.111 billion. The request for all three time periods is summarized in Tables I through VIII.

This budget request will enable us to continue major development programs started in prior years. It will permit a continued emphasis on providing our tactical forces with the capability to operate in a dense surface-to-air missile environment day or night in all kinds of weather. The Vladivostok Agreement reaffirmed our determination to rely on qualitative rather than quantitative superiority, and this budget request continues the emphasis on strategic systems to insure this qualitative superiority.

Highlighting this year's request is the accomplishment of significant milestones in our major aircraft programs. Full scale development of the F-15 and F-5E will be essentially complete by the end of fiscal year 1976, and the A-10 will complete its planned development by the end of fiscal year 1977. These highly successful programs will provide valuable additions to the Air Force inventory.

Two prototype programs, the Advanced Medium STOL Transport, AMST, and the Lightweight Fighter, are transitioning into engineering development. The YF-16 began development as the F-16 in the latter half of fiscal year 1975, and the AMST

prototype is scheduled to begin engineering development in fiscal year 1977.

The principle of fly-before-buy continues to be a basic ingredient in our approach to acquiring new weapon systems. This principle requires testing to demonstrate that all high risks have been eliminated before a significant production commitment is made. However, the Air Force makes much broader use of the concept than the words "fly-before-buy" might indicate. In fact, I believe a more descriptive term would be "try-before-buy," because it applies to more than just flight testing. It includes ground testing of airborne systems and subsystems, as well as testing of non-flying systems. We have found that part of the testing of airborne subsystems can be done perfectly well on the ground, and that we can significantly reduce the flight testing of these subsystems. In some electronics subsystems, for example, testing is actually better on the ground where "hot mockups" can be put through their paces in a precisely controlled environment. "Try-before-buy" does not mean, however, that every possible risk is eliminated before a production decision is made. This would be prohibitively expensive and break the essential continuity of a program. The balance between adequate testing and an acceptable degree of risk is a delicate judgment call, but we are convinced that "try-before-buy" has paid off and will continue to do so. We see proof of this payoff in the smooth transition from development to production in programs like the F-15 and A-10, both of which have employed the "try-before-buy" philosophy.

We are continually seeking to improve the way in which we acquire new weapon systems and equipment. Two keys to reducing

the cost of weapon systems are setting a Design to Cost goal and focusing on lowering Life Cycle Costs. Both are applied by the Air Force with the goal of providing new and improved systems which we can afford to buy and to operate.

Design to Cost calls for early establishment of a reasonable and affordable production cost goal for the system or equipment being developed. Within specified performance requirements, tradeoffs are made in schedule and performance as required to best meet unit production cost objectives. Application of Design to Cost, however, must also include recognition of total Life Cycle Cost, insuring an early emphasis on the operating and support costs that must be borne by the Air Force. If necessary, we are prepared to increase the production cost goal when a greater demonstrated savings can be realized over the total life of the system.

Taken individually, these improvements in the acquisition process may not represent any new, dramatic change in the way we do business, but they do represent further evidence of a continuing effort to obtain more capability for the defense dollar.

At this time I would like to briefly discuss some of our major programs, beginning with the B-1.

STRATEGIC

B-1

The B-1 strategic bomber is the highest priority development program in the Air Force and is designed to modernize the vital manned bomber portion of the strategic deterrent forces.

The fiscal year 1975 program was highlighted by first flight on 23 December 1974. The aircraft took off from Palmdale, California, flew for one and one-half hours and landed at Edwards AFB, California, where it will be based for the rest of the flight test program. The flight was very encouraging and all systems that were tested performed satisfactorily. It was an auspicious beginning of what we expect to be a very successful flight test program.

The second aircraft is structurally complete and undergoing ground static load tests which simulate flight conditions. These tests will be completed this summer.

The B-1 engine, the F-101, is performing very well. It successfully completed its Preliminary Flight Rating Testing in April 1974, and we expect production qualification by mid-1976. In avionics development, the offensive equipment completed Critical Design Review last August, and major components are now being flight tested in a C-141 test bed aircraft. The defensive avionics equipment will be fabricated and ground tested in fiscal year 1976 and 197T.

A significant design change occurred in fiscal year 1975 when the decision was made to replace the crew escape module with advanced technology ejection seats in the fourth and subsequent aircraft. Although a crew escape module would have some advantages over the ejection seats, those advantages did not outweigh the costs and technical risks in developing the module.

The cost of the B-1 program through the mid-eighties continues to reflect the significant impact of inflation in the national economy. Most of the B-1 cost increase is due to

estimated inflation in the production program. In order to reduce costs and offset inflationary increases, we have made several design changes. These include deleting avionics subsystems that are not absolutely essential, reducing the complexity of the engine inlet ducts for the production aircraft, and deleting development and testing of the wing pylon. These changes represent a small reduction in aircraft performance, but they do not affect the ability of the B-1 to carry out its mission. The wing pylons and variable inlets can be added to the aircraft at a later date, if the circumstances dictate.

Flight and ground testing will characterize the B-1 activity in fiscal year 1976 and the transition period. The first aircraft will continue flight testing while the second completes proof load testing and begins preflight checkout. First flight of the second aircraft is scheduled during the transition period. The third RDT&E aircraft, with offensive avionics equipment installed, is scheduled to begin flight testing in the spring of 1976. In addition, funds are included in the fiscal year 1976 and 197T request to continue the fourth RDT&E aircraft. Authority to start the fourth aircraft will be requested later this fiscal year. $672.2 million is requested in fiscal year 1976 and $168.3 million in fiscal year 197T to proceed with continued development and flight test.

Authorization of $432.7 million is requested for fiscal year 1977. Highlights of this time period will be completion of offensive avionics flight testing, engine verification testing, and aircraft performance testing required to support a production decision early in the fiscal year.

Air Launched Cruise Missile

Development is continuing on the Air Launched Cruise Missile, ALCM, which is an air-to-ground missile designed to be interchangeable with SRAM for internal carriage on the B-52 and B-1. The ALCM can also be carried externally on the B-52 SRAM pylon.

The combination of range extension and launch flexibility provided by this missile will enable bombers to reduce their exposure to enemy defenses, and the addition of ALCMs will increase the number and types of penetrating objects requiring enemy defensive reaction. This dilution effect increases bomber survivability and overall force effectiveness.

In December 1974, the decision was made to keep the ALCM in advanced development in fiscal year 1976 to permit additional proof-of-concept demonstration testing. Both the Air Force and Navy are working jointly to maximize commonality of cruise missile subsystems such as the navigation-guidance package, warhead and engine. The $51.0 million requested in fiscal year 1976 will provide for full scale wind tunnel tests and powered flight testing of a prototype missile launched from a B-52. In fiscal year 197T, the missile's inertial guidance system and terrain correlation scheme will be demonstrated in guided flight tests from a B-52.

These demonstrations will provide a firm basis for a full scale development decision early in 1977. $13.0 million is requested in fiscal year 197T and authorization of $103.8 million in fiscal year 1977 to continue this effort.

Advanced Tanker/Cargo Aircraft

The Advanced Tanker/Cargo Aircraft program, initiated in fiscal year 1975, will augment the KC-135 tanker force to

provide enhanced aerial refueling support to the Airlift, Tactical and Strategic Forces. With a wide-body tanker, non-stop airlift to virtually any location in the world would be possible. A substantial improvement in worldwide deployment of our Airlift and Tactical Forces is possible with a longer-range, larger capacity tanker than is currently available, thus reducing our reliance on foreign bases for staging. The capability to provide fuel to several aircraft simultaneously will significantly enhance our deployment capability, and fiscal year 1975 effort includes development of improved aerial refueling systems such as a new centerline boom and a multipoint refueling system.

A derivative of a current, wide-body transport in the 747, DC-10, L-1011, C-5 class offers the best potential to meet aerial refueling requirements. A wide-body tanker also offers an inherent cargo-carrying or bulk POL delivery capability. In fiscal year 1976, contractor proposals will be evaluated and one contractor will be selected to initiate full-scale development. The $5.2 million requested in fiscal year 1976 will support this development, which will continue in fiscal year 197T and fiscal year 1977. $1.4 million is requested for the transition period, and authorization of $50 million is requested for fiscal year 1977.

Minuteman

$122.7 million is requested in fiscal year 1976 and $34.0 million for the transition period to continue development efforts begun in prior years. These include the Upgrade Silo effort for improved prelaunch survivability; the Missile Performance Measurement System to enable more precise evaluation of Minuteman III guidance accuracy; the Mk-12A

Reentry Vehicle which will provide a larger yield than the present Mk-12; and the Improved Guidance program which will increase the accuracy of the Minuteman III through improved computer programs. The Missile Performance Measurement System will complete integration and ground testing in fiscal year 1976 and be ready for flight demonstration in the transition period. The Mk-12A will proceed through Critical Design Review and qualification testing. We will also complete Preliminary Design Reviews of the Improved Guidance and begin delivering missiles to Vandenberg Air Force Base for flight test.

The fiscal year 1977 authorization request of $137.8 million will support continued development of Upgrade Silo for Minuteman II, Mk-12A Reentry Vehicle for Minuteman III, and Improved Guidance for Minuteman III.

Space Shuttle

The Air Force, as the executive agent for the Department of Defense, is responsible for assuring that the NASA developped Space Shuttle will meet national defense needs. Fiscal year 1975 effort will refine the interface specifications that DOD payloads must meet to fly on the shuttle, continue definition of DOD operational and support system concepts, and evaluate the impact of the evolving NASA Shuttle design on DOD requirements.

The major effort planned for fiscal years 1976 and 197T is selection of an existing upper stage booster that will be modified for use with the Space Shuttle. This modified booster is called the Interim Upper Stage, IUS. The Space Shuttle alone does not have the capability to place payloads

in high earth orbit, and the IUS will be used for this purpose until the mid-1980's when the NASA developed Space Tug becomes available. Minimum development cost to meet DOD requirements will be a key factor in selection of the IUS. Detailed reviews of the NASA Shuttle and associated support systems will also be continued. A total of $30.9 million is requested for this period. In fiscal year 1977, the validation phase of IUS development will be completed, and construction of prototype flight hardware will begin. Design studies on the Vandenberg Air Force Base shuttle facility will be completed. Authorization of $57.6 million is requested for fiscal year 1977.

NAVSTAR Global Positioning System

A revolutionary development in navigation that will significantly increase the effectiveness of both strategic and tactical forces is called NAVSTAR. This satellite system will provide precise positioning signals to military forces anywhere in the world, day or night, in any type of weather or on any terrain. All users will be able to operate from a common global grid. The potential system accuracy is better than ten meters in all three dimensions. NAVSTAR equipment will vary from backpacks for ground troops to avionics for supersonic aircraft. Since the system will be using satellites controlled from a ground station in the United States, it will not require overseas ground stations or foreign base rights.

During fiscal year 1975, development is continuing on user equipment for all services, ground station equipment, and prototype satellites. Two additional prototype satellites have been placed on contract, for a total of six. The additional satellites will provide expanded coverage to include Atlantic

and Pacific Fleet Ballistic Missile test areas. Concurrent with our testing, the Navy will use the positioning signals from these satellites to support testing for their Fleet Ballistic Missile Improved Accuracy program.

During fiscal year 1976 and 197T, development of user equipment, satellites and ground station equipment will reach a peak of activity and design work which characterized fiscal year 1975 will transition to the hardware phase. To support this activity, we are requesting $74.6 million in fiscal year 1976 and $13.2 million in the transition period. The fiscal year 1977 authorization request is $53.8 million. During the 15-month period beginning this July, all user and ground station equipment will progress through design review, assembly and in-plant testing. Beginning in the spring of 1976, equipment will be installed in the ground stations and the stations checked out to support the launch of the Navy's Navigation Technology Satellite in the fall of 1976.

TACTICAL

Airborne Warning and Control System, AWACS

The Airborne Warning and Control System, or AWACS, will be an airborne surveillance, control and communications system which will use a modified Boeing 707 as the airborne platform. The distinguishing technical feature will be a radar subsystem capable of detecting and tracking aircraft at all altitudes over land and water. Equipment includes the radar, communications, identification sensors, navigation units and data processor to provide an integrated presentation of the air situation on operator display consoles in near real time. The capability to detect and track targets against ground clutter makes AWACS effective against targets at all altitudes.

Since the radar is contained in a high flying jet aircraft, long range low altitude surveillance is greatly improved compared to a ground based radar.

The System Integration Demonstration, SID, was successfully completed in December 1974. The purpose of the SID was to provide early demonstration of the critical portions of AWACS performance to minimize development risk, accomplish engineering test and evaluation of prototype equipment, and provide initial test data for timely using command assessment. Critical performance characteristics measured included target acquisition, tracking capability in the presence of ECM, intercept control, and communication link performance. All major performance goals were met or exceeded. In addition, requirements in the areas of navigation, communications, systems integration, and on board test monitoring and maintenance also were met or exceeded. SID was expanded to include additional ECM testing requested by the Ad Hoc Panel on The Vulnerability of the AWACS Radar to Enemy Jamming. Tests were conducted against ground noise jammers; single and multiple aircraft employing both standoff and escort jamming techniques; a repeater jammer, and a specially assembled very high power ground jammer. In addition to demonstrating AWACS ability to meet performance specifications, testing to date has given confidence that AWACS will provide the capability for a multi-mission role on a worldwide basis.

Fabrication of the first of three DT&E aircraft will be completed in this fiscal year and subsystem verification testing will be started. $199.2 million in fiscal year 1976 and $54.5 million in fiscal year 197T is requested to

complete the other two DT&E aircraft and continue verification testing and digital data link enhancement. Maritime surface surveillance efforts will also be pursued in fiscal year 1976. Maritime and anti-jam data link enhancements will be available for fiscal year 1977 production. Work will also begin on the AWACS radar improvements recommended by the Ad Hoc Panel on The Vulnerability of the AWACS Radar to Enemy Jamming. These radar improvements will be implemented as the ECM threat evolves. In fiscal year 1977, authorization of $123.8 million is requested to continue DT&E and to initiate development on Signal Intelligence, Self Defense Subsystem, Satellite Communication enhancements and Special Identification Friend or Foe.

F-15

The F-15 development test program has confirmed that the Air Force has a superior air-to-air combat fighter that will out-climb, out-accelerate, out-turn and defeat any known or postulated enemy fighter threat. It has attained a supersonic speed of Mach 2.5 and has a ferry range of 2,600 nautical miles without air refueling. Armament includes an internal 20mm gun and short range AIM-9 infrared-guided missiles for close-in maneuvering engagements; and radar guided AIM-7F missiles for longer range attacks.

During fiscal year 1975, contractor Development, Test and Evaluation was essentially completed and Air Force DT&E, which started in March 1974, continues at Edwards Air Force Base. Air Force testing will be completed in December 1975. The last four of a total of 20 DT&E aircraft were produced and over 3,600 flight test hours have been accumulated on the test aircraft as of the first of this year. Overall, the F-15

program has proceeded extremely well, and the $39.9 million requested in fiscal year 1976 will essentially complete the planned development of this aircraft.

A-10

Development of the A-10 is now over 70 percent complete. The program continues to proceed satisfactorily, and experience gained from the A-10 prototype aircraft has been instrumental in eliminating program uncertainties. A rigorous test program is now under way which includes testing of the GAU-8 gun throughout the A-10 flight envelope. Over 29,000 rounds have been fired in flight. Secondary ignition of gun gases outside the aircraft was eliminated by modifying the composition of the propellant in the 30mm cartridge. Two ammunition contractors are proceeding with competitive development of the 30mm ammunition to bring the benefits of competition to bear on the cost of the production rounds.

A significant milestone was achieved in October 1974 when the A-10 engine sucessfully completed a qualification program that involved two, back-to-back, 150 hour endurance runs.

The request for fiscal year 1976 is $51.9 million, and $1.0 million is requested for fiscal year 197T. This will permit continued development of the A-10 and complete purchase of the test aircraft to be used by the Air Force for Development and Operational Test and Evaluation. This testing is extremely important to provide early definition of tactics and procedures, training and support requirements. The fiscal year 1977 request of $2.1 million will complete the planned development of the A-10. This will provide the Air Force an aircraft that has been optimized to perform the close air

support mission and has been tailored for the antiarmor role. The A-10 will be highly versatile since it can employ the Maverick missile when the enemy defenses dictate the use of standoff weapons, and the GAU-8 30mm gun when the tactics require that the enemy be engaged at close range.

F-16

The objective of the F-16 program is to develop a lightweight, high performance, multi-purpose fighter which is capable of performing an acceptable spectrum of tactical air warfare tasks at an affordable cost. The F-16, built by General Dynamics, will be a missionized version of the YF-16, which was selected in January as the more promising of the YF-16 and YF-17 Lightweight Fighter prototype aircraft. The F-16 will permit high sortie rates with rapid turn around, minimum manpower/logistics burden, and exceptional air combat maneuvering performance coupled with a potent air-to-ground weapons delivery capability. The F-16 is required because of the continuing need for force modernization and expansion while further reversing the upward trend in acquisition and ownership cost of new weapon systems.

Four European countries (The Netherlands, Denmark, Norway, and Belgium) have demonstrated interest in the F-16 as a common replacement for their F-104 aircraft in the 1978-1985 time frame. Their participation in the program offers the potential of significant foreign military sales and increased Allied force effectiveness through standardization and modernization of equipment.

A transition program between the Lightweight Fighter prototype program and full scale development was initiated in

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July 1974, and in November, a competitive prototype radar demonstration program was initiated and contracts were awarded to Hughes and Westinghouse for a radar demonstration and flyoff. The Lightweight Fighter flight test program, structured to permit thorough operational evaluation, was completed in January 1975.

$273.0 million in fiscal year 1976 and $82.5 million in fiscal year 197T is requested to continue full scale development to meet both the initial operational capability date and commitments to the European Consortium involving development and procurement of the F-16. Major design, engineering, and tooling efforts will be under way, as will wind tunnel testing, component and subsystem qualification, airworthiness evaluations, reliability/maintainability evaluations, and training and support equipment development. The two YF-16 prototypes will remain in flight test status to evaluate the few configuration changes, and to begin integration and flight test of major subsystems. Delivery of DT&E aircraft will begin in fiscal year 1977. Authorization of $245.0 million is requested for this period.

Defense Suppression/Tactical Strike

Continued emphasis is being placed on insuring that our tactical forces can defeat enemy armor and provide effective close air support in an intense defensive environment. The need is amplified by the threat and weather conditions encountered in Europe.

The Precision Location Strike System, or PLSS, is being developed to improve our capability to accurately locate and strike targets day or night in any kind of weather. The system is designed to locate threat emitters and will also

accurately locate fixed, non-emitter targets such as bridges, airfields, and storage areas through the use of reconnaissance imagery and photographic data bases. PLSS provides an all-weather, stand-off strike capability to destroy the targets it locates, as well as targets located by other systems. This capability will reduce the attrition of strike forces from surface-to-air defenses.

Recent developments in forward looking infrared and laser technology are also being exploited to provide an effective night attack capability. The Improved Tactical Bombing program will complete the initial development and flight testing of a pod referred to as PAVE TACK. This pod contains a forward looking infrared sensor and laser for locating and designating targets and can be used on the F-111, F-4 and RF-4C aircraft. When fully integrated with the aircraft navigation system and video displays, the system will provide major operational improvements during day, night or adverse weather operations.

Development is continuing on the laser and imaging infrared guidance units for the Maverick missile. These guidance modes will extend the weapon's utility into night and poor weather, primarily to counter the world-wide enemy armor threat. Alternate conventional warhead options are also being developed to expand the target spectrum, as well as providing increased tri-service utility for all versions of Maverick.

To improve our capability for immediately countering hostile radar systems, development is continuing on the Advanced Wild Weasel system. These specially configured F-4E aircraft will search out and destroy those threat radar systems that endanger our capability to achieve and maintain air superiority.

Development is also continuing on the EF-111A tactical jamming system. The EF-111A is an existing F-111A aircraft modified to carry an electronic countermeasures subsystem consisting of high power jammers as well as threat warning and self protection equipment. Flight characteristics of the aircraft will approximate those of the F-111A. The aircraft will contribute significantly in all tactical missions by suppressing enemy radars while either escorting friendly penetrating aircraft or standing off to protect close air support combat sorties. Following an eight month design competition, Grumman Corporation was awarded a contract in January 1975 to build and test two EF-111A prototypes. Flight testing is scheduled to begin in fiscal year 1977.

We are also exploring the use of low cost one way expendable drones to saturate and confuse enemy air defenses. These devices have the potential to markedly improve the penetration ability of tactical fighters when they encounter a very dense and sophisticated hostile environment.

Command, Control and Communication

In the area of command and control of strategic forces, development will continue on the Advanced Airborne Command Post, AABNCP. The AABNCP is a modified Boeing 747 aircraft which will provide the National Command Authorities and Strategic Air Command with a highly survivable command and control system. The AABNCP will contain an advanced command, control and communications, C^3, package which will provide greater survivability and flexibility and permit effective management of our strategic forces in all phases of a general war.

The first Boeing 747 equipped with existing EC-135 communications equipment is now operational at Andrews Air Force Base, Maryland. The Air Force has also accepted delivery of the second and third aircraft, which are being modified and configured with existing EC-135 communication equipment. These three aircraft will serve as Interim National Emergency Airborne Command Posts and will provide operational experience which will assist in the design of the advanced C^3 equipment. The advanced C^3 equipment is the major development effort in the program.

$42.2 million is requested in fiscal year 1976 and $7.8 million in fiscal year 197T to continue the program.

Satellite Communications Systems continue to contribute to the effective employment of our forces. The Air Force Satellite Communications System, AFSATCOM, will provide the National Command Authorities with a global UHF communications capability for command and control of strategic forces. The system will share Navy FLTSATCOM satellites for communications in the lower latitudes, and Air Force Satellite Data System satellites for northern global communications coverage. These primary communications links will be complemented by small UHF transponders installed on other satellites which insure the availability of vital communications with our strategic forces. The AFSATCOM program element provides for development of these transponders as well as ground and aircraft terminals.

During fiscal year 1975 development of the basic terminals will be completed, and testing will begin using prototype terminals in operational aircraft and ground sites. In fiscal year 1976 and 197T testing of the terminals will be completed

and interfaces with other command and control systems will be developed. In addition, transponder improvements will be initiated and additional space programs will be evaluated as potential hosts for transponders. A total of $18.2 million is requested for fiscal year 1976 and 197T.

The Advanced Space Communications Program develops the technical base for advanced communications systems. In fiscal year 1975, effort continues on a satellite-to-satellite laser communications system and improved components for satellite communication terminals. The $26.7 million requested in fiscal year 1976 and $6.7 million in 197T will permit the launch and evaluation of data from Lincoln Experimental Satellites 8 and 9. These satellites will demonstrate many of the recent advances made in survivable satellite communications technology.

DRONES AND REMOTELY PILOTED VEHICLES

The Air Force is continuing to develop drones and remotely piloted vehicles, RPVs. This technology offers considerable potential for filling the very low end of the high-low mix in our tactical forces. The BGM-34C, a modular multi-mission RPV, was initiated in fiscal year 1975. It will be capable of low altitude reconnaissance and electronic warfare, while at the same time, providing the basic vehicle for further evaluation of an air-to-ground strike role. This RPV will not really be new; instead, it will be a combination of the best components and subsystems that we have developed over the past several years. We expect to demonstrate, through hardware test and evaluation, that a single vehicle capable of several missions is feasible and cost effective. Testing of the reconnaissance and EW configurations will start in fiscal year 1976 and be

completed by the end of the transition period. Testing of the strike configuration will be in fiscal year 1977. In addition to the RPV, we are also prototyping a new configuration of the DC-130 launch and control aircraft. Following successful flight tests, this prototype will provide the pattern for force modernization of the older portion of our existing DC-130 inventory.

The development of COMPASS COPE, a high altitude, long endurance remotely piloted vehicle, is also continuing. The concept validation phase conducted with two prototype designs will be completed in early fiscal year 1976. This phase includes flight demonstrations, an automatic landing system design, and engineering analyses to define the changes required to turn the prototype design into an operational system. Both Boeing and Teledyne-Ryan flew a successful performance demonstration flight in November 1974. One contractor will be selected for full scale engineering development by the middle of fiscal year 1976. When fully developed, COMPASS COPE will provide a low cost platform for a variety of surveillance and relay missions.

TECHNOLOGY EFFORTS

There is almost universal agreement that productive research and technology programs are essential to our long term security. The difficulty is in achieving agreement on which programs will provide that security and how much money should be spent. However, just as in the case of an individual's long term investments, we continually strive to select those programs which offer the highest potential return on our investment. Competition is keen, and only the most promising survive the extensive review process.

We are sensitive to the pressure exerted on our far term needs by more immediate concerns, and as with any judgment, an argument may be made for changes in a particular area. However, I am convinced that the program as proposed will provide the essential research and development to meet future Air Force requirements.

Prototyping has proved to be an excellent way of exploiting new technology and the Advanced Medium STOL Transport is currently the major effort in this area. The program is proceeding satisfactorily, and both Boeing and McDonnell Douglas are well into the fabrication phase on their respective prototypes. First flight of the McDonnell Douglas YC-15 is scheduled for the fall of 1975, and the Boeing YC-14 will first fly in the summer of 1976. The two prototype designs will permit test and evaluation of new technology, demonstrate operational utility and, after additional engineering development, provide a low cost development option for modernization of the tactical airlift force which currently consists of aging C-7, C-123, and C-130 aircraft.

The AMST will carry up to three times the payload of the C-130 into and out of 3,500 foot hard surface runways. In addition, it will have the capability to operate from 2,000 foot semi-prepared landing zones with payloads of up to 40,000 pounds at a radius of 200 nautical miles. The wide body design will enable it to carry virtually all Army division combat essential vehicles. The existing tactical airlift force cannot satisfy current requirements for short field and off-runway performance, speed, and cargo compartment size.

The fiscal year 1976 request of $85 million is required to continue manufacturing and major assembly of the prototypes and support the flight test program. In anticipation of a successful flight test program, a series of studies is being conducted in areas such as cargo compartment configuration, avionics, survivability and vulnerability, and life support to assure that the AMST, while low in cost, is optimized for the performance of its missions. The results of these studies, plus the flight test data, will be used to support a decision to begin full scale development in fiscal year 1977. $21.9 million is included in the authorization request for fiscal year 1977 to complete the prototype program and $23.4 million to initiate engineering development.

Advanced ICBM Technology and Advanced Ballistic Re-Entry Systems, ABRES, are two programs that are receiving continued emphasis in this year's request. In the Advanced ICBM Technology program, missile related technology applicable to all basing modes was continued in fiscal year 1975 with emphasis on propulsion and guidance, where the biggest payoffs can be achieved. In addition, the program continued to investigate basing technology applicable to silo, ground mobile and air mobile concepts. Initial ground mobile facility tests were conducted, and feasibility of the air mobile concept was successfully demonstrated in October 1974, when a Minuteman I missile was dropped from a C-5 aircraft and then ignited. A major purpose of this effort is to narrow the concepts to those which are feasible and operationally practical. The results of the basing investigations should provide equal confidence in the cost, schedule and performance estimates of the concepts still under consideration.

$41.2 million in fiscal year 1976 and $15.3 million in fiscal year 197T is requested to continue tasks initiated earlier, with increased emphasis on fabrication and testing of various subsystem designs. Propulsion preprototype motor firings and advanced nozzle tests will be conducted. In the guidance area, preprototype development of the Advanced Inertial Reference Sphere, AIRS, will continue. Advanced computer effort will focus on Air Force testing of contractor fabricated nuclear hardened semi-conductor devices, and the advanced computer design will be initiated. In basing, land and air mobile concepts will be further narrowed and testing/ demonstrations will be conducted as required.

The fiscal year 1977 planned program will include final fabrication and testing of preprototype motors with high energy propellants and advanced nozzles. A number of AIRS guidance systems will be fabricated and extensively tested for performance and hardness in all basing modes. The advanced computer task will culminate in fabrication and breadboard testing of the critical parts of the computer design. Authorization of $70.0 million is requested for fiscal year 1977.

The Advanced Ballistic Reentry Systems program continues to provide vital contributions to our overall strategic force potential. This tri-service program provides the fundamental basis of our current superiority in strategic missile payloads and is essential for our continued dominance in this area.

In fiscal year 1975, as before, the program includes technology efforts aimed at providing more operational flexibility, reliability, accuracy, and yield-on-target. Beginning in fiscal year 1975, maneuvering technology is being oriented to stress maneuvering for accuracy.

The fiscal year 1976 and 197T requests of $101.0 million and $29.2 million, respectively, will support continued technology efforts in accuracy maneuvering, ballistic reentry vehicles, penetration aids, and improved reentry vehicle subsystems. Accuracy maneuvering will be implemented through design and flight test of a Precision Guided Reentry Vehicle, or PGRV. This vehicle will have the capability of updating its position as it nears the target by use of a sensor or sensors, thereby improving overall systems accuracy. Efforts in ballistic reentry vehicles will be directed toward providing candidate designs for existing and future strategic missiles. Included in this technology area are plans to flight test reentry vehicles capable of carrying increased yield warheads optimized for single and multiple carriage on ICBMs and SLBMs.

Mr. Chairman, this concludes my prepared statement. I will be happy to respond to any questions.

TABLE I
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES*
(In Millions of Dollars)

RDT&E PROGRAM BY BUDGET ACTIVITY

	FY 75	FY 76	FY 7T	FY 77
MILITARY SCIENCES	132.2	143.6	38.3	152.3
AIRCRAFT AND RELATED EQUIPMENT	1,097.5	1,430.2	362.5	1,158.0
MISSILES AND RELATED EQUIPMENT	370.5	358.3	107.9	514.6
MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	453.7	560.5	133.7	698.4
ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT	149.4	188.7	57.6	279.7
OTHER EQUIPMENT	633.7	719.9	204.7	795.9
PROGRAM-WIDE MANAGEMENT AND SUPPORT	462.0	502.0	129.3	512.0
TOTAL DIRECT PROGRAM	3,298.9	3,903.2	1,034.0	4,110.9

*Totals may not add due to rounding.

TABLE II
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

MILITARY SCIENCES

	FY 75	FY 76	FY 7T	FY 77
IN-HOUSE LABORATORY INDEPENDENT RESEARCH	5.3	6.0	1.5	6.2
DEFENSE RESEARCH SCIENCES	74.4	81.8	20.5	82.8
ENVIRONMENT	7.8	8.9	2.5	11.8
MATERIALS	25.1	26.8	7.1	29.4
PRELIMINARY DESIGN AND DEVELOPMENT	2.6	2.8	.9	3.3
INNOVATIONS IN TRAINING AND EDUCATION	6.4	6.1	2.8	7.7
AIR FORCE PROJECT RAND	9.0	9.5	2.4	9.5
ANALYTIC SERVICES, INCORPORATED (ANSER)	1.5	1.7	.6	1.6
TOTAL	132.2	143.6	38.3	152.3

TABLE III
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

AIRCRAFT AND RELATED EQUIPMENT

	FY 75	FY 76	FY 7T	FY 77
AEROSPACE FLIGHT DYNAMICS	36.4	38.5	10.1	41.3
AEROSPACE BIOTECHNOLOGY	19.8	22.2	6.0	24.1
AEROSPACE PROPULSION	33.3	34.8	8.9	36.0
AEROSPACE AVIONICS	49.2	55.5	13.5	56.0
AIRCRAFT PROPULSION SUBSYSTEM INTEGRATION	5.9	8.0	2.5	10.8
ADVANCED AVIONICS FOR AIRCRAFT	7.6	10.2	3.6	14.1
FLIGHT VEHICLE TECHNOLOGY	7.5	10.7	5.2	21.5
RECONNAISSANCE SENSORS/PROCESSING TECHNOLOGY	3.5	2.1	.7	6.4
AEROSPACE STRUCTURAL MATERIALS	27.7	26.0	7.7	30.2
ADVANCED TURBINE ENGINE GAS GENERATOR	8.5	10.0	2.3	12.5
ADVANCED AERIAL TARGET TECHNOLOGY	4.6	5.6	2.0	9.0
LIGHTWEIGHT FIGHTER PROTOTYPE	12.7	-	-	-
STALL/SPIN INHIBITORS	-	-	.6	2.0
LIGHTWEIGHT FIGHTER ENGINE	10.0	-	-	-
ELECTRONICALLY AGILE RADAR	4.0	7.5	3.0	11.0

TABLE III (Contd)

	FY 75	FY 76	FY 7T	FY 77
CONUS AIR DEFENSE	-	-	-	.5
DIGITAL AVIONICS INFORMATION SYSTEM	4.5	5.0	1.4	6.5
AIRCRAFT NON-NUCLEAR SURVIVABILITY	-	1.5	.4	1.5
WILD WEASEL	13.6	11.7	4.4	2.0
AIRCRAFT EQUIPMENT DEVELOPMENT	5.0	7.5	2.2	10.8
ADVANCED TANKER/CARGO	2.0	5.2	1.4	50.0
B-1	445.0	672.2	168.3	432.7
EF-111A	36.7	5.0	5.0	37.0
A-10 AIRCRAFT	81.4	51.9	1.0	2.1
FLIGHT SIMULATOR DEVELOPMENT	1.6	2.7	.7	8.7
ADVANCED MEDIUM STOL TRANSPORT	55.8	85.0	11.4	45.3
F-16 AIR COMBAT FIGHTER (ACF)	32.0	273.0	82.5	245.0
B-52 SQUADRONS	.4	10.3	7.3	18.2
F-15 SQUADRONS	182.6	39.9	-	-
TACTICAL FIGHTER TRAINING (AGGRESSOR) SQ (F-5)	6.1	5.9	-	-
C-5 AIRLIFT SQUADRONS	-	22.3	10.4	22.8
TOTAL	1,097.5	1,430.2	362.5	1,158.0

TABLE IV
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

MISSILES AND RELATED EQUIPMENT

	FY 75	FY 76	FY 7T	FY 77
ROCKET PROPULSION	20.6	22.6	6.0	23.9
ADVANCED ICBM TECHNOLOGY	37.3	41.2	15.3	70.0
ADVANCED BALLISTIC RE-ENTRY SYSTEMS (ABRES)	111.8	101.0	29.2	125.0
STRATEGIC BOMBER PENETRATION	5.5	7.7	5.7	21.2
ADVANCED SHORT RANGE AIR-TO-AIR MISSILE SYSTEMS TECHNOLOGY	-	3.8	1.2	10.0
AIR LAUNCHED CRUISE MISSILE	66.5	51.0	13.0	103.8
SAMTEC AND ACS - TELECOMMUNICATIONS	3.1	4.5	1.0	5.0
SHORT RANGE ATTACK MISSILE (AGM-69)	-	3.0	2.4	14.9
MINUTEMAN SQUADRONS	123.9	122.7	34.0	137.8
TACTICAL AIR INTERCEPTOR MISSILES	1.7	.8	.1	3.0
TOTAL	370.5	358.3	107.9	514.6

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TABLE V
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

MILITARY ASTRONAUTICS AND RELATED EQUIPMENT

	FY 75	FY 76	FY 7T	FY 77
SPACE VEHICLE SUBSYSTEMS	4.1	7.4	2.5	16.3
SPACE TEST PROGRAM	14.6	16.4	7.8	40.7
SPACE SHUTTLE	10.0	22.7	8.2	57.6
NAVSTAR GLOBAL POSITIONING SYSTEM	23.9	74.6	13.2	53.8
MISSILE SURVEILLANCE TECHNOLOGY	7.8	8.8	3.3	24.7
SPACE SURVEILLANCE TECHNOLOGY	18.9	13.6	3.6	37.0
WARNING INFORMATION CORRELATION	3.9	.3	-	-
ADVANCED SPACE COMMUNICATIONS	23.4	26.7	6.7	35.8
SATELLITE SYSTEMS SURVIVABILITY	2.4	4.8	1.7	11.6
SPACE DEFENSE SYSTEM	3.5	4.0	2.2	11.7
AEROSPACE	11.5	12.7	3.2	12.5
SPACETRACK	-	3.1	.6	4.3
DEFENSE SUPPORT PROGRAM	33.8	16.4	4.8	22.7
SLBM RADAR WARNING SYSTEM	.8	3.6	2.0	7.0
DEFENSE DISSEMINATION PROGRAM				

TABLE V (Contd)

	FY 75	FY 76	FY 7T	FY 77
DEFENSE SATELLITE COMMUNICATIONS SYSTEM	1.8	12.4	3.1	39.6
AIR FORCE SATELLITE COMMUNICATIONS SYSTEM	10.0	12.8	5.4	25.4
SPECIAL ACTIVITIES				
SATELLITE CONTROL FACILITY	3.2	3.3	1.4	5.4
SPACE BOOSTERS	3.6	9.7	2.6	13.6
SATELLITE DATA SYSTEM	36.5	30.2	4.0	10.4
DEFENSE METEOROLOGICAL SATELLITE PROGRAM	5.0	6.0	1.7	10.0
TOTAL	453.7	560.5	133.7	698.4

TABLE VI
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT

	FY 75	FY 76	FY 7T	FY 77
ADVANCED WEAPONS	21.3	23.7	6.1	24.8
CONVENTIONAL MUNITIONS	16.9	18.4	5.0	20.9
CONVENTIONAL WEAPONS				
ADVANCED RADIATION TECHNOLOGY				
AERIAL GUN SYSTEM	-	.5	.2	7.5
CHEMICAL/BIOLOGICAL DEFENSE EQUIPMENT	.7	.6	.1	.5
ARMAMENT/ORDNANCE DEVELOPMENT	6.9	9.7	2.8	15.1
IMPROVED AIRCRAFT GUN SYSTEMS	2.2	5.6	1.1	3.9
30mm CLOSE AIR SUPPORT GUN SYSTEM	8.0	8.0	-	-
CLOSE AIR SUPPORT WEAPON SYSTEM (CASWS)	20.8	31.5	16.8	61.8
AIRCRAFT AVIONICS EQUIPMENT DEVELOPMENT	6.0	5.6	1.4	8.3
AIR DELIVERED LAND MINES	2.5	10.8	2.0	12.9
TOTAL	149.4	188.7	57.6	279.7

TABLE VII
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1975 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

OTHER EQUIPMENT

	FY 75	FY 76	FY 7T	FY 77
GROUND ELECTRONICS	41.4	45.4	12.1	43.2
HUMAN RESOURCES	6.5	7.9	2.1	8.4
BASE SECURITY	2.8	4.4	1.2	6.2
ELECTRONIC WARFARE TECHNOLOGY	6.6	8.4	2.7	15.2
SIMULATOR FOR AIR-TO-AIR COMBAT	1.6	.6	.2	-
AEROSPACE FACILITIES TECHNOLOGY	2.6	2.2	.6	2.8
ADVANCED COMMUNICATIONS TECHNOLOGY	1.4	2.2	.4	1.3
ADVANCED COMPUTER TECHNOLOGY	2.3	4.0	1.2	6.5
ADVANCED DETECTION SYSTEM DEVELOPMENT	5.0	5.0	1.0	5.4
WWMCCS ARCHITECTURE	6.5	.5	.2	.5
NUCLEAR AIRCRAFT PROPULSION TECHNOLOGY	-	-	-	1.1
ADVANCED DRONE/REMOTELY PILOTED VEHICLE DEVELOPMENT	3.1	3.0	.9	9.2
DEFENSE SUPPRESSION	2.3	1.7	.4	6.7
AIR-TO-AIR IDENTIFICATION OF NON-COOPERATIVE TARGETS	2.7	2.2	.8	7.3
ELECTRO-OPTICAL WARFARE	4.0	6.1	1.9	13.5

	FY 75	FY 76	FY 7T	FY 77
COMPASS COPE	6.0	1.1	-	-
SIDE LOOKING AIRBORNE RADAR (SLAR)	4.2	3.6	4.2	28.5
LOW VISIBILITY MOVING TARGET ACQUISITION/STRIKE	-	2.5	.9	5.7
COMMAND, CONTROL & COMMUNICATIONS ADVANCED DEVELOPMENT	-	.6	.3	5.4
TACTICAL INFORMATION PROCESSING AND INTERPRETATION	6.3	8.3	2.0	11.2
LIFE SUPPORT SYSTEMS	4.1	6.9	2.0	8.6
OTHER OPERATIONAL EQUIPMENT	6.6	9.9	2.2	10.8
IMPROVED TACTICAL BOMBING	8.5	22.0	4.7	11.7
RECONNAISSANCE/ELECTRONIC WARFARE EQUIPMENT	8.2	14.5	4.1	19.4
SYSTEMS SURVIVABILITY	6.8	7.5	2.1	13.2
IMPROVED AIRCRAFT FIRE FIGHTING EQUIPMENT	.5	.6	.1	.5
INTEGRATED PROGRAM FOR AIR BASE DEFENSE	1.5	7.5	1.7	7.5
ADVANCED AIRBORNE COMMAND POST (AABNCP)	62.7	42.2	7.8	15.8
TACTICAL LORAN	14.5	10.7	1.4	6.1
DRONE/REMOTELY PILOTED VEHICLE SYSTEMS DEVELOPMENT	17.0	14.0	6.0	35.1
SURFACE DEFENSE SUPPRESSION	13.9	23.7	9.8	38.6
RF-X	-	-	-	1.1

	FY 75	FY 76	FY 7T	FY 77
IMPROVED CAPABILITY FOR OPERATIONAL TEST AND EVALUATION	6.3	2.8	.9	9.8
FOREIGN WEAPONS EVALUATION	-	-	-	1.1
PROTECTIVE SYSTEMS	17.5	31.5	7.5	32.5
F-4 PROTECTIVE SYSTEMS	3.4	3.2	1.3	8.1
APPLICATION INFORMATION PROCESSING TECHNOLOGY	-	1.1	.3	3.4
PRECISION LOCATION STRIKE SYSTEM	22.1	19.0	10.6	45.6
TACTICAL SUPPORT JAMMING	1.0	.4	.1	1.6
AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	202.0	199.2	54.5	123.8
EXPENDABLE DRONES	.6	2.2	.7	7.8
ELECTROMAGNETIC RADIATION (EMR) TEST FACILITIES	8.4	14.6	3.5	15.2
ADVANCED FIGHTER PROTECTIVE SYSTEMS	15.5	18.8	3.6	10.7
INTELLIGENCE EQUIPMENT	3.6	7.2	3.3	21.1
INTRA-THEATER IMAGING SYSTEM	-	.3	.2	2.4
TDMA DIGITAL DATA LINK	13.6	14.4	4.8	19.0
SYSTEMS PROTECTION	.5	2.2	1.3	5.4
LINCOLN LABORATORY	15.8	17.4	4.4	17.1
MITRE	7.5	8.3	2.1	8.1
AIRCRAFT NAVIGATION SYSTEM VERIFICATION	1.0	1.4	.4	1.6

	FY 75	FY 76	FY 7T	FY 77
STRATEGIC AIR COMMAND COMMUNICATIONS	1.0	6.0	1.0	14.0
NORAD COC	4.4	7.2	2.3	3.0
JOINT SURVEILLANCE SYSTEM	-	7.7	2.2	5.5
CONUS OVER-THE-HORIZON (OTH) RADAR SYSTEM	10.3	8.0	6.7	13.9
TACTICAL AIR CONTROL SYSTEM	3.0	7.9	1.1	6.0
JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC)	12.7	26.4	6.0	24.8
CRYPTOLOGIC ACTIVITIES				
TECHNICAL SENSOR COLLECTION	3.0	1.1	.3	2.4
RECONNAISSANCE DRONE OPERATIONS	1.2	2.8	.3	3.3
SENIOR YEAR OPERATIONS				
AIR FORCE COMMUNICATIONS (DCS)	2.7	5.2	1.4	7.8
MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	5.2	7.9	2.2	7.7
ELECTROMAGNETIC COMPATIBILITY ANALYSIS CENTER (ECAC)	6.1	4.4	1.1	4.3
COMMUNICATIONS SECURITY (COMSEC)	1.3	1.3	.3	1.3
TRAFFIC CONTROL, APPROACH AND LANDING SYSTEM (TRACALS)	5.9	8.6	2.4	8.6
TOTAL	633.7	719.9	204.7	795.9

TABLE VIII
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1976 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

PROGRAM-WIDE MANAGEMENT AND SUPPORT

	FY 75	FY 76	FY 7T	FY 77
INTERNATIONAL COOPERATIVE RESEARCH AND DEVELOPMENT	.3	.4	.1	.5
ACQUISITION AND COMMAND SUPPORT	202.3	212.2	54.0	211.2
TEST AND EVALUATION SUPPORT	258.8	288.5	75.0	299.2
INTERNATIONAL MILITARY HEADQUARTERS & AGENCIES	.7	.9	.2	1.1
TOTAL	462.0	502.0	129.3	512.0

BUDGET REQUEST

General CHAPMAN. I would like to mention that our total request is $3.9 billion for 1976, and $1.034 billion for the transition period. This contains an inflation ratio on the average of about 5 to 7 percent.

We have tried to recognize escalation into our program, particularly, about 5 to 7 percent, and we have done that.

The biggest increase in this year's request is because of the B–1 program which, as you know, peaks at $672 million in 1976, because of the AWACS program we have just been discussing and because of the F–16, the new lightweight fighter we are bringing on.

At the same time, in this year's request, the F–15 completes its development program and we will complete the development program on the F–5E which has been one of our most successful foreign sales, as you know.

F–16/NATO BUY

Senator YOUNG. Have you been able to persuade NATO to buy the F–16?

General CHAPMAN. Not yet, this decision is still a few weeks ahead of us. The last we have heard is that the French have made a counter offer which is getting very close in price to the price for which we have offered the F–16.

Right now, I guess that we think the four countries are leaning toward the F–16 except perhaps Belgium, and I think that they are uncertain at the moment.

Senator YOUNG. How about Germany?

General CHAPMAN. Germany is not yet considering this aircraft. It does not have to replace its aircraft quite as soon as some of the others, and they have a development of their own which they are presently working on, the MRCA, multi-role combat aircraft, which the United Kingdom and the Germans and Italians are considering.

So, they are not at this time thinking of the F–16, those three countries.

They are buying some F–4's now, and completing their force.

AIR-LAUNCHED CRUISE MISSILE

Another program I should mention is the air-launched cruise missile, which last year was appropriated at about $65 mililon.

There was some controversy surrounding that program because the Navy also had a sub-launched cruise missile. We have since joined hands with the Navy and we are sharing a number of development components as to guidance and propulsion to try to reduce the costs of those two programs.

So, the air launched cruise missile, which is a part of this total question of the B–1 and the other aircraft, is being developed; but it is being developed jointly, in a sense, with the Navy, and we restructured that program, and the amounts of money then have been diminished until about 1977, when we imagine we will complete our development on that airplane program.

NAVIGATION SATELLITE PROGRAM

We are trying to develop a navigational satellite in this year's budget. The budget for that satellite will actually peak in 1976 and 197T. This is a satellite system which will be precise enough, for example, for the Navy to use in testing their new missiles in connection with the Trident system in their test ranges.

We are providing about $16 million in this year's effort to provide that test capability for the Navy.

We think the navigation system, when we finally have it deployed in 24 satellites, will probably be the most accurate navigation capability that has ever been deployed anywhere in the world.

Chairman McCLELLAN. How long will these satellites last?

General CHAPMAN. The life we expect now is about 4 years.

Chairman McCLELLAN. What do they cost per unit?

General CHAPMAN. Our present projection of satellite production unit costs is $7.5 to $8.5 million in fiscal year 1975 constant dollars. This is based on minimum changes to the prototype satellites to be launched in 1977 and a contractor start date in 1978 for the first nine production satellites.

Chairman McCLELLAN. You are going to have 20 of those?

General CHAPMAN. No, we will have 24 of those.

Chairman McCLELLAN. Will they all be up at one time?

General CHAPMAN. Yes sir, to give us worldwide capability.

They will be equipped so they can only be used by friendly people.

Senator YOUNG. Wouldn't that parallel to some extent the sanguine system?

General CHAPMAN. That is a communications system. This is for navigation.

I am not familiar with the Navy's system, but it basically is a communications system with very low frequency.

The navigation system tells you where you are at any point.

Senator YOUNG. We had an Omega system, and that permits a submarine even [deleted] feet down below the surface to communicate.

General CHAPMAN. I don't believe it gives you a precise location. I may be incorrect on that. Perhaps the Navy should be asked about that.

Chairman McCLELLAN. We are being signalled for another vote. Perhaps we can complete the hearing before we must leave.

ADVANCED AIRBORNE COMMAND POST SYSTEM

General CHAPMAN. I have 2 other programs. First the Advanced Airborne Command Post System.

We have 1 aircraft at Andrews Air Force Base operating with communications equipment for the National Command Authorities. In our 197T request, we are requesting 3 additional aircraft to complete the procurement of 7 that we hope to build for the Advanced Airborne Command Post capability, some of which will be stationed with the National Command Authorities in Washington and some of which will be Strategic Air Command aircraft.

M–X PROGRAM

The last program I might mention is a follow-on to the Minuteman, the M–X. We are looking to a 1978 full development of that. This is a high performance system with about [deleted] times the throw weight of Minuteman for a mobile or silo system. We can have either an air mobile or a ground mobile system. In connection with that, in our advanced ballistic and reentry systems, we are doing a lot of work on guidance and warheads to tie in with the M–X. So we are definitely looking at a follow-on missile.

Senator YOUNG. When will that be available?

General CHAPMAN. The schedule we have now, Senator Young, would bring that missile in about [deleted].

Senator YOUNG. The Navy is working on a lot of those?

General CHAPMAN. Yes, I think there are 16 of those.

I think that concludes my remarks, Mr. Chairman.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Chairman MCCLELLAN. Due to our time pressures today, I am going to submit all my questions. Will you please respond to them for the record?

Dr. LABERGE. Certainly, sir. The appropriate person will respond to them.

[The questions and answers follow:]

AMST REQUIREMENT

Chairman MCCLELLAN. The Air Force has the very versatile C–130 for tactical airlift and the C–5 and other wide bodied jets for strategic airlift. Is it then necessary to pursue a very expensive development for an airlift aircraft such as AMST to fit in somewhere between these two types of aircraft?

General CHAPMAN. The AMST is not designed to fit in somewhere between the C–130 and C–5 aircraft. It is being designed to meet the tactical airlift mission requirements of our general purpose forces. In that primary role, it will not only accomplish all tasks now assigned to the existing tactical airlift force of C–130, C–123, and C–7 aircraft, but it will markedly improve intra-theater mobility support of the ground combat forces. When there are reduced tactical airlift requirements, this wide bodied aircraft could augment strategic airlift forces by transporting many combat essential items of equipment which can be carried now only by the C–5.

The C–130 has been a versatile aircraft and its introduction in the late fifties provided a great improvement over the then relatively new C–119 "Flying Boxcar." However, the C–130, with its narrow body design and limited performance, is simply unable to satisfy requirements of modern ground combat forces. Twenty years of technology development made it possible to develop a transport which meets the needs of our modern ground combat forces. Development of a new generation of tactical airlift aircraft is more critical now than when we last undertook such a step in the 1950's.

AIR COMBAT FIGHTER/DEVELOPMENT COSTS

Chairman MCCLELLAN. The Air Force recently selected an air combat fighter candidate, the F–16, after a fly-off between two prototypes. Why will it now cost upwards of $500 million to continue development of the selected prototype? What was accomplished with the prototyping demonstration?

General CHAPMAN. The flight test data gathered during the Lightweight Fighter (LWF) Prototype program on the prototype YF–16 has contributed significantly towards the development of the F–16. The prototype design is very similar to the preproduction aircraft and much of the flight test data will be directly relatable. However, major design, engineering, and tooling efforts, including wind tunnel testing, component and subsystem qualification, airworthiness evaluation, reliability/maintainability, training and support equipment development, and data support must be accomplished before quantity production can commence. All such efforts must be based on the results of a thorough flight testing program to acquire detailed performance data, ensure comprehensive stability and control investigations, and assure the soundness of a production design compatible with an 8,000 hour projected life span. The System Program Office, in conjunction with the Air Force Test and Evaluation Center, has structured a test program to accomplish these objectives using only eight pre-production aircraft.

During the LWF prototype program, the YF–16 flew over 300 flights and 400 hours. Preliminary performance data, handling qualities, and operational characteristics were determined. The YF–16s will continue in flight test to evaluate system components and minor configuration changes which will be representative of the production aircraft configuration.

F–16 PROGRAM UNIT COST/RADAR MISSILE CAPABILITY

Chairman MCCLELLAN. What is the latest program unit cost of the F–16? Does that cost include a radar missile capability? Do you plan such a capability?

General CHAPMAN. The F–16 estimated unit program cost is $6.3 million in fiscal year 1975 dollars for the total 658 aircraft program (650 production aircraft and the eight DT&E aircraft). An AIM–7 missile capability will not be incorporated; however, the F–16 will have space, weight, power, and cooling provisions for possible future inclusion of a radar missile capability.

The eight DT&E aircraft full scale development program was briefed to the DSARC and is waiting approval by the Secretary of Defense.

F–16/FMS PROSPECTS

Chairman MCCLELLAN. What countries now seem seriously interested in purchasing the F–16?

General CHAPMAN. Although many countries have requested information on the F–16, only the four Consortium countries (Belgium, Denmark, Norway, and the Netherlands) have entered into serious negotiations with the Department of Defense.

F–15/ENGINE STATUS

Chairman MCCLELLAN. In your statement, you mention a smooth transition from development to production in the F–15 program. I understand that you had major engine problems in the F–15 program. Has the F–15 engine been fully developed? Will funds for the F–16 be used for the development of the common F–15/F–16 engine?

General CHAPMAN. There were some technical problems in the development of the F100 engine associated with the 150 hour endurance qualification test. However, the engine successfully completed this strenuous test in October 1973.

This testing occurred over one year prior to delivery of the first production aircraft which was equipped with production engines. This allowed a smooth transition from development to production. The development of the F100 engine is essentially complete and funds are not required in FY 76 for such development.

There are no F–16 funds planned for further development of the F100 engine.

LIFE CYCLE COSTS

Chairman MCCLELLAN. The selection criteria for several new programs such as the A–10 and F–16 seemed heavily weighted to life cycle costs. How good are the data upon which these life cycle costs are based? Doesn't life cycle costing lend itself to manipulation in order to justify a decision made on some basis other than competitive bidding?

Dr. LA BERGE. To arrive at a life cycle cost estimate for any program we add an estimate of operating and support (O&S) costs to development, procurement,

and military construction costs. Our program estimates for development, procurement, and military construction costs are well known to you and are routinely provided to the Congress in the Selected Acquisition Reports (SARs). Over time however, O&S costs are much more subject to change as they are greatly effected by policy decisions on the use of a weapon system and by changing support concepts as we attempt to take advantage of lessons learned and new technology. Many of our O&S estimates are based on assumptions as to activity rates, basing concepts, what percentage of a depot's operations will be needed to support a particular weapon system, and the like. These assumptions are not always proven valid as we accumulate experience over a long period of time.

Because of these types of situations in the O&S area, our largest use of estimates derived from current life cycle cost models is for comparing possible tradeoffs at major decision points rather than as absolute cost targets over a system's life. Whether used in the source selection decision process or the Defense Systems Acquisition Review Council's (DSARC) review, comparisons are always made such that the aforementioned assumptions are carefully prescribed and applied uniformly in evaluating similar alternative systems. Further, the estimates are reviewed in detail by Air Staff and OSD cost analysts. Any manipulation under these conditions would be self defeating.

I would like to add that we are placing heavy emphasis on improving reliability and maintainability, two key drivers of support costs. We are initiating a system where contractors assume additional responsibility for the field reliability of their equipment. Also, reliability and maintainability minimum thresholds will be specified in Decision Coordinating Papers and the Air Force will be responsible for tracking its progress against these thresholds. Further, we are actively seeking better ways to collect actual cost information by weapons systems to allow us to manage our O&S costs more effectively. Together, these efforts should allow us to continue to improve our life cycle cost estimating ability.

Design to Cost

Chairman McClellan. You stress design to cost in your new programs. Is that simply a technique whereby you design a basic vehicle with the intention of later adding capability and thus increase the cost after the program is approved?

General Evans. No, it is not. The proposed weapon system which is reviewed by the Defense Systems Acquisition Review Council and approved for development by the Secretary of Defense is the total system required to meet the stated operational need. The question of affordability is a critical one, but it is inseparably tied to total mission effectiveness as well. Moreover, the affordability question also includes the estimated operating and support costs. These considerations require that the system with all of its critical subsystems and equipments be addressed. The design to cost goal approved by the Secretary of Defense is carried throughout the remainder of the acquisition phases. The goal is not totally inflexible, but any changes to allow for an increased performance capability would have to be justified on the basis of changes in the threat and required mission capability. Design to cost is definitely not a concept which allows for incorporating "nice to have" capabilities as the system progressively moves through development to production and deployment.

Cost of 4th B–1/Impact on Program

Chairman McClellan. How much could be saved in the FY 1976 R&D budget by not procuring the fourth R&D B–1 aircraft? How would such a decision impact on the B–1 program?

General Chapman. In our FY 1976 RDT&E budget request, we have included $90.9 million for Air Vehicle #4. Part of this money, some $44 million, is directly attributable just to that aircraft and could be eliminated if a decision was made not to procure Air Vehicle #4 at this time. With respect to the balance of that money (almost $47 million) some $9 million is an overhead allocation and must be furnished whether AV #4 is built or not, and the remaining $38 million is to be used for the design efforts to implement our cost reduction studies. They are included in the Air Vehicle #4 request since it is the first aircraft into which these items would be designed.

The impact of not funding the fourth Air Vehicle would be felt primarily in the flight test area because it will be the first aircraft incorporating design changes resulting from our development testing and cost reduction efforts. In

addition, it will be used to flight test the defensive avionics system. Without Air Vehicle #4, we would begin the production program without having had a complete production configured prototype. We would also have to test the defensive avionics on Air Vehicle #3 or the first production aircraft. If such testing were done on Air Vehicle #3, it would require an 8 to 10 month retrofit to incorporate the defensive equipment. The aircraft would be lost to the flight test program for that time period. If testing were accomplished on the first production aircraft, we would increase our risks of additional retrofit into the production aircraft to follow.

In addition to the technical problems just described, the deletion of Air Vehicle #4 would increase the manufacturing gap between the last development Air Vehicle and the first production vehicle with further loss of learning on the part of those manufacturing personnel who can be retained in other activities or be recalled, and a greater risk that individuals will not respond to a recall notice when their services are again required. This, of course, increases the cost of the program.

B–1 RDT&E Funding Profile/No. FY 76 Procurement

Chairman McClellan. If Congress indicates a desire to forego procurement of the B–1, could the FY 1976, FY 197T, and FY 1977 RDT&E funding be stretched out?

General Chapman. Aside from the question of the fourth aircraft, which I have just addressed, there are a number of tasks in the FY 1976, FY 7T, and FY 1977 RDT&E funding request which are related to transitioning the program from development into production. These tasks are timed to start in the same time frame as the long lead effort, which is funded in the procurement account. If we have to accept the schedule slip and increased cost of a delay in the production of the aircraft engendered by disapproval of our long lead funding request, then these tasks can be rephased. They include production planning such as process specification update, drawing release and plant layout as well as tasks associated with weapons system support, such as aircrew and maintenance training equipment, ground support equipment (AGE) and technical data. Funding for all these tasks in the RDT&E program is as follows: FY 76, $110M; FY 7T, $50M; FY 77, $100M.

If these tasks, and the long lead effort, are not funded in FY 76, we will incur the additional costs of doing them later and we will have to adjust the cost of the remaining effort due to the contractor's increased overhead burden on the reduced amount of work authorized.

Strategic Cruise Missile/Joint AF/Navy Program

Chairman McClellan. Both the Navy and Air Force have strategic cruise missile programs. Why can't there be one program for this missile, with slight modifications for air to sea launched?

General Chapman. The significant differences in launch platform and operational launch environment between the bomber and the submarine have led to current DOD approval of the two program advanced development approach with maximum subsystem commonality. The cost benefits of this approach versus the costs of integrating a single missile into different weapon systems will be reviewed by the DOD before a full-scale development decision is made in FY 77.

Cruise Missile/Effective Weapon

Chairman McClellan. Is a long range cruise missile an effective military weapon?

General Evans. The Air Launched Cruise Missile (ALCM) contributes significantly to bomber force effectiveness. ALCMs dilute area defenses and reduce bomber penetration distances with a resultant decrease in tanker requirements and bomber exposure to defenses. A recent Air Force study measured the effectiveness of the 1983 bomber force with and without ALCMs. The results indicate that ALCMs launched from penetrating bombers increase target destruction by 5% and bomber survivability by 19%. Employing ALCMs from outside the defense perimeter increased bomber survivability by 45% but decreased target destruction by 6%. This decrease was attributable to the number of high value targets that could not be struck because they were beyond ALCM range. On the

other hand, excursions addressed longer range ALCMs and found that for stand-off ALCMs, target value destroyed does not vary significantly with range beyond [deleted] NM. Extended ALCM flight times (one hour to penetrate [deleted] NM) result in increased attrition by enemy interceptors and a reduced probability of target destruction.

Cost to Evaluate Contractor/Advance Tanker

Chairman McClellan. Why does it cost $5.2 million to evaluate contractor proposals for an airborne tanker? What can be done to reduce the costs of paper studies?

General Chapman. The $5.2 million will not be used to evaluate contractor proposals but rather to initiate full-scale engineering development. Evaluation of contractor proposals, leading to source selection late in FY 76, will be conducted in-house.

Space Shuttle Studies/Explain

Chairman McClellan. Again, in the Space Shuttle there appears to be $31 million required basically for paper studies. Explain the manner in which this $31 million will be expended.

General Chapman. I will provide a detailed breakout of the total FY 1976/197T request of $30.9 million for the record. The information follows:

[In millions of dollars]

	Fiscal year 1976	Fiscal year 197T
Shuttle engineering: Conducts a detailed review of the NASA Shuttle vehicle and support systems and identifies DOD unique requirements to NASA for incorporation	1.0	0.3
Interim upper stage: Selects a minimum cost IUS concept to meet DOD high altitude requirements for certain critical payloads. Initiates the hardware validation phase of the development program for the upper stage concept selected in fiscal year 1975	4.3	3.1
Operational planning: Completes the definition of the flight and ground support system (equipment, communications, and software) required for Vandenberg Air Force Base (VAFB) Shuttle operations. Also completes determination of the support required for DOD missions that are flown from Kennedy Space Center (KSC), and continues the review of NASA's software development program	11.2	3.4
Mission applications: Continues the development of DOD paylaod and payload-to-Shuttle interface requirements	3.5	.4
Planning and integration: Continues integration tasks with NASA developed Shuttle facilities and equipment	2.7	1.0

AWACS/Evaluation of Mission

Chairman McClellan. The mission of the AWACS has been changed since the Air Force testified last year. Please explain the evolution of the AWACS mission from strategic defensive to tactical offensive to tactical defensive.

General Evans. The AWACS program, from the first documented requirement in 1963 until today, has been the subject of extensive studies which have resulted in an increased Air Force comprehension over time of the potential applications of the system. The understanding of the need to provide low altitude radar surveillance is as old as radar itself. This need is not categorically identifiable as defensive or offensive nor strategic or tactical. Commanders responsible for allocation of resources need timely data. As jet aircraft have developed, low-altitude and high speeds are increasing in threat significance and the capabilities provided by AWACS are becoming more and more important.

From its inception, the AWACS was to have the capability to perform in both the tactical and strategic air defense roles. These dual roles are stated in the 1963 Specific Operational Requirement. This fact is significant because, at that time, the principal anticipated force allocation was for the strategic defense role. However, Soviet developments have borne out the foresight of including a capability to meet the tactical requirements as well as our air defense needs.

The 1966 TAC/ADC Required Operational Capability (ROC) document and the 1969 TAC/ADC agreement on the CORE configuration confirmed the dual role for AWACS. Thus, our planning is based on AWACS being employed in both the tactical and strategic defense mission areas. Allocation of forces to these roles would depend on the priorities of specific crisis situations.

The tactical air role has many facets; and the unique capabilities and flexibility of AWACS will allow it to be employed in support of any of the missions of tactical airpower. Some confusion exists with the somewhat academic terms of "offensive" and "defensive" missions. These words infer a separation of component mission specifics that exist only partially, and only at times, in the real world.

In the real world, the terms offensive and defensive are not always and/or totally related to the geography and the nature of the airspace over it. The forces that react to attack in a defensive alliance—as NATO is—can be considered in a defensive role no matter what they do. What might be called an offensive operation in hostile airspace today can be a defensive operation in friendly airspace tomorrow. Friendly airspace contains hostile elements, and a strike force may operate on our side, at the FEBA, or beyond the FEBA. A rigid, all-encompassing connotation of execution in friendly vs enemy airspace—offensive versus defensive—limits our essential understanding of what we need to be able to do: surveillance, warning and control of tactical air operations.

Compare AWACS and E–2C

Chairman McClellan. Please compare the capabilities of the E–2C and AWACS. Could the E–2C be used in NATO if the AWACS is denied by the Congress?

Dr. LaBerge. The E–2C serves very effectively for the Navy in the role of fleet air defense; however, there are many significant differences in the nature of that mission and the mission of worldwide surveillance, warning, and control envisioned for the AWACS.

First, the mission of fleet air defense is essentially one of point defense in which the E–2C serves as an airborne radar sensor for the shipboard command and control system. The radar data derived from the E–2C is provided by data link to the surface based system where virtually all command and control functions are performed. The E–2C radar is optimized for detections over water and has neither the range, ECM resistance, nor detection capability of the AWACS radar over land. In addition, the E–2C radar is not designed to cope with the high density environment that could be encountered over land in a tactical air war in Central Europe. It is not designed for autonomous operation in dense environments where surface based facilities are not available. For example, the E–2C has only three consoles and operators on-board compared with nine for the first production models of the AWACS with an option to increase to 16 consoles on later models. The size of the aircraft is constrained by the requirement for operations aboard aircraft carriers. This constraint effectively precludes expansion of the on-board capability to overcome these deficiencies. In addition, the range and speed of the aircraft are much less than those of the AWACS. For example, the 5.5 hour mission duration of the E–2C is about one-half that of the E–3A. The mission duration of the E–3A can be extended to over 20 hours with aerial refueling.

In spite of these limitations the E–2C was examined in 1973 as one alternative to the E–3A AWACS in terms of effectiveness and cost-effectiveness in the context of a Central European conflict. Even though the E–2C is less expensive than the E–3A, the requirement for a larger force size to provide comparable surveillance coverage, plus the limitations described above, showed it to be less effective and less cost-effective than the E–3A. It should also be emphasized that this analysis assumed a Central European environment where extensive surface-based command and control facilities exist. The design limitations of the E–2C could be further exacerbated in other regions where extensive surface command and control facilities do not exist.

Recently a NATO group compared the E–3A and the E–2C against SACEUR's stated Required Operational Capability (ROC) for an AWACS-type system. That group concluded that, considering only surveillance volume and endurance, it would take four times as many E–2Cs to cover the orbit requirements as one E–3A. Moreover, the study concluded that the E–3A has a significant advantage over the E–2C in terms of ECM resistance.

In sum, the E–2C is a highly capable aircraft optimized for over water operations for the fleet air defense mission and shipboard operations. It would not be capable of performing the worldwide mission of surveillance, warning, and control envisioned for the AWACS. We also conclude that the E–2C would be neither as effective nor cost-effective as the AWACS in Europe. Moreover, space,

range, speed, and the basic radar design features effectively preclude modification of the E–2C to overcome these deficiencies.

A–10/GAU–8 Gun Status

Chairman McClellan. What is the status of the GAU–8 gun for the A–10? Is that gun effective against modern tanks?

General Chapman. The GAU–8 gun program is proceeding on schedule. Compatibility of the 30mm GAU–8 gun system and the A–10 has been demonstrated by firing over 29,000 rounds in flight. The gun system qualification program was initiated in October 1974 with the acceptance of the first pre-production gun and is proceeding satisfactorily. Compatibility of the combat rounds in the gun firing at the full rate of fire of 4000 shots per minute has been demonstrated by actual firing tests. The Critical Design Review of the Armor Piercing Incendiary round was completed satisfactorily in December 1974. The round meets armor penetration performance specifications and therefore the predicted high effectiveness against modern tanks should be achieved.

In-House Laboratories/Impact of 30 Percent Cut

Chairman McClellan. How much money could you save in FY 1976 if you cut your in-house laboratory effort by 30%? What would be the technological impact of such a cut?

General Chapman. Thirty percent of the costs of the in-house laboratories is approximately $55M including salaries, travel, equipment, and supplies. This provides for in-house laboratory work and the management of the contract effort, both of which are necessary to maintain a competent laboratory staff for the evaluation of new technology. Salaries account for approximately 75% of the support costs and the proposed 30% reduction can be equated to a loss of at least 2,000 people. The impact of a loss of that magnitude would be unacceptable; a long term loss of technological capability. Such a loss cannot be quantified, but let me cite the examples of laboratory sponsored technology of the past 5–10 years that are used on the F–16, which is only one example of a developing system.

1. Blended wing body.
2. Variable camber wing.
3. Fly-by-wire control system.
4. Normal shock engine inlets.
5. Negative static margin design.
6. 30° high acceleration seat.
7. Side-stick control.
8. Graphite composite tail.
9. F–100 engine technology.

I can't put a price tag on these items or the cumulative performance gain they allowed. I can assure you that the Air Force continually monitors the in-house/contract ratio of the laboratory complex and it is our best judgment that the program for FY 76 is properly balanced.

B–1 Cost and Performance Thresholds

Chairman McClellan. Why have performance or cost thresholds not been established for the B–1 in the DCP, as they have been, for example, for the F–15?

General Chapman. The mission capabilities and flexibility of the manned bomber essentially preclude the establishment of hard performance thresholds. The operational trade-offs available; e.g., adding air refueling support, adjusting weapons payloads, altering speed and altitude profiles, just to mention a few, provide so many employment options, that arbitrarily selecting a specific range or performance parameter tends to be meaningless. The problem is further complicated by the many and diverse missions that might be assigned to an operational B–1. These, among others, include nuclear SIOP missions, conventional weapon interdiction sorties, sea lane patrol or surface ship strikes.

The B–1 program is constantly being reviewed, with cost and performance updates forming the foundation for Air Force decisions on the management of the development program and planning for a possible production program. To date, the B–1 has been the most operationally suitable/cost effective approach to bomber force modernization.

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Air-to-Surface Missile for the B–1

Chairman McClellan. When will a final decision be made as to the primary air-to-surface missile for the B–1? Is it feasible to assume that ASALM will be available for equipage of the first SAC bomb wing to reach IOC? If not, when does the Air Force plan to make the SRAM production decision to equip the B–1 force? When will these SRAMS be phased out and replaced by ASALMS?

General Chapman. The AGM–69 SRAM will be the primary air-to-surface missile for the B–1. ASALM is currently undergoing the early stages of research and development and will not be available to equip the first SAC B–1 wing to reach IOC. Long lead funding is programmed in FY 77 for the production of SRAMs for the B–1. A production decision for these SRAMs will be made subsequent to the production decision for the B–1. The availability or need for a new missile to replace the B–1 SRAMs in the future has not been determined.

B–1 Gross Take-Off Weight

Chairman McClellan. Can the gross take-off weight exceed 395,000 pounds with the present airframe structure, landing gear, wheels, and brakes? Are there any plans to change the aircraft to permit a greater gross take-off weight?

General Chapman. The 395,000 pound gross take-off weight is a definite design limit. The wheels, tires, and brakes have been redesigned to accommodate this heavier weight and will be installed on Air Vehicle No. 2. There are no plans to redesign the aircraft for a heavier gross weight.

B–1/Weight Increases/Range Degradation/Requirements

Chairman McClellan. If aircraft weight increases and causes a degradation in design mission, how does this affect planned mission requirements for the B–1? How would the B–1 compare to alternate bomber candidates if further degradations occur in its planned range? What range must be maintained for the B–1 for it to still be considered effective for its intended mission?

General Chapman. The B–1 "design mission" is just that—an engineering design point. Operationally, the B–1 will be employed with varying weapon loads, launch base to recovery distances, tanker off-loads and tactics. This same employment flexibility can compensate for nominal weight increases that may appear as range degrades in the design mission.

Range is only one characteristic on which to compare the B–1 to alternative bomber candidates. For example, the Joint Strategic Bomber Study found the FB–111G to be deficient in its total dependence on aerial refueling, payload, range and electronic countermeasures. Even if the B–1's weight increased by 25,000 pounds, which would be contrary to current weight reductions, its payload could be reduced by 50% (25,000 pounds) and it would still be able to reach most of its targets and outrange the FB–111G with a much greater probability of delivering its weapons on target and surviving to a recovery base. The B–52I did well with regard to range/payload, but it was found to be deficient in both nuclear hardness and ability to penetrate defenses.

The Bisplinghoff Committee's 1973 assessment of the B–1 development program included a range of performance estimates for the production aircraft that they termed "possible", "most probable" and "reasonably adverse." For each estimate, a force of B–1s can be planned to extract the same target value using the employment flexibility cited above. In the "reasonably adverse" case, more B–1s could be expected to suffer attrition during the recovery phase of the mission. I might add that the current performance estimate lies midway between the Bisplinghoff Committee's "possible" and "most probable" estimates.

B–1 Fuel Tanks/Nitrogen Inerting System

Chairman McClellan. Why did the Air Force only incorporate provisions for the nitrogen inerting system (a system designed to prevent fuel tank fires and explosions) in production aircraft before determining the resulting probability of aircraft loss? What adverse effect will the system deletion have on the safety of personnel and equipment? Since the B–1 is vulnerable to fuel tank explosions, what measures are being taken to reduce such explosions? What circumstances would require retrofitting all C–5s (a noncombat aircraft) with a nitrogen inerting system while deleting a similar system for the B–1, a combat aircraft?

General CHAPMAN. The development aircraft have the nitrogen inerting system installed and the production aircraft design includes provisions for its installation should the system be required. Prior to the production decision, test and analyses will be accomplished to define the impact of elimination of the system on the safety of B–1 personnel and equipment. Should a serious safety impact be uncovered during these further tests and analyses, the plan for elimination of the system will be re-examined.

The decision to remove the equipment from the B–1 was made based on cost, weight reduction and performance improvement criteria. In the case of the C–5, which has the capability to transport large numbers of personnel, the safety aspect has different implications. For the B–1, there are fewer personnel involved, and the trade between cost or performance and safety equipment is weighted differently. Improved performance contributes to the survival of a combat aircraft and so becomes an important factor in the overall safety equation.

B–1/F–101 ENGINE/COST/PERFORMANCE TRADE-OFFS

Chairman MCCLELLAN. Recognizing that a disproportionate amount of dollars are required to attain the last bit of performance from an engine, what cost and performance trade-offs are possible relating to the F–101 engine? For example, what amount of RDT&E funding is required to bring specific fuel consumption up to specification, and what would be the impact on production unit costs, life cycle costs, and fuel savings. What is the estimated cost, and the percentage of improvement in performance being strived for?

General CHAPMAN. A preliminary assessment of the B–1 F–101 engine, based on testing to date, indicates that it will not quite meet the fuel consumption requirements at subsonic cruise. At higher power settings, the engine is expected to meet or exceed specifications. All engine improvement efforts are being pursued within the current engine development budget and these efforts are aimed toward providing the best performance level by the November 1976 production decision date.

We are not prepared at this time to estimate a marginal cost increase to the engine development program to improve specific fuel consumption since we will not be sure of the exact level of the performance shortfall until current development efforts are complete. Likewise, the life cycle cost and fuel savings are a function of other parameters of the air vehicle, such as drag. Should those parameters be better than anticipated, they may balance any lower engine performance. Again, these answers will not be clear until the development program is further advanced.

B–1/F–101 ENGINE QUALIFICATION TESTING

Chairman MCCLELLAN. In view of recent Air Force policy to relate engine development to planned mission usage, has the F–101 engine qualification testing been changed to make it more closely related to the planned mission usage of the engine? If so, what is the cost and schedule impact of changing the testing program? What improvements in the engine are expected as a result of the change in testing?

General CHAPMAN. The F–101 engine qualification testing has recently been restructured to provide a more realistic assessment of its capability to meet B–1 mission requirements. There has been no schedule impact and the test program should be completed by the fall of 1976. Cost negotiations for the restructured program are not yet completed but the contractor's not-to-exceed estimate is approximately $3.6 million. There will be no increase in the total RDT&E program cost. The most significant change in the tests was the addition of throttle transient requirements simulating the terrain following, sea level penetration mission segment. These, and other test segments, will provide assurance that the F–101 engine will be suitable for service use.

B–1 DOPPLER RADAR

Chairman MCCLELLAN. Recognizing that the doppler radar planned for use on the B–1 cannot withstand expected B–1 vibration levels and that modifications are not planned until actual vibration levels are determined, what impact will the use of an unmodified doppler radar have on the planned avionics flight testing for air vehicle 3?

General CHAPMAN. The high vibration levels are predicted when the forward looking infrared (FLIR) pod is extended and weapon bay doors open at low

altitudes. Most tests requiring doppler can be conducted without lowering the FLIR pod or opening the weapon bay doors. Ultimately, it is probable that a more compatible doppler radar (now becoming available) will be substituted. The APN 200 and APN 206 are candidates.

B–1 Avionics/Temperature Requirements

Chairman McClellan. Why was equipment qualified to operate at a minimum temperature of —20° F. selected for use in the B–1 when the B–1 is required to operate in temperatures as low as —65° F.? What does the Air Force plan to do to resolve this problem? What is the cost and schedule impact?

General Chapman. The —20° F. represents the minimum temperature at which the avionics system will meet performance specifications. None of the selected avionics equipment will suffer any detrimental effects when turned on at —65° F. This cold soak condition will not exist very long since the equipment generates heat when turned on and quickly warms up. It was not considered an operational requirement, nor cost effective to redesign the equipment to meet the aircraft —65° F. specification. The Air Force does not consider this a problem and there are no schedule or cost implications.

B–1 Tail Warning Set

Chairman McClellan. Will the selection of a tail warning set in early 1977 provide sufficient time for development, production, and installation of the set into the B–1 before the 1981 initial operational capability?

General Chapman. Six candidate tail warning systems have been identified for possible B–1 use. The systems include radars being developed for the B–52 and proposed for the F–15, plus laser, noise, and infrared systems being developed by the Air Force Avionics Laboratory and the Navy. From these systems, a tail warning set should be selected by late 1976. Since the system will already be proven in other programs, only repackaging, prequalification and qualification testing should be required. Hence, production and installation for an initial operational capability in 1981 is considered feasible and realistic.

B–1 Terrain Following/Avoidance

Chairman McClellan. Will the B–1 terrain following/terrain avoidance radar be susceptible to countermeasures that could force the B–1 to a higher altitude where it would become more vulnerable to enemy defenses?

General Chapman. The B–1 uses the same terrain following radar as the F–111F. [Deleted.] This type of action/counter-action is characteristic of electronic countermeasures and counter-countermeasures.

B–1 Cost Effectiveness Studies/Results

Chairman McClellan. What were the results of cost-effectiveness studies performed by DoD, which gave consideration to alternative bomber forces, and various analysis performed in the study?

General Chapman. The major cost-effectiveness study performed by DoD was the Joint Strategic Bomber Study. This effort was designed to address a range of issues for the 1980s as they affected the future bomber force. One of the significant issues was the cost-effectiveness of alternative bomber forces. Seven different forces were examined: the programmed FY 1980 force and six different equal-cost bomber forces. To facilitate how the forces were compared, and the results of each of the study, I will detail what each force was composed of.

[The information follows:]

Force 1—Aircraft programmed to be in the inventory in 1980, including B–52 D, G, H, FB–111A, and KC–135 aircraft.

Force 2—The baseline force for costing from which alternative equal cost forces were developed. It consisted of the planned B–1 force programmed to penetrate defenses and attack targets with SRAM and gravity weapons, accompanied by the B–52H force employing standoff cruise missiles.

Force 3—This force was similar to Force 2 in number and type of aircraft, but the cruise missiles were replaced by multi-mission missiles capable of air-to-air or air-to-ground attack.

Force 4—A smaller number of B–1s were used in this force, which contained re-engined B–52G/Hs (the B–52I). The entire force was programmed to penetrate the postulated air defenses, that is, no standoff cruise missiles were included.

Force 5—This force was an all standoff force of a number of wide-bodied jets (similar to the Boeing 747) and the B–52H force employing standoff cruise missiles from outside defenses.

Force 6—In this force option, the FB–111G (a "stretch" FB–111 variant) was substituted for the B–1 in quantities about twice as large as the number of B–1s bought in the baseline case. FB–111Gs penetrated air defenses to attack, while a force of B–52Hs launched cruise missiles from outside air defenses.

Force 7—This option contained a smaller number of B–1s (two-thirds of the planned program buy) which penetrated air defenses. A B–52G/H force carrying cruise missiles was employed in a standoff role.

The alternative aircraft candidates identified for investigation in the study were those that had been discussed by the Congress, examined by OSD or GAO, and appeared feasible for bomber force modernization.

Briefly, the study methodology subjected each of the equal-cost forces, plus the programmed FY 1980 force, to a survivability and penetrativity analysis. Threats to the forces were developed for 1980 (for the FY 1980 programmed force) and 1988 (for the alternative forces). Defense Intelligence Projections for Planning were used for 1980. Specific threat data for 1988 were drawn from estimates by OASD and DIA projections. High levels of threat to bomber launch and penetration were postulated, and no strategic warning was assumed for U.S. forces, in order to present a conservative case for each of the forces. Each of the alternative forces was subjected to the same threat, the same force posturing assumptions, and to a common target list. The target value destroyed by each force was the principal measure of merit of the forces. The force effectiveness analysis was accomplished using detailed computer simulations.

The results of the study indicated that Forces 2, 3 and 4, which contained B–1s in greater numbers, performed substantially better than other forces. In terms of cost-effectiveness, there was no significant difference between Forces 2, 3 and 4. The study showed that the effectiveness of the B–52I/B–1 combination in Force 4 was close to that of the other forces which contained higher numbers of B–1s. However, the B–52I suffered rather high attrition to fighters in the study. Also, this larger force would have higher O&M costs beyond 1988. Force 5, which consisted only of cruise missiles employed by B–52s and the 747-type aircraft, was not as cost-effective as Forces 2, 3 or 4. The "stretch" FB–111G (Force 6) was clearly non-competitive due to deficiencies in range, payload and ECM capability. In fact, it was the least cost-effective alternative force examined. Force 7, which included a smaller number of B–1s accompanied by large numbers of cruise missiles employed by a standoff B–52G/H fleet, was not as cost-effective as Forces 2, 3, or 4.

B–1 DOD Study/Consideration to FB–111 Versions

Chairman McClellan. What consideration was given to the FB–111H or 916 version of the FB–111 bomber in the DOD study?

General Chapman. The FB–111H (also referred to as the "916" or "stretch-stretch" version) was not available for consideration in the Department of Defense Joint Strategic Bomber Study. This major cost-effectiveness study was completed on September 1, 1974 and forwarded to the Appropriations and Armed Services Committees of the Senate and House in December 1974. The FB–111H is a new conceptual design, first proposed to the Air Force by the contractor in early December 1974. The "stretch" FB–111 variant examined in the study was the FB–111G—an earlier proposal.

B–1 Compared to FB–111H/Cost Effectiveness/Results

Chairman McClellan. Was the FB–111H compared to the B–1 on a force level basis to determine which was more cost-effective? What were the results?

General Chapman. The FB–111H was not compared to the B–1 on a force level basis in the year-long Joint Strategic Bomber Study that I mentioned. The contractor first proposed this conceptual version after that study was completed. The "stretch" FB–111 variant examined in the study was the FB–111G. The FB–111G proved to be the least cost-effective alternative examined in the Joint Strategic Bomber Study.

The new FB–111H concept provides more room for fuel via a further "stretch", and allows the carriage of a few more weapons (12 SRAM versus 8 SRAM on the F–111G version). Since the FB–111H was proposed to the Air Force in early December 1974, we have been examining its cost-effectiveness. Our studies show that the newer FB–111H variant will not fare much better than the FB–111G. The aircraft still has about the same space limitations as the FB–111G. It cannot carry enough fuel or weapons to provide adequate target coverage. There is not enough volume in the airframe for sufficient avionics and electronic countermeasures to defeat many enemy defenses. Like its predecessors, the FB–111H, carrying a full weapon load, is dependent on aerial tanker support to reach even a single Soviet target from the CONUS. If it became the primary strategic bomber in the 1980s, we would need over twice as many FB–111Hs as B–1s to cover the same targets because the FB–111H carries only one-half the payload of the B–1. Along with the aircraft we would also need a proportionately larger number of bases to launch them from and a force of aerial tankers twice the size required for the B–1 force. So, even though the cost of an individual FB–111H is approximately one-half that of a B–1 in unsunk 1975 dollars, to choose the FB–111H over the B–1 would be a much more costly proposition. In sum, the FB–111 variants ("G" or "H") are not viable alternatives to the B–1 when viewed both in the context of mission effectiveness and force costs.

F–15 Aircraft Program/Engine Problems/Test Program Status

Chairman McClellan. The General Accounting Office in its February 1975 staff study on the F–15 aircraft program pointed out that the F–15 has not achieved certain performance requirements in the test program. Further, the GAO expressed the opinion that, it believed the difficulties expressed with the engine to be a major contributing cause to the Air Force's inability thus far to accomplish these requirements.

What is the current status of the test program?

Has the Air Force accomplished all of the performance threshold requirements and program goals listed in the SAR?

Has the engine been a major contributing cause to the difficulties experienced with achieving the performance requirements?

If the engine is at fault, then what is being done to correct the problem and who will pick up the cost?

If the difficulties experienced in the test program are not attributable to the engine, then what was the cause? For example, were problems experienced with the airframe?

General Chapman. The Contractor Development and Test (CDT&E) of the F–15 is nearing completion and the only areas for which testing remains are flights to evaluate stall/spin characteristics, Tactical Electronic Warfare System (TEWS) performance and flying qualities with asymetric loads. The Air Force Development, Test and Evaluation (AFDT&E) which began in March 1974 will continue into FY 76. The AFDT&E is evaluating armament, avionics, propulsion, subsystem performance, and flight handling qualities. In addition, AFDT&E will evaluate the total system performance on the air superiority mission to include reliability and maintainability.

The F–15 is expected to meet or exceeed all performance thresholds established by DoD. The attached chart compares original F–15 performance goals and DoD thresholds against current Air Force estimates and demonstrated performance.

The engine has demonstrated excellent performance in the flight test program. It has flown over 9000 hours without a single rotating hardware failure. There was a problem with some of the early production engines in that of the first 28 delivered, seven were slightly below specification on thrust. A modification to the third stage turbine has been made which increased the thrust. Pratt & Whitney has incorporated this modification into the production engines delivered after engine 28 and will retrofit the earlier engines at no change in contract amount.

F–15 PERFORMANCE

	Original USAF program	USAF current estimate	Demonstrated performance	OSD threshold
1. (C) Maximum speed/sea level, sustained (mach)	[Deleted]			
2. (C) Maxemum speed/at altitude, sustained (mach)				
3. (C) Maximum speed/burst, (mach)				
4. (C) Design mission radius, (NM) cruise/dash				
5. (C) Thrust to weight ratio take-off				
6. (C) Thrust/engine (pounds)				
Maximum rated				
Military rated				
7. (C) Specific excess power (feet per second)				
Mach 0.6 5g 10,000 ft (A/B)				
Mach 0.9 lg 10,000 ft (A/B)				
Mach 0.9 5g 10,000 ft (A/B)				
Mach 0.9 5g 30,000 ft (A/B)				
Mach 1.6 5g 35,000 ft (A/B)				
Mach 0.9 5g 30,000 ft (Mil)				

AIRCRAFT ARMAMENT AND ELECTRONICS

Chairman MCCLELLAN. The Department of Defense has been experiencing problems in developing the AIM–7F and AIM–9L missiles. The Air Force has had difficulties in developing an improved gun and the Tactical Electronic Warfare System. All of these to be used with the F–15. It appears that the Air Force may have in the F–15 initially an aircraft possessing exceptional performance capabilities but lacking the complete range of weapons and defensive avionics necessary to exploit these capabilities.

What is the Air Force and DoD doing to resolve these problems and when are they expected to be resolved?

What effect will these problems have on the F–15 squadrons achieving full operational capability?

General CHAPMAN. There are no major problems which will adversely affect the F–15s operational capability. It will have a full complement of the offensive weapons for which it was designed. The F–15 was designed for and has been flight tested with the AIM–7F, AIM–9E/J and the M–61 20mm gun. The exceptional performance being demonstrated by the F–15 serves to enhance the effectiveness of these weapons. Specifically, the AIM–7F radar missile has been approved for production and will be available for the first F–15 operational wing. It has proven effective in flight tests and has demonstrated a reliability [deleted] times better than the AIM–7E.

The "Sidewinder" heat seeking missiles originally planned for the F–15 were the AIM–9E/J. The AIM–9L missile, a new generation "Sidewinder", is in development and has demonstrated exceptional performance in the test program. The AIM–9E/J missiles will be fully qualified on the F–15 and until such time as the AIM–9L is available in sufficient quantities the AIM–9E/J will provide a significant mission capability for the F–15.

The combat proven M–61 20mm gun is being installed in the F–15. The 25mm GAU–7 gun, which was identified as a high risk effort, was being developed in a separate program. Subsequent technical problems caused the cancellation of this program. If the GAU–7 development had been successful, it would have replaced the M–61 as the F–15 gun. A development program is underway with the objective to improve the M–61 gun and the 20mm round.

Early in the F–15 program, following careful consideration by the Air Force and OSD, development of the Tactical Electronic Warfare System, TEWS, for defensive avionics was identified as a high risk area and consequently the development program was initiated separate from the F–15 program. The F–15 was designed to accept the TEWS, including all necessary interfacing equip-

ments. There were originally five elements of the TEWS, three of which are the heart of the system. Two of these elements, the Radar Warning Receiver and the Electronic Warfare Warning System, which have been approved for production by the Department of Defense, will be available in the first F–15 operational wing. The third of the more significant elements, the Internal Countermeasures System, is completing a successful flight test program. The two ancillary elements, the Tail Warning System and the Countermeasures Dispenser System are in engineering development.

AWACS Configurations/Capabilities in European Environment

Chairman McClellan. The Defense System Acquisition Review Council (DSARC) recommended the production of the Block I "Core" AWACS. What are the planned capabilities of this version in a central European environment? What are the planned capabilities of the Block I, II, and III versions in this same environment?

General Chapman. As you know, Senator, our analyses of a Central European conflict have assumed a "worst case" situation. However, through continued use of worst case analysis we sometimes generate a sort of "inferiority complex" relative to the capabilities of our systems. AWACS is a case in point. I have full confidence that CORE AWACS can make a significant contribution to the ability of the NATO Alliance to deter aggression. Should deterrence fail, it can, through its unique capabilities, enhance the ability of the Alliance to respond in an appropriate manner. CORE AWACS can do this by: (1) providing all-altitude surveillance (including low level surveillance) deep into Pact territory; and (2) assisting in the integration of the separate fragmented command and control elements of Allied Air Forces Central Europe. Note that we are talking here of capabilities and functions which are badly needed, and which can be provided by no other single system in existence. Block II will add a capability to provide maritime surface surveillance to the maritime regions of the NATO flank countries and will expand considerably the surveillance, warning, and control capabilities of AWACS through the Joint Tactical Information Distribution System, formerly called Time Division Multiple Access Digital Data Link.

Resources are programmed to fund enhancements which will expand AWACS track handling capacity from [deleted] tracks to [deleted] tracks, add additional consoles, Signal Intelligence, Special Identification Friend or Foe, Satellite Communications, ECCM improvements, and a Self Defense Subsystem. We will be keeping track of Pact ECM development and as the threat evolves we will implement the improvements. We have heard that NATO may require a track capacity greater than our planned Block III capacity. We feel confident that the track capacity can be expanded by a factor of from 3 to 4 over CORE if necessary. In summary, we feel that AWACS is a vital and necessary contribution to the defenses of the free world and that the design flexibility built into CORE AWACS will allow it to evolve as technology and the threat evolve so that its present margin of technological superiority can be maintained.

AWACS/Fill Low Altitude Void/Early Warning Gains

Chairman McClellan. It is planned that AWACS will fill the low altitude void of the existing NATO gound radars. Exactly what will be gained in early warning as a result of using AWACS?

General Chapman. NATO has [deleted] ground sites facing the Warsaw Pact's Central region. The coverage by these radars is limited in low altitude detection below [deleted] feet beyond [deleted] nautical miles (NM) and below [deleted] feet beyond approximately [deleted] miles. Pact aircraft operating below these altitudes could penetrate within [deleted] of these radar sites undetected. In addition, the present NATO radar sites are located so that very little overlap in coverage is provided. The loss of these sites would drastically reduce the presently limited surveillance and warning capabilities. [Deleted] of the central Region NADGE sites are within [deleted] of the political boundary [deleted]. Loss of these radars would result in virtually no coverage below [deleted] on the friendly side of the border. Under these circumstances, enemy aircraft penetrating at low altitudes could be over friendly air bases and ground installations virtually undetected. Thus, it is obvious that improved low level surveillance is needed to fill existing blind spots and fill the additional gaps which would result from enemy action. AWACS can do this. It can extend radar coverage at all alti-

tudes, including low level coverage deep into Pact territory. The actual extent depends upon the scenario, but if we assume AWACS is operating within [deleted] of the border at 30,000 feet, radar coverage from the surface to [deleted] feet will be extended approximately [deleted] into Pact territory. Radar coverage for targets flying at [deleted] feet will be extended to about [deleted] into Pact territory, and the targets at [deleted] feet coverage will extend about [deleted] beyond the border. In addition, AWACS is more survivable than ground base systems because of its maneuverability at jet speeds, and its radar is more resistant to Pact electronic and Chaff countermeasures. Further, AWACS will provide an overall "big picture" of the developing tactical situation for use by commanders in more effectively using their available forces.

AWACS will sustain deterrence by denying a potential aggressor confidence of being able to delay, disrupt, or otherwise negate a timely, controlled, and effective response by U.S. and allied forces through attack on those less survivable elements of our surveillance, warning, and control systems which are located at fixed, ground-based sites.

The AWACS would contribute to deterrence by providing surveillance and detection of aircraft at all altitudes over nearly [deleted] square miles of territory with each scan of the antenna. In addition to providing important information on the location and movement of enemy air forces, AWACS surveillance would deter attacks that depend on surprise for success. Warning of an attack may well prevent the aggressor from achieving his objective. Thus, the capability of the AWACS to provide the "big picture" is an element in threat assessment and crisis management that does not exist today. The contribution of AWACS to the quality and timeliness of surveillance and warning, in itself, may be sufficient justification for deployment of the AWACS.

Soviet ECM Technology

Chairman McClellan. What is DIA's estimate of Soviet ECM technology? In recent hearings it was estimated that the Soviets are 10 years behind the U.S. in electronic countermeasures (ECM) technology.

General Chapman. Mr. Chairman, looking at a potential ECM technology gap measured in years between the U.S. and the Soviets can be misleading and [deleted]. Assessment of ECM technology necessarily encompasses the multiplicity of electronic warfare problems that the Soviets perceive, possible solutions, priority of effort, and the state of research and development.

DIA estimates that: "Based on the rapid development of Soviet ECM observed in the past decade, [deleted]. It is believed that three general categories of improvement will occur: namely, inventory increases of current equipment, improved performance of currently employed techniques, and development of new techniques. Soviet literature relative to electronic warfare has proven useful in establishing [deleted]. The conclusion can be reached that [deleted] technology base exists. [Deleted.]

The Soviets have shown a tendency not to push the state-of-the-art in technology, but to field less sophisticated systems than the U.S. [Deleted.]

AWACS in ECM Environment/Airborne ECM

Chairman McClellan. The Air Force has concluded that AWACS would be survivable in a dense ECM environment. Please comment on this and explain how airborne ECM was used to calculate AWACS effectiveness in an ECM environment in Europe.

Dr. LaBerge. Your question covers two separate aspects of the AWACS question, survivability and effectiveness. Let me discuss the survivability part of your question first.

Several Air Force analyses of AWACS survivability and a survivability flight test conducted during October and November 1974 have shown that successfully attacking the AWACS is a difficult task for an enemy fighter aircraft. The results of these analyses and flight test support the observation that the largest single contributor to AWACS survivability is its ability to fly out of enemy GCI coverage by either withdrawing or descending below the radar horizon. This tactic forces the attacker to rely on its range-limited aircraft radar to find AWACS. The results of the AWACS Survivability Flight Test have shown the AWACS to be highly survivable because finding it is a very difficult task for an unaided enemy fighter.

With the AWACS' capability to maneuver to avoid detection our analyses and tests have shown that its ability to survive remains high even in a dense ECM environment. The maneuvering ability that is used to avoid detection by enemy GCI radars also can be used to put any ground based jamming beyond the AWACS' radar horizon. Then the AWACS radar will be able to detect potential attackers with sufficient time to maneuver away from them or to vector our fighters to attack them. As for airborne jamming, the AWACS radar will display this jamming as a strobe on the radar display. With this information, the AWACS is able to vector friendly fighters up the jamming strobe to intercept the attacking fighters. These "beam rider" tactics were successfully demonstrated during the AWACS Survivability Flight Test.

The second part of your question deals with AWACS effectiveness. Obviously we cannot test the AWACS in the actual ECM environment that we might find in Europe. However, we have done extensive testing against a combination of ground and airborne jammers during AWACS IOT&E to determine the system's vulnerability to ECM. Six specific jamming threats were evaluated, including [deleted]. Test results indicate that the basic AWACS radar design incorporated ECCM that will permit combat operations in the projected ECM environment.

In addition to the inherent ECCM capabilities of the AWACS radar, operational considerations will contribute to AWACS effectiveness. Various tactics are available to deny or degrade the effects of airborne ECM. For example, AWACS in adjacent orbits can provide mutual assistance in areas where ECM might be particularly effective. Also, the "beam rider" tactic described earlier could be used if necessary.

AWACS/Survivability Against High Performance Attackers

Chairman McClellan. AWACS will be a high value target. Will it be survivable against high performance attackers capable of Mach 2 and Mach 3?

Dr. LaBerge. Yes, sir. The question of AWACS survivability has been the subject of several analyses and flight test conducted in October and November 1974. The results show that the probability that AWACS could survive an attack by enemy fighters is high. This is due primarily to the ability of AWACS to deny position information to enemy GCI radars by withdrawing or descending until it is below the enemy's radar horizon. The AWACS can do this while vectoring friendly aircraft to its defense and maneuvering to place friendly ground defenses in the path of the attacking aircraft.

The AWACS Survivability Flight Test of Oct-Nov 74 tested the findings of the analytical studies. The test used F–5, F–106, and F–15 aircraft to simulate various enemy aircraft. The simulated enemy aircraft flew three different attack profiles and used varying tactics in an attempt to intercept the AWACS. Single and multiple aircraft formations were used, with and without ECM escort aircraft. A single F–15, with its radar range [deleted] flew a high speed, high altitude profile in an unsuccessful attempt to intercept the AWACS. The speed throughout the attempted intercept was in excess of Mach 2.

The results of the flight test showed that the most important capability contributing to the high survivability of AWACS is its ability to maneuver out of enemy GCI coverage to avoid detection. This maneuver forces the enemy aircraft to rely on their range-limited onboard radar system to find AWACS. The results of the flight test showed this to be a very difficult task.

AWACS/NATO vs. AF Configuration

Chairman McClellan. NATO has shown some interest in AWACS. Please comment on the AWACS configuration supported by NATO studies versus the configuration supported by Air Force studies.

Dr. LaBerge. Both the United States and NATO agree that the CORE AWACS will offer unprecedented capabilities for all-altitude, ECM-resistant surveillance,

warning and air battle management in the European environment. The following chart shows the enhancements to the CORE configuration that are being considered by the U.S. and NATO:

	United States	NATO
Enhancements under consideration:		
Maritime modification	X	X
ECM-resistant communications data link	X	X
Expanded track capacity:		
x 2	X	
x 3-to-4		X
Automatic track initiation (ATI)		X
Self defense subsystem (SDS)	X	X
Electronic support measures (ESM)		X
Electronic counter-countermeasures (ECCM)	X	
Satellite communications (SATCOM)	X	
Special identification friend from foe (SIFF)	X	
Signal intelligence (SIGINT)	X	

These provide additional, evolutionary capabilities that will support mission requirements through the 1980s.

The U.S. and NATO both agree that the maritime modification to improve seaborne target detection and an ECM-resistant communications data link should be incorporated into the AWACS as soon as practical. In addition, we are both pursuing options for self defense (to include airborne jammer, flares and chaff) and for an increased track handling capability. Here, the U.S. is retaining an option to approximately double the existing track capacity and incorporate additional multipurpose consoles and operators, if test and operational experience indicates a need for more capability. NATO currently believes that between three and four times the existing track capacity, augmented by an automatic track initiation capability against target radar returns, will be necessary for a dedicated system to handle the dense air traffic environment they anticipate in a Central European scenario. This divergence is related to differences in concept of operation, which is the determining factor for desired track capacity. Other enhancement features to support U.S. tactical and intelligence requirements are not being addressed by NATO. NATO nations are continuing to refine their initial requirements just as we are, and while we both recognize the efficiencies of a common basic AWACS configuration, we must both pursue solutions we consider adequate for our special requirements.

AWACS NATO Studies/Conclusions

Chairman McClellan. What conclusions were reached in these NATO studies about the cost-effectiveness, survivability, resistivity to ECM, and alternatives to AWACS?

Dr. LaBerge. The NATO analytic studies that we have examined to date have been preliminary in nature and have focused on specific scenarios. Within these confines, however, AWACS resistivity to ECM has been considered satisfactory, and far superior to other systems examined as possible alternatives to AWACS. AWACS survivability issues have not yet been addressed but have been mentioned as a topic for future analysis. Brief comparisons of AWACS with potential alternatives have shown AWACS aircraft performance, avionics effectiveness, and mission employment capabilities to be the most effective and flexible. Cost-effectiveness comparisons also favor AWACS for projections of equal-capability forces of each alternative system. Although NATO's analytic studies are not yet complete, results thus far support the conclusions of NATO working groups that NATO should concentrate its future efforts for procurement of an airborne warning and control system on the AWACS.

AWACS/NATO Purchases/Funding

Chairman McClellan. What arrangements are being considered for the funding of any AWACS that may be purchased by NATO countries?

General Chapman. A high level group under NATO's Conference of National Armaments Directors (CNAD) is addressing questions of ownership, funding and management of a force of AWACS for NATO, in the event of a favorable decision by the NATO countries. The present view of this group is that the NATO infrastructure cost-sharing formula would be used as a departure point, but that procurement costs should be from a separately established fund, with the national shares yet to be determined.

AWACS Susceptibility to Jamming/Conclusions of Ad-Hoc Panel

Chairman McClellan. What were the conclusions and recommendations of the Ad-Hoc panel studying AWACS susceptibility to jamming?

General Chapman. The conclusions of the panel were that if the offensive mission is secondary to the defensive mission, and if the Panel's recommendations are implemented in the near future, the vulnerability of AWACS to ECM is a secondary consideration with regard to acquisition and deployment of this system in Europe.

The specific recommendations were:

1. [Deleted.]
2. [Deleted.]
3. [Deleted.]
4. [Deleted.]
5. [Deleted.]
6. [Deleted.]
7. [Deleted.]
8. [Deleted.]

Recommendations 1 and 2 are being pursued as part of ongoing programs other than AWACS. Funds for recommendations 4, 6, and 7 and 8 are included in the AWACS program reported in the 31 December 1974 Selected Acquisitions Report. No specific program is underway with respect to recommendations 3 and 5 which are based on use of a ground-bounce phenomenon. This phenomenon has been examined in the past and the probability of its being used is very low. Action will be initiated or modified in this and the other areas in response to evolutions of the threat.

CONUS OTH–B/Results of Northern Experiment

Chariman McClellan. What were the results of the Northern Experiment (called Polar Cap III)? Will the analysis of the Polar Cap III data provide positive information concerning the feasibility of and the parameters for an OTH–B Radar in the Auroral Zone?

General Chapman. The Polar Cap III northern experiment has made a valuable contribution to our understanding of the characteristics of the polar cap ionosphere. While the results of the experiment are still being analyzed, preliminary evaluation indicates that an OTH–B radar, located within the auroral zone, has a high probability of working in the polar region. However, we are continuing with our analysis of the data to confirm whether further development effort is required before a decision to deploy an OTH–B site in the arctic area can be made.

CONUS OTH–B/Radar Performance Specification

Chairman McClellan. Detection of bombers is presently specified as a distance from an OTH–B Radar. Although this is necessary for contractual purposes, explain how the radar performance specification meets operational requirements of aerospace defense command (ADC) for CONUS early warning?

Dr. LaBerge. The CONUS Over-the Horizon Backscatter radar system is being developed to provide long-range, all-altitude radar surveillance of aircraft approaching the North American Continent. In determining the minimum detection range for the system, the Aerospace Defense Command (ADC) wanted to fulfill two basic operational requirements: to insure adequate warning time for National Command Authorities (NCA) for decision making and reaction, and, adequate reaction time to intercept and destroy target aircraft prior to Air-to-Surface

Missile (ASM) launch. The specific range was determined mathematically and considered such factor as: target speed; target detection, initiation and identification time; ASM launch distances; and, interceptor scramble and flight time to intercept point.

CONUS OTH–B/Number Sites Required and Cost

Chairman McClellan. With regard to the previous questions, does DOD now feel that more than one OTH–B site on the East and West coasts of the U.S. would be necessary for protection of strategic targets? Would there be a program cost increase and about what amount if more than one OTH–B site on the East and West CONUS are required?

Dr. LaBerge. In the currently planned program, one OTH–B site will be deployed on the East coast and one on the West coast. With a nominal 180-degree coverage, all-altitude detection capability and surveillance coverage from [deleted] miles, one OTH–B site on each coast will provide the necessary long range tactical early warning and surveillance of aircraft approaching the North American continent. As you know, we are pursuing the OTH–B radar development in two steps. First, we plan to develop a prototype radar to validate performance parameters, systems concepts and develop operational procedures. This prototype development should be completed by the summer of 1978. After confirming that our test objectives have been met, we would then proceed with our planned deployment in [deleted] of one OTH–B site on the East coast and one on the West coast.

AABNCP/C^3 Development Problems

Chairman McClellan. The AABNCP program cost estimate was $594 million as of September 1974 according to the General Accounting Office's report on this program. There are indications that the program cost could increase further as a result of problems being experienced with the command, control and communications (C^3) equipment being developed for the aircraft. Additionally, future program improvements to the system, such as the installation of automatic data processing equipment may increase cost by another $125 million.

What are the difficulties being experienced with the C^3 development and what steps are being taken with the contractor, Boeing Company, to achieve their resolution? What costs will occur and who will assume them—the Government or the contractor?

Dr. LaBerge. In January 1975, the Boeing Company identified a $50 million cost impact on the advanced C^3 development contract which has a target cost of $90 million. An in-depth evaluation was conducted by the Air Force and it is now estimated that the cost impact is at least as great as identified by Boeing. The contractor implies the cost increase is due, in part, to a difference in specification interpretation and system growth leading to a larger job than anticipated at the time of bid, and that authorized changes and escalation account for the remainder of the cost impact.

In addition, new production estimates also indicate a substantial cost increase. A review of the program is now underway and the Air Force is working with the contractor, OSD and OJCS personnel in an effort to reduce the magnitude of the problem. Since the present C^3 development effort is a cost reimbursement type contract, the government will assume the costs up to the scope of the work directed and/or limited by the government.

A–10 Gun/Secondary Burning of Gun Gas

Chairman McClellan. The problem of secondary burning of gun gas appears to have been solved when firing target practice ammunition, through the use of flash suppressants in the propellant. Will this solution be applicable to the Armor Piercing Incendiary (API) ammunition which is heavier and requires greater velocity?

General Chapman. The flash suppressant in the propellant of the 30mm round is equally satisfactory when firing either the heavier Armor Piercing Incendiary round or the lighter Training round. The desired muzzle velocity is not degraded by adding the suppressant. The additional weight of the projectile does not affect the effectiveness of the suppressant. This was demonstrated in flight by firing approximately one thousand heavy, inert projectiles, simulating the weight of the Armor Piercing Incendiary projectile.

A–10 Gun/Status of API Ammo Development

Chairman McClellan. What is the status of API ammunition development? Have test firings been accomplished to demonstrate effective penetration and accuracy?

General Chapman. The API round successfully passed the Critical Design Review in December, 1974. It meets armor penetration performance specifications. Compatibility of the API round with the GAU–8 gun, firing at the full rate of fire, has been demonstrated. Accuracy of the round when firing from the ground mount is satisfactory. Air firing of the API round is scheduled for the September–October 75 time period. A manufacturing method program is underway to identify the optimum production method for economical production at high production rates of the depleted uranium penetrator.

Weight of A–10 Gun

Chairman McClellan. Has the gun system experienced any additional weight growth? What is being done to reduce the weight of the gun system?

General Chapman. The contractual requirement is for a gun system weight, including fuel and storage subsystems, of 1950 pounds. This does not include ammunition. The actual weight of the gun systems being accepted by the Air Force is 1890 pounds. We have no plans to reduce the weight of the gun which is not critical to the A–10 flight performance.

A–10 Operating Weight

Chairman McClellan. What is the status of the operating weight of the A–10 aircraft? Does the Air Force foresee any maneuverability problems?

General Chapman. The operational weight of the mature A–10 is based on the actual weight of the number one Development Test and Evaluation aircraft plus anticipated changes for approved engineering design changes. The empty weight is 20,700 pounds. The maximum gross weight is 47,200 pounds. The A–10 can achieve all of the specified performance goals at these gross weights.

The Air Force does not anticipate any maneuverability problems. Specified maneuvering load factors will be equaled or exceeded. The improved yaw stability augmentation system has eliminated the maneuvering problem identified during the A–7/A–10 comparative evaluation.

Use of Simulators Versus Dual Seat A–10 for Training

Chairman McClellan. The Air Force is considering the possibile use of simulators versus dual-seat A–10 aircraft as training devices. Has any decision been made on this matter? If so, what is the cost impact?

General Chapman. The Air Force has developed the A–10 aircrew training program by the Instructional System Development (ISD) process. This process assures that the most cost effective aircrew training equipment, in relation to life cycle costs, is procured. Based on this ISD analysis and verified by a joint TAC/AFSC trade study, the following simulators are planned for A–10 aircrew training: two instrument flight simulators with limited visual systems and one mission simulator, two cockpits, at the combat crew training wing and one mission simulator at each operational wing. These simulators preclude the need for two-seat aircraft for aircrew flight training. It is anticipated that the mission simulators planned for the A–10 will provide annual savings in excess of 57,000 flying hours and over 24 million gallons of aviation fuel after full program implementation.

A–10/Contractors Current Weight Cost Estimates/Design to Cost of Goals

Chairman McClellan. What are the contractors' current unit cost estimates? How do they compare with their design-to-cost goals? Is the $1.5 million per aircraft design-to-cost goal attainable?

General Chapman. When the A–10 full scale development program was initiated in March 1973, the procurement cost estimate was based on a $1.7 million average unit flyaway cost for 600 aircraft in FY 1970 dollars at a rate of 20 per month. With the addition of Radar Warning Receivers, Instrument Landing and Flight

Director systems, and the addition of wiring provisions for Flare and Chaff Dispensers and Secure Voice, the flyaway estimate increased to $1.8 million. We are reviewing the A–10 configuration at the present time and are making every effort to reduce the cost to the $1.7 million estimate. However, based upon current estimates from our contractors, the design-to-cost goal of $1.5 million appears unattainable.

FAIRCHILD PRODUCTION CAPABILITY

Chairman MCCLELLAN. What is the status of Fairchild's production capability? What assurance does the Air Force have besides the Production Readiness Review that Fairchild can produce at the required rate? If additional equipment and personnel are required, what will the cost impact be on program cost?

General CHAPMAN. The Air Force is continually reviewing the Fairchild Republic Corporation capability and planning for the production of the A–10 aircraft. Our System Program Office and Air Force Plant Representative Office assure us, that based on an evaluation of the availability of rate tools, manpower, and parts, the contractor is capable of producing at the required rate. It is not anticipated that there will be additional requirements for people or equipment other than those that Fairchild has already identified. Therefore, we do not anticipate any adverse cost impacts.

A–10 PRODUCTION/TIMELINESS OF VENDOR SHIPMENTS/COSTS AND SCHEDULES

Chairman MCCLELLAN. What steps have been taken to improve the timeliness of shipments from vendors? Due to the increase of material lead times, what is the expected cost and schedule impact?

General CHAPMAN. There have been six requests for priorities assistance (from Fairchild) successfully processed in accordance with the Defense Production Act of 1950 as amended and the Defense Priority System Regulation 1, revised July 1974. These requested actions were to improve delivery dates from vendors on material when Fairchild could not improve their quoted delivery dates. In addition, the promised dates from vendors have been compared with Fairchild need dates and it has been determined that the vendors have quoted, with very minor exceptions delivery dates which are compatible with Fairchild's requirements for existing production contracts. Fairchild has established an organization of field representatives to visit the vendors' facilities to assess progress and determine if delivery problems are to be anticipated. Fairchild has resident representatives at the major vendors, and others are visited on a periodic basis. The frequency of visits depends on criticality of the part and past performance of vendors.

There have been extensions in the material lead times, primarily in forgoings, which have extended the production lead time for the A–10 to 29 months. Both Fairchild and General Electric are working closely with their vendors to reduce lead times. The increase in material lead times has not impacted program costs or schedule; however, the increased lead times have necessitated the commitment of advance procurement funds earlier than previously planned.

AMST/CARRY HEAVY TANKS/STRATEGIC AUGMENTATIONS

Chairman MCCLELLAN. Why is the Air Force considering the use of the AMST to carry heavy tanks on transatlantic flights?

General CHAPMAN. A tank carrying capability would provide a low cost option to augment our intertheater tank carrying force. Only the C–5 can presently carry a heavy tank. If the AMST could relieve some of the burden of the C–5 in this area, a greatly improved utilization of available C–5 cargo floor space could be obtained.

AMST/AF DECISION ON CARRYING HEAVY TANKS

Chairman MCCLELLAN. When will the Air Force decide whether or not the AMST will be required to perform this mission?

Dr. LABERGE. A decision will be made prior to engineering development go-ahead.

AMST/WEIGHT AND COST INCREASES FROM STRATEGIC AUGMENTATION REQUIREMENT

Chairman MCCLELLAN. What would be the aircraft weight and cost increases resulting from such a requirement?

Dr. LABERGE. In order to provide a capability to airlift heavy tanks at a routine 2.5 g maneuver load factor, approximately 10,000 pounds must be added to the operating weight of the basic tactical airlift aircraft. It is estimated that total program costs would increase approximately 10%.

AMST/IMPACT OF STRATEGIC AUGMENTATION ON TACTICAL STOL CAPABILITY

Chairman MCCLELLAN. What would be the impact on the tactical STOL capability of the AMST as a result of requiring the AMST to perform this mission?

Dr. LABERGE. If the AMST was required to airlift heavy tanks routinely at a 2.5g maneuver load factor, STOL performance would be reduced. This, in turn, would require runways of some 200–400 feet longer for the STOL mission.

AMST/ADDED FULL REQUIREMENTS FOR STRATEGIC AUGMENTATION

Chairman MCCLELLAN. What provisions would have to be made to satisfy any additional fuel requirements necessitated by this mission?

General CHAPMAN. Both AMST prototypes will demonstrate an air refueling capability, and a production version would also have this added range feature. It is also possible to increase the heavy payload, strategic airlift augmentation range capability of an AMST through addition of external wing tanks.

AMST/WEIGHT LIMITS ON STOL LANDING

Chairman MCCLELLAN. The AMST is designed to carry equipment "outsized" to the C–130; however, depending upon the weight of the equipment, it is possible that even though the AMST can carry the outsized equipment the inclusion of this equipment in the aircraft would preclude it from landing on short runways. What is the capability of the AMST to carry heavier than C–130 type equipment and still land on short runways? What items cannot be carried in this regard?

Dr. LABERGE. The AMST will be able to carry payloads of all outsize equipment weighing up to 60,000 pounds into improved runways less than 2500 feet long using normal operating procedures. In like circumstances, the C–130 requires runways 3500 feet long and carries less than half that payload.

COMPARE AMST/C–5A/C–130 WHEN STOL CAPABILITY IS LOST

Chairman MCCLELLAN. When the gross weight of the load precludes the AMST from landing on short runways, it becomes essentially a conventional transport aircraft. What are the advantages (costs and performance wise) of the AMST over the C–5A and the C–130, including comparative runway length requirements, when the STOL capability is lost?

Dr. LABERGE. The AMST, designed to include a STOL capability, will consistently require shorter runways than the C–5 or C–130 for the same operating conditions. Less runway construction effort will be required for operations with the AMST. The limited number of C–5s must be dedicated to the strategic airlift mission, and due to their high cost, it is not practical to expose them to the combat risks associated with forward area operations. While the C–5 does not require long takeoff or landing distances, its size restricts operations into airfields having hard surface runways in the 3000–4000 foot category, because these airfields normally have narrow runways and taxiways, small parking ramps, and usually lack obstruction-free clear zones. Further, problems associated with ground mobility could be expected since the C–5 requires a large turning area. These considerations dictate that the C–5 is not a viable candidate for the tactical airlift mission. Therefore, cost and performance comparisons are not relevant. For conventional operations into and out of a 3500 feet hard surface runway (S.L. 103° F) on a 400 N.M. radius mission, the AMST will carry a payload of over 60,000 pounds. This is contrasted with 20,000 pounds for the C–130. The AMST will be more cost effective than the C–130 for this conventional transport mission.

AMST/COMMITMENT TO 2,000 FT. RUNWAY FOR STOL

Chairman MCCLELLAN. To what extent is the Air Force committed to the 2,000 foot runway goal for STOL operations?

Dr. LABERGE. The 2000 foot runway goal is not a rigid requirement. However, analysis of worldwide runway availability, particularly in West Germany and underdeveloped areas, indicates that great improvement in airlift flexibility and

responsiveness can be achieved with this capability. The AMST prototype has been designed to meet this performance goal using normal operating procedures which involve a reasonable margin for safety. If other requirements or increased costs should make it unreasonable to achieve that goal, assault operating procedures, using reduced safety margins, could still be employed in critical situations to permit operations into and out of airfields of 2000 feet or less.

AF Interim STOL Program/STOL Requirement for AMST

Chairman McClellan. In 1970 the Air Force had a plan to replace the C–7 and C–123 with a readily available STOL aircraft. The replacement aircraft would have been used on an interim basis until a tactical airlift modernization program could be implemented. However, the "interim STOL" program never materialized; consequently, except for the C–7s and C–123s in the Air Force Reserves, the Air Force has no STOL-capable aircraft in the tactical airlift inventory.

(a) Why was the "interim STOL" program never implemented?

(b) What degree of risk did the Air Force/DOD assume by not obtaining a STOL-capable aircraft for the active forces?

(c) Since the Air Force apparently plans to live without a STOL-capable aircraft for a number of years, why is such a capability needed in the AMST?

General Chapman. The Interim STOL program was not approved by OSD in 1971. At the same time and in a related action, OSD approved a request to begin the AMST Prototype Program.

The Air Force has a STOL capability with its C–123/C–7 force which is programmed to remain a part of the Reserve Forces into the 1980's. However, these aircraft carry relatively small payloads and thus cannot satisfy total mission requirements. The AMST would provide the required flexibility and responsiveness to user needs. Due to priorities we have had to accept the risks resulting from inadequate STOL capability in our contingency planning.

The Air Force is not living without a short field capability, but it is living with an inadequate one. The AMST is designed to improve that capability.

C–130 STOL as Alternative to AMST

Chairman McClellan. Over the years Lockheed has submitted several proposals to modify the C–130 for STOL operations. Are these proposals still being considered as an alternative to the AMST? If so, what role would the proposed C–130 modifications play in any Air Force decision to produce the AMST?

Dr. LaBerge. For many years the Air Force has reviewed numerous Lockheed proposals to improve the C–130 with a STOL capability. Their proposals have been carefully reviewed and systematically rejected on the basis of cost and the marginal improvement in performance. A STOL capable C–130 is not considered a viable alternative to the AMST based on its narrow body, slow speeds, inadequate STOL performance and poor cost effectiveness.

AMST Follow-on/Estimated Development & Production Cost

Chairman McClellan. Recognizing that the recent AMST cost effectiveness study results were inputs to an effort to compute follow-on program cost estimates, what are the estimated development and production costs for a follow-on AMST program?

General Chapman. Development costs are estimated at $618.1 million. Average flyaway costs are estimated to be $9.3–$10.0 million in FY 75 dollars. Flyaway costs can be increased by approximately 25% to account for such support as spares, aerospace ground equipment and training. These production figures are consistent with the original design-to-cost goal of $5 million (expressed in FY 72 dollars for the 300th production article).

AMST/Production Configuration Studies

Chairman McClellan. What other production configuration studies have been made or are planned (especially regarding the two man vs three man crew)?

Dr. LaBerge. The Air Force has studies underway or completed in the areas of avionics, cockpit configuration, alternate mission applications, survivability/vulnerability, reliability/maintainability, cargo compartment optimization, life support and life cycle costs to assist in defining specifications for a production aircraft. The preliminary results of our avionics study are being incorporated

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into a cockpit configuration study to determine if a two man crew can manage the workload without incurring cost increases for automation that would negate the projected cost savings for eliminating the navigator position. Present studies are considered adequate to define a production configuration.

AMST Operational Factors Evaluated During Testing

Chairman McClellan. What specific operational factors will be evaluated during prototype flight testing?

Dr. LaBerge. We will be investigating primarily the use of steep approaches, high touchdown sink rates, touchdown dispersal, off runway remote site problems, aerial delivery by airdrop and extraction and loadability/transportability of heavy/bulky items of Army equipment.

F–16/Impact on Quantities of F–15 and A–10

Chairman McClellan. How will the ACF be used in relation with other aircraft and what impact will this relationship have on the need for currently planned quantities of F–15 and A–10 aircraft?

General Chapman. The ACF, or F–16 as it is now called, has been planned to interface with our other tactical aircraft across the spectrum of tactical operations. As you are aware, Senator, the Air Force prepares and trains for three classic tactical missions: close air support, counterair, and interdiction. Each of the aircraft planned for our tactical air forces, including the F–16, performs one or more of these missions particularly well. The F–16 is an aircraft which possesses excellent abilities in both the air to ground and air to air components of the Air Force missions, and will afford the combatant commander outstanding flexibility. During clear weather, the F–16 can fly counterair missions, complementing our F–15s, and protecting our A–10 and F–4 aircraft from attack by hostile fighters. When the battle situation demands, the F–16 can be loaded with bombs and used to augment the A–10 in air to ground missions supporting the land battle.

The number of F–16s we plan to buy has been calculated in full consideration of the F–15 and A–10 levels currently programmed. Our planned purchase of F–15s, although representing a significant capability qualitatively, falls short of the quantity we need to meet the threat. The F–16, less costly than the F–15, is the low portion of the F–15/F–16 "High-Low" mix, and is intended to partially offset the numerical advantage held by our adversaries. Thus the F–15 and F–16 together represent a total capability, and the procurement of one aircraft does not lessen the requirement for the other.

The A–10 and F–16 complement each other in a similar fashion. The A–10 is specifically designed to excel in close air support of ground forces. When required by particularly intense or demanding conflicts, the F–16 can be called on to enhance our ground attack capabilities, both in close air support and battlefield interdiction. In summary, each of our tactical fighters has unique capabilities. These capabilities have been considered in a total force context in planning the mix of F–15s, F–16s and A–10s required for our force structure.

Production of F–15/More Cost Effective Than F–16

Chairman McClellan. Is the production of additional quantities of F–15s more cost effective than developing a new aircraft (ACF)?

General Chapman. We have recently completed a cost comparison which accounts for the completed F–15 development, uses the F–16 program as the baseline to extrapolate F–15 Operating and Support costs, and considers the procurement of 650 F–15s additional to the current 729 aircraft program. The significant savings in fuel consumption/cost achieved by the F–16 contribute to the reduced operating and support costs shown for this aircraft. The fifteen year life cycle cost estimates in fiscal year 1975 dollars (shown in millions) are as follows:

F–15/F–16 Cost Comparisons

(These estimates will continue to be refined, but we expect that future adjustments will not materially affect the ratio of F–16 to F–15 costs.)

	F-16 [1]	F-16 [2]	F-15 [3]	F-15
Quantity	650	650	520	650
Cost:				
R.D.T. & E	584	496	0	0
Procurement	3,742	3,663	3,948	4,932
O & S (15 yr)	4,462	4,539	4,752	5,942
Total	8,788	8,698	8,700	10,874

[1] Based on the F-16 program estimate at source selection.
[2] Based on USAF approved revised F-16 development program (8 R.D.T. & E. aircraft) and efficiency in production achieved through the use of common fuselage for both single and dual seat aircraft. This program is awaiting OSD approval.
[3] Reflects required change in quantity to achieve equal total costs.

Notes (Reference columns 2 and 3)

1. Additional O&S costs for air-to-air training missiles add $23M for the F-16 and $113M for the F-15. The F-15 has both AIM-9 and AIM-7 capability, whereas the F-16 has only the AIM-9 capability.

2. F-15 with enhanced air-to-ground capability comparable to the F-16 adds $47M to F-15 costs. This combined with Note 1 would reduce F-15 buy to 511 aircraft.

3. Adding one ECM pod per 4 F-16s at $175K/pod adds $18.5M to the F-16 procurement cost. Notes 1, 2, and 3 result in a ratio of 650 F-16s to 513 F-15s.

4. War Reserve Materiel (WRM) not defined for F-16; costs not included for either aircraft.

5. All figures are based upon the assumptions that all production is performed in the US, and no RDT&E costs are recouped through potential foreign sales. If anticipated foreign sales are realized, the F-16 costs to the USAF will decrease as a result of RDT&E recoupment and efficiencies achieved through increased production quantities. The impact on F-15 costs of F-16 sales would be engine cost reductions achieved through increased production quantities.

ACF/Foreign Sales Potential

Chairman McClellan. Was the ACF development and production program undertaken primarily because of its foreign sales potential?

General Chapman. No. The decision to develop and procure an ACF was based primarily on the need to modernize and expand our Tactical Fighter Force. In view of the current and projected threat aircraft numbers and capabilities, it is apparent that modernization is required if we are to maintain a qualitative superiority. Fiscal realities preclude achieving numerical parity with the threat; however, we were convinced that this quantitative deficiency could be reduced through the acquisition of lower cost, but capable fighter which would complement the other more specialized fighter and attack aircraft planned for the force in the 1980s. Accordingly, we chose to pursue the ACF program.

ACF Fulfill AF Fighter Needs

Chairman McClellan. To what extent will the ACF fulfill the Air Force's fighter needs?

General Chapman. To meet the threat and modernize the force while remaining within fiscal constraints, the Air Force is structuring a balanced high-low force mix sufficient, in both quantity and quality, to accomplish the required tactical tasks and to reduce the numerical advantage of the threat. The F-16 will effectively complement the F-15 in close-in air-to-air combat and provide a needed ground attack capability supplementing the A-10 and F-111. We are confident that the versatile F-16 will be a valuable addition to the force.

ACF Foreign Sales Program/Advantages/Disadvantages

Chairman McClellan. What are the military, economic, and political advantages and/or disadvantages of the proposed ACF foreign sales program?

General Chapman. The military advantages include the increase in allied force effectiveness which will accrue from the operation of a more capable

aircraft and the greater standardization of equipment, training, tactics, and tactical doctrine. Should the projected foreign sales be realized, the economic benefits will be recoupment of F–16 development costs, lower procurement costs to the Air Force, and an improvement in our balance of payments. Insofar as political advantages/disadvantages are concerned, I would rather have someone more qualified address that subject.

ACF Flyoff

Chairman McClellan. Why did the Air Force not conduct a flyoff as requested by the Senate Committee on Appropriations?

General Chapman. The Air Force believes the Lightweight Fighter (LWF) prototype flight test program was an objective and comprehensive, comparative evaluation which met and, in most every category, exceeded the requirements of a flyoff. Many aspects of the LWF flight test program contributed to this assessment. Air Force pilots, and in particular Tactical Air Command pilots, interfaced early into the program and flew over one-half of the flights. Quantitative data obtained during flight testing verified comparative performance and extensive operational factors evaluations were qualitatively assessed on all Air Force flights. Both aircraft were evaluated against identical development and operational test criteria; including air combat maneuvers against various types of contemporary fighters.

It would not have been fair nor necessary to stage 'head to head' air combat encounters due to the differing levels of engine development (the YF–17 prototype engine thrust levels were somewhat below those estimated for production) and the resulting difficulty for evaluation pilots to qualitatively assess projected performance increases. Both contractors agreed that adequate comparative flight test data would be accrued to support selection of the superior aircraft. In view of the comprehensive scope of the LWF flight test program, a flyoff similar to the A–7/A–10 would have been a duplication of effort resulting in unwarranted expense and delay.

Derivation of ACF Performance Requirements

Chairman McClellan. Why were the ACF's performance requirements not derived from the expected threat aircraft?

General Chapman. The threat was certainly considered. The performance requirements specified in our ACF proposal instructions were based upon an integrated assessment of both demonstrated prototype performance and the level of performance necessary to ensure an adequate margin of superiority over known and projected threat aircraft. This has not been the standard method, as seldom has the Air Force been so fortunate as to have demonstrated prototype performance data upon which to confidently base the expected performance of the operational aircraft.

ACF/Design-to-Cost Goal

Chairman McClellan. Why did the Air Force not include a design-to-cost goal in the ACF request for proposal?

General Chapman. The ACF proposal instructions were very explicit in stressing the importance the Air Force attaches to achieving low life cycle costs. The objective, as stated in those instructions is "to produce the lowest life cycle cost aircraft with acceptable performance." The contractors were encouraged, through the incentive of award fees, "to make cost/performance trades, military specifications/standards deviations and peculiar program tailoring to improve producibility at minimum cost." Those design features offering potential for reducing operating and support requirements and associated costs, which, incidentally, constitute over 50% of the system's life cycle costs, received special emphasis in the assessment of each contractor's proposal.

Additionally, Life Cycle Cost/Design-to-Cost trade studies are being conducted during full scale development in two parts. The first part addresses air vehicle design and acquisition cost reduction opportunities developed in cost/design trade studies conducted prior to the Critical Design Review. A second part will address supportability, including ground support equipment, maintenance and acquisition cost reduction opportunities conducted prior to the flight of the first DT&E aircraft.

While design-to-cost goals were not an explicit part of the proposal instructions, the General Dynamics contract does specify a design-to-cost goal. The contract states that "a prime objective during full scale development is to design to a cumulative average unit production flyaway cost of $3,842,525 expressed in FY 75 dollars for a total of 1000 aircraft at a maximum production rate of 15 aircraft per month." The GD portion, which excludes the engine, radar, and government furnished aeronautical equipment, of this goal is $2,323,074.

Different Radars/Navy and Air Force ACF

Chairman McClellan. Why are the Air Force and Navy ACFs planned with radars of different ranges even though both aircraft have a designated air superiority mission?

General Chapman. I cannot speak for the Navy, nor am I familiar with their radar range requirements.

F–16 Foreign Sales/Coproduction

Chairman McClellan. Does the DoD plan to offer a coproduction plan to countries other than the Consortium countries?

General Chapman. To my knowledge, the Department of Defense has not been approached by any other countries that are interested in a coproduction arrangement. Should such a request be forthcoming, the DoD would, no doubt, give due consideration to an additional coproduction program.

Consortium Price/Items Included

Chairman McClellan. Will the price paid by the Consortium countries include a share of the following costs: F100 engine development, LWF prototype program, and ACF full-scale development?

General Chapman. In the DoD negotiations with the Consortium countries our policy has been to ensure that all nonrecurring recoupment costs charged to the Consortium are fair and equitable. Accordingly, in the early negotiations which occurred prior to the ACF source selection, the DoD agreed to waive all Lightweight Fighter Prototype Program costs except those for engine development. The DoD position, which was fully understood by the Consortium, was that a pro rata share of all engine, either YJ101 or F100, development costs as well as all ACF full scale development costs would be recouped. There has been no change in that position.

Maverick Requirements

Chairman McClellan. Why have total Air Force requirements for MAVERICK missiles increased from 21,600 to over [deleted]? Are further increases expected?

General Chapman. Total Air Force requirements for MAVERICK, as well as all other War Reserve Materiel munitions, are reviewed annually in accordance with the OSD Defense Policy and Planning Guidance. Balanced force support requirements are sized to fulfill the guidance direction which requires the Services to provide war reserve levels sufficient to sustain combat for [deleted] in Europe or for [deleted] in the Pacific which requires an inventory sufficient to last until US production can expand to match consumption. With the addition of more mission capable A–10's to the force structure, concurrent with the phase out of less capable aircraft such as the F–100, the MAVERICK requirement has increased to support the planned employment of all MAVERICK capable aircraft, i.e., A–7, A–10, F–4D and F–4E. The increase you refer to was planned to support the fiscal year [deleted] force structure. The requirements to support the fiscal year [deleted] force are expected to change as force structure, planned employments and other variables change.

Increases in MAVERICK Requirement/Decreases in Other Weapons

Chairman McClellan. Have increases in MAVERICK requirements been offset against decreases in requirements for other weapons? Why?

General Chapman. Yes. In computing War Reserve Materiel stockpile requirements the Air Force plans to buy munitions to load out the planned available wartime sorties. With changes in the General Purpose force structure and the

development of newer, more effective munitions such as MAVERICK, the newer munitions are planned to load out aircraft stations which were previously loaded with less effective munitions. For example, the Air Force no longer has War Reserve Materiel requirements for such nonnuclear munitions as BULLPUP and WALLEYE.

TRI-SERVICE LASER SEEKER PROGRAM/STATUS

Chairman MCCLELLAN. What is the current status of the tri-Service program involving the laser seeker for the MAVERICK and HELLFIRE missiles?

General CHAPMAN. The laser seeker engineering development was structured using multi-Service requirements incorporated into a tri-Service specification to provide a DOD tri-Service laser seeker for the MAVERICK and HELLFIRE missiles. A Laser MAVERICK Joint Service Operational Requirement was signed between the Air Force and Navy in September 1974. A combined Air Force (Executive Service), Navy and Army Source Selection Evaluation Board was used and the selection completed in March 1975. The seeker contract was awarded to Rockwell International. Hughes Aircraft will do the integration of the seeker to the MAVERICK airframe. The delivery of the first laser MAVERICK missile to the Air Force for flight test is scheduled for October 1976.

CENTRALIZED MANAGEMENT OF OT&E

Chairman MCCLELLAN. What is the feasibility of centralizing the direction and management of operational test and evaluation (OT&E) activities of the military services to achieve the maximum OT&E capability at minimum cost?

General CHAPMAN. The Director of Defense Research and Engineering through his Deputy Director for Test and Evaluation (DDT&E) provides overall policy direction and planning guidance for the national ranges and major test facilities which support operational testing and evaluation. The DDT&E in conjunction with the Military Departments continually reviews the present and planned major range and test facility base to insure its adequacy to meet requirements and to avoid unnecessary duplications and retention of obsolete range assets. The Military Departments manage and operate each National Range or Major Test Facility. The Air Force believes these authorities and responsibilities provide an adequate and appropriate framework within which the Air Force can achieve a cost effective capability to conduct operational testing and evaluation.

AIR FORCE MANAGEMENT OF OT&E

Chairman MCCLELLAN. With the dissolution of the Test and Evaluation Systems Program Office, how does the Air Force intend to provide for management of its OT&E capabilities needed in the future?

General CHAPMAN. The Test and Evaluation Systems Program Office (TESPO) was the Air Force's office responsible for development and acquisition of the COR. The Air Force plans to dissolve TESPO during FY 1976, but will continue to develop and acquire equipments needed to improve our capability to conduct operational testing and training. The Air Force Systems Command will functionally manage the assigned development and acquisition tasks at the field activities where the best expertise exists. Most of the residual TESPO tasks and future tasks which would have been assigned to TESPO will go to the Armament Development and Test Center at Eglin AFB, Florida.

NATURE AND COST/IMPROVEMENTS AT HILL, WENDOVER, AND DUGWAY

Chairman MCCLELLAN. What is the nature and cost of planned range improvements during the next five years at the Hill, Wendover, and Dugway Ranges? How will the capability derived from these improvements compare with that which was to be developed or acquired during mid-term COR?

General CHAPMAN. The table below outlines the improvements programmed by the Air Force through FY 1977. These improvements will provide a minimum essential capability (tracking, communications, command and control) to conduct drone/RPV testing in the H/W/D area. The Air Force had programmed the improvements independent of COR in order to provide an early, minimum capability to support drone testing. At this time no funds are programmed for improvements in FY 1978 or beyond. Any additional requirements will be considered by the Air Force on a case-by-case basis during the normal programming/budgeting process.

($ in Thousands)	Fiscal year—			
	1975 and prior	1976	197T	1977
Item:				
Instrumentation	300	1,400		100
Misson control center		125		670
Communications	684			150
Total	984	1,525		920

In addition to the above capabilities, mid-term (FY 78–79) COR funding was to provide: a simulated threat environment including radars and typical ground targets; communications throughout the range; scoring capability for air-to-air, air-to-ground, and electronic warfare missions; and data links to connect the Nellis ranges with the H/W/D complex. These COR improvements would have provided the capability to expand air-to-air, air-to-ground, and electronic warfare operations into the Hill/Wendover/Dugway ranges and to integrate these operations with Nellis operations.

Hill/Wendover/Dugway is at this time considered a range complex to support ongoing drone/RPV testing and the Air Force Logistics Command's ongoing operations such as the Minuteman aging and surveillance program and conventional munitions quality assurance program.

COR Cancellation/Impact

Chairman McClellan. What is the loss in operational test capability with the cancellation of COR, the effect on future weapon system operational testing and the Air Force's plan to satisfy future test requirements?

General Chapman. The loss of COR will deny the DOD an integrated test complex resulting from the consolidation of several individual service ranges into a multi-service test and training environment. This environment was to provide an in depth, multi-defended, well instrumented and relatively encroachment free test and training area. The loss in operational test capability results from the inability to conduct large scale multi-service exercises in a realistic environment where the interactions can be closely monitored and the proper data collected. The individual military departments will continue to budget for and operate their own facilites and provide the improvements needed for their respective missions and workloads. We are planning to improve the Tactical Fighter Weapons Center ranges in Nevada, the Air Defense Weapons Center over water range in Florida and other smaller operational ranges to accommodate most of our operational testing and training.

AF Plans/Obtain Improved Test Range Capabilities

Chairman McClellan. Since the Air Force still feels that many of the improved test range capabilities that were planned for COR are urgently needed, what is the current plan for obtaining these capabilities?

General Chapman. The Air Force is planning to improve and modernize various operational test and training ranges including the Tactical Fighter Weapons Center ranges at Nellis AFB, the Air Defense Weapons Center over water range at Tyndall AFB, and other smaller "backyard" training ranges such as those at Luke AFB and McDill AFB. In FY 1976 we will install air combat maneuvering instrumentation (ACMI) at the Tyndall range and improve the simulated threat environment and instrumentation at the Nellis ranges. Additional ACMI systems and instrumentation systems are planned for the other operational ranges in FY 1977 and beyond.

Remotely Piloted Vehicles (RPVs)/Major Acquisition Policies

Chairman McClellan. Major RPV programs have not been treated by DOD as major acquisitions subject to the policies and procedures of DOD Directive 5000.1. This, along with the fact that many RPV applications are related, have common technologies, and fall into similar research and development activities indicate the potential for redundant efforts and system proliferation.

What can be done to increase coordination between the RPV Joint Technical Coordinating Group or other joint Service groups, and the DDR&E to provide increased visibility of RPV activities?

General CHAPMAN. The Joint Technical Coordinating Group (JTCG) mechanism was created by the Joint Logistics Commanders (JLC) for the purpose of coordinating technology, principally laboratory efforts. The JTCG on RPVs provides the means for the exchange of technical and program information at the working level and it is functioning very well in that capacity.

DDR&E does interact with the JTCG only on an informal basis since the JTCG is a JLC organization. DDR&E formally interacts with all Service RPV programs twice a year; at the Topical Reviews in the fall, and at the budget apportionment reviews in the spring. DDR&E also interacts on a continuous but informal basis throughout the year with all the Services on their RPV programs.

Due to the anticipated growth of RPV program activity in the technology base, DDR&E is planning to hold a comprehensive Joint Service Topical Review exclusively on RPVs during the fall of this calendar year. Previously the RPV programs have been reviewed as a part of our Topical Review on Target Exploitation.

DSARC REVIEW OF RPV PROGRAMS

Chairman MCCLELLAN. Why haven't RPV programs been made subject to the DSARC review process to determine suitability to enter full scale development or production?

General CHAPMAN. Since the DSARC process began, no RPV program which meets the DSARC criteria has progressed to the full scale engineering development or production decision phase. The COMPASS COPE RPV program will be the first to be reviewed by the DSARC, currently scheduled for late calendar 1975.

TOTAL PROGRAM ESTIMATES FOR RPV PROGRAMS

Chairman MCCLELLAN. Why haven't total program estimates been established for RPV programs?

General CHAPMAN. Most of our past RPV projects have been exploratory and advanced developments where we are concerned with investigating ideas and proving concepts, rather than establishing total program costs. For those few programs that have progressed beyond the concept validation phase we have developed more comprehensive program cost estimates. Specifically, for programs that reach the full scale engineering development phase, such as the BGM-34C, total program cost estimates have been made and provided to Congress.

RPV PROGRAMS/INCLUDE UNDER DOD DIRECTIVE 5000.1

Chairman MCCLELLAN. Why haven't RPV programs been included under the acquisition policies and procedures of DOD Directive 5000.1?

General CHAPMAN. The DSARC review process of DOD Directive 5000.1 applies to major defense systems so designated by the Secretary of Defense or Deputy Secretary of Defense. Thus far no RPV program has met the criteria for designation as a major defense system. The management principles embodied in the directive are applicable and have been applied.

RPV CAPABILITIES/DENSE ECM ENVIRONMENT

Chairman MCCLELLAN. Have studies been made to assess potential capability in a dense electronic countermeasure environment?

General CHAPMAN. Theoretical studies have been made in connection with the Drone Control and Data Retrieval System (DCDRS) to determine the susceptibility of RPV's to operate in a preprogrammed mode using self-contained navi- effective communications with RPVs. Other studies have investigated the capability of RPVs to operate in a preprogrammed mode using self-contained navigation. This mode obviates communication links subject to electronic countermeasures.

The Defense Advanced Research Projects Agency (DARPA) has been working with the Air Force to examine, both theoretically and experimentally, the performance of a wide band data link in the presence of several jammers.

Impact of RPV's on Manned Aircraft

Chairman McClellan. In analyzing RPV potentials to date, DOD officials have stated that RPVs are to complement, not replace manned aircraft. Are any studies planned, or have any been completed, which address the impact of RPV's on the force structure of manned aircraft?

General Chapman. Some studies have been made regarding the missions that RPVs can perform, particularly in the areas of reconnaissance and electronic countermeasure support. These studies have included some cost effectiveness analyses. More work is planned to define the costs of RPVs and their associated capabilities before making major decisions regarding the mix of manned and unmanned aircraft.

RPV Mission Analysis

Chairman McClellan. The Air Force completed an RPV "Mission Analysis" in January 1974 which identified seven RPV mission options. The options are to be ranked in order of importance in January 1975. What are the relative priorities assigned and how does the assignment relate to specific operational capability requirements?

General Chapman. The Air Force assessed the relative importance of the seven options by determining the major command interest in them. As a result of that assessment it is evident that the multi-mission tactical drone, the high altitude, long endurance drone and the tactical expendable drone are accorded high priority while the remaining options received little command support. A more refined prioritization showing individual ranking has not been made and is not planned. The options receiving the most command interest relate to specific operational requirements.

Compass Cope/Planned Contract

Chairman McClellan. The Air Force plans to start full scale development of the COMPASS COPE in January 1976. What is the scope, and characteristics of the planned contract?

General Chapman. The full scale engineering development contract will be awarded to one contractor based on a competitive source selection between the Boeing Company and Teledyne Ryan Aeronautical Company. The engineering development effort will include fabrication and testing of six flight test and one structural test preproduction vehicles. These vehicles will utilize the engine configuration selected for follow-on production, improved flight control avionics, an automatic approach and landing system, and an operational payload. Testing will include an initial operational test and evaluation phase. We are planning on contract award in January 1976 and we expect the development and testing to take slightly over three years at a total program cost of $74.1 million.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator Young. Mr. Chairman, I also have questions that I would appreciate receiving answers to.

Chairman McClellan. Certainly, Senator.

[The questions and answers follow:]

Utilization of FCRCs

Senator Young. How does the Air Force utilize the services of the Federal Contract Research Centers?

Dr. LaBerge. In answering your question I must first point out that the Air Force sponsored Federal Contract Research Centers (FCRCs) can be grouped into three categories: the laboratory type, the system engineering corporation, and the studies and analysis organization. In the first category, there is Lincoln Laboratory; in the second, there are the MITRE Corporation and Aerospace Corporation; and RAND and ANSER are in the third.

Each category of FCRC's provide a somewhat different service to the Air Force. Lincoln Laboratory carries out a research and development program related to national defense with particular emphasis on advanced electronics and

communications. The major role of the MITRE Corporation and Aerospace Corporation is to provide systems engineering/technical direction to the programs managed by Electronic Systems Division (ESD) and the Space and Missile Systems Organization (SAMSO), respectively, of the Air Force Systems Command. RAND and ANSER are used to provide independent and objective analysis and research to support decisions on force posture, doctrine, strategy and the allocation of resources and to support the concept formulation and planning for advanced weapon systems.

A recent Air Force review of FCRCs has reaffirmed that their work is essential to Air Force management and the decisionmaking process and we continue to have a need for their unique capabilities. It should be noted that FCRCs are controlled to insure that only the most urgent requirements are satisfied, that their work does not duplicate that of other organizations and that they directly support the requirements of the Department of Defense.

AF FCRCs/Amount Requested

Senator Young. Please name those Federal Contract Research Centers that are utilized by the Air Force and the amount requested for each?

Dr. LaBerge. The Air Force uses six Federal Contract Research Centers (FCRCs): Aerospace Corporation, Analytic Services, Inc., Lincoln Laboratory, MITRE Corporation, Rand, and Applied Physics Laboratory/John Hopkins University (APL/JHU). The first five are sponsored by the Air Force and APL/JHU is sponsored by the Navy. The funds for FCRCs fall into two categories. The first category is funds requested by a specific RDT&E program element for a given FCRC, e.g., P.E. 65402F, Aerospace. This funding is referred to as the "basic" or "line" program. The second category of funds comes from other programs, such as the Space Shuttle, which provide funds to a FCRC for a support on their program. This category of funds, which comes from a number of appropriations, represents the majority of funds provided to the FCRCs and is identified as the "below-the-line" program.

The total funding for each FCRC in FY 1976 is: Aerospace Corporation, $76,265,000; Analytic Services, Inc., $2,340,000; Lincoln Laboratory, $28,626,000; MITRE Corporation, $36,078,000; Rand Corporation, $9,500,000; and Applied Physics Laboratory/John Hopkins University, $965,000. Section 7 of the RDT&E Budget Justification Book includes complete details on funding.

Number and Location/Air Force Laboratories

Senator Young. How many laboratories does the Air Force operate? Where are they located?

Dr. LaBerge. The 13 technology laboratories and two related organizations currently under the Director of Science and Technology Air Force Systems Command are as follows:

1. Aerospace Research Laboratory (ARL), Wright-Patterson AFB, OH.
2. Air Force Cambridge Research Laboratory (AFCRL), L. G. Hanscom AFB, MA.
3. Frank J. Seiler Research Laboratory (FJSRL), Air Force Academy, CO.
4. Air Force Office of Scientific Research (AFOSR), Arlington, Va.
5. Air Force Avionics Laboratory (AFAL), Wright-Patterson AFB, OH.
6. Air Force Materials Laboratory (AFML), Wright-Patterson AFB, OH.
7. Air Force Flight Dynamics Laboratory (AFFDL), Wright-Patterson AFB, OH.
8. Air Force Aero-Propulsion Laboratory (AFAPL), Wright-Patterson AFB, OH.
9. Air Force Rocket Propulsion Laboratory (AFRPL), Edwards AFB, CA.
10. Air Force Human Resources Laboratory (AFHRL), Brooks AFB, TX.
11. Air Force Weapons Laboratory (AFWL), Albuquerque, NM.
12. Rome Air Development Center (RADC), Griffiss AFB, NY.
13. Air Force Armament Laboratory (AFATL), Eglin AFB, FL.
14. Air Force School of Aerospace Medicine (AFSAM), Brooks AFB, TX.
15. Aerospace Medical Research Laboratory (AMRL), Wright-Patterson AFB, OH.

Air Force University Contracts

Senator Young. How many universities does the Air Force have contracts for research work? Are certain universities given more contracts than others? If so, please explain.

Dr. LaBerge. There are currently 115 universities or educational institutions with Air Force contracts for research work. There is no limit on the number of research proposals a university may submit. Therefore, certain universities have more contracts because they submit more proposals in selected areas of science than others.

AF Simulator Program

Senator Young. What is the magnitude of the Air Force effort to develop aircraft simulators?

Dr. LaBerge. The Air Force is requesting $205.5 million for FY 76 for aircraft simulators. Included in this request are:

	Million
Development	$10.3
Procurement	185.5
Military Construction	9.7
Total	205.5

Types of Simulators Planned for Development

Senator Young. How many types of aircraft simulators does the Air Force plan to develop?

Dr. LaBerge. The Air Force's FY 76 request will fund simulator efforts for 11 types of aircraft. These aircraft are: A–10, F/TF–15A, AWACS, C–130, B–52, KC–135, T–37, T–38, F–4, C5, C–141.

FY 76 Increase/Inflation vs Real Growth

Senator Young. How much of the $604.3 million increase for fiscal year 1976 over fiscal year 1975 is for inflation and real growth?

General Chapman. $304.3 million of this increase is attributable to inflation. The balance consists of more extensive effort in fullscale engineering development programs.

FY 7T Increase/Inflation vs Real Growth

Senator Young. Also, how much of the $.2 billion increase shown for fiscal year 1977 over fiscal year 1976 is for inflation and real growth?

General Chapman. $.13 billion of this increase is attributable to inflation. The remainder consists of increased effort in full scale engineering development programs.

Fourth B–1 R&D Aircraft

Senator Young. Will a fourth B–1 research and development aircraft be requested in the fiscal year 1976 budget? If so, what will be the advantages of having this aircraft vice proceeding with program with three research aircraft?

General Chapman. We plan to request authority to start AV # 4 in April of this year, with initial funding—about $5 million—in FY 75. In FY 76 we have $90.9 million to continue work on AV # 4.

AV #4 will be the first production configured aircraft incorporating design changes resulting from development testing and cost reduction efforts. In addition, AV #4 will be used to flight test the defensive avionics. Without AV #4 several things happen. First, the airframe contractor's engineering team, in a number of skills, is reduced below a critical level. It is estimated that this loss in skill would add between $150 million and $200 million to the programming. Second, the cost in the production program would be increased because the first production funded aircraft is not preceded by a true production configuration prototype aircraft. Without AV #4, the testing of defensive avionics would require either a retrofit of AV #3, thereby losing a valuable test asset for 8 to 10 months, or testing in the first production aircraft, thereby incurring the risk of additional production aircraft retrofit.

In summary, AV #4 represents a reasonable and logical progression from development aircraft to production. Failure to proceed with it would disrupt this transition and increase costs.

B–1 Mission Profiles

Senator Young. The Committee has been informed that the B–1 is designed for both a high altitude mission and a low altitude mission although the low altitude mission is the primary means of employment. Recognizing that both mission profiles would be nice to have but in view of the cost of the aircraft has the Air Force considered in its cost reduction program a B–1 designed for only the low altitude mission? If not, why not?

General Chapman. As part of our cost reduction efforts, we considered a subsonic only design along with several other variations. As a result of these activities, we rejected the subsonic only design, but did decide to change from a variable to a fixed geometry engine inlet. This reduces the top speed of the aircraft but results in reduced weight and cost. Should the higher speed capability, which will be demonstrated during the development testing, become necessary in the future, the hardware required to achieve these speeds could be purchased and installed at that time.

Retaining the high speed, high altitude capability greatly complicates the enemy defense problem and increases his costs without adding to our costs. Defenses designed for optimum effectiveness against high altitude supersonic penetrators are not as effective when employed against very low altitude penetrators, and resources committed to this defense might otherwise be applied in other areas more profitable to the enemy and costly to us if we did not pose this threat.

One final point is that a pure subsonic design would always be limited to subsonic penetration, and supersonic operations could never be conducted regardless of the change in threat. To delete this option in employment now would reduce the flexibility of the B–1 without any commensurate savings.

ALCM Range

Senator Young. What range is being sought for the Air Launched Cruise missile?

General Chapman. The range of the ALCM is approximately [deleted] NM at low level and this range can be increased with the use of a belly tank to provide a low level range of approximately [deleted] NM.

ALCM Contractors

Senator Young. Are the Air Force and Navy employing the same contractors for the Air Launch Cruise missiles? If not, why not?

General Chapman. The Air Force and the Navy are employing the same contractors for cruise missile engines and navigation guidance equipment. Separate airframe contractors have been selected. The Air Force selected the Boeing Company as the airframe contractor based on competition in 1972 for a missile (SCAD) that would be interchangeable with SRAM on the B–52. This contract has been extended for the ALCM (the ALCM airframe is essentially the same as the SCAD airframe). The Navy selected two contractors in 1974 to compete for the airframe portion of the advanced development contracts, General Dynamics Corporation and Ling Temco Vought. The Navy will select the winner in the Spring of CY 1976.

Advanced Tanker/Cargo Aircraft Selection

Senator Young. What is the planned method for selecting the aircraft to be the Advanced Tanker/Cargo Aircraft?

General Chapman. The Air Force plans to employ the normal source selection process in FY 1976 to select one of the competing contractors to continue into full-scale development. During this process, each candidate's capabilities and costs will be evaluated in the context of their ability to meet overall aerial refueling requirements based upon realistic mission scenarios as well as assessment of their inherent cargo-carrying capabilities. The candidate which best meets these requirements will be selected.

AWACS IOC

Senator YOUNG. When will the AWACS Aircraft become operational?

General CHAPMAN. Planning calls for achievement of an interim operational capability with AWACS in September 1977.

AWACS R&D COSTS

Senator YOUNG. How much has been spent for R&D for AWACS to date and how much more will be required?

General CHAPMAN. Through March 31, 1975, approximately $840 million of RDT&E funds have been spent, through noncancelable government obligations and commitments. We currently estimate that we will require $316.9 million to complete the CORE program. An additional $331.2 million is programmed for development of the following enhancements: Joint Tactical Information Distribution System; Enhanced Maritime; Enhanced C^3/SIGINT; Self Defense Subsystem; ECM Hardness; Special IFF; and SATCOM terminals. We are firmly committed only to the first two which are estimated to cost $65.7 million.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Chairman MCCLELLAN. In addition, I have some questions which Senator Thurmond would like answered. If there is no objection, they will also be printed in the record at this point.

[The questions and answers follow:]

REALIGNMENT OF RESEARCH EFFORT/REVISIONS IN PERSONNEL OR FUNDING

Senator THURMOND. Mr. Secretary, will the realignment actions of the basic research effort that you describe on page 6 of your statement result in any revisions in personnel or funding requirements for the same basic research work?

Dr. LABERGE. There will definitely be a change in personnel requirements since the research program will be predominantly a contract effort. The Aerospace Research Laboratory will be closed and the Air Force Cambridge Research Laboratory will be changed from a research laboratory to a technology laboratory. The resulting personnel changes are still under review and final decisions will be reflected in the FY 1977 budget submission. There will be no change in the funding requirement since the Air Force intends to maintain a level-of-effort program increasing the external contract program at the expense of the centralized in-house effort.

RESEARCH REALIGNMENT COORDINATED WITH OTHER SERVICES

Senator THURMOND. Mr. Secretary, has the Air Force coordinated this research realignment program with the other service research effort as well as the research effort within the Office of Secretary of Defense?

Dr. LABERGE. The Air Force has not specifically coordinated each part of the research realignment with the other services. However, the overall plan has been briefed to the office of the Director of Defense Research and Engineering and representatives of the Army and Navy staffs. In addition, the new single manager of the Air Force research program has been tasked to make certain that the research program is coordinated with other agencies sponsoring research, and there are continuing joint meetings of the research contracting offices i.e., the Air Force Office of Scientific Research, the Office of Naval Research and the Army Research Office.

AFSC REPOSTURING/WHEN RESULTS OF REEXAMINATION AVAILABLE

Senator THURMOND. Mr. Secretary, you indicate on page 9 of your statement that the timing and extent of certain portions of the Air Force Systems Command reposturing is presently under examination by the Secretary of the Air Force. When does the Air Force expect that a full report of the equitable balance in these actions can be made to the Committee?

Dr. LABERGE. The review of portions of the AFSC reposturing should be completed in May, and allowing for discussions, I believe late June would be a likely time for a report.

BENEFITS FROM WORK OF FCRC'S/EXAMPLES

Senator THURMOND. Mr. Secretary, can you cite for the record some specific examples of the benefits received from work done by the Federal Contract Research Centers?

Dr. LABERGE. The following are representative examples where work performed by Federal Contract Research Centers has benefited the Air Force:

Aeropsace Corporation: Based on an Aerospace recommendation the Air Force adopted a new guidance system for the TITAN IIIC launch vehicle. Aerospace also designed the set of guidance equations that are used with it. The new system has reduced cost, increased launch vehicle maneuvering capability, and allowed heavier payloads to be placed in orbit. For the Defense Support Program, the contractor proposed certain modifications to include a new secure command system in the satellite simulator used at each ground station. However, Aerospace proposed a design that eliminated the need for the satellite simulator modifications. This action resulted in an initial savings of approximately $500,000 and precluded additional operation and maintenance costs over the life of the simulators.

Analytic Services, Inc (ANSER): Recent ANSER studies of the phenomenon of reentry vehicle fratricide have helped focus attention on the difficulty of successfully achieving multiround attacks on ICBM silos. Taking into account the constraints of this phenomenon has allowed a projection of the acceptable survivability of land-based missiles into the mid-1980s. ANSER has also been assisting the Air Force in preparing a long range plan for navigation systems. The plan evaluates the utility of existing and programmed systems to meet the positioning and navigation requirements of all major Air Force Systems for the next 15 years.

Lincoln Laboratory: Using recently developed sensors, Lincoln Laboratory has conducted a number of field experiments in deep space surveillance. The Air Force requires surveillance of satellites beyond the range of existing radars and telescopes using photographic film. These experiments confirmed that it is possible to detect satellites up to some 60,000 kilometers. The experimental data are being used in the development of a test system to prove the concept. In the area of communication satellites, Lincoln Laboratory has been the front runner in demonstrating technology for survivable satellite communications. This technology is critical in developing techniques for antijam, satellite concealment, and increased communications coverage through satellite internetting. At the current time, Lincoln Laboratory is completing work on the Lincoln Experimental Satellites (LES) 8 and 9 which are scheduled for launch in November this year. These two satellites are to demonstrate technology to be incorporated into Air Force Satellite Communications System Phase II.

MITRE Corporation: MITRE has performed systems engineering/technical direction for the Airborne Warning and Control System (AWACS). In this capacity, MITRE has had a lead role in the development of technical requirements and the preparation of the system specifications, statement of work, and technical evaluation criteria used during the source selection. MITRE is presently monitoring contractor performance and analyzing the solutions to design problems to insure that the system's performance requirements are being met. MITRE assistance was particularly significant in supporting studies and analysis relating to the Congressionally directed review on the vulnerablity of AWACS to jamming.

RAND: Since 1970, Project RAND has been engaged in an analysis of the effect of the All Volunteer Force on the Air Reserve Forces. Now substantially complete, the study has identified alternative manning options to offset the expected shortfall of nonprior Service recruits. The study also evaluated and made recommendations as to the effectiveness of various recruiting incentive programs. RAND is continuing its efforts toward improved avionics development, test, and maintenance. Recently RAND participated in Air Force field tests at

Plattsburgh Air Force Base, New York, of the FB–111A inertial navigation system. The RAND recommendations for revised computer programming, improved diagnostic techniques and changes to shop test equipment are being implemented for the FB–111A, F–111D, and F–111F aircraft. Further significant progress should be realized as these and related RAND ideas are adopted for advanced avionics systems development.

INCREASE USE OF SIMULATORS/C–5A AND OTHER CARGO AIRCRAFT

Senator THURMOND. Mr. Secretary, you mentioned the increased use of simulators that the Air Force is achieving although you refer primarily to fighter type aircraft. Does the Air Force plan to extend the use of simulators to the C–5A and other air cargo type of aircraft?

Dr. LABERGE. The Air Force has used simulators as an integral part of cargo type aircraft training programs for some time. Currently, efforts are underway to procure newer, more sophisticated training devices for the C–130 aircraft. Simulators used in C–5 and C–141 training are among the most sophisticated devices in the Air Force inventory. Two C–5 and two C–141 simulators used in basic transition training at Altus AFB have recently been modified to include visual capability. The C–5 and C–141 simulators at the operational units are also programmed for the incorporation of visual capability.

R&D COST AMORTIZATION/FOREIGN BUY OF F–16 AIRCRAFT

Senator THURMOND. Mr. Secretary, you mention on page 14 that the Air Force's efforts in R&D cooperation with the NATO alliance and proposed use of Air Force systems such as the F–16 for the NATO alliance would benefit us through broader amortization of R&D costs. Will the Air Force charge an amortized share of R&D costs for the F–16 program to all of these aircraft sold to foreign countries or are some of the R&D costs not planned to be amortized?

Dr. LABERGE. The Defense Security Assistance Agency (DSAA), determines the nonrecurring recoupment charge to be applied to the purchase of major defense systems. The charge is normally calculated on a pro rata basis by applying identifiable RDT&E costs for the defense article to the total anticipated production of the aircraft. In the case of the F–16, the DoD has forecast a total anticipated production run from 2000 to 3000 aircraft, which includes 650 USAF, 350 NATO Consortium, and 1000 to 2000 additional third country sales. DSAA will also make final determinations as to whether the price for any F–16s sold to foreign countries would not include amortization of RDT&E costs.

INTERSERVICE RELATIONSHIP/MAVERICK

Senator THURMOND. Mr. Secretary, what interservice relationship are you referring to on page 15 with the MAVERICK program

Dr. LABERGE. The AGM–65C laser and AGM–65D Imaging Infrared MAVERICK missile systems are being developed with extensive tri-Service coordination of requirements and applicability. Engineering development of the laser and imaging infrared seekers are structured using multi-service requirements. A tri-Service laser seeker engineering development specification was prepared to provide a DOD tri-Service laser seeker for the MAVERICK and Hellfire missiles. A Laser MAVERICK Joint Service Operational Requirement was signed between the Air Force and Navy in September 1974. In the case of the imaging and infrared seeker development, the Air Force and Navy have a Memorandum of Agreement for the development of a single field of view and a dual field of view seeker for the MAVERICK, Walleye and GBU–15. Further we have established excellent informal working arrangements between Air Force and Navy field level organizations.

B–1/SUPERIOR TO SMALLER AIRCRAFT/OTHER DESIGNS

Senator THURMOND. Mr. Secretary, you state that the B–1 aircraft will be far superior to smaller aircraft procured in greater numbers or to any other design which technology will permit today or in the foreseeable future. What smaller

aircraft are you referring to in this statement? What is the basis for your statement regarding the B–1 being superior to any other design either today or in the foreseeable future?

Dr. LABERGE. The smaller aircraft that I was referring to are the "stretch" FB–111 variants that General Dynamics conceptually developed recently. In the context of my statement I mentioned that each of us tends to focus on what an individual bomber will cost, rather than what the total force must cost. In basic terms, although the latest FB–111 variant costs approximately one-half that of a B–1 aircraft, we do not think it is half as capable. Due to the size of the basic FB–111 airframe, the aircraft has inherent space limitations that are nearly impossible to overcome. For example, it cannot carry enough fuel or weapons to give us adequate target coverage. The airframe does not provide enough volume for sufficient avionics and electronic countermeasures to defeat many enemy defenses.

When based in the CONUS on alert, it is completely dependent on aerial tanker support to reach any of its targets. If we were to accept the limitations imposed by the FB–111 airframe, in terms of designating it as our primary strategic bomber in the 1980's, we would need over twice as many FB–111 variants as B–1's to cover the same targets. We would also need a proportionately larger number of bases to launch them from, and a larger force of aerial tankers to refuel them. So, the choice of an FB–111 variant in lieu of the B–1 would be a much more costly proposition. When you look beyond the price tag of a single aircraft, none of the FB–111 variants are cost-effective alternatives to the B–1.

There are a number of reasons why the B–1 is superior to any other design today or in the foreseeable future. The primary reason, of course, is that from its inception the aircraft has been designed specifically to perform the future strategic mission. If you recall, the B–52 was originally designed as a high altitude bomber using primarily the technology of the late 1940's and early 1950's. We have continually modified both B–52 tactics and equipment to insure that the bomber force would be equal to its task. The B–52's original potential has been expanded many times. The inherent design limitations of the B–52 (such as its large radar cross-section and modest speed at low altitude) effectively preclude the major improvements that would be required to maintain it as the primary bomber element of our strategic forces for the foreseeable future.

We have anticipated and studied this eventuality for many years. The B–1 is specifically designed to ensure that it can overcome Soviet offensive and defensive capabilities as they evolve over the B–1's lifetime.

Alternatives to the B–1, in terms of candidate airframes, are predominantly existing aircraft modified to allow moderate improvements in performance. Since the inception of the B–1, we have continued to study a variety of alternatives. We simply have not found an existing airframe, or modifications to an existing airframe, that would not have important limitations in the future strategic role; either because of its technological age or its performance characteristics. We will continue to examine other candidates as they appear. My belief that none superior to the B–1 will appear in the foreseeable future is based on the fact that the B–1 has been specifically designed to do its mission in the 1980's and beyond, while others have not.

B–1 Offensive Avionics CDR/Problems with Doppler System

Senator THURMOND. General Chapman, in your critical design review of the B–1 offensive avionics did the Air Force determine that there are problems with the planned doppler system and what is being done about this problem?

General CHAPMAN. We have identified some problems with the "off-the-shelf" doppler system that we had planned to install on the B–1. The major problem is that the vibration environment now predicted for the doppler in the B–1, with the bomb bay doors open at low altitude, exceeds the design requirements for the unit. When subjected to that environment during test, the unit failed.

We are currently pursuing several alternatives to solve this problem. The first is to measure the real vibration environment at the doppler location in the aircraft. This cannot be done until later in the test program, but we have elected not to incur the cost of extensive redesign of this particular doppler system until we are certain of the vibration environment.

We are also evaluating in a C–141 avionics test bed aircraft two other candidate

"off-the-shelf" doppler radars which can be used in lieu of the current system. One of these systems has been tested to the predicted B–1 vibration levels with no failures. We expect no adverse program impact from doppler problems.

B–1 Escape Capsule/Further Development Planned

Senator Thurmond. General Chapman, does the Air Force plan to continue to spend any money in further development of the crew escape capsule?

General Chapman. Yes, we will have some testing which we plan to accomplish on the crew capsule. The first three development aircraft have the crew capsule installed, and we are currently planning to use them in a flight test program which lasts four years and about 1100 hours. Since much of this flying is potentially hazardous in view of the nature of test flying, we must have confidence that the crew can escape from the aircraft over a wider range of speeds than we have currently tested.

It is estimated that approximately $2 million will be spent in FY 75 to complete the crew capsule development effort.

B–1 Delete Equipment to Reduce Cost/Needed Later

Senator Thurmond. General Chapman, why would the Air Force want to delete equipment now in an effort to reduce cost if there was any consideration that this equipment might be needed at a later date?

General Chapman. Our cost reduction effort was directed towards challenging the design requirements for the aircraft and its subsystems. As a part of that review, we were able to identify some equipment which is not essential to accomplish the mission of the B–1, and that equipment was deleted. We identified other equipment which is not required now, but will possibly be required at a later date. An example is the change in engine inlet from variable to fixed geometry and the associated decrease in supersonic speed. It was determined by analysis that we could accept the decrease in supersonic speed at this time considering the projected enemy threat and that we could realize cost and weight savings. However, we could not eliminate the possibility that the threat might change and the higher speed might be required at a later date. Accordingly, the maximum speed capability of the B–1 is retained with the option to modify some or all of the then existing aircraft with variable geometry actuators. In the meantime, the first three R&D aircraft will retain the variable inlets and will be tested to assure that the B–1 can perform at that maximum speed.

B–1 FY 77 Program/Engine Verification Testing/Requirement

Senator Thurmond. General Chapman, you indicate that the funds for the B–1 program FY 1977 would be used for, among other things, engine verification testing. What is required in this engine verification testing and shouldn't this testing be completed before production funding is approprated for any engine procurement?

General Chapman. The engine production verification testing is the formal test performed on a new engine prior to acceptance for production. It is the culmination of all the extensive component and system development tests that have been performed previously, and serves to verify that the engine performs as predicted under prescribed test conditions. It was previously referred to as Military Qualification Test (MQT).

In FY 1977, we are requesting funds to complete the production verification test scheduled to be finished prior to the production decision in November 1976.

ALCM as Weapon to Destroy Targets in Lieu of B–1

Senator Thurmond. General Chapman, you infer in your statement that the ALCM will enable bombers to reduce their exposure to enemy defenses but make no mention that this ALCM will be actually utilized to destroy similar targets as the B–1. Why isn't this ALCM being designed and developed to destroy the same type of targets as the B–1 where it could be considered as a weapon in lieu of the B–1?

General Chapman. The ALCM is being developed as a useful adjunct to the penetrating bomber force. The ALCM offers potential value in diluting area de-

fenses and to attack targets undefended by advanced SAMs. The Air Force does not support a pure force of ALCMs used in a stand-off mode in place of the B–1 because ALCMs are vulnerable to improved SAMs and the ALCM carrier is vulnerable to attack prior to ALCM launch. On the other hand, the B–1, with ECM, and carrying a mix of weapons including SRAM and gravity bombs with varying yields, can use a wide variety of tactics to provide high potential effectiveness against the Soviet target system and projected Soviet air defenses.

ADV Tanker/Cargo Aircraft/Development Effort Required

Senator Thurmond. What type of development effort would be required for the advanced tanker/cargo aircraft if an existing aircraft is purchased? Do all of these aircraft have sufficient fatigue and static testing already performed to satisfy Air Force requirements for useful and capable lifetime planning?

General Chapman. We do propose, in effect, to purchase an existing aircraft, a derivative of a current, wide-bodied aircraft. Our proposed development program is based upon this approach. These aircraft will have undergone fatigue and static testing on the basic airframe and we intend to take maximum advantage of this prior testing. However, some additional fatigue testing will be required as a result of the peculiar modifications (aerial refueling boom, wing-tip refueling store, additional tankage) which will be required for the tanker/cargo configuration. We are confident that these tests will provide sufficient data for useful lifetime planning.

GAU–8 Ammunition

Senator Thurmond. General Chapman, has the GAU–8 gun special ammunition been successfully tested to the requirements of the Air Force?

General Chapman. The GAU–8 special ammunition successfully passed the Critical Design Review milestone in Dec 74. It meets armor penetration performance specifications and has been fired satisfactorily in the GAU–8 gun at the full rate of fire of 4000 shots per minute.

Compare F–16 and A–10 Development Programs/Costs

Senator Thurmond. General Chapman, if both the A–10 and the F–16 are considered prototype fly-before-buy programs, then why is so much more development funding being required for this F–16 than was required for the A–10 to complete the development program?

General Chapman. The development funding of just over a billion dollars reflected in the President's FY 76 Budget was formulated prior to the Air Combat Fighter source selection and was based upon Air Force estimates of a funding level that would support a development program for either competing aircraft. Immediately following source selection, the F–16 development program estimate was approximately $700 million in then year dollars. Subsequently, refinements were incorporated in the F–16 design and a comprehensive review of the development program indicated that the number of DT&E aircraft could be reduced from fifteen to eight. This revised program, which reduced the development estimate to approximately $580 million in then year dollars, was presented at the recent F–16 DSARC and is awaiting formal OSD approval.

The remaining cost differential over the then year dollar A–10 development estimate of approximately $284 million results from the differing characteristics, flight regimes, and equipments of the two aircraft. The A–10 has a relatively simple and proven aerodynamic design with a conventional flight control system, and will operate only in the low subsonic flight regime. Additionally, the A–10 is a single-seat aircraft with only the austere avionics suite required for close air support. The F–16, on the other hand, incorporates advanced aerodynamic design and flight control technologies, and will operate throughout the subsonic, transonic, and supersonic flight regimes. Both a single and a two-seat version will be developed, and the avionics required for an effective air combat capability, in addition to ground attack features, are considerably more extensive than in the A–10. While proven, off-the-shelf avionics components will be utilized to the maximum extent possible, a new lower cost, lookdown radar will be developed in this program. These factors directly influence both the extent of development and amount of testing required and, hence, the cost of the development program.

We are convinced that our recommended F–16 program contains only the tasks absolutely essential, and that the cost will be substantially less than other recent fighter developments.

F–16/Less Funding in FY 76 If No Requirements for NATO Consortium

Senator Thurmond. General Chapman, how much less funding would be required in the FY 1976 budget request if we did not have to meet commitments that you state to the European Consortium involving development and procurement of the F–16?

General Chapman. The proposal instructions given the two competing Air Combat Fighter contractors requested they propose what they considered to be the most cost effective development and production program to the Air Force. As the Air Combat Fighter source selection was not made until mid-January 1975, the FY 76 budget request was based upon Air Force estimates of the funding level required to support either competitor. The F–16 program, which is awaiting final OSD approval, includes schedules and funding profiles based on the most cost effective program for the 650 Air Force aircraft. Should the European Consortium select the F–16, the DoD commitments will readily be accommodated within the scope of the Air Force program.

Problems on Advanced Command, Control, and Communications Equipment

Senator Thurmond. Gen. Chapman, will you please provide to the Subcommittee a statement of the development problems now being experienced by the Air Force on the command, control, and communications equipment for the AABNCP.

General Chapman. In January 1975, the Boeing Company identified a $50 million cost increase on the contract for development of the advanced Command, Control and Communications (C^3) equipment, which has a present target value of $90 million. An in-depth evaluation by the Air Force indicates that the cost increase is at least as great as had been identified by Boeing. The contractor attributes the cost increase, in part, to a difference in specification interpretation and system growth leadng to a larger job than anticipated at the time of bid. Authorized changes and escalation are said to account for the remainder of the cost increase. A review of the program is now underway in an attempt to reduce the impact of this increase.

SUBCOMMITTEE RECESS

Chairman McClellan. Thank you, gentlemen, very much. We appreciate your help and cooperation.

We will stand in recess until 2 o'clock.

[Whereupon, at 11:30 a.m., Wednesday, March 19, the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

WEDNESDAY, MARCH 19, 1975

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

The subcommittee met at 2 p.m., in room S–126, the Capitol, Hon. Milton R. Young presiding.

Present: Senators Young and McGee.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

MILITARY PERSONNEL APPROPRIATION

STATEMENT OF MAJ. GEN. OLIVER W. LEWIS, DIRECTOR OF PERSONNEL PROGRAMS, DEPUTY CHIEF OF STAFF PERSONNEL, HEADQUARTERS, U.S. AIR FORCE

ACCOMPANIED BY:

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES, HEADQUARTERS, U.S. AIR FORCE

BRIG. GEN. JACK I. POSNER, DIRECTOR OF MANPOWER AND ORGANIZATION, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES, HEADQUARTERS, U.S. AIR FORCE

COL. J. L. ASHBAKER, DEPUTY, OPERATING APPROPRIATIONS DIVISION, DIRECTORATE OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

COL. WILLIAM J. MILES, CHIEF, FORCE PROGRAM DIVISION, DIRECTORATE OF PERSONNEL PROGRAMS, HEADQUARTERS, U.S. AIR FORCE

COL. LEON S. HIRSH, CHIEF, BUDGET BRANCH, FORCE PROGRAMS DIVISION, DIRECTORATE OF PERSONNEL PROGRAMS, HEADQUARTERS, U.S. AIR FORCE

LT. COL. RICHARD L. SOMERS, ASSISTANT FOR PROGRAM COORDINATION, DIRECTORATE OF MANPOWER AND ORGANIZATION, HEADQUARTERS, U.S. AIR FORCE

LT. COL. LOUIS M. ANDERSEN, CHIEF, PROMOTIONS AND SEPARATIONS BRANCH, POLICY DIVISION, DIRECTORATE OF PERSONNEL PLANS, HEADQUARTERS, U.S. AIR FORCE

THOMAS M. VICK, CHIEF, MILITARY PERSONNEL BRANCH, OPERATING APPROPRIATIONS DIVISION, DIRECTORATE OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

BUDGET REQUEST

Senator YOUNG. The subcommittee will come to order.

This afternoon the subcommittee will receive testimony in support of fiscal year 1976 budget requests for the Air Force military personnel accounts.

The witnesses will be Maj. Gen. Oliver W. Lewis, director of personnel programs, and Brig. Gen. Jack I. Posner, director of manpower and organization.

JUSTIFICATION

Before they begin their testimony, however, I would like to have the justification inserted in the record. Without objection, they will appear at this point.

[The justification follows:]

Justification

SUMMARY OF REQUIREMENTS BY SUBACTIVITY
($ in Thousands)

1. PAY AND ALLOWANCES OF OFFICERS	FY 1974	FY 1975	FY 1976	FY 197T
Basic Pay	$1,622,118	$1,649,887	$1,609,181	$ 391,434
Incentive Pay	118,265	120,614	115,093	27,663
Special Pay	21,117	32,251	35,657	11,654
Basic Allowance for Quarters	175,468	172,354	169,833	41,633
Basic Allowance for Subsistence	65,124	65,104	62,853	15,249
Station Allowances, Overseas	14,424	14,032	13,797	3,315
Uniform Allowances	2,161	1,939	1,860	768
Family Separation Allowances	2,897	2,530	2,435	559
Separation Payments	45,910	55,385	70,882	9,452
Social Security Tax - Employer's Contribution	71,233	79,974	78,557	19,060
Missing-in-Action and Prisoners of War	12,399	10,864	9,387	2,048
Reimbursables	(10,644)	(12,055)	(13,197)	(5,361)
Total Obligations	2,151,116	2,204,934	2,169,535	522,835
Less:Reimbursements	10,644	12,055	13,197	5,361
Total Direct Obligations	$2,140,472	$2,192,879	$2,156,338	$ 517,474
2. PAY AND ALLOWANCES OF ENLISTED				
Basic Pay	$3,390,186	$3,338,248	$3,260,003	$ 792,654
Incentive Pay	16,534	16,219	16,256	4,064
Special Pay	17,057	14,576	13,072	3,156
Proficiency Pay	26,165	15,795	5,411	1,398
Reenlistment Bonus	101,693	67,738	59,592	19,392
Basic Allowance for Quarters	438,208	421,409	404,901	99,213
Station Allowances Overseas	53,124	57,553	56,403	13,539
Clothing Allowances	66,039	67,623	66,788	18,627
Family Separation Allowances	10,761	9,968	9,652	2,315
Separation Payments	119,772	117,624	102,520	21,202
Social Security Tax - Employer's Contribution	197,335	195,180	190,801	46,354
Missing-in-Action and Prisoners of War	854	780	726	181
Reimbursables	(20,798)	(22,511)	(22,594)	(6,344)
Total Obligations	4,437,728	4,322,713	4,186,125	1,022,095
Less:Reimbursements	20,798	22,511	22,594	6,344
Total Direct Obligations	$4,416,930	$4,300,202	$4,163,531	$1,015,751

SUMMARY OF REQUIREMENTS BY SUBACTIVITY
($ in Thousands)

	FY 1974	FY 1975	FY 1976	FY 197T
3. PAY AND ALLOWANCES OF CADETS				
Academy Cadets	$ 17,765	$ 20,946	$ 21,089	$ 5,797
4. SUBSISTENCE OF ENLISTED PERSONNEL				
Basic Allowance for Subsistence	$291,158	$327,785	$325,161	$ 79,961
Subsistence-in-Kind	78,506	83,550	80,594	19,473
Reimbursables	24,895	27,350	25,925	6,625
Total Obligations	394,559	438,685	431,680	106,059
Less:Reimbursements	24,895	27,350	25,925	6,625
Total Direct Obligations	$369,664	$411,335	$405,755	$ 99,434
5. PERMANENT CHANGE OF STATION TRAVEL				
Accession Travel	$ 15,288	$ 24,857	$ 25,296	$ 8,746
Training Travel	23,712	23,383	23,259	7,754
Operational Travel	60,961	62,658	101,679	25,292
Rotational Travel	348,502	333,185	392,970	111,730
Separation Travel	59,502	121,122	101,449	22,708
Travel of Organized Units	5,799	3,408	4,900	680
Total Obligations	513,764	568,613	649,553	176,910
Less:Reimbursements	165	200	200	50
Total Direct Obligations	$513,599	$568,413	$649,353	$176,860
6. OTHER MILITARY PERSONNEL COSTS				
Apprehension of Military Deserters, Absentees and Escaped Military Prisoners	$ 435	$ 372	$ 350	$ 70
Interest on Uniformed Services Savings Deposits	12,972	1,849	1,795	407
Death Gratuities	2,681	2,224	2,389	507
Servicemen's Group Life Insurance	3,993	1,736	-	-
Total Obligations	20,081	6,181	4,534	984
Less:Reimbursements	-	-	-	-
Total Direct Obligations	$ 20,081	$ 6,181	$ 4,534	$ 984

MILITARY PERSONNEL, AIR FORCE

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 Air Force on active duty (except members of reserve components provided for elsewhere), cadets, and aviation cadets; ($7,229,531,000.) $7,400,600,000

For "Military Personnel, Air Force" for the period July 1, 1976, through September 30, 1976, $1,816,300,000 (10 U.S.C. 501-09, 518-19, 555-65, 683-84, 687, 701-04, 744, 1035, 1037, 1040, 1212, 1475-80, 2421, 2632, 2634, 8012, 8033-34, 8036, 8066, 8201-15, 8281, 8284-89, 8293-8303, 8305-10, 8312-13, 8441-42, 8444-49, 8451-52, 8491, 8494-8504, 8531, 8687, 8722, 9306, 9331-37, 9341-55, 9441, 9561-63, 9621-23, 9741-43; 12 U.S.C. 1715m; 33 U.S.C. 855, 858: chs. 3, 4, 7, 9, 10, and 11 of title 37, United States Code; 49 U.S.C. 1657; 50 U.S.C. App. 2201-09, 2213-16; 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 07-05-3500-0-1-051	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:			
DIRECT PROGRAM:			
1. STRATEGIC FORCES	1,640,975	1,639,626	1,549,287
2. GENERAL PURPOSE FORCES	1,729,184	1,753,648	1,586,867
3. INTELLIGENCE AND COMMUNICATIONS	802,897	793,576	738,694
4. AIRLIFT AND SEALIFT	431,973	438,292	592,160
5. GUARD AND RESERVE	28,123	27,849	24,248
6. RESEARCH AND DEVELOPMENT	216,263	233,717	236,720
7. CENTRAL SUPPLY AND MAINTENANCE	131,100	127,332	120,205
8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	2,245,188	2,215,536	2,300,592
9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	223,377	218,755	217,470
10. SUPPORT OF OTHER NATIONS	29,431	39,956	34,357
TOTAL DIRECT PROGRAM	7,478,511	7,488,287	7,400,600
REIMBURSABLE (TOTAL)	56,502	62,116	61,916
10 TOTAL OBLIGATIONS	7,535,013	7,550,403	7,462,516
FINANCING:			
RECEIPTS AND REIMBURSEMENTS FROM:			
11 FEDERAL FUNDS	-11,306	-12,433	-12,383
13 TRUST FUNDS	-20,829	-22,911	-22,847
14 NON-FEDERAL SOURCES	-24,367	-26,772	-26,686
25 UNOBLIGATED BALANCE LAPSING	589	.....	.....
BUDGET AUTHORITY	7,479,100	7,488,287	7,400,600
BUDGET AUTHORITY:			
40 APPROPRIATION	7,479,100	7,229,531	7,400,600
44.30 PROPOSED SUPPLEMENTAL FOR MILITARY PAY RAISES	.....	258,756	.....
RELATION OF OBLIGATIONS TO OUTLAYS:			
71 OBLIGATIONS INCURRED, NET	7,478,511	7,488,287	7,400,600
72 OBLIGATED BALANCE, START OF YEAR	134,285	275,062	269,785
74 OBLIGATED BALANCE, END OF YEAR	-275,062	-269,785	-329,618
77 ADJUSTMENTS IN EXPIRED ACCOUNTS	27,851	.....	.....
90 OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	7,365,584	7,247,746	7,327,829
91.30 OUTLAYS FROM MILITARY PAY RAISE SUPPLEMENTAL	.....	245,818	12,938

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3500-0-1-051				TRANSITION
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. STRATEGIC FORCES			369,892
	2. GENERAL PURPOSE FORCES			381,394
	3. INTELLIGENCE AND COMMUNICATIONS			175,644
	4. AIRLIFT AND SEALIFT			154,329
	5. GUARD AND RESERVE			5,261
	6. RESEARCH AND DEVELOPMENT			57,756
	7. CENTRAL SUPPLY AND MAINTENANCE			28,958
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES			580,871
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES			53,841
	10. SUPPORT OF OTHER NATIONS			8,314
	TOTAL DIRECT PROGRAM			1,816,300
	REIMBURSABLE (TOTAL)			18,380
10	TOTAL OBLIGATIONS			1,834,680
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS			-3,676
13	TRUST FUNDS			-6,782
14	NON-FEDERAL SOURCES			-7,922
	BUDGET AUTHORITY			1,816,300
	BUDGET AUTHORITY:			
40	APPROPRIATION			1,816,300
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET			1,816,300
72	OBLIGATED BALANCE, START OF YEAR			329,618
74	OBLIGATED BALANCE, END OF YEAR			-328,918
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL			1,817,000

(SUPPLEMENTAL NOW REQUESTED)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3500-1-1-051	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:			
DIRECT PROGRAM:			
1. STRATEGIC FORCES	.....	2,872	.....
2. GENERAL PURPOSE FORCES	.....	3,251	.....
3. INTELLIGENCE AND COMMUNICATIONS	.....	1,473	.....
4. AIRLIFT AND SEALIFT	.....	798	.....
5. GUARD AND RESERVE	.....	40	.....
6. RESEARCH AND DEVELOPMENT	.....	233	.....
7. CENTRAL SUPPLY AND MAINTENANCE	.....	155	.....
8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	.....	2,549	.....
9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	.....	249	.....
10. SUPPORT OF OTHER NATIONS	.....	49	.....
10 TOTAL OBLIGATIONS	.....	11,669	.....
FINANCING:			
40 BUDGET AUTHORITY (PROPOSED SUPPLEMENTAL APPROPRIATION)	.....	11,669	.....
RELATION OF OBLIGATIONS TO OUTLAYS:			
71 OBLIGATIONS INCURRED, NET	.....	11,669	.....
72 OBLIGATED BALANCE, START OF YEAR	.....	.....	233
74 OBLIGATED BALANCE, END OF YEAR	.....	-233	.....
90 OUTLAYS	.....	11,436	233

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-05-3500-0-1-051	1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	5,435,932	5,416,441	5,151,326
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	1,455,390	1,448,876	1,553,956
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	156,537	174,875	185,767
22.0	TRANSPORTATION OF THINGS	329,077	367,195	415,159
25.0	OTHER SERVICES	7,416	7,957	10,274
26.0	SUPPLIES AND MATERIALS	78,506	68,870	79,934
42.0	INSURANCE CLAIMS AND INDEMNITIES	2,681	2,224	2,389
43.0	INTEREST AND DIVIDENDS	12,972	1,849	1,795
	TOTAL DIRECT OBLIGATIONS	7,478,511	7,488,287	7,400,600
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	26,057	28,761	29,129
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	5,393	5,812	6,673
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	50	61	56
22.0	TRANSPORTATION OF THINGS	106	129	130
26.0	SUPPLIES AND MATERIALS	24,896	27,353	25,928
	TOTAL REIMBURSABLE OBLIGATIONS	56,502	62,116	61,916
99.0	TOTAL OBLIGATIONS	7,535,013	7,550,403	7,462,516

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-05-3500-0-1-051	TRANSITION
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	1,271,516
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	355,212
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	51,697
22.0	TRANSPORTATION OF THINGS	114,683
25.0	OTHER SERVICES	2,789
26.0	SUPPLIES AND MATERIALS	19,489
42.0	INSURANCE CLAIMS AND INDEMNITIES	507
43.0	INTEREST AND DIVIDENDS	407
	TOTAL DIRECT OBLIGATIONS	1,816,300
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	9,726
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	1,981
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	14
22.0	TRANSPORTATION OF THINGS	33
26.0	SUPPLIES AND MATERIALS	6,626
	TOTAL REIMBURSABLE OBLIGATIONS	18,380
99.0	TOTAL OBLIGATIONS	1,834,680

(SUPPLEMENTAL NOW REQUESTED)

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3500-1-1-051	1975 EST
DIRECT OBLIGATIONS:	
26.0 SUPPLIES AND MATERIALS	11,669
TOTAL DIRECT OBLIGATIONS	11,669

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 1975	Man-Years	End Strength 30 June 1975	Man-Years	End Strength 30 June 1976	Man-Years	End Strength 30 September 1976	End Strength 30 September 1977
DIRECT PROGRAM									
Officers	113,147	110,081	108,559	104,239	103,381	99,621	24,980	98,807	98,796
Enlisted	555,747	528,587	517,588	502,068	498,320	485,072	123,062	485,445	485,430
Academy Cadets	3,890	4,412	4,220	4,417	4,138	4,417	1,138	4,211	4,240
Subtotal	672,784	643,080	630,367	610,724	605,839	589,110	149,180	588,463	588,466
REIMBURSABLE PROGRAM 1/									
Officers	199	235	247	262	296	346	174	697	694
Enlisted	394	480	545	548	533	544	210	840	840
Subtotal	593	715	792	810	829	890	384	1,537	1,534
TOTAL PROGRAM									
Officers	113,346	110,316	108,806	104,501	103,677	99,967	25,154	99,504	99,490
Enlisted	556,141	529,067	518,133	502,616	498,853	485,616	123,272	486,285	486,270
Academy Cadets	3,890	4,412	4,220	4,417	4,138	4,417	1,138	4,211	4,240
Total	673,377	643,795	631,159	611,534	606,668	590,000	149,564	590,000	590,000

1/ Military personnel assigned to agencies outside of Department of Defense on a reimbursable basis under the provisions of 10 U.S.C. 8230 (Air Force).

Military Personnel, Air Force
End Strengths by Grade 1/
(Total Program)

	30 June FY 1975	Reimbursables Included	30 June FY 1976	Reimbursables Included	30 Sep FY 197T	Reimbursables Included
Commissioned Officers						
O-10 General	13	-	13	-	13	-
O-9 Lt General	43	-	44	-	44	-
O-8 Major General	134	1	130	1	130	1
O-7 Brigadier General	191	2	188	2	188	2
O-6 Colonel	5,645	29	5,480	38	5,501	77
O-5 Lt Colonel	12,875	71	12,334	89	12,372	178
O-4 Major	20,187	83	19,368	106	19,403	217
O-3 Captain	39,650	67	38,652	91	38,208	183
O-2 1st Lieutenant	13,955	9	13,019	19	12,929	39
O-1 2nd Lieutenant	11,768	-	10,716	-	10,693	-
Total	104,461	262	99,944	346	99,481	697
Warrant Officers						
W-4 Chief Warrant Officer	40		23		23	
Total Officer Personnel	104,501	262	99,967	346	99,504	697
Enlisted Personnel						
E-9 Chief Master Sergeant	4,926	17	4,856	17	4,856	27
E-8 Senior Master Sergeant	9,851	43	9,712	43	9,712	67
E-7 Master Sergeant	34,681	248	33,993	248	33,993	382
E-6 Technical Sergeant	61,822	158	58,274	158	58,274	244
E-5 Staff Sergeant	102,433	42	94,452	39	94,452	59
E-4 Sergeant	124,900	32	122,618	31	122,618	48
E-3 Airman 1st Class	98,217	5	103,743	5	102,441	8
E-2 Airman	39,647	3	34,198	3	26,951	5
E-1 Airman Basic	26,139	-	23,770	-	32,988	-
Total	502,616	548	485,616	544	486,285	840
Total Officer and Enlisted	607,117	810	585,583	890	585,789	1,537
Cadets	4,417	-	4,417	-	4,211	-
Total End Strengths	611,534	810	590,000	890	590,000	1,537

1/ Excludes active duty personnel paid from Civil Functions, Reserve, and Guard Appropriations.

Military Personnel, Air Force
Manyears by Grade 1/
(Total Program)

	Manyears FY 1975	Reimbursables Included	Manyears FY 1976	Reimbursables Included	Manyears FY 197T	Reimbursables Included
Commissioned Officers						
0-10 General	14	-	13	-	4	-
0-9 Lt General	42	-	44	-	10	-
0-8 Major General	138	1	134	1	33	-
0-7 Brigadier General	197	2	191	2	47	1
0-6 Colonel	5,782	28	5,516	32	1,385	20
0-5 Lt Colonel	13,255	68	12,428	78	3,099	48
0-4 Major	20,908	79	19,575	92	4,860	58
0-3 Captain	40,472	61	40,480	77	9,745	40
0-2 1st Lieutenant	14,980	8	14,072	14	3,268	7
0-1 2nd Lieutenant	12,965	-	11,194	-	2,697	-
Total	108,753	247	103,647	296	25,148	174
Warrant Officers						
W-4 Chief Warrant Officer	53		30		6	
Total Officer Personnel	108,806	247	103,677	296	25,154	174
Enlisted Personnel						
E-9 Chief Master Sergeant	5,173	17	4,988	17	1,229	7
E-8 Senior Master Sergeant	10,447	42	9,967	42	2,453	17
E-7 Master Sergeant	36,972	227	34,951	243	8,583	92
E-6 Technical Sergeant	67,021	156	60,683	153	14,685	61
E-5 Staff Sergeant	110,851	53	98,941	38	23,745	18
E-4 Sergeant	128,525	39	125,828	32	30,824	12
E-3 Airman 1st Class	99,789	8	104,005	5	27,085	2
E-2 Airman	32,187	3	36,743	3	7,679	1
E-1 Airman Basic	27,168	-	22,747	-	6,989	-
Total	518,133	545	498,853	533	123,272	210
Total Officer and Enlisted	626,939	792	602,530	829	148,426	384
Cadets	4,220		4,138		1,138	
Total Manyears	631,159	792	606,668	829	149,564	384

1/ Excludes active duty military personnel paid from Civil Functions, Reserve, and Guard Appropriations.

Military Personnel, Air Force
Active Duty Strengths by Month 1/
(In Thousands)

Month	FY 1975				FY 1976				FY 197T			
	Officers	Enlisted	Cadets	Total	Officers	Enlisted	Cadets	Total	Officers	Enlisted	Cadets	Total
June	110.3	529.1	4.4	643.8	104.5	502.6	4.4	611.5	100.0	488.6	4.4	590.0
July	110.2	526.9	4.4	641.5	104.5	501.6	4.4	610.5	99.4	487.1	4.3	590.8
August	108.5	522.6	4.3	635.4	104.2	501.4	4.3	609.9	99.1	487.1	4.3	590.5
September	108.5	521.3	4.3	634.1	104.0	501.6	4.2	609.8	99.5	486.3	4.2	590.0
October	108.9	519.1	4.2	632.2	104.1	500.7	4.2	609.0				
November	108.9	516.8	4.2	629.9 2/	104.1	499.6	4.1	607.8				
December	108.7	514.7	4.2	627.6	104.0	497.4	4.1	605.5				
January	108.5	513.4	4.1	626.0	103.6	496.2	4.1	603.9				
February	108.6	511.5	4.0	624.1	103.5	495.6	4.0	603.1				
March	108.5	509.5	4.0	622.0	103.5	494.2	4.0	601.7				
April	108.2	507.7	4.0	619.9	103.5	491.6	3.9	599.0				
May	108.0	505.2	3.9	617.1	103.3	487.5	3.9	594.7				
June	104.5	502.6	4.4	611.5	100.0	485.6	4.4	590.0				
Average	108.8	518.1	4.2	631.1	103.7	498.9	4.1	606.7	25.2	123.3	1.1	149.6

1/ Includes reimbursable active duty military pay strength, but excludes active duty military personnel paid from Civil Functions, Reserve, and National Guard Appropriations.

2/ Actual data through 30 November 1974.

SUMMARY OF REQUIREMENTS BY BUDGET PROGRAM
(In Thousands of Dollars)

Title (1)	FY 1974 Actual (2)	FY 1975 Estimate (3)	FY 1976 Estimate (4)	FY 197T Estimate (5)
DIRECT PROGRAM				
Pay and Allowances of Officers	$2,140,472	$2,192,879	$2,156,338	$ 517,474
Pay and Allowances of Enlisted	4,416,930	4,300,202	4,163,531	1,015,751
Pay and Allowances of Cadets	17,765	20,946	21,089	5,797
Subsistence of Enlisted Personnel	369,664	411,335	405,755	99,434
Permanent Change of Station Travel	513,599	568,413	649,353	176,860
Other Military Personnel Costs	20,081	6,181	4,534	984
Total Direct Program	7,478,511	7,499,956	7,400,600	1,816,300
REIMBURSABLE PROGRAM				
Pay and Allowances of Officers	10,644	12,055	13,197	5,361
Pay and Allowances of Enlisted	20,798	22,511	22,594	6,344
Subsistence of Enlisted Personnel	24,895	27,350	25,925	6,625
Permanent Change of Station Travel	165	200	200	50
Total Reimbursable Program	56,502	62,116	61,916	18,380
TOTAL PROGRAM				
Pay and Allowances of Officers	2,151,116	2,204,934	2,169,535	522,835
Pay and Allowances of Enlisted	4,437,728	4,322,713	4,186,125	1,022,095
Pay and Allowances of Cadets	17,765	20,946	21,089	5,797
Subsistence of Enlisted Personnel	394,559	438,685	431,680	106,059
Permanent Change of Station Travel	513,764	568,613	649,553	176,910
Other Military Personnel Costs	20,081	6,181	4,534	984
Total Obligations	$7,535,013	$7,562,072	$7,462,516	$1,834,680

SCHEDULE OF INCREASES AND DECREASES
(In Thousands of Dollars)

		Amount
FY 1975 Direct Program		$7,499,956
Increases:		
Full year effect of 1 October 1974 pay raise	+ 74,731	
Increased PCS travel, transportation, and storage costs	+ 80,940	
Total Increases		+ 155,671
Decreases:		
Decreased entitlements and allowances	- 13,228	
Strength and grade changes	-221,772	
Decreased accession, separation and reenlistment expenses	- 13,132	
Full year effect of ration rate change	- 5,248	
Net miscellaneous other expenses	- 1,647	
Total Decreases		- 255,027
FY 1976 Direct Program		$7,400,600

Schedule of Increases and Decreases
(In Thousands of Dollars)

1. Pay and Allowances of Officers		Amount
FY 1975 Program		$2,192,879
Increases:		
Full year effect of 1 October 1974 pay raise	+26,768	
Grade structure and longevity changes	+16,792	
Increased promotion passovers	+ 550	
Increased early releases	+13,756	
Total Increases		+ 57,866
Decreases:		
Reduced strength	-92,008	
Reduced accession/separation costs	- 1,984	
Reduced manyears drawing overseas allowances	- 415	
Total Decreases		- 94,407
FY 1976 Program		$2,156,338

INTRODUCTION OF WITNESS

Senator YOUNG. General Lewis will be the first witness.

I want to welcome you to this committee, General.

General LEWIS. Thank you, sir.

Senator YOUNG. Do you have a written statement?

General LEWIS. Sir, I have a long statement that I would request to submit for the record and a short summary which I would like to cover and talk to as we go through consisting of about six pages.

Senator YOUNG. The material will be inserted at the conclusion of your prepared remarks. Will you proceed, please.

General LEWIS. Mr. Chairman, for the third consecutive year it is my privilege to present the Air Force military personnel appropriation request. I will follow essentially the same format as in my previous years' presentations.

On my right is Brig. Gen. Jack I. Posner, director of manpower and organization. On my left is Maj. Gen. Abbott C. Greenleaf, director of programs. On my far right is Col. J. L. Ashbaker representing the director of budget.

AIR FORCE PERSONNEL PLANNING

To begin, I would like to quote the words of the Air Force Chief of Staff in his statement before the Armed Services Committee as they drive our personnel effort. General Jones stated:

> We are proud of our all-volunteer record and of our reputation for good management and sensitive leadership; we are even more proud of the quality of the young men and women joining the Air Force.

Our continuing personnel task is to attract and retain the highest quality people at the least possible cost to insure the highest possible state of combat readiness. We approach this in a systematic manner through the use of the USAF Personnel Plan, a document which prescribes the Air Force approach to total force personnel management. Its focus is twofold: first, qualitative objectives for all segments of the force—officer, enlisted, civilian, and Reserve forces—providing broad direction for action, both short term and long term; and second, quantified objective force structures against which impact of internal policies and external influences can be measured. This plan constitutes the basic building block for all our efforts.

Notwithstanding the turbulence associated with continuing strength reductions, we believe we have been successful in sustaining high morale, motivation, and career intent. This comment is not based upon any sophisticated technique employed to measure these essentially intangible factors but rather on assessment of organizational effectiveness as measured by our continuing capability to perform the mission. This does not imply we can maintain this capability in the face of continued significant strength reductions. We need a period of relative stability in order to sustain readiness levels and adjust to the 35 percent reduction in total military force size we will have experienced since fiscal year 1968.

FISCAL YEAR 1976 REQUEST

Mr. Chairman, my next few remarks are not printed there but what we are requesting in the 1976 budget is support of 590,000 military which represents 21,534 less people than what we will have at the end of this fiscal year.

With that brief introduction I will now discuss the highlights of our military personnel appropriation request as they are broken out and presented in the 1976 fiscal budget.

The fiscal year 1976 budget request is based on the orderly achievement of an officer end-strength of 99,967, a decrease of 4,534 from the programed end fiscal year 1975 position. This is a 4.3 percent change from the previous year, a 28.4 percent reduction since fiscal year 1968 and a 25.1 percent reduction since the pre-Southeast Asian buildup of 1964. This is the largest percentage reduction of any service since fiscal year 1964 and represents the lowest level of officer strength since the pre-Korean conflict level in fiscal year 1950. The 197T programed officer strength is 99,504.

We estimate $2,156,338,000 will be required for the fiscal year 1976 officer program. The 197T request is $517,474,000.

Officer accessions for fiscal year 1976 have been programed at the lowest level since fiscal year 1959 to reduce end-strengths and to minimize required reduction-in-force (RIF) actions. The number of accession reductions from the original fiscal year 1976 program is 2,296. Of the 7,735 remaining accessions—these are new people, sir, being brought into the Air Force—5,063 line officers are considered absolutely essential to insure combat readiness since the majority of these are devoted to meeting flying training and critical skill requirements. The other 2,672 are necessary to man the specialist areas—such as legal, doctors, and chaplains—with the largest portion going to the medical skills where significant procurement shortfalls have occurred during the past 2 years.

Senator YOUNG. Could I interrupt?

General LEWIS. Yes.

Senator YOUNG. Off the record.

[Discussion off the record.]

Senator YOUNG. Proceed.

General LEWIS. All right, sir.

PROGRAMS FOR MEDICAL PERSONNEL

My last comments were that we had experienced considerable shortfalls in medical skills during the past 2 years.

Senator YOUNG. Pardon me, General Lewis. I have a question in that regard. What are you doing about doctors? One of the other services indicated that they expect to meet this shortfall by helping a student through medical school, after which he is obligated to serve a designated period of time. Do you have that kind of program?

General LEWIS. Yes. That is provided for under H.R. 2, which is a medical scholarship program for a total of, I think, $1,500 plus a year. We award a scholarship. After completion they will be re-

quired to serve 2 to 4 years, and of course all services will draw from this pool of candidates. That program is meeting with very good success. The quotas are all filled and it is estimated that out in the 1979 time frame that will be the primary source of all new doctors coming into the services and of course it is expected to alleviate the shortages.

In the meantime for the Air Force to get by these critical years in which we are experiencing a shortage, we have relied upon trained physicians' assistants. These are medical corpsmen who can be trained up to a certain qualification for service to patients, thereby relieving the doctor of some of his chores in order to let him take care of the more serious cases. That is how we are making it through these 2 years.

Senator YOUNG. Do you have patients use other than military facilities—I know you have some. How much do the other facilities provide?

CHAMPUS PROGRAM

General LEWIS. The program that relieves the service, Senator, is the CHAMPUS program and that is based upon what is available. In other words, if the service is available, it is provided; if it is not, then CHAMPUS is.

Senator YOUNG. Do you use very much of that money?

General LEWIS. Yes, sir, and I can provide you for the record the total. I don't have those numbers offhand of the patients, Senator, accommodated through the CHAMPUS program but I can provide that.

Senator YOUNG. That also includes your retired personnel?

General LEWIS. That is correct, sir.

[The information follows:]

COST OF CHAMPUS/NUMBERS OF PATIENTS

The following is the cost of the Air Force's portion of the CHAMPUS:

Fiscal year:	
1973	$165,563,000
1974	181,893,000
1975	194,910,000

The CHAMPUS was transferred from the services to OSD by Congressional action effective FY 1975. The FY 1975 figure represents the amount of money transferred from the Air Force to OSD. The predominant cost of CHAMPUS is derived from inpatient care.

The following is the average daily inpatient load of Air Force beneficiaries in civilian facilities utilizing CHAMPUS:

	Fiscal year—		
	1973	1974	1975
Dependents of active duty military personnel	1,867	1,721	1,570
Retired military personnel	341	409	430
Dependents of retired and deceased military personnel	1,474	1,564	1,600
Total	3,682	3,694	3,600

Senator YOUNG. Proceed.

General LEWIS. In addition to reducing accession programs the Air Force had to simultaneously resort to expanded voluntary and involuntary loss management programs. For example, in fiscal year 1975, the Air Force continued to relax active duty service releases. The Air Force was also forced to involuntarily separate personnel scheduled for normal release in fiscal year 1976 and RIF approximately 1,100 career reserve officers. Because our fiscal-year-1974 and fiscal-year-1975 force reduction programs have borrowed from future year voluntary loss sources, increasingly larger numbers of involuntary actions will be required in fiscal year 1976 and beyond. We are now in a situation where we must RIF officers in direct proportion to any added reduction-in-force size.

Senator YOUNG. Let me ask a question please. Do you have a surplus of fighter pilots?

General LEWIS. That is correct, sir. We have at the moment a surplus of pilots and of course that has been generated by the end of the hostilities in South Vietnam, changing requirements over the last 2 years and projected out ahead. The surplus for fiscal year 1976 would be 2,614 and that is based on decreasing requirements. In view of that, we have also included some pilots in the reduction-in-force that I am talking about—primarily those who have elected not to be a career officer anyway and those that are based on quality considerations.

Now because we have this surplus we have also reduced training, starting back in fiscal year 1974. In other words, we don't want to keep adding to the surplus. What we have now in our training, Senator, is a program that in the 1978–79 time period will allow those people in the inventory to equal the requirements.

Senator YOUNG. Let me give you one case that came to my attention recently. A young man is an Air Force pilot in Germany. He is obligated to serve for 6 years, I believe, and he has about 2½ years left. If he wanted to transfer to the Air National Guard, is he the kind of person you want to keep, or would he be able to get out?

General LEWIS. He would be able to get out. He would have two courses of action open to him. If he has the skills that the Guard or Reserve needs, either one would be pleased to have him—and if he is a fighter pilot, I am sure they would. This is what we call the Palace Chase program where he could go to a Reserve or Guard unit in reserve status and fly as his time would permit. So he has a career he could follow either in the Reserve or Guard.

Senator YOUNG. I think he wants to stay in; he likes the flight program.

General LEWIS. All right, sir.

In fiscal year 1975 the Air Force is promoting at 57 percent of the fiscal year 1974 field-grade-officer promotion rate. This adjustment results from the large strength reduction sustained in the current fiscal year as well as management initiatives taken to move toward the promotion guidelines established in the Defense Officer Personnel

Management Act (DOPMA) which was designed to provide permanent and equitable grade authorizations for all services. It is significant to note that while the officer force has been reduced by 28.4 percent over the period shown, the corresponding field-grade-officer reduction is 30 percent compared with a company-grade-officer reduction of 26 percent. In other words, sir, as the force has come down the field-grade-officer reduction has exceeded the total reduction.

The rated requirements in the Air Force have been decreasing as our force structure has declined. This refers to pilots and navigators, sir. The revised requirements have resulted in a near-term overage of rated officers in the Active Force. To correct this inventory imbalance, the Air Force has reduced its pilot production in fiscal year 1976, as I referred to earlier, as we did in 1975 and also in 1974.

RECALL OF RESERVE PILOTS

Senator YOUNG. In case of an emergency, about how many pilots would you be able to call up?

General LEWIS. Well, sir, the first priority would be those that are already trained and can be brought to bear in the contingency or emergency—that would be primarily the Guard and the Reserve. Then from that point we could go and find those people who still had a skill or that could be retrained, and they are in the Inactive Reserve. I don't know offhand the total number of pilots that are out there in the Inactive Reserve.

[The information follows:]

PILOTS IN INACTIVE RESERVE

There are 2381 pilots in the Individual Ready Reserve (IRR). Of these 2381 pilots, 1266 have not flown since 1971 or earlier and it is questionable as to whether they can be counted as a viable resource. The 1115 listed as having flown since 1972 or as current pilots have varying degrees of usefulness. Based on the foregoing assumptions, the usable IRR pilot inventory does not exceed 1000 pilots and may be as low as 700.

END STRENGTH OF GUARD

Senator YOUNG. Do you have an equal number of units and personnel in the Reserve as in the Air National Guard?

General GREENLEAF. We have 91 flying units in the Air National Guard and 53 flying units in the Air Force Reserve. The number of pilots per unit is the function of the equipage.

General LEWIS. The end strength, and I will just use round figures, of the Guard, is 95,000 people. All of those, of course, are not crew members but include support and maintenance personnel. The strength of the Reserve is 53,000 and likewise those units are manned to do their job, they are not quite fully manned. They likewise include maintenance, crew members and so forth as required. That would be the first group of people that you could recall in your contingency.

Now in the Inactive Reserve, the Reserve Military Personnel Center maintains all their files—from there on, Mr. Chairman, it would be a matter of screening the records, finding out who is out there that has a skill that you could use the quickest and recalling them on an individual basis.

Senator McGee [presiding.] Do you want to put the rest of your statement in the record?

General Lewis. At your pleasure, Mr. Chairman. We can put the complete prepared statement into the record at this point, and then proceed with questions if that is what you desire.

Senator McGee. That is what I prefer, unless you have some major point that you need to make yet.

General Lewis. Sir, at your pleasure.

Senator McGee. Senator Young, do you have any questions

Senator Young. No. I just want to commend the Air Force for reducing their personnel by such a large amount. It can be pretty hard on officers who are not ready to retire.

General Lewis. Yes; it is. The Air Force has operated throughout the phase down in strength from Southeast Asia with consideration for people in mind. In other words, we have continually adjusted the new people coming in, and are still adjusting our accession rates to try to avoid having a reduction in force wherever possible because it is a very disruptive thing and creates turbulence in the force. Certainly we would rather not have to do that but on the other hand when you have a strength that requires you to get down to certain numbers, you really can't avoid it. We are trying to do it on a gradual and a phased basis using quality as a base for such reductions.

PREPARED STATEMENTS

Senator McGee. If it is agreeable, we will put your full statement in the record and General Posner's biographical sketch and prepared statement also.

General Lewis. Yes, sir.

[The statements follow:]

STATEMENT OF MAJOR GENERAL OLIVER W. LEWIS

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

For the third consecutive year, it is my privilege to present the Air Force Military Personnel Appropriation request. I will follow essentially the same format as in my previous years' presentations. I will describe the personnel management task and then address in detail the individual budget programs and items of special interest.

To begin, I would like to quote the words of the Air Force Chief of Staff, in his statement before the Armed Services Committees, as they drive our personnel effort. General Jones stated: "We are proud of our all-volunteer record and of our reputation for good management and sensitive leadership; we are even more proud of the quality of the young men and women joining the Air Force."

Our continuing personnel task is to attract and retain the highest quality people at the least possible cost to insure the highest possible state of combat readiness. We approach this in a systematic manner through the use of the USAF Personnel Plan, a document which prescribes the Air Force approach to total force personnel management. It's focus is twofold: first, qualitative objectives for all segments of the force - officer, enlisted, civilian and reserve forces - providing broad direction for action, both short-term and long-term; and second, quantified objective force structures against which impact of internal policies and external influences can be measured. This plan constitutes the basic building block for all our efforts.

We have had excellent success in meeting planned enlisted nonprior service recruiting goals and the young men and women we have acquired are of high quality. This success

has been achieved in spite of the personnel turbulence associated with continued significant enlisted strength reductions. Reducing the size of the enlisted force can be accomplished with relative efficiency due to the large number of first termers.

However, in the officer area the turbulence problem has been made worse because of the difficulty in adjusting long lead time procurement sources and lengthy training programs (such as pilot training) to large reductions in strength required over very short periods of time. Additionally, the officer force poses difficult problems associated with large numbers of tenured careerists.

Specifically, reductions-in-force (RIF) of over 1500 Reserve officers from active duty occurred in fiscal years 1974 and 1975, and an even larger number is expected in fiscal year 1976. In an effort to minimize these reduction-in-force actions and to accommodate the lower flying training rates, we have reduced our officer procurement by over 1,500 from that proposed in the President's Budget for fiscal year 1975. Furthermore, the originally planned fiscal year 1976 accessions program has been reduced by nearly 2,300. I will discuss these actions in more detail later in my statement.

Notwithstanding the turbulence associated with continuing strength reductions, we believe we have been successful in sustaining high morale, motivation, and career intent. This comment is not based upon any sophisticated technique employed to measure these essentially intangible factors, but rather on assessment of organizational effectiveness as measured by our continuing capability to perform the mission. This does not imply we can maintain this cap-

ability in the face of continued significant strength reductions. We need a period of relative stability in order to sustain readiness levels and adjust to the 35% reduction in total military force size we will have experienced over the eight year period since fiscal year 1968.

In providing program specifics, data on fiscal year 1976 and 197T will be displayed in various tables; however, I will key on fiscal year 1976 data as the base line for discussing annual trend projections.

With that brief introduction I will now turn to the Officer Program.

OFFICER PROGRAM

Before outlining the details of the officer program and the required funding, I would like to present in Table I some specific facts about the officer force.

TABLE I
OFFICER FORCE CHARACTERISTICS

- 63% Captains or below
- 42% Under 30 years of age
- 37% Under 5 years of service
- 91% College graduates
- 55% Regular Officers
- 44% Pilot/Navigator
- 4.5% Women
- 3.1% Minorities
- 81% With Dependents

Contrasting these figures with those of fiscal year 1974, the trend is toward a slightly older force. The proportion of officers over 30 years of age has increased by four percentage points as a result of drastically reduced officer accession programs. The percentages of women and minorities have increased by .5 and .4 percentage points respectively as a result of continued efforts to move toward our women and minority representation objectives.

Strength and Funding

The fiscal year 1976 budget request is based on the orderly achievement of an officer end strength of 99,967, a decrease of 4,534 from the programmed end fiscal year 1975 position. This is a 4.3 percent change from the previous year, a 28.4 percent reduction since fiscal year 1968 and a 25.1 percent reduction since the pre-Southeast Asian buildup of 1964. This is the largest percentage reduction of any Service since fiscal year 1964 and represents the lowest level of officer strength since the pre-Korean conflict level in fiscal year 1950. The 197T programmed officer strength is 99,504.

We estimate $2,156,338,000 will be required for the fiscal year 1976 officer program. Although the cost factors that go into the determination of officer pay and allowances continue to rise, the reduced manyears associated with end strength reductions result in a net decrease of $36,541,000 from the current year's programmed funding level. The 197T request is $517,474,000.

Accessions

Officer accessions for fiscal year 1976 have been programmed at the lowest level since fiscal year 1959 to reduce end strengths, and to minimize required reduction-in-force (RIF) actions. The number of accession reductions from the original fiscal year 1976 program is 2,296. Of the 7,735 remaining accessions, 5,063 line officers are considered absolutely essential to insure combat readiness since the majority of these are devoted to meeting flying training and critical skill requirements. The other 2,672 are necessary to man the specialist areas, such as legal and

chaplain, with the largest portion going to the medical skills where significant procurement shortfalls have occurred during the past two years. In developing the fiscal year 1976 accession program, the Air Force has continued to employ its long lead time sources, the Air Force Academy and the Reserve Officer Training Corps (ROTC), to meet its basic officer input requirements. We are also using our short lead time source, the Officer Training School (OTS), to adjust to out-of-cycle fluctuations in force requirements. However, OTS accessions have been reduced by over 1,000 since fiscal year 1974. Those remaining in the program are needed to fill flying training and technical/scientific requirements and also to provide commissioning opportunities for promising young enlisted members. Table II shows the officer accessions by source for fiscal years 1974 - 197T. With the exception of the direct appointment/other line in the table the accessions shown are officers who are on initial tours of active duty.

TABLE II
OFFICER ACCESSIONS
FY 1974 to 197T

	FISCAL YEAR			
SOURCE	1974 ACTUAL	1975 ESTIMATE	1976 ESTIMATE	197T ESTIMATE
Academy	814	758	950	-
AFROTC	3,251	2,850	2,941	1,000
OTS	2,279	1,755	1,266	577
Direct Appointment/ Other	2,754	2,672	2,578	1,255
TOTAL	9,098	8,035	7,735	2,832

WOMEN ACCESSIONS

The Air Force continues to provide numerous opportunities for women to serve throughout the officer force. In this context, jobs in all career fields, except those precluded by law are open to women. With the recent redistribution of AFROTC scholarships, more opportunities in the technical/scientific career fields will be open to women line officers than ever before. We are also continuing to attain a wider distribution of women in most career areas. In fiscal year 1974, the number of Air Force women line officers increased by 20 percent. We expect an increase of at least 15 percent in fiscal year 1975 and another 10 percent in fiscal year 1976.

By the end of fiscal year 1978 we plan to nearly double the number of women line officers we had in fiscal year 1974, and we have established accession objectives for each year to help us reach this goal. The accession objectives are based upon a percentage of total nonrated line officer accessions and are shown in Table III. It should be noted that the numbers of women we access could fluctuate with nonrated line officer accession adjustments. However, we are confident that with continued favorable trends in recruiting and limited fluctuations in the nonrated accessions programs upon which the women procurement objectives are based, we will achieve these goals.

TABLE III
WOMEN LINE OFFICER ACCESSIONS
FY 1975 to 1978

	FISCAL YEAR				
	1975	1976	197T	1977	1978
Officers	415*	18% (420)	97*	20% (572)	21% (600)

*Changes to percentage objective effective fiscal year 1976. Fiscal 197T percentage not meaningful.

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Loss Management

The officer force has been reduced at a rate of between four and five percent per year since fiscal year 1968, which as I previously stated is a 28.4 percent overall reduction through fiscal year 1976. To achieve these reductions, it has been necessary for the Air Force to reduce its accession programs and simultaneously resort to expanded voluntary and involuntary loss management programs. For example, in fiscal year 1975, the Air Force continued to relax active duty service commitment policies in order to induce voluntary early releases. In addition, the Air Force was forced to involuntarily separate personnel scheduled for normal release in fiscal year 1976, and RIF approximately 1,100 career reserve officers.

In order to achieve the 4,534 officer reduction in fiscal year 1976, it will again be necessary for the Air Force to complement reduced accessions with similar loss management actions, including the involuntary separation (RIF) of approximately 2,100 career reserve officers.

Table IV highlights the officer loss programs for fiscal years 1975 to 197T. It should be noted that the combination of reduced accessions coupled with liberal use of voluntary separation programs have reduced the yields available from this resource. Because our fiscal year 1974 and fiscal year 1975 force reduction programs have borrowed from future year voluntary loss sources, increasingly larger numbers of involuntary actions will be required in fiscal year 1976 and beyond. We are now in a situation where we must RIF officers in direct proportion to any added reduction-in-force size.

TABLE IV
OFFICER LOSS PROGRAM
FY 1975 to 197T

	FISCAL YEAR		
	1975	1976	197T
Contract and Obligation Termination	2,574	1,555	740
Separation of Career Reserves	520	706	122
Retirements (over 20 years)	3,767	3,137	867
Attrition	622	634	276
Disability Separation	80	55	20
Promotion Passovers	763	797	80
Separation/Retirement of Medical Officers	2,286	2,117	1,190
Early Release	2,110	1,180	-
Involuntary Separation (RIF)	1,100	2,088	-
Loss Adjustments	28	-	-
TOTAL	13,850	12,269	3,295

RETIREMENTS

The budget is based on an estimate of 3,348 officer retirements for fiscal year 1976. This includes 2,137 line and 211 medical officers. Although some of these are mandatory as a result of statutes and policy, the greater portion are voluntary. As indicated in Table V officer retirements are showing a downward trend. The estimate for fiscal year 1976 represents a 25% decrease from fiscal year 1974.

TABLE V
RETIREMENTS
FY 1974 - 197T

		FISCAL YEAR		
	Actual	Projected		
	1974	1975	1976	197T
Officer Retirements	4,459	3,978	3,348	987

Promotions

Providing a viable promotion program for officers continues to be a major objective in officer force management. The Officer Grade Limitation Act (OGLA) as amended by P.L. 93-397 serves as the statutory basis for Air Force officer promotion programs. In fiscal year 1975 the Air Force is promoting at 57% of the fiscal year 1974 field grade officer promotion rate. This adjustment results from the large strength reduction sustained in the current fiscal year as well as management initiatives taken to move toward the promotion guidelines established in the Defense Officer Personnel Management Act (DOPMA) which was designed to provide permanent and equitable grade authorizations for all Services. The results of these initiatives are reflected in the fiscal year 1976 promotion program which more closely tracks to DOPMA selection opportunities and promotion points. Table VI portrays promotion opportunities and promotion points for Air Force field grade officers programmed for fiscal year 1976.

TABLE VI
PROMOTION OPPORTUNITY/PROMOTION POINTS

GRADE	% Opportunity	Promotion Points
Colonel	50%	22nd year
Lt Colonel	70%	17th year
Major	80%	12th year

Table VII provides a comparison of grade structures since fiscal year 1968. It is significant to note that while the officer force has been reduced by 28.4% over the period shown, the corresponding field grade officer reduction is 30% compared with a company grade officer reduction of 26%.

TABLE VII
OFFICER GRADE STRUCTURE
BUDGET CHARGEABLE END STRENGTHS

	Fiscal Year					Net Change	
GRADES	1968	1974	1975	1976	197T	68-76	75-76
Gen	440	383	381	375	375	- 65	- 6
Col	6,611	6,009	5,645	5,480	5,501	- 1,131	- 165
Lt Col	16,920	13,834	12,875	12,334	12,372	- 4,586	- 541
Maj	29,920	21,677	20,187	19,368	19,403	-10,552	- 819
Capt	47,725	40,629	39,650	38,652	38,208	- 9,073	- 998
1st Lt	15,382	14,029	13,955	13,019	12,929	- 2,363	- 936
2nd Lt	21,235	13,688	11,768	10,716	10,693	-10,519	-1,052
Warrant	1,367	67	40	23	23	- 1,344	- 17
TOTAL	139,600	110,316	104,501	99,967	99,504	-39,633	-4,534

Rated Requirements and Inventories

The rated requirements in the Air Force have been decreasing as our force structure has declined. The revised requirements have resulted in a near term overage of rated officers in the active force. Table VIII compares the rated requirements and inventory for fiscal years 1974 through 197T.

TABLE VIII
RATED REQUIREMENTS VERSUS INVENTORY
FY 1974 to 197T
(Lt Col & Below)

	Fiscal Year			
	1974	1975	1976	197T
Pilots				
Requirements	28,514	26,639	24,257	24,271
Inventory	31,158	29,092	26,871	26,583
Difference	+2,644	+2,453	+2,614	+2,312
Navigators				
Requirements	14,460	13,917	11,981	11,981
Inventory	13,185	12,901	12,712	12,606
Difference	-1,275	-1,016	+ 713	+ 625

To correct this inventory imbalance, the Air Force has reduced its pilot production in fiscal year 1976. The reduced production, coupled with normal losses, will nearly balance the inventory with requirements by the end of fiscal year 1978. In the next five years, the Air Force will lose 48 percent of today's pilot and navigator inventory. These losses are primarily due to young officers separating from the service upon completion of their active duty service commitments and the retirement of senior officers at the completion of their military careers. Table IX displays the historical and projected gains and losses to the rated force.

TABLE IX
PILOT/NAVIGATOR INPUTS AND LOSSES
FY 1970 to 197T

	Fiscal Year							
	1970	1971	1972	1973	1974	1975	1976	197T
Pilots								
Production	3,521	3,895	4,032	3,033	2,167	1,936	1,800	450
Losses	4,016	5,545	3,921	5,056	4,180	4,002	4,021	738
Navigators								
Production	956	1,037	1,324	1,351	1,356	1,250	900	225
Losses	2,077	1,461	1,516	1,850	1,907	1,534	1,089	331

As you will note, the losses from the rated inventory have exceeded the training gains in every year except fiscal year 1972. As the inventory losses continue to exceed production, the available inventory will fall below projected requirements for fiscal years 1979 and beyond. These trends are continuously evaluated and appropriate adjustments are made to the training rates.

Retention

We are retaining, for entry into the career force, all of the nonrated officers we need. We are also experiencing higher rated officer retention to offset earlier retention shortfalls. Compared with a retention rate objective of 52.3 percent for pilots at the eight year aviation service point, we are currently projecting a 56.4 percent retention rate for fiscal year 1975.

I will now cover the Enlisted Program.

ENLISTED PROGRAM

The enlisted force characteristics shown in Table X reveal the changing complexion of the enlisted force since the all-volunteer force was initiated.

TABLE X
ENLISTED FORCE CHARACTERISTICS

Category	FY 1972	FY 1976
Sgt (E-4) or below	53%	59%
30 years of age & under	70%	72%
21 years of age & under	29%	31%
With Dependents (Total)	62.5%	63%
Sgt (E-4) with Dependents	44%	52%
Amn First Class (E-3) with Dependents	29%	36%
High School Grads (excludes GED)	89%	91%
College Grads	3%	2%
Women	2%	6%
Minorities	13.4%	15.6%
Average Grade	4.48	4.27
Average years of Service	7.1	6.9

As the Table reveals, the enlisted force is getting younger, and differs in several respects from the force in the draft era. It is especially important to note that an increased percentage of the current enlisted force is married with dependents, is under age 21, and serves in pay grade E-4 or below.

STRENGTHS AND FUNDING

The projected end fiscal year 1976 Air Force enlisted strength of 485,616 reflects a decrease of 17,000 from the end fiscal year 1975 planned strength of 502,616. A strength of 486,285 is projected for 197T. During the past eight years, Air Force enlisted strength reductions have totalled approximately 276,000 resulting in a fiscal year 1976 programmed strength level which is the lowest since fiscal year 1950.

A total of $4,163,531,000 is required for the fiscal year 1976 enlisted program. This is a decrease of $136,671,000 from fiscal year 1975, due primarily to these reduced strengths. The request for 197T is $1,015,751,000.

ACCESSIONS

We plan to access a total of 81,521 enlisted personnel in fiscal year 1976. The programmed nonprior service recruiting objective for men and women is 75,000 which is about the same level as the fiscal year 1974 and 1975 levels of 73,754 and 74,155 respectively. In addition, we also plan to access 5,000 personnel with prior military service, 844 people to enter our Officer Commissioning Programs, and 677 individuals in other programs such as Reserve/Guard recalls and the USAF Academy Preparatory School. A total of 27,728 accessions consisting of 24,673 non-prior service men and women; 2,250 people with prior military service; 483 Officer

Candidates; and 322 in other programs will be required in 197T.

These programmed accession levels are a function of losses and strength ceilings as shown in Table XI.

TABLE XI
PROGRAMMED ACCESSIONS

Category	FY 1975	FY 1976	FY 197T
Beginning Strength	529,067	502,616	485,616
(Minus) Losses	105,279	98,521	27,059
Remainder	423,788	404,095	458,557
End Strength	502,616	485,616	486,285
(Minus) Remainder	423,788	404,095	458,557
Accessions	78,828	81,521	27,728

The non-prior service accession program for fiscal year 1976 reflects our continuing management emphasis to stabilize the annual non-prior service input in order to avoid costly fluctuations in recruiting and training programs.

Table XII provides an update of the major quality indicators of non-prior service accessions.

I will discuss our recruiting progress in a later section of my statement.

TABLE XII
QUALITY INDICATORS OF NON-PRIOR SERVICE ACCESSIONS (MALE & FEMALE)

FY 1973	High School*	Non-High School	Mental Groups I/II	Mental Groups III	Mental Groups IV
Jul-Sep	26,098	2,666	12,776	14,805	1,183
Oct-Dec	19,570	2,797	10,673	10,706	988
Jan-Mar	18,506	3,052	10,397	10,199	962
Apr-Jun	18,381	2,847	9,469	11,230	529
TOTAL	82,555	11,362	43,315	46,940	3,662
FY 1974					
Jul-Sep	20,208	868	8,512	10,069	145**
Oct-Dec	14,671	993	6,330	7,573	108**
Jan-Mar	17,798	1,496	8,735	10,469	90***
Apr-Jun	16,880	840	7,601	10,039	80***
TOTAL	69,557	4,197	31,178	38,150	423*****
FY 1975					
Jul-Sep	19,516****	1,957	9,005	12,370	98
Oct-Dec	15,209****	921	6,999	9,055	76

*Includes General Education Development Certifications

**Includes male NPS only-female data not available by mental category

***Includes male and female NPS

****Excludes Non-State certified General Education Development Certifications

*****Totals of High School/Non-High do not equal mental groups due to lack of female data

RETENTION

Retention of high quality personnel continues to be a major personnel management objective. In furtherance of this goal, on July 1974, the Air Force implemented an innovative management system known as the Career Airman Reenlistment Reservation System (CAREERS). CAREERS is designed to permit management officials to meet qualitative and quantitative annual career force entry objectives.

Annual CAREERS objectives total approximately 19,000 and a specific objective is established for each Air Force specialty. First term airmen are reenlisted against these validated career force objectives. If a requirement exists, quality first term airmen may reenlist in either a skill in which currently qualified, or they are encouraged to voluntarily retrain into another required skill for which shortages are projected. We are currently refining CAREERS procedures and feel that this innovation will insure that our long range enlisted force structure objectives are met. In addition, CAREERS will enable us to apply available monetary incentives at the minimum essential rate and only to those skills absolutely requiring such incentives.

MONETARY INCENTIVES

The Selective Reenlistment Bonus (SRB) Program enacted by the Congress during calendar year 1974 will be helpful in meeting our retention objectives. The budget before you requests a total of $9.8 million for SRB payments which is a reduction of $18.4 million from the $28.2 million approved by the Congress for fiscal year 1975. This is due to improved retention and a shift to payments on an installment rather than a lump sum basis. We feel that this reduction is feasible based on projected retention given the current state of the national economy; however, this should not be construed to indicate that requirements will continue to decline in future years.

In acting on the fiscal year 1975 Military Personnel Appropriation, the Congress reduced the Air Force request for Superior Performance Proficiency Pay by nearly 50% and directed that the program be phased out by the end of fiscal year 1976. The request before you reflects that the Air

Force Superior Performance Proficiency Pay Program will be terminated by the end of fiscal year 1975.

The Air Force has been successful in the past in meeting our retention objectives and we feel that we can continue to do so in the future. It is imperative that we do so in order to avoid mission degradation if the size of the force continues to decrease.

PROMOTIONS

The Air Force has continued to phase down the percentage of personnel in the top six enlisted grades to reach a 65.2% level by the end of fiscal year 1977. We reduced this percentage from 70.3% in fiscal year 1974 to 67.4% in fiscal year 1975. The fiscal year 1976 budget includes a further reduction to 66.7% by the end of fiscal year 1976 and to 66.6% by the end of 197T. Table XIII reveals that the combined impact of force reductions and a reduction in top six grade percentage of 6.45% since fiscal year 1972, have resulted in a decrease of about 115,000 noncommissioned officers. Since fiscal year 1972, the top six grades decreased by 27% compared to a 20% decrease in total enlisted strength. Thus far, we have managed to provide our personnel with a viable promotion program, but we continue to exercise care to avoid promotion slowdowns similar to those identified as critical by the House Armed Services Special Sub-Committee on Enlisted Promotion Policy Review (Lennon Sub-Committee) of the Ninetieth Congress (Report 85-066 0-68-NO38-1). Table XIII portrays a comparison of average months of total service at time of promotion to each of the top six enlisted grades in fiscal year 1967 (as reflected in the sub-committee report) versus that projected in the fiscal year 1976 budget.

TABLE XIII
AVERAGE MONTHS OF TOTAL ACTIVE SERVICE AT TIME OF PROMOTION

Grade	E-9	E-8	E-7	E-6	E-5	E-4
FY 67	259	227	200	169	102	30
FY 76	287	245	212	168	64	30

As the Table reveals, our enlisted personnel in grades E-7 through E-9 are being promoted from one to two years later in fiscal year 1976 than during fiscal year 1967. However, we will be able to continue to provide our people with reasonable career progression at the strength levels and top six percentages included in the FY 1976 budget.

TABLE XIV
ENLISTED GRADE STRUCTURE/TOP SIX PROMOTIONS
FY 1972 TO FY 197T

Fiscal Year	Total Force	Number In Grades E1/E2/E3	Number In Top Six	Percent Top Six	Promotions
1972 (Actual)	599,774	161,058	438,716	73.15	137,889
1973 (Actual)	571,790	167,367	404,423	70.73	134,809
1974 (Actual)	529,067	156,951	372,116	70.33	108,434
1975 (Program)	502,616	164,003	338,613	67.37	84,656
1976 (Program)	485,616	161,711	323,905	66.70	103,580
197T (Program)	486,285	162,380	323,905	66.61	31,172

LOSS MANAGEMENT

The Air Force anticipates accommodating the current planned enlisted force strength reductions of approximately 26,000 in fiscal year 1975 and 17,000 in fiscal year 1976 through normal accession and loss management without resorting to special early release programs.

RETIREMENTS

The budget reflects an enlisted retirement estimate of 21,266 men and women in fiscal year 1976. This is 8,251 less than fiscal year 1975 and due primarily to a smaller number of retirement eligible personnel. Since most retirements are voluntary, they also tend to be affected by economic conditions, promotion opportunities, and military pay rates. Retirement trends are reflected in Table XV.

TABLE XV
ENLISTED RETIREMENTS
FY 1972 to FY 197T

FY 1972 ACTUAL	FY1973 ACTUAL	FY1974 ACTUAL	FY1975 PROGRAM	FY1976 PROGRAM	FY197T PROGRAM
26,489	27,952	23,848	29,517	21,266	3,210

Table XVI shows the number of enlisted personnel who will be eligible to retire during fiscal years 1975 through 1979. The large number of retirements expected will facilitate movement toward a reduced top six enlisted grade structure, as previously discussed, and toward an increasingly younger force.

TABLE XVI
RETIREMENT ELIGIBLE ENLISTED PERSONNEL
FY 1975 THROUGH FY 1979

FY 1975	FY 1976	FY 197T	FY 1977	FY 1978	FY 1979
63,549	52,502	34,601	46,363	38,909	33,761

ENLISTED WOMEN IN THE AIR FORCE

As can be seen in Table XVII, we are continuing our objective to provide increased opportunities for enlisted women. Since fiscal year 1972, we have not only tripled the number of enlisted women in the force, but have also provided career opportunities in every Air Force specialty except those directly involving combat-related duties. For example, from fiscal year 1972 through fiscal year 1975 the number of

women increased from 23 to 1,626 in the electronics area; from 1 to 2,267 in the maintenance career area; and from 21 to 465 in the civil engineering trade skills (metal work, electrician, carpentry, plumbers, etc.).

Our plan to double the number of women in the force by the end of fiscal year 1978 continues on schedule. Tables XVII and XVIII delineate strength and accession program objectives for fiscal years 1974 through 1978. However, like the officer program, these objectives are based upon percentages and are subject to fluctuation with end strength and accession adjustments. Our goal is to have approximately 8% women in our enlisted force which is triple what we had in fiscal year 1973.

TABLE XVII
TOTAL ENLISTED STRENGTHS (WOMEN)

FY 1974	FY 1975	FY 1976	FY 197T	FY 1977	FY 1978
19,465	25,174	28,674	30,164	33,896	41,103

TABLE XVIII
NON-PRIOR SERVICE ACCESSION GOALS (WOMEN)

FY 1974	FY 1975	FY 1976	FY 197T	FY 1977	FY 1978
8,031*	10,000*	12%(9,000)	3,207*	13%(10,000)	16%(12,000)

*Changed to percentage objective effective fiscal year 1976. Fiscal 197T percentage not meaningful.

I will now discuss the Cadet Program.

CADET PROGRAM

The final category of pay and allowances is that of the Air Force Academy cadets. The funds requested for fiscal year 1976 total $21,089,000 for an increase of $143,000 over fiscal year 1975. This upward trend results from increases in pay and subsistence ration rates. The estimate for 197T is $5,797,000.

The Air Force Academy will provide approximately 750 newly commissioned officers this year or about 9.5 percent of our officer accessions. This will increase to approximately 935 in FY 1976.

The number of bona fide candidates for the Air Force Academy remains high. For instance, the class of 1978 which entered the Academy on 1 July 1974 was chosen from 7,562 nominees. This class consisted of 1,630 new cadets--the largest class ever to enter the Academy. Also, the overall quality of Academy candidates remains high. About 60 percent of the class of 1978 ranked in the top ten percent of their high school class, and 89 percent were in the top quarter.

The attrition rate at the Air Force Academy, and the other service academies as well, continues to receive much attention. This increase in attrition is, of course, highlighted in the class of 1975 which will graduate this June with about 46 percent attrition. This attrition has been a matter of concern to the Air Force because it is costly and we lose some potentially valuable inputs to our career officer force. I am pleased to report to the committee that the positive steps we undertook some time ago in an effort to reduce this attrition rate appear to have taken effect. Specifically, the Academy's efforts were aimed at improving our selection methods, our communications with the cadet candidates, and the training environment at the Academy. We wanted to insure that only the most highly dedicated and motivated young men are selected to enter the Academy and that those who are selected have a realistic view of what will be expected of them and what they should expect during their four years at the Academy and during their military careers. One of the programs implemented in

this area was project TOP TALK. This was a test project we started last year which involved inviting some 500 fully qualified candidates for the Academy class of 1978 to operational bases throughout the United States for a base visitation and a structured interview with a team of Air Force officers headed by a senior Regular officer. This base visit and structured interview provided the cadet candidate an opportunity to view the operational Air Force at base level and to learn more about the Academy during discussions with knowledgeable Air Force officers. Our initial results in this test program have been encouraging.

Thus far, those who were identified to participate in the program have experienced about a three percent lower attrition rate than the class of 1978 as a group. Because of these encouraging results, we have expanded the program this year and are inviting all fully qualified candidates for the class of 1979 to visit one of our operational bases. We are hopeful that this expanded program will help considerably in improving the candidates understanding of the Academy program and the Air Force.

I also mentioned that we have made significant progress in improving the cadet training environment at the Academy. Cadet participation and responsibility in administering the cadet wing have been expanded, and we have taken positive steps to insure that all aspects of the Academy training are relevant to the cadet's future as an Air Force combat leader.

As a net result of all these efforts, we appear to have turned the corner on attrition. The class of 1978 experienced considerably lower attrition during basic cadet training than had any of the preceding several classes, and this trend has continued on into their freshman year at the

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Academy. Thus far, their attrition rate is about two to three percent lower than the classes of 1977 and 1976 and about four percent lower than the class of 1975 at similar points in their training. This reduced rate is also reflected in the classes of 1976 and 1977 which have about six percent lower attrition than had the classes of 1974 and 1975 respectively, at similar points in training.

I am also pleased to report that the realization of our goal of filling the Academy to capacity and the reduced attrition rate will result in improved utilization of academy facilities.

Finally, while we will continue our efforts to further reduce attrition and achieve economies, the quality of our graduates and their preparation and motivation for an Air Force career remains our goal. In this regard, we continue to retain a healthy percentage of our Academy graduates. Of all graduates who have completed their obligated service, only about 29 percent have voluntarily resigned their commission. We are, of course, very pleased with this continuing high retention rate as well as with the performance of our graduates. Also, we continue to seek better and more economical utilization of the valuable resources our Academy graduates represent. Increasing percentages of our graduates are going directly into aircrew training after graduation from the Academy. This year, approximately 78 percent of the graduates of the class of 1975 will be going directly into pilot, helicopter, and navigator training. The majority of the remainder of the class will go to combat support jobs and missile launch officer training. To achieve better utilization of our Academy graduates and to get the

most effective use out of our graduate education dollars, we are phasing out the various programs that have, in the past, provided Academy graduates further formal education immediately after graduation from the Academy. After 1977, the only graduates who will be allowed to pursue immediate graduate level degrees will be the recipients of prestigious national scholarships.

In summary, we believe the Air Force Academy is fulfilling its mission very well. Attrition has been turned downward, retention of graduates remains high, and we are using this highly trained resource better than ever before.

I will now turn to the Subsistence Program.

SUBSISTENCE PROGRAM

We have requested a total of $405,755,000 for the subsistence of enlisted personnel in fiscal year 1976. This represents a decrease of $5,580,000 over the previous year's requirements due to reduced strengths. The estimate for 197T is $99,434,000.

The total number of personnel being fed in Air Force dining halls reflects a reduction from fiscal year 1975 levels, primarily because of strength reductions. This reduction has been tempered by an increase in dining hall participation due to the higher prices of food available in competing commercial facilities. Recent price escalation and the introduction of a revised Food Cost Index have resulted in an increase in the cost of feeding personnel in the dining halls over the base used in estimating the initial fiscal year 1975 budget.

The Air Force continues to seek ways to offset the effects of high food costs, while not compromising the quality of the food. The substitution of low cost food for

high cost food items, improved training of food service personnel, and reduction of waste in preparing and serving meals receive continued attention.

Formal instruction provided to our food services supervisory personnel covers the technical and managerial skills necessary to perform duties as Air Force dining hall supervisors and operators. They are trained in menu planning, preparation and cooking of food, management of a food service activity, flight and missile complex feeding, sanitation and personal hygiene and other duties pertaining to food service functions. This training greatly enhances the ability of managers to operate their dining halls with maximum efficiency and economy and provide optimum food service support.

The decrease of over $2 million in Basic Allowance for Subsistence requirements is the result of reduced strengths partially offset by increased rates. The Basic Allowance for Subsistence is paid primarily to enlisted personnel who are married, living off base, or whose duty hours or working conditions prevent them from eating in the dining hall. The rate was changed on 1 October 1974 from $2.28 per day to $2.41 per day in connection with the military pay increase of 5.5% as amended by Executive Order 11812 pursuant to the Federal Pay Comparability Act of 1970 and section 1009 of Title 37 of the United States Code. While the need for this increase is justified by rising food costs, the Air Force recognizes its responsibility to insure that only those members eligible to receive the allowance receive it. The eligibility of members is constantly being reviewed in order to assure the appropriateness of payments and to

maximize the utilization of the Air Force dining halls and the investments they represent.

.Now I will discuss the PCS Program.

PERMANENT CHANGE OF STATION TRAVEL

The Air Force is requesting $649,353,000 for PCS travel requirements in fiscal year 1976. This represents an increase of slightly more than 14% over the estimated requirement for fiscal year 1975. The increased amount is necessary to finance increased PCS movements, and continued substantial cargo and passenger tariff rate increases. The request for 197T is $176,860,000.

The increased number of movements, primarily in the operational and rotational travel categories, is related to several specific actions. First, the Air Force deferred PCS moves from fiscal year 1975 to fiscal year 1976 through both voluntary and involuntary extensions to partially offset the deficit in the fiscal year 1975 PCS account generated by tariff rate increases. Second, increased movements will result from base closures and realignments programmed to occur in fiscal year 1976. While an overall savings will accrue to the Air Force as a result of this latter action, PCS travel funds must be expended to accommodate necessary personnel relocations. The Air Force estimate of the total number of PCS moves required in fiscal year 1976 would have been lower than in fiscal year 1975 except for the actions delineated above.

In spite of our efforts to manage this account by encouraging voluntary tour extensions, reducing major commands' internal movements, and modifying or eliminating programs where possible, the costs associated with PCS travel continue to climb. The full year effect of tariff

rate increases experienced this year will drive the cost of PCS travel to new highs in fiscal year 1976. These cargo and passenger tariff rate increases, over which the Air Force has no control, resulted in the Air Force request to the Congress for reprogramming authority to transfer funds into the fiscal year 1975 PCS account.

Almost 60% of the PCS travel program is associated with the transportation of personal property. This entitlement is influenced significantly by increases in commercial and military transportation tariff rate charges driven by the mounting cost of fuel. After the Air Force presented its fiscal year 1975 budget to the Congress last year, there were five rate increases in the shipment of personal property category. Even as we make this presentation, consideration is being given to additional rate increases.

While PCS price increases are not unexpected in these times of rising costs, increased management efforts are being taken within the Air Force to minimize their impact. Air Force personnel at all levels have been instructed to get the most for each transportation dollar expended. We are looking at personnel turbulence to insure that whenever possible we have minimized it to the greatest possible extent. Assignments are being made where possible with every consideration of the costs involved. Where practicable, the Air Force schedules moves to coincide with the availability of housing to minimize storage costs. I would like to assure the Committee that we will continue to monitor this program to insure that each move made in the Air Force falls into the category of one that must be consummated to fulfill mission essential functions.

I will now discuss the last of our six programs, Other Military Personnel Costs.

OTHER MILITARY PERSONNEL COSTS

This, the smallest of the six programs in the Military Personnel Appropriation, includes a number of miscellaneous costs. The estimated requirement for fiscal year 1976 is $4,534,000 which is $1,647,000 less than the amount budgeted for this program in fiscal year 1975. This decrease of about 27% is attributable to the Servicemen's Group Life Insurance Program, which is administered by the Veteran's Administration. Contributions were suspended 1 November 1974, because surplus accumulation and monthly premiums from service members is considered adequate to offset claims. No funds have been requested for fiscal year 1976 or 197T.

The $4.5 million being requested in FY 1976 and $1.0 million in 197T is for the payment of death gratuities, costs associated with the apprehension of absentees, deserters, escapees, and interest on Uniformed Services Savings Deposits for personnel missing-in-action.

MILITARY PERSONNEL APPROPRIATIONS

As shown in Table XIV, the Military Personnel Appropriations program reflects a net decrease. This is consistent with the force structure changes and declining strengths. The program requirements we have presented have been subjected to the closest scrutiny and revision through Air Force, OSD, and OMB planning, programming and budget reviews. Accordingly, they reflect the minimum Military Personnel Appropriation funds required for the Air Force to carry out its responsibilities in national defense. Table XIV is a summary of the Air Force Military Personnel Appropriations request.

TABLE XIV
MILITARY PERSONNEL APPROPRIATIONS REQUEST SUMMARY
(in thousands of dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate	75-76 Difference
Pay and Allow of Officers	$2,140,472	$2,192,879	$2,156,338	$ 517,474	- 36,541
Pay and Allow of Enlisted Personnel	4,416,930	4,300,202	4,163,531	1,015,751	136,671
Pay and Allow of Cadets	17,765	20,946	21,089	5,797	+ 143
Subsistence of Enlisted Personnel	369,664	411,335	405,755	99,434	- 5,580
Permanent Change of Station	513,599	568,413	649,353	176,860	80,940
Other Military Personnel Costs	20,081	6,181	4,534	984	- 1,647
TOTAL	$7,478,511	$7,499,956	$7,400,600	$1,816,300	-99,356

I will now follow with some selected subjects of special interest to this Committee.

SPECIAL INTEREST ITEMS

RECRUITING

We are proud of the success we have had in meeting our recruiting objectives in a draft free environment. We have been able to meet these objectives without disruptive changes and without incurring excessive costs. As noted earlier in my report, the quality of the people we are getting is high -- but it does not exceed our needs.

Our sophisticated weapons management and support systems require our recruits to absorb extensive and

difficult training in preparation for their Air Force jobs. Therefore, the young men and women we recruit to fill our manpower needs must meet demanding standards and be highly motivated. They are the young people who look to the future and who want to learn while they work. For many, the Air Force represents an attractive and attainable means to receive the training, education and experience which will have long term benefits for them and our nation. However, because of the quality and motivational characteristics we demand of our recruits, downturns in economic conditions do not significantly increase the qualified pool from which we can recruit.

Therefore, while current economic conditions have resulted in increased interest in the opportunities the Air Force has to offer, the task of reaching, identifying and recruiting the people who can meet the essential standards we have established has not been appreciably diminished. Accordingly, we must maintain an aggressive and stable recruiting organization if we are to continue to meet our recruiting objectives. Any degradation of our recruiting effort or its supporting programs, based on current economic conditions, would be unrealistic and would undermine our efforts to make our all-volunteer force a continuing and long term success.

Addressing our officer area, we are meeting our requirements except in the medical area. From the onset, the recruiting and retention of the required number of medical personnel, particularly physicians, was recognized as our most difficult hurdle to attaining an All-Volunteer Force. The Armed SERVICES Health Professions Scholarship Program is operating well but because of the long leadtime involved in

this program, it will be several years before we begin to realize any significant benefits from it.

We entered this fiscal year with a shortage of approximately 425 physicians with projections that this shortage would increase to as high as 613 by the end of fiscal year 1975. However, the Variable Incentive Pay, which was authorized for physicians this year, gives us an attractive incentive and we are experiencing moderate sucess in recruiting qualified physicians. At this time, we are projecting that we will end the year with a shortage of approximately 300 -- an improvement over our position at the beginning of the year and certainly much better than we were predicting a year ago. However, money alone is not the answer to recruiting and retaining physicians, as they are greatly influenced by the quality of the facilities in which they must work and most importantly by the opportunities we provide them to enhance their professional qualifications.

AIRMAN EDUCATION AND COMMISSIONING PROGRAM

A vital source for new officers is the accession of highly qualified members of the enlisted ranks through our Airman Education and Commissioning Program (AECP). This valuable program has been, since 1962 a prime source for meeting requirements for officers with technical degrees, and also provides upward mobility for our outstanding enlisted members who show great leadership potential.

Under the AECP, airmen who have at least 45 semester hours of college may compete for selection. Those who already have degrees needed by the Air Force are sent directly to Officer Training School (OTS), while those who have not completed their degrees are enrolled in a civilian college and go to OTS upon degree completion.

Last year the Congress reduced the AECP funds by $2.4 million and directed that we not enter students into college after 1 October 1974. We are requesting reinstatement of the program in fiscal year 1976 and a training load of 640 that includes carryover from previous years. Our fiscal year 1976 programmed input to college is entirely technical with 17 percent of the input in computer sciences, 44 percent in engineering, 22 percent in the physical sciences, and 17 percent in technical management programs. Those selected and entered in college during fiscal year 1976 will help meet our technical needs in fiscal year 1978 and early fiscal year 1979.

Although the initial costs are high in comparison to some other commissioning programs, the AECP is a cost effective program when viewed in totality. AECP students complete the degree program for which selected at a higher rate than other commissioning sources, perform better in OTS, and have a higher retention rate than any commissioning source.

One of the major considerations in determining the cost effectiveness of a commissioning source is the length of time the commissionees remain in the Air Force. Of all the Air Force officers entering active duty during fiscal year 1967, 44.8 percent remained beyond the seven year point. The AFROTC percentage was 51.8%, all OTS graduates was 39.3%, the Air Force Academy percentage was 71.0% while the AECP percentages for the same period was 94.2%. The attrition rate for the AECP during the college phase of the program is currently only 3.9 percent and only 1.5 percent of the AECP entries were eliminated from OTS during this period.

The fact that the Air Force offers its enlisted members upward mobility has long been a strong Air Force selling point to prospective recruits. The severe reduction in the AECP fiscal year 1975 funding forces the Air Force into a position of critically limiting that upward mobility, particularly to those without a degree. Most important though, our other procurement programs cannot produce sufficient technically oriented personnel to meet requirements; hence, the need for a fully funded AECP. It is an essential program and one that we need to meet our requirements.

GRADUATE EDUCATION PROGRAM

The primary objective of the Air Force graduate education program is to provide officers in sufficient numbers who possess the technical, managerial, and scientific knowledge needed to function capably in certain especially complex and crucial research, teaching, and middle management roles. A secondary objective of our graduate education program is to provide a core of well-educated thinkers, planners, and decision makers--officers whose minds have been expanded through contact with the best brain power available in our nation's top graduate schools--officers who are attuned to the developments in the civilian sector, and who can use that knowledge in their research, systems acquisition, and management activities to give us an Air Force that is not only as strong as necessary but is also as economical as is humanly possible. To some extent, this secondary objective is measurable in terms of specific jobs or positions, but to a large extent we believe that the benefits of graduate education extend over an officer's

full career transcending individual job descriptions and military grades or titles.

We do have in the Air Force some 9,810 positions currently identified on manpower documents, that have been validated as requiring the educational background normally associated with an advanced academic degree. We use a variety of sources to meet these requirements, with our policy being to acquire all we can at minimal or no cost, and pay fully for only what we must. A number of officers come into the Air Force with the right types of advanced education. Many others complete advanced degrees entirely on their own initiative through off-duty efforts, using tuition assistance or their VA benefits. We never select and send an officer full-time to school until we have determined that we would otherwise have unfilled requirements that could not be satisfied through less costly means.

Over the past several years, we have increased dramatically our ability to produce graduate-educated officers at minimal expense through non-duty programs. At almost all our major bases, universities offer master's level programs that can be completed entirely through off-duty study. However, I must add the caveat that if the VA in-service educational benefit is terminated without a corresponding increase in the tuition assistance that we are able to provide, the output of the education services programs will not attain the projected level and we may be faced with additional shortages that we will need to meet through fully-funded, full-time programs.

During this current fiscal year, we have exercised the Advanced Academic Degree Management System (AADMS) exten-

sively in reviewing every position that required an advanced degree. As a result we reduced the approved ceilings on the number of validated advanced degree positions by 23 percent. This, in turn, has enabled us to reduce our authorized training load from 1,570 in fiscal year 1975 to 1,300 in fiscal year 1976.

Briefly, let me explain how AADMS works. This management system was implemented by the Air Force in 1972 and has been continuously refined and revised. A directive published by the Air Force provides standardization guide lines and rationale and decision-logic tables to assist supervisors in making the requirements determinations. Using this information, the supervisors perform a periodic individual desk audit to determine the level of knowledge required for each manpower position. In addition, work centers, or positions in aggregate, are reviewed to determine if the amount of requirements can be reduced on that basis. Requirements are forwarded through functional area channels (such as Intelligence, Research and Development, Operations, etc.), reviewed at each command level, validated by the appropriate Air Staff functional manager and approved by the Air Force Education Requirements Board (AFERB). This board is composed of senior officers, usually in the grades of colonel or brigadier general, from all Air Staff functional areas.

There were 11,754 Air Force graduate degree requirements validated in 1972. During fiscal year 1975, to date, the AFERB has met twice to review updates of those requirements. The 9,810 advanced academic degree requirements now on Air Force manpower documents represent 11 percent of the present Air Force authorized line officer strength. Of

these requirements, 4,210 are in the science and engineering fields, 4,076 are in the management area, 944 are humanities, education and social science requirements, and 580 are AFROTC instructor requirements which call for any graduate degree within our inventory. The science and engineering educated officers are primarily used to man the Air Force Systems Command laboratories and Product Acquisition Divisions, and to a lesser degree as instructors in Air Force educational institutions. Management area requirements are closely related to specific specialties. For instance, almost one-half of this group is related to technical management specialties such as research and development, engineering management, computer systems, and logistics management. In the humanities, education, and social science area, the requirements are basically in three career fields; intelligence, education, and information.

A 1973 Department of Defense survey determined that industry has an objective for 20 to 25 percent of their people in management jobs to have graduate degrees. This is about double that which we have validated as Air Force requirements. In conversations with a number of corporations and government agencies at the federal and local levels, we find that the Air Force advanced degree objective is about the same or lower than that of these agencies for comparable career fields.

The annual Air Force graduate education program is established by a detailed requirements versus Air Force inventory comparison. The inventory of officers with graduate degrees that can be used against validated requirements includes graduate degrees obtained from any source. Where deficits exist in relation to requirements for particular

specialties, school quotas are established. This is a computerized process, which also considers projected gains and losses.

It should be noted that the student load of 1,300 includes students carried forward from previous years. The 916 officers we have programmed for fiscal year 1976 entry comprise approximately one-third of a three year program aimed almost exclusively at meeting our engineering, physical science, and technical management requirements for the next five years. During this period, we will produce twice as many graduate degrees through non-funded and partially-funded programs as we will through fully-funded programs. However, these non-fully-funded degrees are seldom in the science, engineering and technical management fields where our needs are most acute.

The officers whom the Air Force sends to graduate education programs are carefully screened. Each student must be career oriented and agree to fulfill an active duty service commitment of three times the length of the education provided. He must have a performance record that predicts at least normal career advancement, and must also possess high academic qualifications.

It is Air Force policy to buy graduate education from civilian institutions when they have or can readily develop programs which will meet our needs. When civilian schools cannot meet certain Air Force needs with an "off-the-shelf" program, the cost and feasibility of a "tailored" civilian program are compared with that of conducting the course at the resident Air Force Institute of Technology.

The utilization of specific civilian institutions for the graduate degree program is based upon the quality of

instruction, the particular curriculum content offered, the institution's interest in Air Force programs and agreement to accept the individual student concerned.

Of the 916 graduate students scheduled for entry in fiscal year 1976, 577 will attend civilian schools and 339 will attend resident programs at the Air Force Institute of Technology at Wright-Patterson AFB, Ohio. Almost all will be captains. All are career officers. The graduate education they receive will contribute to their job performance through the grade of lieutenant colonel, after which time the knowledge and experience they have acquired will serve them well in positions of increased scope and responsibility as leaders and managers.

SUMMARY

Mr. Chairman, members of the Committee:

In closing, I would like to offer some brief and general comments regarding our people.

In recent months, the Deputy Chief of Staff for Personnel has traveled extensively, meeting and talking with our people at 32 different bases. His observations are pertinent to the issues with which this committee is concerned and I would like to relate these impressions to you.

First, Air Force people are high quality, dedicated, disciplined professionals. Secondly, commanders at all levels are accessible to their subordinates and are providing strong leadership, which is greatly promoting high morale and a strong "esprit-de-corps". Thirdly, we are noticing improving trends in disciplinary indicators.

These impressions were reinforced in a letter I recently received from the commander of our Basic Military Training

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Center at Lackland AFB, Texas. Reflecting on the character and motivation of our new recruits, he commented that they were the finest he had observed in his many years of experience and that he was "very excited at the prospects" that the future holds, when these youngsters will constitute a preponderant number within our force.

I hasten to add that a key factor in attracting these fine young people to the Air Force is the reasonably competitive total compensation package we are able to offer compared to what is available in the private sector. Our ability to retain our people in the future will, in large measure, depend upon the continuation of pay, allowances and other traditional elements of total compensation as well as improved stability in our force. In this latter respect, we are hopeful that the Congress will authorize relatively stable strength levels beginning with fiscal year 1976, so that the personnel turbulence associated with the eight previous years of strength reductions can be dampened.

The indicators all tell the same story: We have the finest Air Force we have ever had. We firmly believe that the programs for which we now seek funds will continue to provide the Nation with the best Air Force in the world.

Mr. Chairman, members of the Committee: The Air Force is requesting $7,400,600 in fiscal year 1976 and $1,816,000 in 197T to support an end strength of 590,000 people. The Air Force manpower and personnel programs have been thoroughly reviewed from the standpoint of the minimum requirements necessary to maintain readiness. They are lean, practical, and well scrubbed. We solicit your support in funding these programs.

BIOGRAPHY OF BRIGADIER GENERAL JACK I. POSNER

BIOGRAPHICAL SKETCH OF WITNESS: Brigadier General Jack I. Posner was born on March 24, 1923, in New York, N.Y. He enlisted in the Army Air Corps during World War II and received his commission as second lieutenant in 1944. He was assigned to the 92d Bombardment Group and flew 18 combat missions as a B-17 aircraft commander in the European Theater of Operations. After the war, he returned to civilian life, was associated until 1950 with Dun and Bradstreet, and was a member of the Reserve.

He earned his bachelor of business administration degree, evenings, from the College of the City of New York in 1948. Later evening/part-time work earned a bachelor of laws degree from New York Law School, N.Y., 1951 and a master of arts degree in public law and government from Columbia University, N.Y., 1955. While attending the Industrial College of the Armed Forces, he earned a master of science in business administration from The George Washington University, Washington, D.C., 1969.

He was recalled to active duty during the Korean War in 1950 and served tours of duty with Headquarters Continental Air Command, the Air Force Reserve Officers Training Corps at Columbia University, the 5th Tow Target Squadron in Libya, Headquarters Twelfth Air Force and Headquarters United States Air Forces in Europe.

After graduating from the Air Command and Staff College in 1960, General Posner was assigned to Headquarters U.S. Air Force in the office of the Deputy Chief of Staff, Personnel. In 1964 he served with Headquarters Air Force Systems Command as Chief of Personnel Plans Division. In 1965 General Posner was designated Department of Defense representative to the President's Cabinet Committee on Federal Staff Retirement Systems and served until the committee was terminated in 1966. He was then assigned to the office of the Assistant Secretary of Defense (Manpower and Reserve Affairs) where he became Director of Legislative Programs. Following graduation in 1969 from the Industrial College of the Armed Forces, he served as senior U.S. Air Force personnel advisor to the Vietnamese Air Force.

In 1970 General Posner returned to Headquarters U.S. Air Force and was assigned to the office of the Deputy Chief of Staff, Programs and Resources, in the Directorate of Manpower and Organization, becoming Deputy Director in April 1972, and Director effective July 1, 1974.

His military decorations and awards include the Legion of Merit with two oak leaf clusters, Air Medal with two oak leaf clusters, Joint Service Commendation Medal, and Army Commendation Medal. He was awarded the Republic of Vietnam Air Force Distinguished Service Order, Second Class. He is a command pilot.

STATEMENT OF BRIGADIER GENERAL JACK I. POSNER

INTRODUCTION

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am Brigadier General Jack I. Posner, Director of Manpower and Organization, Headquarters United States Air Force. It is a privilege for me to testify before this distinguished committee, in my first appearance as Director of Manpower and Organization. I welcome this opportunity to discuss the Air Force manpower program and present our active duty military and civilian personnel strength requirements.

My statement falls into four areas. First, I will outline our overall requirements and objectives, in the context of trends over the past few years in forces and related manpower. The next part of the presentation will cover a number of initiatives we have taken to improve the utilization of Air Force manpower. Third, I will discuss requirements by Major Defense Program, emphasizing changes since the President's Fiscal Year (FY) 1975 budget was submitted. The fourth and final portion will focus on how Air Force manpower requirements are developed.

During the presentation, I'll refer to various tables and graphs, designed to assist me in giving you a thorough understanding of the Air Force manpower program, while focusing on the key issues.

Although our primary concern today is the appropriation of funds to support our military personnel requirements, we do not construct a separate military personnel program. Both military and civilian strengths are a product of the same regularized manpower requirements determination process;

therefore, throughout this presentation I will be addressing both military and associated civilian requirements.

REQUIREMENTS, TRENDS AND OBJECTIVES

Figure 1 shows Air Force military, direct hire civilian, and indirect hire civilian end strength requirements for FY 76, 7T and 77 in relation to end-FY 74 actual strength and current projections for FY 75.

MANPOWER AUTHORIZATION REQUEST

	FY 74 (Actual)	FY 75 (Projected)	FY 76 (President's Budget)	FY 7T	FY 77 (Authorization Request)
Military	643,795	611,534	590,000	590,000	590,000
Direct Hire Civilian	273,596	265,578	255,904	257,825	255,699
Indirect Hire Civilian	15,816	15,588	15,364	15,362	15,318

Figure 1

The strength request for end-FY 76 continues the trend of declining Air Force manpower levels which has prevailed since 1968. This reduction of over 31,000 from the current projection for FY 75 results primarily from the initiatives we have taken to: -- Reduce our headquarters and support activities. -- Retain the manpower needed to generate 100% of our strategic offensive forces, but cut back the number of strategic offensive aircraft and personnel standing full-time alert. -- Assign KC-135s and a new strategic offensive role, as well as additional C-130s and RF-4s, to modernize Reserve Forces.

Part of the manpower saved as a result of these actions will be used to provide improvements in tactical fighter capability.

But the bulk of these reductions represents a drawdown in our total strength. As indicated in the presentation on manpower requirements by representatives of the Office of the Secretary of Defense, these Air Force reductions account for over 80% of planned DOD military and civilian strength reductions proposed for FY 1976.

To put these reductions in perspective, Air Force strength trends since the Southeast Asia peak year of 1968 are as depicted in Figure 2. This graph, which includes both indirect and direct hire civilian employees as well as military personnel, shows that by the end of FY 1976 the total decline will have amounted to over 401,000 people. On an annualized basis this would amount to a reduction of about 4.7% per year, for a total reduction of 32%. Overseas military deployments have been reduced at a proportionally greater rate, with a 56 percent reduction since FY 1968.

Not since 1950 have the United States possessed a smaller Air Force in terms of people.

Manpower reductions are not an absolute measure of reductions in military capability. As we have reduced, we have attempted to minimize the impact on combat readiness through various means: We have added modernized equipment to both active and Reserve forces; wherever possible we have concentrated reductions in support and overhead areas; and we have focused on improved utilization of remaining personnel. Nevertheless, Air Force capability has been reduced. We will, for example, have 14 fewer strategic bombardment squadrons than in 1968, and the squadrons which remain will be at a reduced alert posture. There have also been reductions of 28 interceptor squadrons and 24 tactical fighter squadrons. The readiness for wartime surge and

AIR FORCE MANPOWER -1968 TO 1977

(IN THOUSANDS)

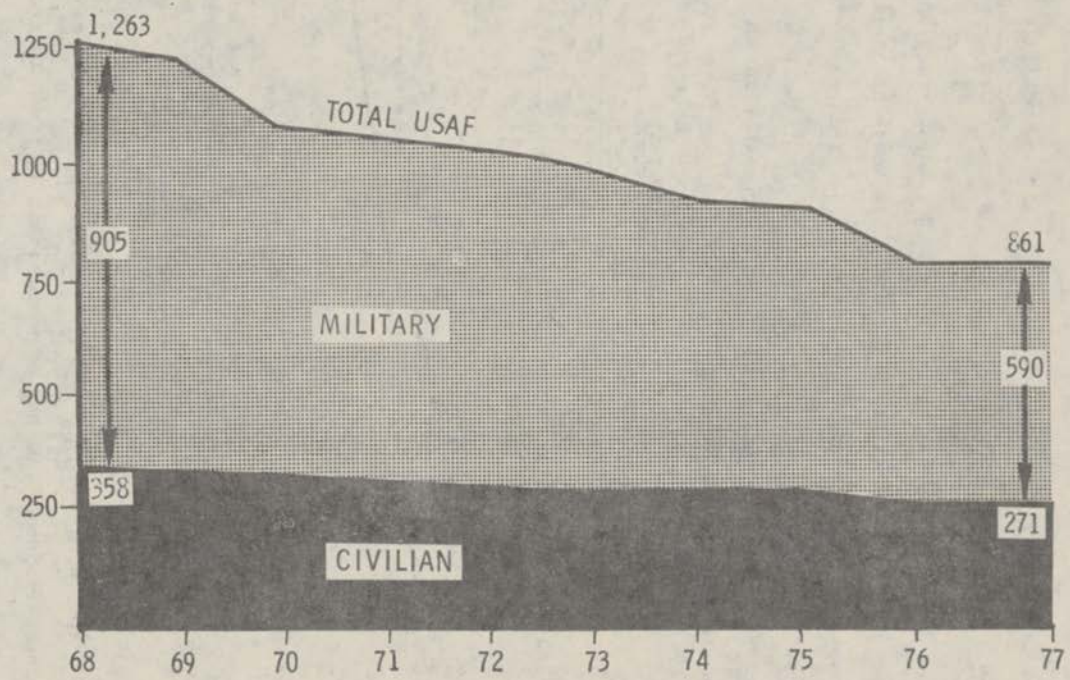

Figure 2

sustained operations in both tactical air and mobility forces has been reduced.

A portion of the overall drawdown has resulted from the phase down of military activities in Southeast Asia. However, manpower levels are now 28% below the pre-Southeast Asia buildup level (FY 64). This trend in strength in relation to the trends experienced by the other Services is graphically displayed in Figure 3.

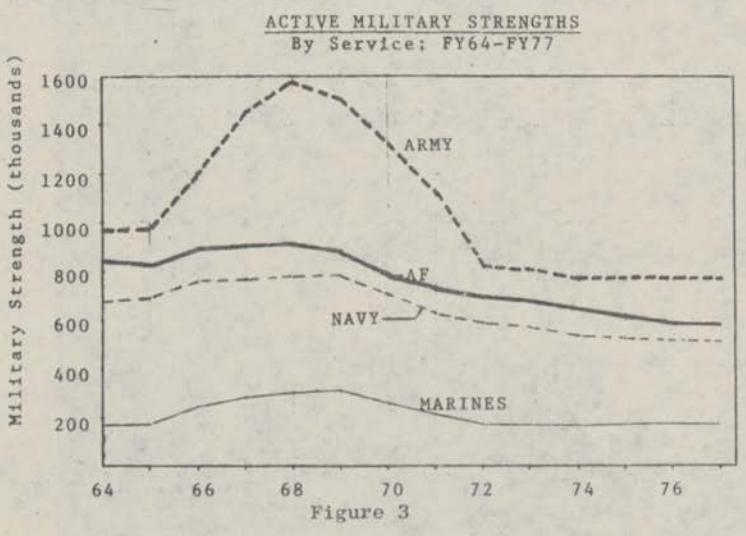

Figure 3

Overall, the percentage reduction in Air Force military manpower since FY 64 has been more than 1½ times as great as that of the other services. On the civilian side, our percentage reduction over the same period has more than doubled the other services'.

The drawdown to currently programmed levels has not been accompanied by a corresponding reduction in the threat. Rather, the decline in active force manpower reflects our effort to hold down total costs and maintain a balance of operating forces, readiness, and modernization during a

period when inflation has severely eroded the buying power of the dollar.

The choice we face now is clear: We can stabilize our manpower posture at about the levels requested for FY 1976, providing for needed improvements in readiness and capability to the maximum extent possible within this level - or we can continue to accept erosion in manpower and combat strength - in effect, a steady unilateral disarmament. We strongly urge that you approve funding for the manpower levels requested for FY 1976 and the transition quarter. Within the levels requested, we will strive to achieve needed improvements in readiness and overall force capability. The alternative -- reductions of a magnitude greater than those in our request for FY 1976 or additional reductions after FY 1976 -- will result in the inevitable erosion of our strength to a level which we believe would be out of balance with current threat projections.

Consequently, beginning with FY 1976, we are requesting stabilization of our manpower program. This will allow us to adjust to our reduced military posture, without the turbulence and disruption of capability implicit in additional force and manpower cuts. It will enable us to concentrate our full attention on improving the efficiency and effectiveness of the existing force structure. Within the framework of a more stable manpower program, we will be able to use the savings resulting from such efforts, to regain some of the essential mission capability lost during the past several years. Our FY 1976 and 197T requests reflect considerable progress in this direction. I will be discussing this progress in some detail in a few moments.

First, however, I would like to highlight the process we follow in sizing Air Force manpower requirements.

Manpower requirements are not independently determined. As indicated in Figure 4, they flow from basic factors which control our force levels. In a country as well endowed as the United States, the primary factor influencing the force structure is the size and scope of the threat. But our national resources are not inexhaustible. So, even in the face of the gravest of threats, resource limitations represent a second factor influencing the structure of our military forces. During a period of simultaneous inflation and recession, such as that which we are now experiencing, the impact of resource limitations is increasingly severe. Finally, even though sufficient resources may be available to build the forces necessary to meet a given threat, other social needs compete for those resources, so priorities must be established, reflecting the will of our people. These national priorities are the third basic determinant of our force structure.

Consideration of these factors leads to the decisions which shape our forces. The forces, in turn, must be deployed, operated, maintained, and kept current with advances in technology. The application of manpower standards and guides to the workloads generated by these activities determines the numbers and kinds of people needed to support the force structure.

Once basic force and readiness level decisions are made and methods of accomplishing associated workloads have been established, it is possible to measure with precision the numbers of people required to accomplish these workloads. The manpower standards and guides which

THE MANPOWER PROCESS

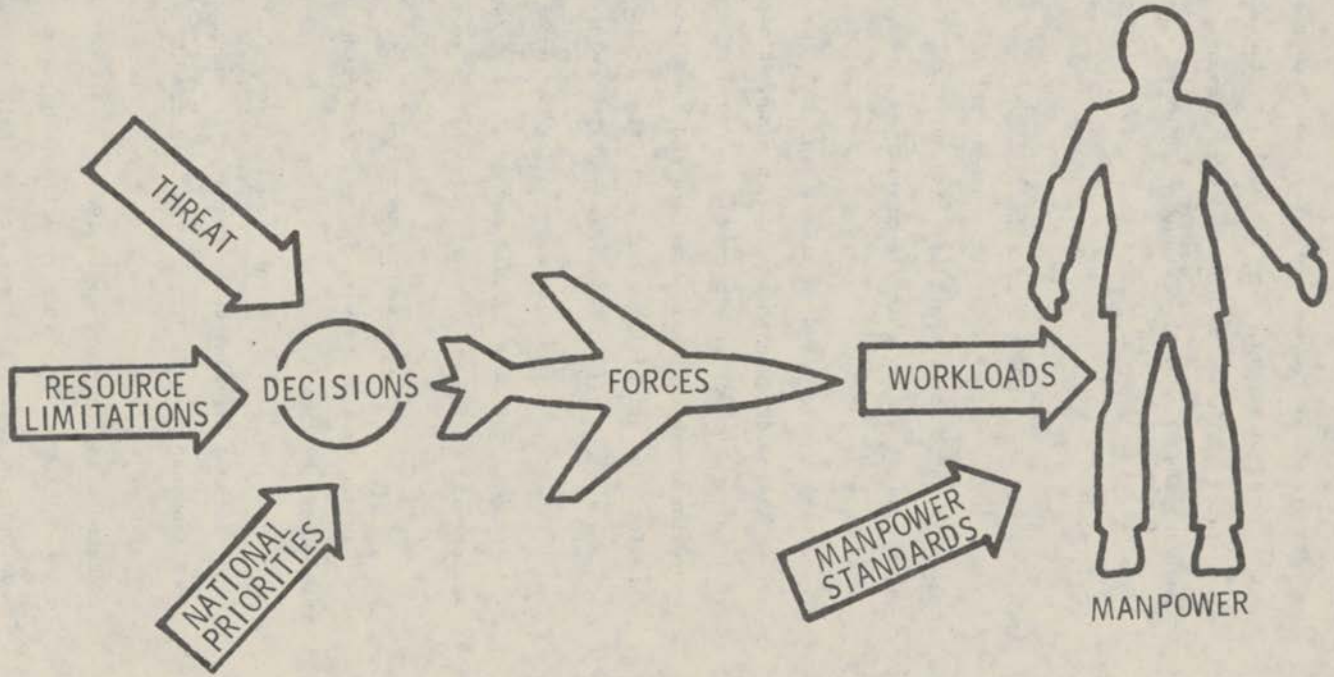

Figure 4

result from this process are developed through the application of contemporary industrial engineering techniques. These standards and guides become the tools used for the allocation of manpower resources and the development of manpower requirements for which funds are requested.

MANAGEMENT INITIATIVES

Several moments ago, I touched on the need for improvements in our combat capability, and our plans for making these improvements within the stabilized manpower program we are now projecting. In Fiscal Year 1976, in the transition quarter, and in Fiscal Year 1977, we will make substantial progress in enhancing our combat capability by realigning manpower from overhead and support areas; by improving organizational structure and consolidating similar functions; by prioritizing our activities to assure that our constrained fiscal resources are allocated to those which provide the maximum contribution to combat readiness; and by taking full advantage of technological advances to improve the productivity of the force.

Headquarters Reductions

In the area of support and overhead reductions, we have further streamlined and reduced our management headquarters. The Air Force reported last year that cumulative reductions in its management headquarters manpower since 1968 amounted to 40%. Through new management initiatives and planned actions, we now expect reductions in Air Force management headquarters since 1968 to reach 53% by the end of Fiscal Year 1977. This reduction, compared to a 32% reduction in total Air Force end strength over the same period, is a measure of our firm intent to hold overhead at minimum essential levels.

Last year, the Air Force included in the budget significant savings in headquarters spaces that were rechanneled to retain combat capability. We seek your renewed support of our current plans to enhance combat capability through headquarters and support reductions. Since submission of last year's budget, further initiatives have been undertaken to eliminate over 8,500 Air Force personnel from the category of DOD management headquarters manpower, yielding a net savings of more than 3,800 spaces projected by the end of Fiscal Year 1977. We plan to continue our emphasis in this area, with a view to additional savings. Let me highlight for you some of the major actions now planned.

As announced by the Secretary of Defense on 10 December most of the management and support functions now performed by HQ Pacific Air Forces (PACAF) will be assumed by Tactical Air Command (TAC), Aerospace Defense Command (ADC), and Military Airlift Command (MAC), and PACAF will be inactivated as a major command. There will be no degradation or interruption of support to Air Force combat units in the Western Pacific, and we will realize a substantial savings in manpower. Plans for this action were submitted to the Congress on 4 March 1975 and will be fully implemented by the end of Fiscal Year 1976.

We have also trimmed the Strategic Air Command intermediate headquarters structure in the Pacific, with management headquarters savings resulting from the elimination of a numbered Air Force headquarters. Eighth Air Force is no longer required on Guam because of mission changes, and its management headquarters functions have been realigned from that location. The substantively smaller operationally-oriented 3rd Air Division is now

located on Guam. Because of its illustrious history, the 8th Air Force name has been retained and moved to Barksdale AFB, Louisiana, replacing the 2nd Air Force unit designation.

Air Force Communications Service (AFCS) will be disestablished as a major command and realigned as a technical service under the Military Airlift Command (MAC). Through consolidation of management functions at Headquarters MAC, duplicative functions can be eliminated, economies of scale realized, and headquarters and support reductions made. The commander and technical staff of the Communications Service will thereafter be free to concentrate fuller attention on the hands-on operational aspects of the communications function.

Consolidation of tactical and support airlift assets under the single management of Military Airlift Command, which already has responsibility for strategic airlift, allows headquarters reductions through economies of scale and grouping of homogeneous missions.

Other headquarters and support savings will be achieved through management actions resulting in economies at all levels of management headquarters. Examples include advanced data systems, scheduled to be fully operational in Fiscal Year 1977, which will reduce workload and associated personnel costs at major command headquarters throughout the Air Force. Implementation of these systems will allow management headquarters manpower reductions and more efficient performance of essential management tasks.

In addition to the Air Force actions I have described, we have continued active involvement in the ongoing DOD examination of headquarters activities to define true

management headquarters functions and achieve comparability of headquarters among the services. The work of the DOD Headquarters Activities Committee should continue, and the Air Force will maintain full participation.

While we are confident that our top management structure is lean and cost-effective, we are continuing to examine our headquarters structure and composition. Our focus will be upon the identification and assessment of possible further reductions in our top management structure, and conversion of resources saved in headquarters to enhance combat capability. We must insure, however, that the actions we take do not have the adverse effect of degrading essential command and control capability to effectively manage our forces. The Air Force must maintain the responsive headquarters structure at our top management echelons necessary to conduct our critical defense mission and efficiently use the resources made available to us. While we shall continue to explore every avenue offering added economy in headquarters strengths, we must concurrently assure essential stability here as we seek a stable total manpower force level in the coming years.

Support Reductions in Europe

Section 302 of the Department of Defense Appropriation Authorization Act (Public Law 93-365) directs that military support forces in Western Europe and Related Areas, authorized as of 30 June 1974, be reduced 18,000 by the end of Fiscal Year 1976.

Using the FY 1974 program as a baseline, the Secretary of Defense has approved 1,600 reductions in Air Force support manpower in Western Europe by 30 June 1975. An additional 800 support spaces will be reduced in FY 76,

bringing the total Air Force support reductions approved by the Secretary of Defense to 2,400. These reductions are primarily centered in management and unified command headquarters in Germany, England, and Spain and in reductions in administrative support aircraft and intelligence support activities throughout Western Europe. The Secretary of Defense has approved 1,500 combat additions which are planned for implementation by 30 June 1976. Additional support reductions and combat additions to offset total support reductions in Europe are now being staffed with the Office of the Secretary of Defense.

Improvements in Organization

In the area of organizational improvements and consolidations, an important Fiscal Year 1976 initiative is the application of the single manager concept to activities which provide services to Air Force organizations. I previously mentioned consolidation of Air Force Communications Service with the Military Airlift Command, which also manages Air Force weather, rescue, and airlift services. This integrated service approach facilitates further reductions, and additional spaces will be saved by reducing overhead at locations where communications, weather, and other Military Airlift Command service activities are located together.

Another organizational initiative is the consolidation of Air Force Systems Command's test aircraft from six to three locations to improve modification facilities and aircraft utilization, and the restructuring of the command's laboratories. These actions will generate overhead savings of nearly 800 manpower authorizations.

Another 500 spaces are being saved by the consolidation of Air Force clothing sales operations into the Exchange Service.

Other Initiatives

We are eliminating more than 400 administrative and support aircraft which were assessed as making a smaller contribution to combat readiness than could be realized by using the associated manpower resources to restore degraded capabilities in our tactical forces. Savings amount to about 6,400 manpower spaces, most realized during Fiscal Year 1975.

Another 1,400 spaces are being saved by closing Ellington and Hamilton Air Force bases, as a result of the realignment and consolidation of Reserve Forces units. Realignment of spaces thus saved, to areas contributing more directly to combat readiness, represents a further improvement in the utilization of our manpower resources.

There are a number of other initiatives through which economies are being made. Reductions in our training establishment, primarily in the areas of pilot and navigator training, save over 4,100 spaces. Other support reduction initiatives amounting to total savings of about 1,700 manpower spaces include such actions as the closure of Matagorda bombing range, inactivation of Tactical Air Command air divisions, and manpower reductions in various support activities such as bands, WAF squadron sections, ceremonial guards, military affiliate radio stations, and command posts.

Technological advances also play an important role in facilitating manpower reductions without degrading combat capability. One example is the implementation of the C-141

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Improved Navigation System. This advanced instrumentation will provide the capability to fly the C-141 over specific routes without the previously required skills of a navigator, allowing us to plan a phased savings of more than 200 navigator positions, with the first increment of 76 expected in FY 1977. In the logistics area, capital investment in technological advances contributes to manpower savings through improved productivity under the Air Force Depot Plant Modernization Program. Existing substandard shop facilities are being modernized or replaced to increase effectiveness and decrease costs. Savings programmed for Fiscal Year 1976 are approximately 450 spaces, and total savings under this program are projected at 3,300 by end-FY 1978.

The savings resulting from these initiatives have provided the headroom within overall budgetary constraints to accommodate development and modernization programs, retain tactical fighter and strategic airlift forces at current levels, and permit much needed increases in combat capability. These combat enhancing initiatives include for Fiscal Year 1976, increases in tactical fighter and C-5 crew ratios, increased flying hours for training surge aircrews in their aircraft of wartime assignment, and activation of three F-5E tactical fighter training (aggressor) squadrons.

While such management initiatives as those I have mentioned improve the ratio of combat forces to support -- the so-called "tooth-to-tail" ratio -- such ratios, however we may choose to define them, are not our sole focus. The real issue is effective utilization of all Air Force manpower. Some of the initiatives I've discussed reduce manpower in management overhead areas, such as the consolidation of strategic and tactical airlift management. Other

initiatives, such as the improved navigation system for the C-141 aircraft, yield economies in primary mission areas. The spaces saved from either type of initiative are used to improve combat capabilities. The prime test of effectiveness is whether the realignments enable us to get more fighting capability out of the same resource levels. Our concern is addressed to the broad and meaningful goals of improving efficiency, productivity and manpower utilization in all areas. Early in this presentation, I reviewed the decline in combat forces which accompanied the steep Air Force manpower drawdown since 1968, leaving us with a lower end strength than at any time since before the Korean War. I also pointed out that there has been no diminution in the threat. In fact, Soviet capabilities continue to grow and as Secretary Schlesinger has pointed out, despite detente the world remains a turbulent place. These considerations point strongly to the need to maintain and improve our current fighting posture.

That need can also be illustrated in another way. As we enter an era when the strategic offensive forces of the United States and the Soviet Union are in a state of equilibrium, we find that the use of these forces by either side is becoming less and less likely. The ability of one side to inflict unacceptable damage on the other tends to keep either side from risking an attack. With strategic offensive forces thus effectively neutralized as an active instrument of national policy, general purpose forces take on added importance. These forces have been repeatedly employed without drawing the super powers into all-out war. They can and have been used by both sides to further national aims.

Therefore, while our goal in the strategic area should be to keep a nuclear war unthinkable for our potential adversaries, our objective in the tactical area should be to insure that a conventional conflict cannot be won by those who oppose us.

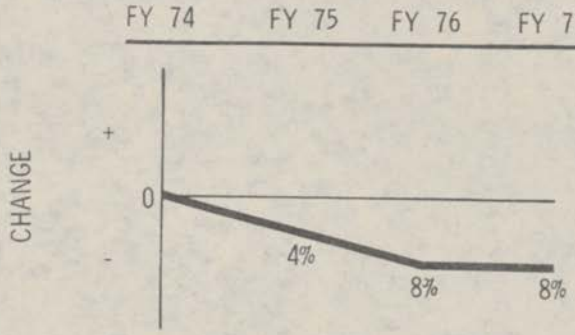
For these reasons, we believe improvements in our general purpose fighting capability are imperative. We have demonstrated the ability to increase our combat capability by realigning resources from support and overhead areas, and concurrently assuring most effective manpower utilization. Your approval of appropriations to support the end strengths requested for Fiscal Year 1976 and the transition quarter will enable us, within the framework of a stabilized manpower program, to intensify these efforts to enhance our fighting posture.

MANPOWER REQUIREMENTS BY MAJOR DEFENSE PROGRAM

The manpower changes in FY 1975 and the management initiatives I have just discussed are the key factors forming the basis of the current Air Force military and civilian manpower program depicted in Figure 5. The projected position for end-Fiscal Year 1976 of 590,000 military and 271,268 direct and indirect hire civilians represents a reduction of eight percent below the Fiscal Year 1974 on-board strength level. As stated previously, the projected level for end-Fiscal Year 197T and 1977 is basically a stabilized program; however, within this stabilized program, we plan further support reduction and combat enhancing initiatives that dramatically change the internal posture of the overall Air Force program.

I will now describe in detail the Air Force manpower program through the transition quarter and highlight

TOTAL AIR FORCE MANPOWER



MIL	643,795	611,534	590,000	590,000
CIV	289,412	281,166	271,268	273,187
TOT	933,207	892,700	861,268	863,187

Figure 5

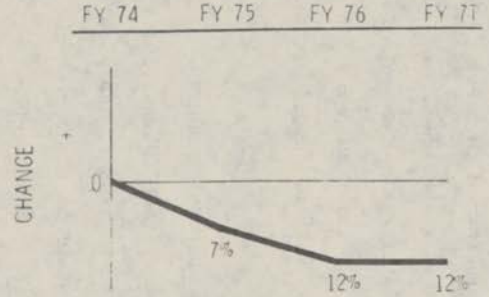
significant changes that are programmed to occur. The next ten figures will address manpower resources in each Major Defense Program. Each figure will reflect a graphic display of the changes in military and civilian manpower since Fiscal Year 1974, and will provide you with principal data elements contained in each program.

STRATEGIC OFFENSIVE AND DEFENSIVE FORCES

Program I, Strategic Offensive and Defensive Forces, includes the strategic bombardment, tanker, and missile forces; the active air defense interceptor forces and surveillance radars; and the bases, headquarters and training activities of the Strategic Air Command, Aerospace Defense Command, and Alaskan Air Command. Figure 6 summarizes the manpower and force structure. A manpower reduction in Strategic Forces amounting to 12% results from programmed

I STRATEGIC OFFENSIVE & DEFENSIVE

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	156,916	143,915	134,737	134,470
CIV	26,957	27,269	26,526	26,499
TOT	183,873	171,184	161,263	160,969

FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
OFFENSIVE				
B-52 SQ	24	23	22	22
FB-111 SQ	4	4	4	4
KC-135 SQ	38	38	35	35
TITAN SQ	6	6	6	6
MINUTEMAN SQ	20	20	20	20
MAJOR INSTALLATIONS	30	29	29	28
SATELLITE BASES	20	8	8	8
DEFENSIVE				
F-106 SQ	7	6	6	6
AEW & C ACFT	12	6	0	0
RADARS (SURVEILLANCE)	99	90	90	90
REGIONAL CONTROL CTR'S	3	8	8	8
MAJOR INSTALLATIONS	10	10	9	9

Figure 6

reductions in both strategic offensive and strategic defensive forces.

Strategic offensive forces reduce in Fiscal Year 1975 primarily because of the reduction of one B-52 squadron with the closure of McCoy AFB, and the inactivation of 12 satellite bases. The further reduction in Fiscal Year 1976 is chiefly the result of two significant actions: First, to provide a better balance between funds available for strategic readiness and force modernization, we have reduced from 40% to 30% the number of strategic offensive aircraft we maintain on ground alert. This has allowed a reduction of aircrews and maintenance personnel. Second, in Fiscal Year 1976, we will initiate a phased program to transfer 128 KC-135 aircraft from the active force to the Reserve components. Thirty-two aircraft will be transferred to the Air National Guard by end-FY 1976; an additional eight aircraft will be transferred to the Air National Guard during the transition quarter.

There are several factors involved in the Fiscal Year 1975 reductions in strategic defensive forces. Among these are transfer of one F-106 fighter interceptor squadron to the Air National Guard, and phasing out some EC-121 airborne early warning and control aircraft at McClellan AFB, California.

In addition, eight Aerospace Defense Command (ADC) ground surveillance radar squadrons in the continental US (CONUS) are being inactivated. These inactivations start the gradual phase out of Air Force ground radars as part of the implementation of the Joint Surveillance System. To form this system, the Air Force independent aircraft warning and control radar system is being modernized and will

combine with FAA air traffic control radars. This joint surveillance network will capitalize on existing systems and reduce overhead.

Also, the increased efficiency of the radar at Eglin AFB, Florida, and the added capability of other submarine launched ballistic missile (SLBM) launch warning systems will permit the SLBM systems at Laredo, Texas, and Moorestown, New Jersey, to be closed.

In FY 1976, one ADC EC-121 squadron will be inactivated.

GENERAL PURPOSE FORCES

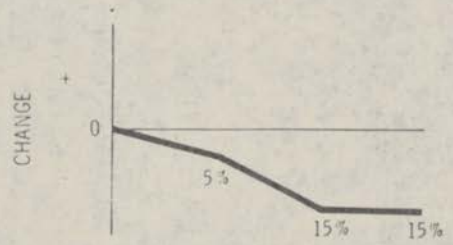
General Purpose Forces, Program II, encompass the CINCEUR, CINCPAC and CINCLANT airborne command posts; the 68-squadron tactical fighter force; tactical reconnaissance; special operations forces; and associated tactical air control and crew training activities. Included in this program are the bases and headquarters of Tactical Air Command, United States Air Forces in Europe, and Pacific Air Forces. Figure 7 summarizes the forces and associated manpower. The 15% manpower drawdown is largely related to the reduction of two tactical airlift squadrons and the transfer of the remaining 15 tactical airlift squadrons to the airlift forces in Program IV. Also transferred to Program IV are three major installations. Other significant reductions in manpower are associated with the planned drawdown or closure of overseas bases, and the transfer of four tactical reconnaissance squadrons to the Air National Guard as part of the Reserve Forces modernization Program.

Program II manpower was also decreased by the management headquarters and indirect support reductions I discussed earlier. These manpower reductions have allowed increases

II GENERAL PURPOSE FORCES

MANPOWER SUMMARY

	FY 74	FY 75	FY 76	FY 7T
MIL	168,463	162,039	143,434	143,811
CIV	38,560	35,408	31,613	31,793
TOT	207,023	197,447	175,047	175,604



FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
ABN CP SQ	3	3	3	3
F-105 SQ	2	2	2	2
F-4 SQ	50	45	44	44
F-111 SQ	12	12	12	12
F-15 SQ	0	0	2	3
A-7 SQ	10	10	8	7
AGGRESSOR TNG SQ (F-5)	0	0	3	3
RF-4 SQ	13	13	9	9
SOF SQ	5	5	3	3
C-130 SQ*	17	17	0	0
C-9 ACFT**	8	8	0	0
MAJOR INSTALLATIONS	53	49	44	44

* TRANSFERRED TO PROGRAM IV IN FY 76, AND REDUCED TO 15 SQUADRONS.

** TRANSFERRED TO PROGRAM IV IN FY 76.

Figure 7

in combat capability in two key areas: First, tactical fighter crew ratios are restored to 1.25 per aircraft, from the 1.1 to which they were reduced in 1971 because of resource limitations. This restoration of trained aircrews represents a significant incremental increase in capability to support rapid deployment of our tactical forces and a greater staying power once they are in the combat zone. Present crew resource limitations prevent us from achieving full system efficiency from the highly capable aircraft we are now deploying, in terms of the ability to meet the high sustained sortie rates we would encounter in combat. Second, tactical air forces combat capability is enhanced with the activation of three 18 UE F-5E tactical fighter training (aggressor) squadrons. These squadrons will provide our combat crews with a more realistic combat training environment than has been possible outside of actual combat situations. This improved combat environment will allow us to develop maneuvers and combat tactics that will enhance the ability of our aircrews to engage enemy forces.

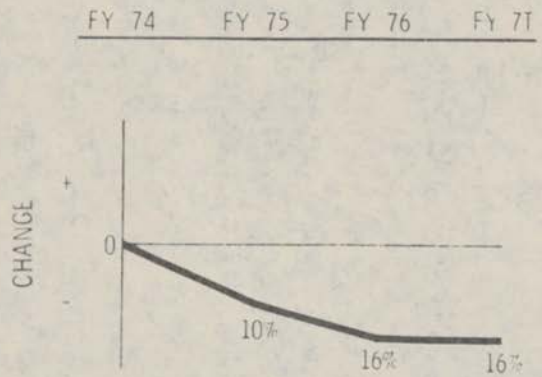
The small increase in the transition quarter is primarily the result of training requirements associated with new systems coming into the inventory, the F-15 and A-10.

INTELLIGENCE AND COMMUNICATIONS

Program III, which is summarized in Figure 8, includes the manpower for Intelligence; Communications; Command and Control; Air Traffic Control; Satellite Communication Systems; Weather and Air Rescue activities; support to Defense agencies such as Defense Investigative Service, Defense Communications Agency, Defense Intelligence Agency, and National Security Agency; and other miscellaneous activities. Support is rendered to all Air Force commands

III INTEL/COMM/WEX/RESCUE

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	78,853	70,712	65,524	65,480
CIV	11,593	11,016	10,411	10,389
TOT	90,446	81,728	75,935	75,869

FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
INTELL RELATED ACFT	78	71	76	76
WEATHER ACFT	25	25	13	13
RESCUE ACFT	145	115	88	91
NEACP ACFT	3	3	3	3
COMM TERMINALS	383	368	361	359
MAJOR INSTALLATIONS	2	1	1	1

Figure 8

and at the National level. The overall 16% reduction is distributed throughout the program, with the larger reductions in intelligence and communications activities.

Intelligence reductions reflect the results of a DOD study that directed phased mission changes between Fiscal Years 1974 and 1978. These reductions were implemented through unit inactivations and phasedown of reconnaissance and signal intelligence activities, and were accommodated through realignment of priorities, management efficiencies, and technological advances. Additionally, cryptologic training resources were realigned to Program VIII (Training, Personnel, and Medical Support) as part of a DOD effort to promote consistency among the services in the programming of training activities. As part of this restructuring, Goodfellow Air Force Base was transferred to Program VIII.

Communications reductions result from several actions. Base communications resources are realigned to other major force programs, to properly identify the resources with the force activities supported. Air Force Communications Service is being disestablished as a major command and realigned as a technical service under Military Airlift Command. Other factors causing reductions in communications are base closures, the consolidation of Kanto Plain activities, unit inactivations and consolidations, reductions in the size of headquarters activities, and disestablishment of HQ PACAF.

There are also reductions in weather and rescue activities, relating to declining aircraft inventories and flying hours. Other reductions are in Defense agency support and result from the inactivation of a mapping and charting unit.

AIRLIFT

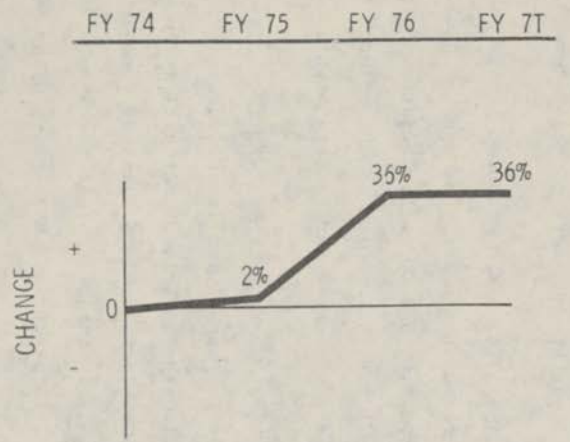
Program IV, summarized in Figure 9, is comprised of strategic and tactical airlift forces, bases, and missions assigned to the Military Airlift Command. Manpower increases from Fiscal Year 1974 to Fiscal Year 1975 are the result of the transfer of support from other major force programs to MAC. The primary reason for the increase from Fiscal Year 1975 to Fiscal Year 1976 is consolidation under MAC of airlift forces. Tactical airlift resources from one CONUS and four overseas commands will be transferred to MAC by the end of Fiscal Year 1976. Included in the transfer are 15 squadrons of C-130's, 8 C-9 aircraft, and 3 major installations. Consolidation of resources under a single manager will provide optimum use of all airlift resources, insure maximum efficiency in utilization of total airlift capability, and afford timely response to airlift requirements of theater commanders. A manpower savings of 168 spaces has already been identified during the initial stages of consolidation. Ninety of these were reduced from within the management headquarters of major commands.

Airlift forces capabilities are enhanced in Fiscal Year 1976 with an increase in the active force C-5 crew ratio per aircraft from 2.0 to 2.25. This adjustment to our airlift forces reflects the results of our efforts to determine the proper mix of active and Reserve within our strategic airlift program.

Experience gained in resupplying Israel during the 1973 Middle East conflict demonstrated that airlift is indispensable for the rapid movement of limited tonnage of critical items. Given this experience, an assessment was made of strategic airlift capability available to the nation

IV AIRLIFT

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	40,638	41,149	56,624	56,495
CIV	13,507	14,294	16,967	16,925
TOT	54,145	55,443	73,591	73,420

FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
C-141 SQ	13	13	13	13
C-5 SQ	4	4	4	4
C-130 SQ*	0	0	15	15
C-9 ACFT**	11	11	19	19
MAJOR INSTALLATIONS	9	9	12	12

*TRANSFERRED FROM PROGRAM II IN FY 76
AND REDUCED FROM 17 TO 15 SQUADRONS

**TRANSFERRED 8 AIRCRAFT
FROM PROGRAM II IN FY 76

Figure 9

during periods of crisis. It was determined that a capability to airlift about 10,000 tons a day in wide-bodied aircraft over a distance of approximately 4,000 nautical miles (without dependence on intermediate refueling bases) would meet the majority of demands which could be placed on strategic airlift.

To meet this objective the President's FY 1975 budget requested authorization and funds for initiating a three part program: increasing crews and spare parts for the C-5 and C-141 force, stretching the C-141s, and modifying 110 wide-bodied jets in the Civil Reserve Air Fleet (CRAF).

My comments on this subject today will focus on Air Force actions to comply with the direction of the Congress in determining the proper mix of active and Reserve forces manpower to achieve the first element of our strategic airlift enhancement program.

The President's FY 1975 budget included a request to increase aircrews and maintenance personnel sufficiently to obtain a 25% increase in sustained and surge capability. Specifically, a mobilized crew ratio of 4.00 crews per aircraft and a maintenance capability to sustain a 10 hour per day utilization rate is required.

The President's FY 1975 budget requested increases in active force aircrew and maintenance personnel to attain this increased capability. Active force C-5 and C-141 crew ratios were to be increased from 2.0 to 2.75 aircrews per aircraft, which, when augmented with the Air Force Reserve associate crew ratio of 1.25 would have met the total force 4.00 aircrew per aircraft requirement.

During hearings last April, the Assistant Secretary of Defense for Manpower and Reserve Affairs stated that, based on improved Reserve recruiting experience, the Reserve portion of this 4.00 aircrew ratio could be increased to 1.50 for the C-141, thereby reducing the active force C-141 crew ratio to 2.50. As a result, the Department of Defense Appropriation Authorization Act, 1975 (Public Law 93-365) reduced 2,810 military from the requested Air Force FY 1975 active duty military end strength. Subsequently, appropriations were denied for the entire active force strategic airlift increase initially requested in the President's FY 1975 Budget.

Also reflected in Public Law 93-365 is the policy of Congress that: "any increase in the ratio of aircrew to aircraft for the strategic airlift mission of the Air Force above the present ratio of crew members per aircraft should be achieved to the maximum extent possible through the components of the Selected Reserve and not by increasing the active duty force level of the Air Force." Results of the study required to meet this Congressional Policy are being separately presented to the Congress by the Office of the Secretary of Defense. While our objective of increasing strategic airlift mobilized capability remains unchanged, we now plan significant modifications in the mix of personnel to be used for attaining this capability.

Consistent with the policy of Congress to employ components of the Selected Reserve to the maximum extent possible to meet increased strategic airlift requirements, and as the result of the study which I just mentioned, we have included in this year's budget request only a modest increase in active force aircrews for the C-5 aircraft.

Recruiting experience indicates that the Air Force Reserve can achieve a crew ratio of 2.00 for the C-141 but will not be able to provide more than 1.75 for the C-5. But the Air Force Reserve cannot meet these crew ratio requirements until FY 1978. In the intervening period, to in effect achieve required strategic airlift mobilized crew ratios representing the effective equivalent of 4.00 per aircraft and the effective capability for sustaining a 10 hour per day utilization rate, active force capabilities are being increased in FY 1976 by two means. First, wartime surge and sustained requirements will be met in part by employing active force "auxiliary" aircrews and maintenance personnel who are performing duties in other than wartime essential functions. This interim method of increasing effective combat capability will not add to total active manpower requirements, but will require the specific identification and control of previously qualified aircrew and maintenance personnel for immediate use in wartime or in a contingency to meet sustained daily strategic airlift utilization rates per airframe. Second, we will employ manpower savings realized from Air Force support reduction initiatives to increase C-5 active force crew ratios from 2.00 to 2.25 per aircraft, while still remaining within our 590,000 active duty military strength level.

RESERVE FORCES

Program V, Reserve Forces, is summarized in Figure 10. Included in Program V are active duty military advisors and civilian technicians in support of the Air National Guard and Air Force Reserve. For information purposes, drill pay manpower resources associated with the Selected Reserve are reflected on the right hand side of Figure 10, but only full time active military, civilian and civilian technician authorizations are included ln the manpower totals at the lower left of Figure 10.

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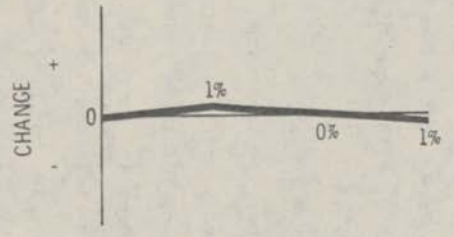
V RESERVE FORCES

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	2,544	2,155	1,715	1,618
CIV	34,521	35,125	35,205	35,205
TOT	37,065	37,280	36,920	36,823

FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
AIR NATIONAL GUARD				
SQUADRONS	91	91	91	91
AVG SELECTED RESERVE*	92,125	95,000	94,879	94,543
ACTIVE MIL MANPOWER	1,239	1,035	914	818
CIV MANPOWER*	23,032	23,567	23,703	23,703
MAJOR INSTALLATIONS	1	1	1	1
AIR FORCE RESERVE				
SQUADRONS	53	53	53	53
AVG SELECTED RESERVE*	44,020	48,336	51,789	53,642
ACTIVE MIL MANPOWER	1,305	1,120	801	800
CIV MANPOWER*	11,489	11,558	11,502	11,502
MAJOR INSTALLATIONS	12	12	10	10

*TECHNICIANS ARE INCLUDED IN BOTH AVERAGE SELECTED RESERVE STRENGTH AND CIVILIAN MANPOWER LINES.

Figure 10

Selected Reserve strengths are separately authorized and were discussed at separate Reserve hearings before this committee.

There are slight fluctuations in the program, primarily due to force modernization in both the ANG and USAFR, and USAFR base closure actions. Force changes include conversion from F-100s, RF-101s, F-101s, F-102s, C-119s, U-10s, KC-97s, C-123s, and C-130s to A-7s, KC-135s, RF-4s, C-130s, WC-130s, AC-130s, and F-4s. These conversions to more sophisticated weapons systems cause an overall increase in civilian manpower spaces. For example, changing from RF-101s, KC-97s and C-130s to RF-4s, KC-135s and WC-130s results in increased maintenance manhours per flying hour, thus increasing the aircraft maintenance technicians required.

The active military decreases are caused by the drawdown of advisors in Tactical Air Command and in the augmentation packages for units that have achieved combat ready status in new weapons systems to which they were recently converted. Actions involving major installations also played a key role in the military strength drawdown. Ellington AFB, Texas, is being closed and Hamilton AFB, California, is being turned over to the Army.

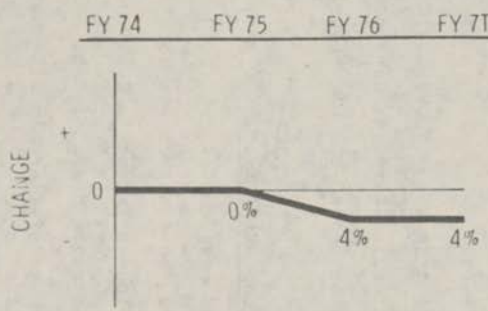
One final note of interest is that FY 1976 will mark the first time that strategic offensive aircraft have been possessed by the Air Reserve Forces, when the KC-135 air refueling mission is assigned to the Air National Guard.

RESEARCH AND DEVELOPMENT

Program VI, Research and Development, is shown in Figure 11. This program encompasses the research, exploratory development, and weapon system development, test, and evaluation activities of the Air Force Systems Command. The decline in research and development manpower is largely attributable to

VI RESEARCH AND DEVELOPMENT

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	17,132	17,130	16,713	16,696
CIV	21,706	21,758	20,580	20,579
TOT	38,838	38,888	37,293	37,275

FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
MAJOR DEFENSE RESEARCH LABS	4	4	3	3
EXPLORATORY DEVELOPMENT LABS	9	9	9	9
PRODUCT DIVISIONS	3	3	3	3
TEST CENTERS / RANGE	5	5	4	4
MAJOR INSTALLATIONS	6	7	7	7

Figure 11

Air Force support reduction initiatives. The Air Force has consolidated laboratory structures to facilitate the focus of research and development activities into three major functional areas: space and missile systems; aeronautical systems; and electronics, communications, command, and control. Not only does this laboratory structure realignment save manpower, but it also permits more direct support to the three Air Force Systems Command (AFSC) product divisions. Further savings result from consolidation of AFSC test aircraft from six to three locations, thus improving utilization of aircraft and modification facilities, and reducing management overhead. These actions, while contributing to the savings generated through management initiatives for realignment to enhance general purpose force capabilities, will not adversely affect future systems development.

One last item of note before leaving this area, civilians in this program are funded from the Research, Development, Test and Evaluation Appropriation.

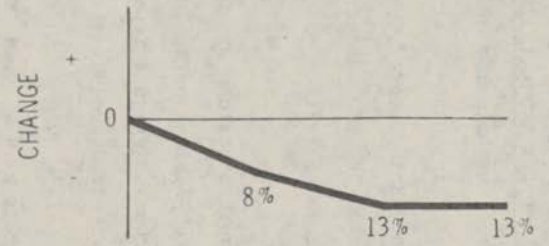
CENTRAL SUPPLY AND MAINTENANCE

Program VII manpower supports the central supply, procurement and depot level maintenance activities of the Air Force Logistics Command. This program, summarized in Figure 12, also includes manpower for the Contract Management Division and the Eastern Test Range activities of the Air Force Systems Command. As you can see, the program is largely civilian. The workload and manpower authorizations are driven to a great extent by total Air Force flying hours and aircraft and missile inventory. Program reductions result from a combination of reduced workload and increased productivity. Workload reductions have come from reduced flying hours. Increased productivity has come through such projects as the Depot Plant Modernization Program

VII CENTRAL SUPPLY AND MAINTENANCE

MANPOWER SUMMARY

	FY 74	FY 75	FY 76	FY 7T
MIL	10,725	9,330	8,924	8,902
CIV	102,379	94,390	89,568	89,515
TOT	113,104	103,720	98,492	98,417



FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
DEPOTS	5	5	5	5
EASTERN TEST RANGE	1	1	1	1
MAJOR INSTALLATIONS	8	7	7	7

Figure 12

(DPMP) and Technology Repair Centers (TRC). DPMP's objective is to maintain a logistics plant for rapid and effective response to deterrent force requirements, and to support surges. This is being accomplished through reduced flow times, increased worker productivity, and improved quality and reability in weapon systems. TRC involves a new concept in the depot-level repair of exchangeable components. This concept consolidates the repair of components requiring like skills, facilities, tools, and test equipment into entities known as technology repair centers. By assigning workloads on the basis of skills, equipment, and facilities required in the repair process rather than by weapon system or supply class, several benefits accrue: reduced number of staff divisions, reduced overhead management, maintenance functions consolidated into fewer buildings, and increased facility utilization.

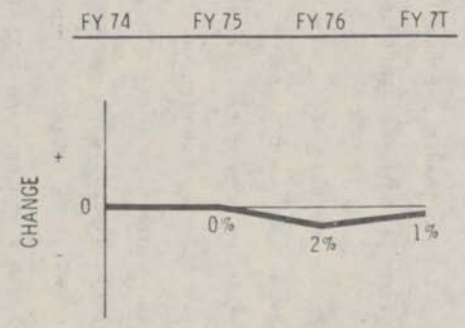
TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL SUPPORT

Program VIII is summarized in Figure 13. This program includes manpower for support of recruit, specialized, flight, and professional training activities of Air Training Command, the Air University, and the Air Force Security Service. It also includes the Air Force Academy, all Air Force hospital manpower, manpower allocated to the transient and patient accounts, and a number of other personnel support activities such as overseas dependent schools.

Changes in this program are due chiefly to significant reductions in medical authorizations based on expected productivity increases, a reduction in the transient account, reduced undergraduate pilot and navigator training, and reductions in enlisted and professional training. These reductions have been partially offset by several increases in the program. Starting in FY 1975, manpower resources supporting cryptologic training were transferred

VIII TRAINING/MEDICAL/PERSONNEL SUPPORT

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	147,103	145,265	142,732	142,958
CIV	29,122	30,639	29,352	31,237
TOT	176,225	175,904	172,084	174,195

FORCES SUMMARY

	FY 74	FY 75	FY 76	FY 7T
NON-PRIOR SVC INPUTS	73,361	74,155	75,000	24,673
USAF PILOT OUTPUTS	2,142	1,936	1,800	450
USAF NAV OUTPUTS	1,356	1,250	900	225
TOTAL PCS STUDENTS	38,169	37,810	37,619	38,319
ACADEMY CADETS	4,412	4,417	4,417	4,211
DEPENDENT SCHOOLS	659	770	738	2,745
MAJOR INSTALLATIONS	18	19	19	19
HOSPITALS	102	99	95	95
TRANSIENTS	25,217	25,003	24,216	23,906

Figure 13

from Program III to Program VIII. The seasonal aspect of changing to the new fiscal year structure caused significant increases in the transition quarter end strength, as a result of including recruit training students and dependent education school teachers. When these bookkeeping increases are excluded, the downward trend of the program is more apparent, with a 1/2 percent decline in Fiscal Year 1975, 3.4 percent in Fiscal Year 1976, and 3.7% in the transition quarter.

Special emphasis has been placed on reducing training costs. An overall reduction of 6% was achieved in training and related support. Currently, 99% of the instructor staff authorizations have been scrutinized through management engineering standards studies. Over 85% of the total training support has been similarly reviewed. We have pursued other management initiatives which will reduce the amount of formal training by using more on-the-job training. The Interservice Training Review Organization approved the consolidation of ten technical training courses during the past year, and more are scheduled for review in the future, to include medical and flying training. While the Air Force will continue its efforts to minimize training costs, it is likely that costs will continue to be high. Air Force training is intensive in the highly technical areas of weapons systems, electronics, and communications maintenance. These are areas that require specially trained and qualified technicians, both for the sake of effective mission accomplishment and aircrew safety. Hands-on experience and individual attention in the classroom are musts in many specialties. Such training by its very nature is more expensive than the

classical math or english training conducted in high schools and colleges.

ADMINISTRATION

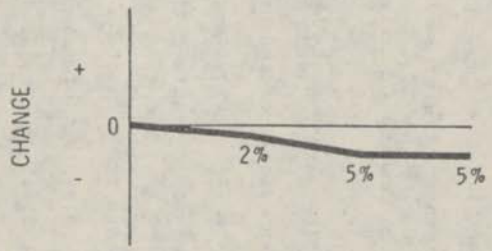
Program IX, Administration, which is summarized in Figure 14, involves a great variety of activities which play a key Air Force-wide role in sustaining other commands and programs. This program includes 1,323 military and 89 civilian Air Force manpower authorizations attached to activities outside the Air Force such as the Office of the Secretary of Defense and the Joint Chiefs of Staff, and 416 reimbursable personnel serving in Federal agencies outside the Department of Defense.

Within the Air Force, Program IX includes manpower for departmental headquarters, two major command headquarters (Headquarters Command and Air Force Southern Command), separate operating agencies such as the Military Personnel Center and Accounting and Finance Center, and certain specialized activities such as the Air Force Band and Civil Air Patrol. The change in manpower from Fiscal Year 1974 to Fiscal Year 1975 results primarily from the recent decision to eliminate reciprocating support aircraft Air Force-wide, and reductions in Air Force management headquarters. The reduction from Fiscal Year 1975 to Fiscal Year 1976 is driven largely by a further programmed reduction in Air Force management headquarters, transfer of Air Force Reserve Staff to Program V, Southern Command airlift consolidation with Military Airlift Command, and other minor adjustments.

IX ADMINISTRATION

MANPOWER SUMMARY

	FY 74	FY 75	FY 76	FY 7T
MIL	17,682	16,826	16,529	16,495
CIV	10,954	11,111	10,814	10,813
TOT	28,636	27,937	27,343	27,308



FORCES SUMMARY

USAF MANPOWER WITH OSD, JCS,
HEADQUARTERS, U.S. AIR FORCE
HEADQUARTERS COMMAND, USAF
HQ, USAF SOUTHERN COMMAND
AIR FORCE MILITARY PERSONNEL CENTER
AIR FORCE ACCOUNTING AND FINANCE CENTER
AIR FORCE DATA AUTOMATION AGENCY
AIR FORCE AUDIT AGENCY
AIR FORCE INSPECTION AND SAFETY CENTER
USAF BAND
CIVIL AIR PATROL
USAF POSTAL AND COURIER SERVICE
REIMBURSEABLE MANPOWER

MAJOR INSTALLATIONS

FY 74	FY 75	FY 76	FY 7T
5	5	4	4

Figure 14

SUPPORT TO OTHER NATIONS

Program X, Support to Other Nations, includes Air Force manpower assigned in support of United States commitments to the NATO military committees, command elements of Allied Command Europe, the US element of CENTO and SEATO, as well as MAAGs, Missions, Military Groups and Foreign Military Sales activities. This program is summarized in Figure 15.

One factor in the decrease in Fiscal Year 1975 manpower resources is the continuing effort to match MAAG, mission, and military group strengths to US priority needs and objectives. Another is the reduction to subordinate command elements levied by the NATO Military Committee. Minor increases in Fiscal Year 1976 are to support the expanding Foreign Military Sales (FMS) program. These increases are related primarily to technical assistance for Iran and Saudi Arabia. The increases are partially offset by a decrease in the Training and Logistics Detachment, US Military Assistance Command - Thailand.

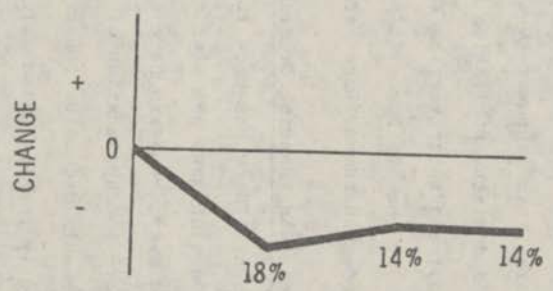
DETERMINING MANPOWER REQUIREMENTS

In the fourth and final portion of this presentation, I would like to take a few minutes to give you a feel for how we develop our manpower requirements.

Total requirements are a function of missions the Air Force is to perform in support of national objectives, and funding levels which limit the resources available for carrying out these missions. Within the framework of these constraints and mission commitments, decisions are made as to the force levels, deployments, and activity which will permit the Air Force to accomplish its assigned missions with a minimum level of risk.

X SUPPORT TO OTHER NATIONS

MANPOWER SUMMARY



	FY 74	FY 75	FY 76	FY 7T
MIL	3,739	3,013	3,068	3,075
CIV	113	156	232	232
TOT	3,852	3,169	3,300	3,307

FORCES SUMMARY

NATO/SHAPE, CENTO, SEATO CONTRIBUTION
MAAGS, MISSIONS, AND MILITARY ASSISTANCE
FOREIGN MILITARY SALES ACTIVITIES

Figure 15

Forces - such as A-7 squadrons and missile squadrons - together with the other mission activities required to sustain them - such as weather forecasting, flight line operations, rescue and recovery, command and management, supply, communications, and intelligence - generate workloads. These workloads are translated into manpower requirements through the development and application of manpower standards and guides.

Steps in Determining Requirements

Simply stated, the manpower requirements determination process is composed of six basic steps: first, identifying the missions or functions to be performed; second, reducing these broad missions or functions to tasks that can be related to measurable manhours and a specific output or workload; third, determining the manhours required to perform these tasks; fourth, dividing these manhours by the number of manhours personnel are available for performance of primary duties; fifth, relating this manpower to a programmable or predictable output; and sixth, publishing manning tables that reflect manpower requirements at varying workloads. The primary vehicle used by the Air Force to accomplish these steps is the Air Force Management Engineering Program.

Management Engineering Program

Since 1961, the Air Force has used the Management Engineering Program to develop manpower standards. The experience and expertise gained over the years have enabled this program to continually improve the application of advanced methodology to the requirements determination process. This constant refinement has steadily increased the value of the program, as a dependable, objective, and accurate vehicle for documenting Air Force manpower requirements.

The program is operated by specially qualified and trained personnel assigned to 122 management engineering teams located at major bases throughout the Air Force. Through detailed, on-site observations and scientific procedures, these teams carry out the steps that define the work tasks, measure the times required to perform them, and develop the manpower requirements.

For example, in a major command having 20 bases where the same function--for example, supply--is performed, at least six management engineering teams are selected at bases performing the function at varying workload levels, so that the subsequent measurements at the six bases will be representative of all 20 bases.

Standards are developed under the direct supervision of the major command Director of Manpower and Organization. Before the standards are given final approval, they are submitted to Headquarters USAF for review, to insure technical accuracy and adherence to applicable policy.

Management engineering personnel have at their disposal a wide range of scientific techniques to conduct their studies. These include work sampling, time study, queuing theory, linear programming, correlation and regression analysis, and many others.

Types of Manpower Determinants

The end product resulting from manpower validation efforts is one of three types: engineered standards, statistical standards, and manpower guides. Each of these represents a different level of detail and analysis that is most appropriate to the nature and characteristics of the function or activity for which requirements are to be determined. For example, an engineered standard is the most

precise basis for measuring requirements, but it is also the most detailed, most time-consuming, and most expensive to develop. Therefore, we reserve the use of this type of standard to those functions which are large, stable, and generally standardized--such as civil engineering and medical--so that our operation is cost effective in achieving its requirements determination objective.

Whether the end product is, by our definition, a "standard" or a "guide," the resulting manpower requirements are related to specific and varying workload volumes and, in most cases, break out the total manpower requirement by skills and grades. Currently, 65% of the total Air Force manpower requirement is determined by standards, 35% by guides.

The application of both manpower standards and guides to forecasted workload requirements provides an accurate, objective and consistent basis for resource managers at all levels of the Air Force to predict future manpower requirements. This process provides the Air Force the capability to insure that like activities throughout the Air Force receive required levels of manpower consistent with mission and workload requirements. Further, when workloads change because of mission or force adjustments, accurate numbers of related manpower can be programmed with the changed mission or force level.

Work Center Standards

There are currently over 8,100 work center standards in use. As the top line of figure 16 shows, there continues to be a steady growth in the numbers of work center standards that have been developed. In the past year, studies were completed in such functions as maintenance, base supply, ICBM

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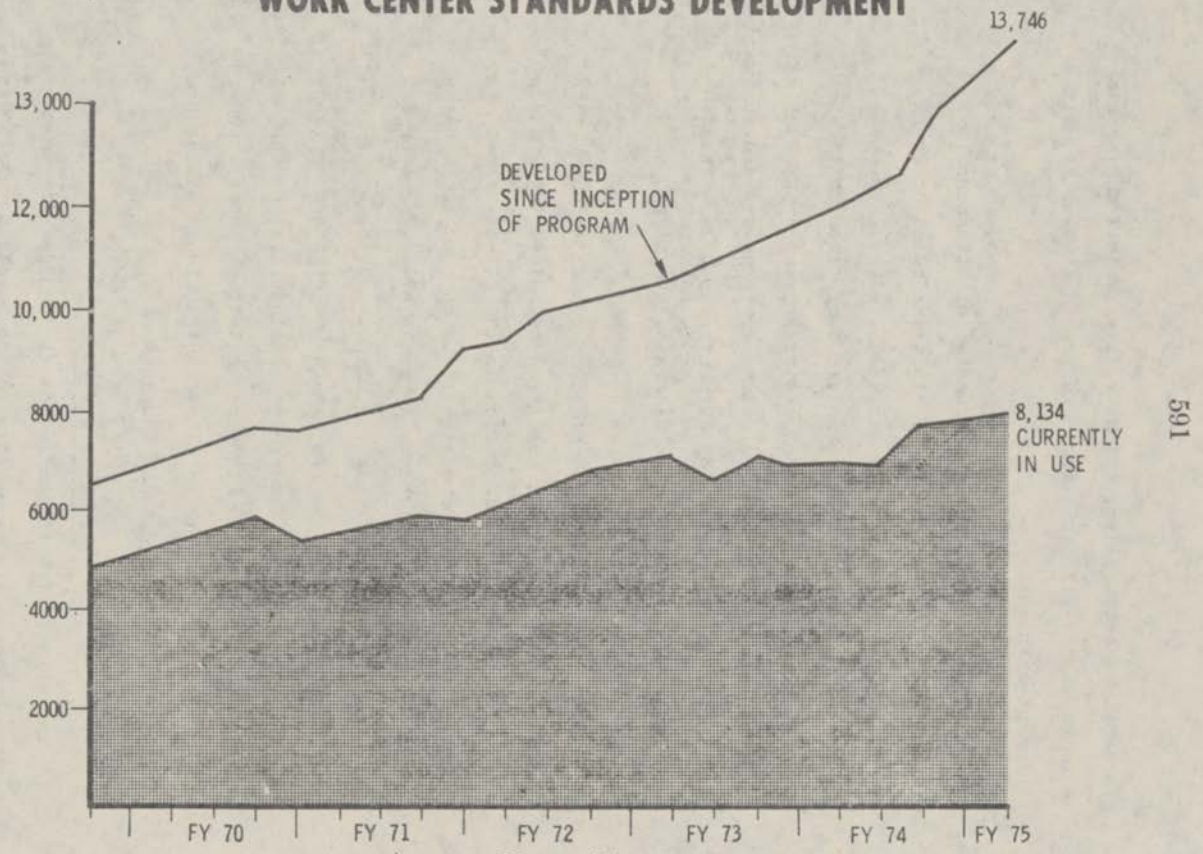


Figure 16

maintenance, comptroller, transportation, civil engineering, technical and flying training, and ground communications equipment maintenance.

The lower line records the number of standards that are current and in use at the points in time indicated on the graph. The area between the lines, therefore, represents standards which have become obsolete over time. Note that although standards development has progressed at a relatively constant rate, there has been considerable upward and downward fluctuation in the numbers of current standards. This is normally caused by changes in aircraft, equipment, or procedures. When standards are established, they relate manpower requirements to the workloads involved in doing work in a particular way with a specified set of tools or equipment. An important consideration in the effectiveness of manpower standards is the degree to which they are updated to reflect changes required as a result of new procedures or equipment. In fiscal year 1975 to date, the Air Force has expended more than 30% of its management engineering capability in updating standards; the remainder of the capability being spent primarily in studying activities where standards did not exist and providing management advisory assistance to commanders and functional managers.

Benefits and Costs

The principal contribution of the Management Engineering Program has been its capability to accurately determine and program manpower requirements and provide a sound basis for distributing available resources for mission needs. Aside from this accomplishment, though, the program has more than paid for itself since its inception in 1961. As figure 17 shows, the $142 million invested has returned a cost avoidance of $814 million, or $5.70 for each dollar spent.

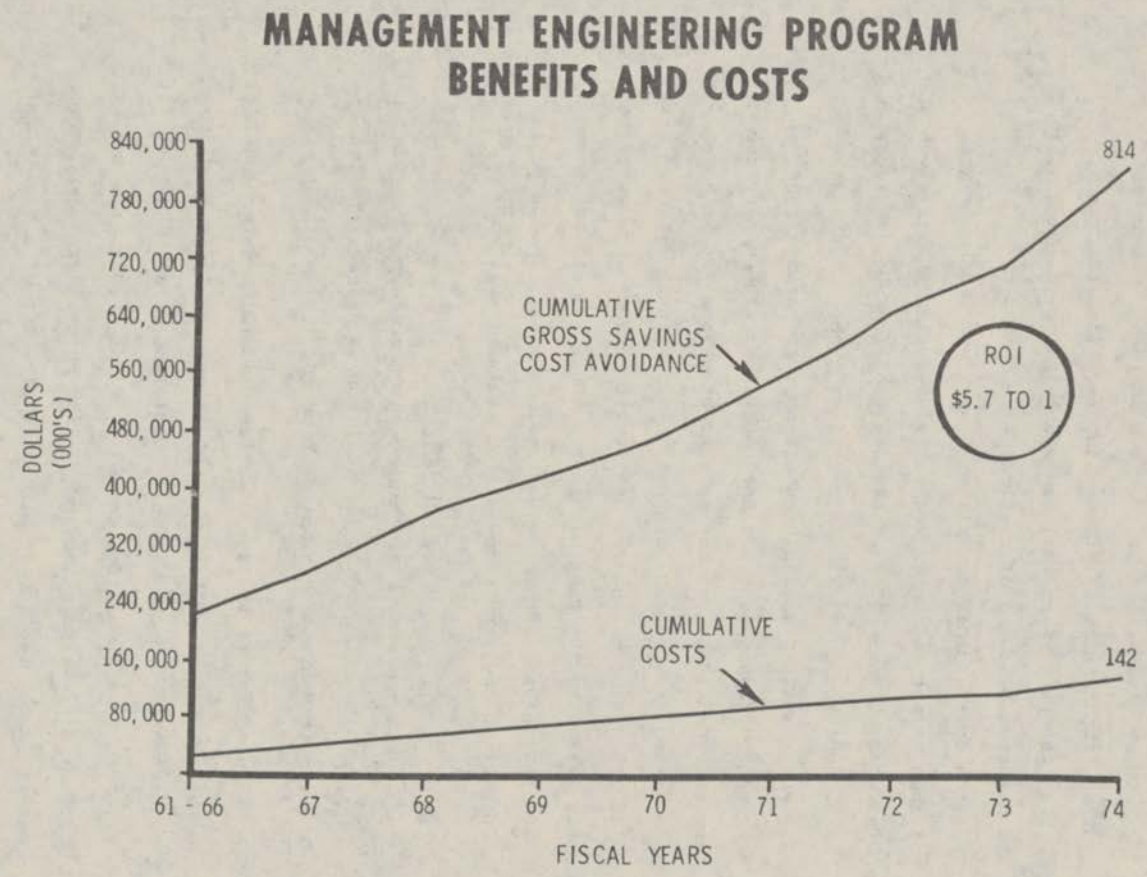

MANAGEMENT ENGINEERING PROGRAM
BENEFITS AND COSTS
DOLLARS (000'S)
840,000
780,000
720,000
640,000
560,000
480,000
400,000
320,000
240,000
160,000
80,000
814
CUMULATIVE GROSS SAVINGS COST AVOIDANCE
ROI
$5.7 TO 1
CUMULATIVE COSTS
142
61 - 66
67
68
69
70
71
72
73
74
FISCAL YEARS

Figure 17

These savings accrue from two sources. One is the initial implementation of new manpower standards which, during the past year, included such studies as the Munitions Maintenance Standard of Tactical Air Command with a $17.2 million cost avoidance. Although not recorded as program savings, other economies are realized during the lifetime of standards, because they enable additional manpower reductions to be achieved as workloads decrease. The second source of savings results from implementation of recommendations made through our management advisory services. These services are provided to assist managers at base level to improve operations and increase manpower utilization. Although only 8 to 11% of the management engineering effort is devoted to this activity, the tangible improvements and savings have been rewarding. These two sources, together, accounted for $90 million cost avoidance during the past year.

Improvements

While discussing the Management Engineering Program, I would also mention two major initiatives underway to improve the requirements determination process.

The first is the use of a large-scale computer model to simulate complex operational conditions and forecast manpower requirements for the variable conditions. This model, referred to as Logistics Composite Model (LCOM), was developed by RAND Corporation and the Air Force Logistics Command. General Kern, the former Air Force Director of Manpower and Organization, discussed the potential of LCOM in testimony last year. Since then, the technique has been successfully used by the Tactical Air Command in developing standards for aircraft maintenance of the F-4E weapon system. As a result, the methodology is being applied to other commands using the F-4 aircraft, and will be expanded to other functions as

economically feasible. LCOM is flexible, will reduce standards development time, and will improve our ability to forecast requirements to meet various operating conditions.

A second improvement has occurred in reducing costs and improving the quality of manpower standards in functions where the manpower resource is of high value. Functional management engineering teams are being assigned full-time responsibility for maintaining the manpower standards that are applicable Air Force-wide for specific functions. Each team will closely monitor all changes to the function that impact on manpower requirements. When sufficient mission changes occur, the team can immediately proceed to lead the Air Force-wide standards update; this will greatly reduce study time required under previous procedures. At the present time, teams are in being for the civil engineering and personnel functions; others are planned for transportation, medical, supply, and security police.

Officer Requirements

Due to the significant interest which has been focused on officer strengths, I would like to conclude this discussion of the requirements determination process by addressing officer requirements.

Air Force officer needs are determined and reevaluated on a continuing basis through a regularized requirements determination process comparable to those in most large civilian business and industrial organizations. Total numbers of officers, as well as enlisted personnel and civilians, are established by relating projected workloads to manpower standards and guides. Specific grade requirements are determined through position analysis considering such factors as organizational level, proximity and degree

of supervision, special qualifications, magnitude of authority and responsibilities, and significance of actions and decisions.

The cost of the overall process is minimized, since position evaluation is part of the quantitative manpower requirements system. This process insures that each position is objectively evaluated and assigned a grade commensurate with the demands of that position. These individual position grade requirements are aggregated into a grade structure which offers promotion opportunity, at appropriate phase points, which is adequate to attract and retain the quality and quantity of officers needed to fill the individual positions.

Evaluation of the Air Force grade distribution has been done by comparing current distributions to those which existed in the past. A number of changes -- such as technology, work force characteristics, and strategy -- limit the value of such a comparison. A more meaningful approach would compare our grade distribution with those of other organizations. When this is done, the current Air Force officer grade structure compares favorably to executive force structures in civilian industry, in other government agencies, and in the armed forces of other nations.

The Air Force is continuing to implement management improvements to insure that this process is as unbiased and as standardized as possible. Improvements currently being finalized with a view to early implementation include: (1) the establishment of an Air Force Colonel Position Review Board to validate colonel positions Air Force-wide and to assure high-level quality control; (2) the Air Force-wide implementation of the results of six years of

behavioral research in grade determination procedures; (3) the use of expanded computer models to more effectively integrate job content and personnel force maintenance considerations, and (4) the improvement of grade accounting control procedures to insure accurate documentation of grade requirements which cannot be funded due to budgetary or legal limitations.

We are well aware that there is considerable interest in the ratio of enlisted to officer personnel in the military services, as well as in overall officer strength levels. This interest is understandable. However, there is no optimal or desired ratio, and our forces are not structured to maintain any given ratio. Officer and enlisted requirements in a unit are based upon analysis of the content of jobs required to support the total programmed workload of that unit. The mix of enlisted/officer requirements changes when units are withdrawn or added to the force, when the civilian-military mix is altered, when aircraft types are changed, when base maintenance services are contracted, when the technical composition of the workload changes, and when labor saving management systems are implemented. These diverse actions, made to enhance the efficiency and effectiveness of the force, determine in the aggregate what the enlisted/officer ratio will be.

Overall, we have made significant reductions in our officer force. Our Fiscal Year 1976 officer strength shows a reduction of 28% from our peak level in 1968. More significantly, we will be fully 25% below our 1964 officer strength which occurred prior to the Vietnam increases. The Air Force has taken larger percentage decreases in both total and officer strength than any other military service as measured against these 1964 levels.

Recent management actions have resulted in a reversal of the decreasing trend in the enlisted/officer ratio. From FY 1974 to FY 1976 the ratio will increase from 4.84 to 4.90. Two of the more significant actions contributing to the reversal are headquarters reductions which are officer intensive and an officer to enlisted conversion program which resulted in the conversion of 456 officer positions.

In the future, we will continue implementing a number of cost-effective options, which may tend to reduce the enlisted/officer ratio, but we will also be implementing programs designed to reduce officer requirements. For example, the installation of a dual inertial navigation system in our C-141s, will allow a reduction in navigators. A program to convert a portion of our air defense system weapons controllers to enlisted authorizations will also help increase the enlisted/officer ratio. Therefore, although we expect to level our total active military strength at about 590,000 beyond 1976, we are predicting slightly larger enlisted/officer ratios in the near future. The FY 1977 ratio is projected to be 4.93. This improvement is predicted to continue throughout the planning horizon.

CONCLUSION

In concluding this statement, there are several points which merit special emphasis.

The manpower program we are projecting for Fiscal Year 1976, the transition quarter, and Fiscal Year 1977 will leave Air Force manpower strength at the lowest level since 1950, before the Korean war. I indicated earlier that the impact on our combat capability of the 32 percent reduction in manpower since fiscal year 1968 has been partially offset by improvements in equipment, increases in productivity, and

concentration of reductions to the maximum extent possible in support and overhead areas. Nevertheless, the capability of our General Purpose Forces to achieve full system efficiency in terms of being able to meet the high sustained sortie rates we would encounter in combat has been reduced. In the face of the growing capabilities of Warsaw Pact forces, this reduction in capability must be reversed.

We are not asking for increases in Air Force manpower levels as a means of restoring some of the combat capability lost over the past several years. We recognize the limitations of the current state of the National economy, and the legitimate requirements of other sectors of our society for scarce resources. But we are seeking a measure of stability in our manpower program. We are seeking an end to annual decrements in manpower strength, and to the continued turbulence and vitiation of combat capability which these reductions cause.

A more stable manpower program will enable us to focus our full attention on improving our combat capability. Several moves in that direction are included within the end strengths for which we seek funding today. The combat enhancements I've discussed have been made possible by the initiatives we've taken in reducing support and overhead manpower, improving organizational structure and consolidating like functions, prioritizing our activities to assure that our constrained fiscal resources are allocated to those which provide the maximum contribution to combat readiness, and taking full advantage of technological advances. Our efforts in these areas have made resources available for combat capability improvements.

Other initiatives are underway which we expect will generate as yet undefinitized savings in the future, and allow further enhancement of essential fighting capability. As our manpower program stabilizes, we intend to continue and to intensify these efforts. Freed from the constant disruption caused by continual strength reductions, we will concentrate our full attention on improving the utilization of our total manpower resources.

I believe we in the Air Force have an excellent system which takes full advantage of the best elements of contemporary industrial engineering techniques for working out the manpower levels required to support our force structure. We have made substantial improvements in the utilization of our resources. And I believe that the manpower program presented for your approval today represents an accurate and austere assessment of what it will take to get the Air Force job done.

No organization as large, dynamic, and far-reaching as the Air Force can say with absolute certainty that every element of waste has been completely eliminated and total efficiency maximized. But I can assure you that we are extremely sensitive to the imperative need to use our resources wisely, and to get every bit of mission effectiveness we can out of every dollar we spend. Beyond that, we feel a real sense of urgency in trying to attain the improved fighting capability we need to meet the threat. The initiatives we've undertaken, which I've discussed with you today, clearly reflect that sensitivity and urgency. Within the framework of the stabilized manpower program we are presenting for your approval, I am confident that we will succeed in making the combat capability improve-

ments required to assure the credibility of our defense posture. I should like to add in this regard that if the Congress in its wisdom determines to make reductions in any Air Force functions or programs, we would urgently request the authority to divert the resources involved to assist in rebuilding our fighting capability. Any significant reduction in manpower below requested levels would impair our ability to make the improvements in General Purpose Force capabilities which, in our considered judgement, are essential to the national security.

At this time, we respectfully request appropriations to support the Air Force manpower program for Fiscal Year 1976 and the transition quarter.

This concludes my prepared statement. I would be most pleased to respond to your questions at this time.

FORCE REDUCTIONS

Senator McGee. We will proceed directly to the questions.
then.

In order to meet end-strength goals, the Air Force involuntarily separated 1,100 career Reserve officers in fiscal year 1975 and plans a further reduction-in-force of 2,100 officers in fiscal year 1976. Why can't a greater proportion of force reductions be accomplished through decreased accessions as opposed to RIF?

General Lewis. Well, sir, that is a very appropriate question and is one on which we have already worked. Just to give you an example, Senator, I will use a 100,000-man force. The average service of all officers is 10.7 years per officer. That is, for everyone who comes in, our losses for retirements, for all reasons, that is the average service. So you can see it takes about 10,000 people a year to sustain that kind of a force.

Now against that backdrop our accessions for 1976 in the line officer force would be about 5,200 so we have already brought that down to the number that we think is absolutely essential to sustain the inputs into critical skills, our pilot and navigator training programs and all our areas where we need the new input. So we think the 5,200 is about all we can do right now and still keep the force level sustained on an out-year basis. As a matter of fact, I think in a few years we will have to elevate that figure back more toward the order of 8,000 to 9,000 new people a year in order to sustain that size of a force.

So the answer specifically to your question is we have taken line officer accessions down from what they were 2 or 3 years ago—on the order of 9,000 down to 5,000. To compensate we have adjusted all the training programs. Our pilot rate just 3 years ago was in the order of 2,900 a year; we are programing 1,800 in fiscal year 1976. So we have made large adjustments in the programs to do just precisely what you suggest. In spite of that we still have to have a reduction-in-force in order to meet the end strength numbers and we can use that as a quality screen of people who are already on board and we are doing so in small numbers.

ENLISTMENTS

Senator McGee. Between fiscal year 1974 and fiscal year 1976, prior service enlistments and reenlistments have steadily increased and non-prior-service accessions show a qualitative improvement. If retention is improving and new enlistees are generally in higher mental categories, why do attritions increase as a percent of total separations over the same time period?

General Lewis. Well, sir, it is a matter of supply to the Air Force as well as I would think a supply as to the other services. We are trying to do all that we can to get a quality force. Back in the years when we had a draft and a new man came aboard and he went to basic training, he really didn't have many options. He had to serve anyway and if he was of low quality or a high quality he still had to complete the training and he had to serve.

Now it is a volunteer force. Certainly if we are going to experience a loss—in other words, a young man makes a decision to come aboard and then he decides, well, this really isn't for me. We have decided to

accept the loss as early as possible in basic training and on into technical training rather than to spend the money to carry him on out into an operational force and then find that he does not perform. He is of no value there and if he is not helping to maintain a ready force so we are willing to accept the early loss and let the man go back home.

Senator McGee. It would be a net savings.

General Lewis. Yes, in the long run for the total force. I think that will account for the increased attrition that you refer to down in those early months of training. I might add that I think all the services found this to be the case and are following that procedure. We have had that in being many years in the Air Force. If a man finds he cannot adjust to military life, it is better to let him go and take a young man who can adjust and is willing to do the job when he gets out of training in an operational unit. If that is not going to take place, then we need to make that separation early.

REENLISTMENT BONUS PAYMENTS

Senator McGee. You request a total of $9.8 million in fiscal year 1976 for selective reenlistment bonus payments. How many personnel will be paid this bonus as opposed to fiscal 1975?

General Lewis The $9.8 million is for a total, sir, of 9,174 people versus 17,147 in fiscal year 1975 and it represents a total of 54 skills that we have isolated. We don't think we can meet our reenlistment goals without this type of a bonus.

Now that is substantially lower than you have seen in past years and does represent our ability to retain people. Our program is set up so that we have an objective of retaining 19,300 people out of all those people completing their first term enlistments into what we call the career force. By doing that you keep your force adjusted so that you have the correct number of people in each year group to be the supervisors and the NCO's, if you will, on through to their years as career people.

We want precisely the right number of people at that fifth year. The way we achieve this is we go through each career field, it does not matter what the skill level is. There are some 320 different skills in the Air Force. We review each one as to how many people are in each skill, how many of them are first term and how many need to be in the career years on out ahead and narrow it down to select the right number. It may be 5 or 6 and that is what we go after and use the selective reenlistment bonus against that skill to procure precisely the right number of people.

SELECTIVE REENLISTMENT BONUS

Senator McGee. How do the numbers of people paid under the selective reenlistment bonus compare with the numbers paid under the old variable reenlistment bonus?

General Lewis. The last year of payments under the variable reenlistment bonus was fiscal year 1974. In fiscal year 1974 the Air Force made new variable reenlistment bonus payments to 9,121 personnel. In fiscal year 1975, the transition year to the selective reenlistment bonus, the Air Force programed for 8,114 personnel to receive new payments.

Our fiscal year 1976 budget requests authorization to pay 3,717 personnel a selective reenlistment bonus. This considerable reduction from previous years reflects our improved retention as a result of the current state of the national economy. The fiscal year 1976 bonus program should not be construed to indicate that these requirements will continue to decline in future years.

REENLISTMENT BONUSES

Senator McGee. Requested fiscal year 1976 funding for selective reenlistment bonus drops sharply from fiscal year 1975 due to shift in payments from lump sum to an installment basis. The committee is aware, however, that the Comptroller General has expressed the opinion that legal entitlement to the full bonus accrues upon completion of reenlistment procedures. If this view prevails, what would be the dollar impact on the fiscal year 1976 program?

General Lewis. Mr. Chairman, I respectfully request that you let me go back and review the record on that. I will have to go to the data base and see how many people are now drawing the installment type bonus and what year it is for, how much of it is unpaid and if it were ruled that we had to pay up. In other words, determine all that is due. That will be a substantial computational job and I would like to fill that in if I may.

Senator McGee. Very good.

[The information follows:]

Reenlistment Bonus/Comptroller General Ruling

The fiscal year 1976 funding for the Selective Reenlistment Bonus would have to be increased by $15.0 million to a total of $24.8 million. While it is true that entitlement to the full bonus accrues at the time of reenlistment, the method of payment is not affected. The Armed Forces Enlisted Personnel Bonus Revision Act of 1974 gives the Secretary of Defense the authority to pay the bonus either in lump sum or on an installment basis.

RETRAINING ENLISTED PERSONNEL

Senator McGee. Would you supply for the record the number of first-term airmen who took voluntary retraining in a new skill upon reenlistment in fiscal year 1974, fiscal year 1975, as well as the projected number for fiscal year 1976?

General Lewis. Yes, sir. We have quite a comprehensive program in reaching this 19,300, what we call careers. Here again we want the individual who wants to reenlist to apply but if we have a surplus and can't use him and he does not want to retrain, then obviously he is a surplus and we could not use him in the out years. That is also a substantial computation and if I may, I will put that into the record.

Senator McGee. Yes.

[The information follows:]

Retraining Enlisted Personnel

During fiscal year 1974, 9334 first-term airmen who were reenlistment eligible, were approved for retraining into shortage skills. To insure the Air Force receives a fair return on its training investment, we require these retrainees to extend their enlistment twenty months beyond their original date of separation. The cost of their retraining was approximately $21.6 million. Since these airmen normally

reenlist after they have completed retraining we cannot provide specific data on the number of these retrainees who reenlisted during 1974. However, our experience tells us that approximately 90% of such airmen eventually do reenlist.

Starting July 1, 1974, the Air Force implemented a new system to control the reenlistment of first-term airmen so that we reenlist them only in the numbers and skills required to man the career force. So far in fiscal year 1975, 3,830 first-term airmen have been approved for retraining in conjunction with reenlistment. We estimate that this retraining will total 5,745 for fiscal year 1975 which will result in an overall expenditure of $16.2 million. During fiscal year 1976 we project a requirement for 18,600 first-term reenlistees to fill career force requirements and at present we expect approximately 4,650 of these will be retrainees, at a cost of $13.0 million.

The costs of retraining are not additive to normal training costs because the training requirements they are placed against are valid and if not met by a retrainee we would be training a new accession in his place. Since these airmen would be surplus to our career force requirements if they reenlist without retraining, and the new skill they enter would otherwise suffer a retention shortfall and fail to meet our needs, we consider this program to be exceptionally cost effective.

TRAINING AND RETRAINING

Senator YOUNG. Aside from doctors, in what other areas does the Air Force have personnel shortages?

General LEWIS. It will generally run, Senator Young, in the high skill areas. Avionics, those types of jobs. Jobs where the market on the outside, the civilian world, has the greatest demand is where we will have our shortages in the Air Force and it is primarily in the high skilled areas such as avionics.

Senator YOUNG. I described earlier the case of a pilot in Germany—would he be able to transfer to another area where you are short?

General LEWIS. Senator Young, we have no limitations in the Air Force on where an Air Force pilot can serve with regard to type of weapon system. In other words, if he is a fighter pilot and he is needed for transport or bomber or reconnaissance type airplanes he certainly would be used and is capable of being retrained to that. I must add in the interest of training cost it does cost money to retrain so we don't readily run out and train people from one type of airplane to another if the needs can be met any other way. To answer your question, yes, he could be used in another type of weapons system.

Senator YOUNG. In some categories such as you mentioned here, avionics, that would require quite a lot of training, would it not?

General LEWIS. Yes, sir; as high as 52 weeks to come out a skilled technician from point of entry level to be a skilled avionics repairman. There are many breakouts of skills. I use the overall term avionics but when it finally gets down to listing the skills we would have many areas and these are primarily where you have the shortages. We would not experience any shortages in transportation, administration and the other less technical skills. It is only in the areas where technology is at a premium.

Senator YOUNG. All right.

COST OF FEEDING PERSONNEL

Senator MCGEE. You refer to price escalation and other increases in the cost of feeding personnel. What steps are being taken to insure eligibility and to maximize use of Air Force dining halls?

General LEWIS. Well, sir, the single most important step that insures that only those people that are eligible or authorized or privileged to eat in the dining hall is the limitation on funds. In other words, commanders at all levels are acutely aware of the constraints and hence they are charged with the responsibility of reviewing, on an individual basis, anyone that is given the privilege of not eating in the dining hall. So the answer to your question specifically is it is a command responsibility which is exercised throughout the force on that basis to insure that they are all eligible.

Did that answer your question?

Senator MCGEE. Yes, thank you. How has the impact of inflation been accommodated in fiscal year 1975, particularly since over $9 million was used to offset permanent change of station cost increases?

General LEWIS. Well, sir, it is primarily the supplemental appropriation request for $11.7 million, I think it is, that we have included to help us offset the escalating prices of food throughout the year.

PERMANENT CHANGE OF STATION

Senator MCGEE. Describe the specific tour extensions being made to save permanent change of station funds.

General LEWIS. Well, sir, we ran this program because we have people whose performance is satisfactory in all tour length areas. By that I mean the short tour area, 12 months, the long tour area, 36 months, and then the 24-month tour areas in between. The individual wanted to extend and applied to receive an extension of 6 months, 1 year or whatever he requested. We encouraged such extensions as a method of saving PCS funds. Applications are reviewed by his commander and when approved, he does not have to have a replacement. That allows us not to have to move somebody all the way back in the backfill process. The program is going very well. It is quality screened. Of course, in some cases we might not want the skill, or the individual cannot stay longer if he has been there for a long period of time. We would review it on that basis.

COMBAT ENHANCING INITIATIVES

Senator MCGEE. Could you tell us for the record, what would be the impact of using the savings in manpower resulting from Air Force initiatives but denying the increases in combat capability; that is, increases in fighter and airlift crew ratios, increased flying hours for training surge aircrews and so forth? Provide a description and justification of each combat enhancing initiative in fiscal year 1976.

General LEWIS. Mr. Chairman, before you arrived I introduced my counterpart, Gen. Jack Posner, director of manpower and organization, and that would fall in his area. General Greenleaf, on my left, is the director of programs.

General Posner, who would you like to address that?

General POSNER. I would like to address that for you here.

Senator MCGEE. Very good.

General POSNER. General Lewis emphasized at the outset that the Air Force fiscal year 1976 military manpower position is 21,534 people below the revised fiscal year 1975 position. When civilians are in-

cluded, there is a total reduction of 31,432. I could add that if one looked at the initial fiscal year 1975 President's budget, you would find that our 1976 total strength projection is 55,975 spaces below the originally planned fiscal year 1975 strength. But that does not tell the whole story.

Effectively those numbers are a net reduction in total strength. We drew down further in order to provide sufficient headroom to put back in spaces for enhancing combat capability. The President's 1976 budget adds approximately 6,400 spaces to enhance combat capability, including an increase in our tactical fighter crew ratios from 1.1 to 1.25 per airplane. This gives us the capacity to support rapid deployment of our tactical forces and a greater staying power once they are in the combat zone.

We will enhance strategic airlift capability by introducing into the active force an increase from 2.0 to 2.25 in our C–5A. We will bring into the force three tactical fighter training squadrons of F–5E aircraft thereby providing the capability to give our tactical fighter crews training in dissimilar air combat training maneuvers. They will perform in a manner comparable to the Soviet aircraft against which our crews will be pitted in a combat environment. That will enhance their capability to perform effectively in combat.

Finally, we depend on the total resource of pilots in the force to meet our increased wartime requirement. Some of them are not or have not in the past been flying the airplanes they will be called upon to fly in the event of war. We bring them from the other jobs that perhaps you asked about earlier, Senator Young, and put them back into the cockpit and ask them to go to war.

We want to be sure that they can immediately perform effectively in combat. Consequently, those behind-the-line people who have aeronautical skills and will be the first called upon to fly in the event of war, are going to be given at least minimal training in the airplanes they will be flying in a combat situation. We have not heretofore done enough of that and it will provide a combat enhancing capability.

What I am saying to you, sir, in response to the question is that we would be denied the capacity to introduce approximately 6,400 manpower spaces worth of combat capability in the areas I have addressed and that would substantively affect our ability to meet what we perceive to be the threat.

Senator McGee. Any further description there that you want to provide for the record, you may.

General Posner. All right, Mr. Chairman. We will look at the question and supplement it as required.

[The information follows:]

SUPPORT AIRCRAFT REDUCTION/MANPOWER IMPACT

These savings are part of a gross projected reduction in total Air Force manpower between FY 1974 and FY 1976 of approximately 78,300 spaces. Of this total, about 6,400 spaces are being reprogrammed to support the initiatives we are undertaking in FY 1976 to enhance the combat capability of our general purpose forces.

TECHNOLOGY REPAIR CENTERS

Senator McGee. Explain the technology repair center concept, with particular attention to the actual savings being accomplished in the new fiscal year.

General GREENLEAF. We will provide that for the record.
Senator MCGEE. All right.
[The information follows:]

The technology repair center concept consolidates the organic repair of exchangeable components that require like skills, facilities, tools, and test equipment in the repair progress. By assigning workloads on this basis, rather than by weapon system or supply class, the Air Force will realize a savings of approximately 1,150 manpower spaces, the number of product divisions will be reduced, and facility utilization will be increased by consolidating into fewer facilities. We have reduced the Air Force Logistic Command by 597 manpower spaces in FY 75, and have programmed an additional reduction of 556 in FY 76 for a total of 1,153. Based on the current pay scales, these reductions equate to $5.8 million in FY 75 plus $16.9 million in FY 76. The annual savings in FY 77 and beyond are projected at $18.0 million.

FUNCTION OF TECHNOLOGY REPAIR CENTER

General GREENLEAF. The technology repair center is a concept by which within the Air Force Logistics Command each Air Logistics Center specializes in the repair and renovation of specific categories of equipment. That concept is combined with a modernization improvement program which has been ongoing for some 4½ years. The combination of the two has resulted in manpower cost avoidances, and has permitted the Air Force to apply those avoidances to improving combat capability and satisfying other Air Force needs.

General POSNER. The magnitude of the manpower savings in 1975 and 1976, sir, will approximate 1,150 spaces.

INCREASING "TOOTH-TO-TAIL" RATIO

General GREENLEAF. Senator McGee, may I return to your previous query. The late General Abrams, Chief of Staff of the Army, submitted to the Secretary of Defense a concept for transferring support manpower to combat manpower which he termed "tail to teeth." The Secretary of Defense accepted that concept from the late Army Chief of Staff and has encouraged each of the military departments to reduce support and managerial headquarters in order to improve combat capability.

Last year, of the three military departments—that is fiscal year 1975—the Air Force was the only service which included within its budget submission to the Congress a headquarters reduction of some 14.8 percent across the Air Force which permitted the retention of three tactical airlift squadrons or a wing in the active force personnelwise as well as improved capabilities in what is called the Tactical Air Control System.

As General Posner remarked, we plan within the TOA planning constraints set forth the 5-year program by the Secretary of Defense, to accommodate and improve the equipage of our tactical fighter force and to increase a combat capability of the tactical fighter wings, for example, without additional manpower authorization.

General LEWIS. I would only add to that, sir, that my colleague, the Director of Manpower, establishes the number of people required to do this job, based on force structure. I, as a personnel manager, will train and direct the resources towards that force structure to provide the people and skills on a timely basis to assure combat readiness.

As I said earlier before you arrived, sir, in my statement that is why we run a personnel system at all, and that is to have a trained ready force there whenever it is called upon. It is hardly a test to go and count the number of people on board, the test is to go and count what that unit can do. That is the way we measure personnel effectiveness. That is to have the right people there when the unit is put to the test and see how they perform. Success is measured in the Air Force through various exercises—IG inspections and these kinds of things.

General GREENLEAF. Much of the personnel turbulence which you and Senator Young were inquiring about earlier can also be reduced with the more stable manpower and personnel strength.

Senator MCGEE. It seems to me that over the years, one of the most frequently criticized concepts of our military manpower has been the large numbers of support personnel in relation to combat personnel. Any improvement in that area is bound to improve the image of the entire service.

General GREENLEAF. Since 1968 it is our best estimate that the Air Force as a service reduced the number of manpower authorizations assigned to management headquarters functions by at least 50 percent, or at least we hope it will be reduced by that much by the end of fiscal year 1976.

General POSNER. Yes, and that points up that we have been reducing support faster than the total force with a view to using at least some of the reduced support resource to enhance our combat capability.

General GREENLEAF. Inherent in the design of many of our newer aircraft systems is a reduction in the support required for each of the newer aircraft; and hence, a reduction in the number of personnel that are required to maintain them.

General LEWIS. And hence the more work I have to do in the classification, training, and finally in the assignment process. We just simply have to have the right number of people assigned to each weapon system as required in order to make that an effective weapon system.

INCREASES IN TECHNICAL ASSISTANCE

Senator MCGEE. Describe the increases in the technical assistance being provided to Iran and Saudi Arabia that result in an increase in the foreign military sales support.

General LEWIS. Well, I would lead off by saying that, too, is one that I would like to request that we be able to provide for the record because it is comprehensive, it is tied to a number of programs.

Senator MCGEE. You may make a full submission for the record.

General LEWIS. Yes, sir.

Do you care to add anything to that?

General POSNER. No. We will simply be sure that we indicate the increased number of spaces dedicated to that support.

Senator MCGEE. All right.

General LEWIS. I can talk to actual numbers here, sir, if you would like but again it would be——

Senator MCGEE. I think in the larger picture it would be more relevant to aviators and technical and so forth. You will supply that for the record.

General LEWIS. Yes, sir. I agree.

[The information follows:]

TECHNICAL ASSISTANCE/IRAN AND SAUDI ARABIA

Technical Assistance in Iran and Saudi Arabia is provided by agreement between the USG and those countries on a fully reimbursable basis in accordance with the Foreign Military Sales Act. In FY 1975, 309 U.S. Air Force personnel have been programmed for Technical Assistance Field Teams (TAFTs) in Iran. For FY 1976, the U.S. Air Force participation increases to 330 team members. These personnel will provide assistance and training in aircraft maintenance, logistics, communications/electronics and aircraft control and warning systems. Additionally, the U.S. Air Force has budgeted on a reimbursable basis for 52 military and 66 civilian personnel for improved Air Base communications and combat effectiveness for the Iranian Air Defense System. This program includes radar site selection, development, test and acquisition of "look down" radars, and communication systems.

In Saudi Arabia, the U.S. Air Force has programmed on a reimbursable basis 21 military and 18 civilian personnel in FY 1975. This participation will be increased to 21 military and 33 civilian personnel for contract management of Royal Saudi Air Force (RSAF) supply modernization, construction, maintenance and technical training. Additionally, TAFTs budgeted again on a reimbursable basis for Saudi Arabia during FY 1976 include 56 military personnel for aircraft combat crew training, maintenance, logistics, intelligence, and other skills necessary to support a modern Air Force.

LOGISTICS COMPOSITE MODEL

Senator MCGEE. The logistics composite model is used to forecast manpower requirements. To what extent have its projections been successful in increasing forecasting ability?

General POSNER. Sir, I think I can address that question for you. My predecessor last year pointed out to the committee, I believe, that the logistics composite model—we call it LCOM—is an improved means of determining manpower requirements. Last year we had just arrived at the point that we were bringing the system to a level of capability suitable for application to determine weapons systems manpower requirements. The first one that we applied this new means of determining manpower requirements to was the F–4E. And it will result in a moderate increase in the number of manpower authorizations dedicated to that weapon system, a net of about 200 spaces in fiscal year 1977.

The point I would like to make is that as we continue with the application of the logistics composite model to other weapons systems as a means of determining manpower requirements, we believe that we will have a better handle on total manpower needs by weapon system. Other examples of ways in which the model is now being applied occur in the Military Airlift Command where the model is now being applied to tactical airlift. It will also be applied to other aircraft as we proceed with this new and improved means of determining manpower requirements.

The efficacy of the system is that LCOM allows us to recognize a variety of factors which the previously employed empirical data collection system did not allow. For example, the manpower impact of increases in the required number of sorties to accommodate the threat under a given scenario can be addressed in finite detail along with many other factors such as parts levels and repairs, forecast rates of breakdowns of systems—all in a way that would not be possible and has not been possible in the past using empirical data collection manual techniques. So we expect in the future to have a better way of determining in a more finite fashion the precise manpower requirements for our weapons system.

General LEWIS. I think the answer, Mr. Chairman, is that the model enables us to package manpower requirements very finitely, as General Posner said, and what it is going to take to get the required sorties.

General POSNER. I think, sir, that we will need at a future hearing to tell you of the real progress. We just brought the system on line and there are some limits on actual applications.

Senator MCGEE. What would be the time lag before you could make a reading that would really——

General POSNER. Six months to a year.

Senator MCGEE. I see. Will you please compare for the record the Air Force officer grade structure to other executive force structures in civilian industry, other Government agencies and the armed forces of both NATO and Warsaw Pact nations.

General POSNER. We can do that, sir.

[The information follows:]

OFFICER GRADE STRUCTURE COMPARISON WITH INDUSTRY AND OTHER GOVERNMENT

Although there is no direct equivalent to a military grade system in civilian industry, rough comparisons can be made on a basis of salary and management level.

In 1974, the Conference Board, an independent research consultant organization based in New York, published an analysis of comparative industry and military staffing patterns. A common baseline was established by arraying the individuals in each organization analyzed in descending order on the basis of salary (or its equivalent). Management levels were then established by stratifying personnel by percentage of the payroll expense, that is, relative shares of compensation.

Six very large companies (identity unspecified) were compared to the DOD. The results relative to the Air Force are displayed on Chart 1 and, as can be seen, the characteristics of Air Force grade structure are similar to most industry counterparts.

A comparison of the Air Force grade structure with other government agencies and a member of NATO is shown in Chart 2. These grade profiles for the Department of Commerce, Department of Agriculture, the Legislative Branch (graded employees only), the Foreign Service and the Canadian Armed Forces were developed in 1974 by the General Research Corporation (GRC), Washington, D.C. The Air Force grade profile compares favorably with these organizations. Because of its field extension structure, the Department of Agriculture shows the highest proportion of its officer/professional structure in low grades. The U.S. Air Force and Canadian Armed Forces show essentially identical patterns. The graded structure of the Legislative Branch (GAO, GPO, Library of Congress, etc.) and the Department of Commerce carry relatively larger proportions of upper middle level management. Most Foreign Service positions are in the upper middle levels of management grades.

Comparative grade structure data for Warsaw Pact nations is not available. However, an available comparison of the proportion of total officers in the U.S. Air Force and the Soviet Air Forces is revealing. The U.S. Air Force proportion of officers to total military is about 17 percent. The Soviet Air arms, including the Long Range Aviation, Air Defense Forces, Long Range Airlift and Tactical Air Forces have about 20 percent officer content.

CHART 1

Executive Force Distribution by Management Level From Comparative Staffing Patterns, The Conference Board, 1974

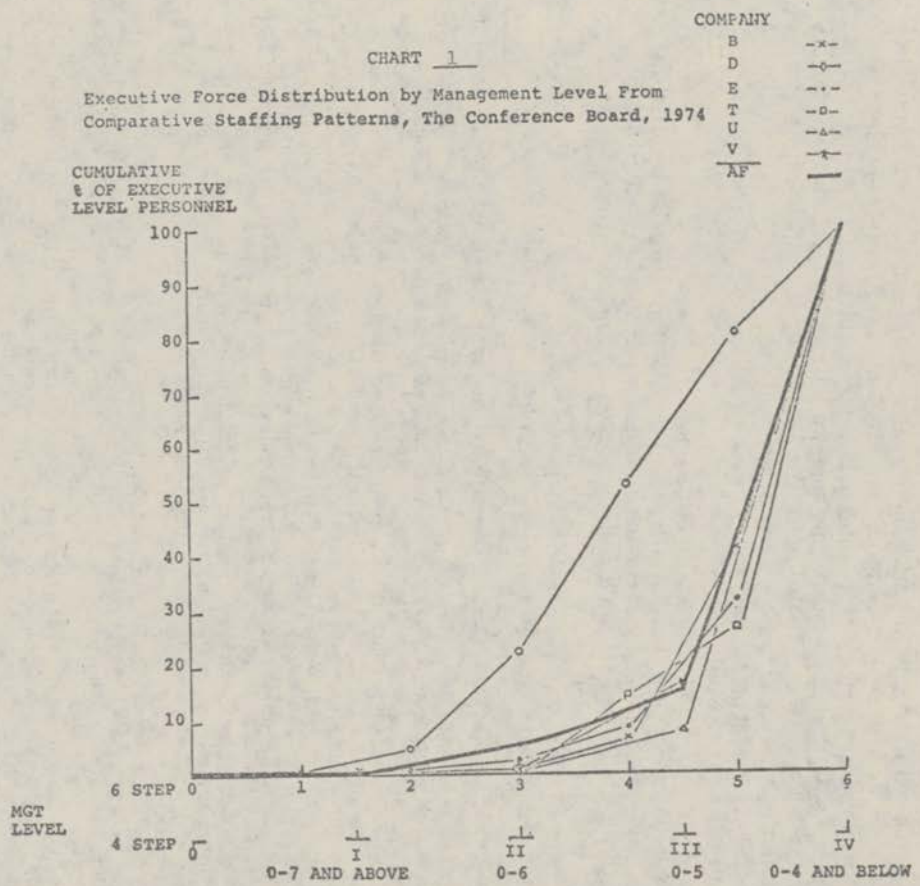
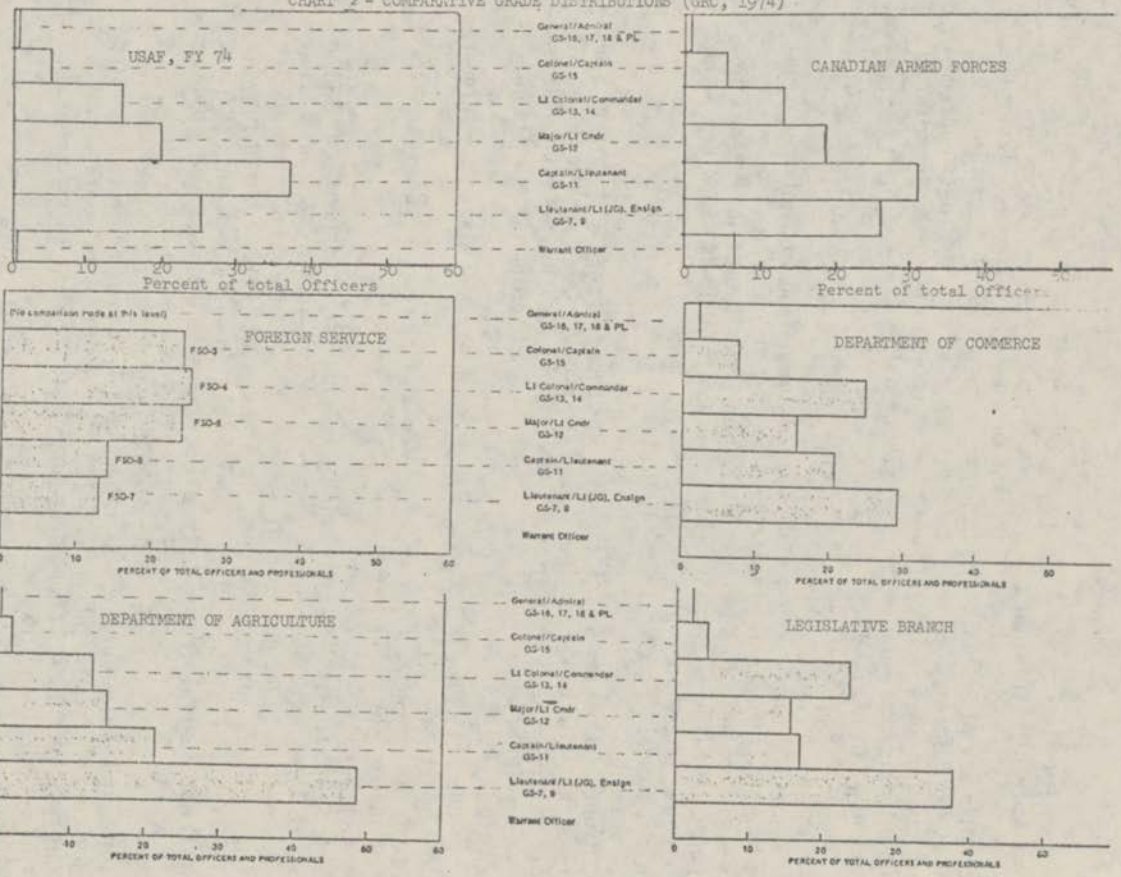


CHART 2 - COMPARATIVE GRADE DISTRIBUTIONS (GRC, 1974)



OFFICER TO ENLISTED CONVERSIONS

Senator McGee. 456 officers were converted to enlisted positions. In what areas did this take place generally?

General Posner. I can read that precisely into the record, sir; the number is rather small. The functions were personnel, 52; supply services, 45; information, 38; administration, 36; my own functional area of manpower, 29; intelligence, 25; weapons controller, 24; aircraft maintenance, 23; finance, 26; and other smaller numbers in other areas to make a total of 456.

Senator McGee. What is planned for the new fiscal year in this program?

General Posner. We are always looking, sir, at not only the capability but also the requirement to convert to enlisted positions, and we will continue to do that on an as able basis. I have no specific number at this time to introduce into the record for fiscal 1976. This is an ongoing program.

Senator McGee. Are there other areas where such conversions would be feasible?

General Posner. Yes. I am sure that there are areas other than the ones that I have already elicited. I have listed one that should be of special interest as an example. The conversion of weapons controllers —a direct combat support skill—from officer to enlisted should demonstrate that it is possible in a variety of functions.

Senator Young. When you make these conversions, are they subject to a lower pay scale?

General Posner. The pay associated with the new grade, yes.

Senator Young. Lower grade?

General Posner. Yes, sir.

General Lewis. The conversion from officer requirements affects the accessions that I described earlier and explains why I would bring aboard a smaller number of people. The requirements for officers changed; therefore, I changed the number of people coming in from ROTC and OTS accordingly and would do this on an annual basis.

What General Posner described is precisely correct, it is an ongoing program. For example, as you change an organization or force structure or any kind of a weapons system local management engineering teams analyze the impact on job requirements and identify for conversion any officer jobs that can be done just as effectively by enlisted personnel. That is an ongoing program that has worked throughout the Air Force.

Senator Young. In what category do you offer a bonus?

General Lewis. Normally at the 4-year level; in other words, when the individual is reenlisting into the fifth year is where the bonus is applied.

Does that answer your question, sir?

Senator Young. What categories of the service?

REENLISTMENT BONUS/WHEN APPLIED

General Lewis. I have a long list, sir. It is a handwritten list that depicts where we expect to use the selective reenlistment bonus that was authorized by the Congress last year for shortage skill areas that

do not match the inventory. If we are not getting them, then we apply the reenlistment bonus and see if that——

Senator YOUNG. Could you furnish that information for the committee, please?

General LEWIS. Yes, sir.

[The information follows:]

FY 1974 BONUS SKILLS

SELECTIVE REENLISTMENT BONUS LEVEL FIVE

305X4	Electronic Computer Systems
317X0	Instrumentation
321X0	Bomb-Navigation Systems
323X0	Defensive Fire Control Systems Repair
99125	Special Electronics

SELECTIVE REENLISTMENT BONUS LEVEL FOUR

303X1	Air Traffic Control Radar
303X2	Aircraft Control and Warning Radar
303X3	Auto Tracking Radar
322X0	Fire Control Systems
322X1	Weapon Control Systems
324X0	Precision Measuring Equipment
442X0	Missile Pneudraulics
463X0	Nuclear Weapons
464X0	Munitions Disposal
511X1	Computer Programming
511X2	Computer Systems Analysis and Design
541X0	Missile Facilities

SELECTIVE REENLISTMENT BONUS LEVEL THREE

202X0	Radio Communications Analysis
203X0	Linguist/Interrogator
203X1	Voice Processing
204X0	Intelligence Operations
205X0	Electronic Intelligence Operations
207X1	Morse Systems
207X2	Printer Systems
222X0	Geodetic Surveyor
252X1	Weather Observer
253X0	Weather Forecaster
274X0	Command and Control
291X0	Communications Center
293X3	Radio Operator
302X0	Weather Equipment
302X1	Air Traffic Control Radar
304X0	Radio Relay Equipment
304X4	Ground Radio Communications Equipment
316X0	Missile Systems Analyst
326X0	Avionics Aerospace Ground Equipment
326X1	Integrated Avionics Component
327X0	Defense Fire Control Systems Operator

342X0 Flight Simulator

342X1 Defensive Systems Trainer

363X0 Communications and Relay Center Equipment

391X0 Maintenance Analysis

431X1 Aircraft Maintenance

443X0 Missile Mechanic

443X1 Missile Engine Mechanic

511X0 Computer Operator

622X0 Cook

622X1 Diet Therapy

651X0 Procurement

671XX Accounting

672X0 Budget

673X0 Auditing

691X0 Management Analysis

732X0 Personnel

732X1 Personal Affairs

732X3 Personnel Systems Management

732X4 Career Advisory

733X0 Manpower

733X1 Management Engineering

742X0 Steward

751X0 Education

751X1 Audio-Visual

751X2 Training

751X3 Instructional Systems

753X0 Small Arms

871X0 Instrumentalist

904X0 Medical Laboratory

904X1 Histopathology

904X2 Cytotechnology

982X0 Dental Laboratory

SELECTIVE REENLISTMENT BONUS LEVEL TWO

276X0 Aerospace Control and Warning

276X1 Electronic Warfare Countermeasures

612X0 Meatcutter

645X0 Inventory Management

915X0 Medical Materiel

Fiscal year 1975 provides an example of a typical year in reviewing selective reenlistment bonus history. Military specialties are placed on bonus status as a financial inducement to increase reenlistments in skills experiencing insufficient retention. As the

fiscal year progresses, requirements change while reenlistments increase in some skills and decrease in others and the bonus list is revised and changed accordingly within overall fiscal constraints. During fiscal year 1974, 16 skills were removed from selective reenlistment bonus status while 20 other skills were added to the list. The bonus multiplier is also adjusted as necessary during the fiscal year. In fiscal year 1974, five skills had the multiplier adjusted upwards while in 19 others the multiplier was decreased.

FY 1975 BONUS SKILLS
SELECTIVE REENLISTMENT BONUS LEVEL FOUR

305X4	Electronic Computer Systems
317X0	Instrumentation
321X0	Bomb-Navigation Systems
324X0	Precision Measuring Equipment[1]
463X0	Nuclear Weapons
464X0	Munitions Disposal
99125	Special Electronics

SELECTIVE REENLISTMENT BONUS LEVEL THREE

204X0	Intelligence Operations
206X0	Imagery Interpreter
252X1	Weather Observer
253X0	Weather Forecaster
272X0	Air Traffic Control
274X0	Command and Control
302X0	Weather Equipment
302X1	Airborne Meteorological/Atmospheric Research Equipment
303X1	Air Traffic Control Radar
303X2	Aircraft Control and Warning Radar
303X3	Auto Tracking Radar
304X0	Radio Relay Equipment
304X1	Flight Facilities Equipment
304X4	Ground Radio Communications Equipment
304X5	Television Equipment Repair
304X6	Space Communications System Equipment Operations
316X0	Missile Systems Analyst
316X1	Missile Systems Maintenance
316X2	Missile Electronic Equipment
322X1	Weapons Control Systems[1]

323X0	Defensive Fire Control Systems Mechanic[1]
326X0	Avionics Aerospace Ground Equipment
326X1	Integrated Avionics Components
326X2	Integrated Avionics Systems
327X0	Defense Fire Control System Operator
328X0	Avionics Communications
328X1	Avionics Navigation Systems
328X2	Airborne Early Warning Radar
328X3	Electronic Warfare Systems
328X4	Avionic Inertial and Radar Navigation Systems
342X0	Flight Simulator
342X1	Defensive Systems Trainer
391X0	Maintenance Analysis
443X0	Missile Mechanic
443X1	Missile Engine Mechanic
511X0	Computer Operator
511X1	Computer Programming
511X2	Computer Systems Analysis
691X0	Management Analysis
732X0	Personnel
732X1	Personal Affairs

732X3 Personnel Systems Management

732X4 Career Advisor

733X1 Management Engineering

742X0 Steward

751X0 Education

751X1 Audio-Visual[1]

871X0 Musician

SELECTIVE REENLISTMENT BONUS LEVEL TWO

203X0 Linguist/Interrogator

203X1 Voice Processing

222X1 Geodetic Computations

276X0 Aerospace Control and Warning Systems

276X1 Electronic Warfare Countermeasures

291X0 Communications Center[2]

307X0 Tele-Communications Systems

325X0 Automatic Flight Control Systems

325X1 Avionics Instrument Systems

363X0 Communications and Relay Center Equipment[1]

403X0 Biomedical Equipment Maintenance

431X1 Aircraft Maintenance

432X0 Jet Engine Mechanic[2]

442X0 Missile Pneudraulics[1]

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541X0	Missile Facilities
622X0	Cook[1]
645X0	Inventory Management[1]
651X0	Procurement
751X2	Training
751X3	Instructional Systems
753X0	Small Arms
902X2	Operating Room[1]
915X0	Medical Materiel[1]

1. Removed from list effective 15 Jan 1975.
2. Will be removed from list effective 1 Apr 1975.

Fiscal year 1975 began with 78 specialties designed for the selective reenlistment bonus. As was the case in fiscal year 1974 the list was revised several times during the year. There were no increases or decreases in the selective reenlistment bonus multiplier during fiscal year 1975; however, 12 skills were removed from the bonus list while four were added. Fiscal year 1975 will end with 70 skills on the bonus list.

TOP BONUS AREAS

General LEWIS. Some examples are weather forecaster, air traffic control, command and control, people who work in command posts, flight facilities—that is, GCA and radar—electronic warfare systems.

Senator YOUNG. To which one would you give the highest bonus?

General LEWIS. It will also be in those——

Senator YOUNG. Which one right now is getting the highest bonus?

General LEWIS. It would be a SRB 4, and it would be in special electronics and munitions disposal. Those are the highest ones.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I have some questions that I would like to submit for the record.

[The questions and answers follow:]

AIR FORCE RECRUITING SERVICES

Senator YOUNG. What is the Air Force experience in obtaining personnel, both officer and enlisted, capable of learning the technical skills required?

General LEWIS. To date, the AF has been able to obtain the types of people capable of learning our required technical skills. We do this by very carefully identifying the qualifications an individual must have to succeed in a given specialty. Then we direct our recruiting efforts to identifying and attracting people with these specific qualifications.

VOLUNTEERS/IMPACT OF PRESENT STATE OF ECONOMY

Senator YOUNG. Is the present state of the economy improving the quality of the volunteers for the Air Force?

General LEWIS. No sir, it is not. The impact of the economy on our recruiting has been to increase the level of inquiries primarily from the marginally qualified and unqualified individuals, but there has been no real shift in the availability of the higher-quality applicants. As a matter of fact, our quality indicators reflect no significant difference in today's enlistees and those we recruited in previous years.

DRUG PROBLEM IN AIR FORCE

Senator YOUNG. Does the Air Force have a drug problem? If so, to what extent?

General LEWIS. Sir, the Air Force, like the rest of our society, has experienced a drug problem over the past few years. We have approached the problem realistically, and we believe our methods have been proving successful. All indications are that drug abuse in the Air Force is stabilized, that identification methods are improving in efficiency, and that mission impact is negligible.

Based on urine test statistics since implementation of Air Force-wide testing in July 1972, hard drug use appears to be decreasing.

Percent of number tested who are identified:

Calendar year:	*Percent*
1972	0.45
1973	.32
1974	.30

This decreasing trend is supported by investigation statistics. Percentage of total drug abuse investigations for narcotics and dangerous drugs:

Calendar year:	*Percent*
1972	14
1973	7
1974	4

Current figures on the number of drug abusers identified and entered into rehabilitation are as follows:

Calendar year:	
1972 (7.8/1,000)	5,659
1973 (9.3/1,000)	6,439
1974 (14.3/1,000)	9,105

The rise in drug identifications is due to increased commander awareness and improved law enforcement techniques. The majority of drug abusers (approximately 80%) are identified for marijuana. Additionally, the vast majority of Air Force drug abusers are at the experimentation, occasional use level. For this reason, coupled with the increasing sophistication of our rehabilitation program, we have been able to return the majority of abusers to productive duty status. Return to duty rates for identified drug abusers in rehabilitation are:

Calendar year:	*Percent*
1972	53
1973	64
1974	66

These rates represent considerable personnel replacement dollar savings for the Air Force.

IDENTIFICATION OF DRUG USERS

Senator YOUNG. How are drug users identified? Are urine tests given voluntarily or involuntarily?

General LEWIS. The Air Force basically employs four methods of identifying drug abusers. The first is through investigation/apprehension/arrest. This category includes identifications by the Air Force Office of Special Investigations (OSI) resulting from drug investigations, Security Police law enforcement efforts (including vehicle searches and sniffer dogs), anti-smuggling aircraft searches, civil apprehensions, and detections by commanders and supervisors. Increasing sophisication in these investigatory capabilities causes this to be our largest source of identifications. A second source of identifications is incident to medical care. Primarily, abusers identified through this method experience a medical problem, seek medical assistance, and are found to have drug involvement. Very few persons are identified in this manner. Our exemption program, the Limited Privileged Communication Program, is the third means of identification. Through this program, a member may seek medical and rehabilitative assistance for a drug problem without having information he reveals about his drug use or possession of drugs used against him in any action under the Uniform Code of Military Justice. The fourth means of identifying drug abusers is the urine test.

Urine testing is not voluntary. All military personnel age 25 and under are subject to random selection for urine testing. All military personnel regardless of age are subject to commander or physician-directed testing. Also, all persons entering the Air Force are screened for drug abuse. Urine testing is a part of that screening process. Urine testing is done to detect, to deter, and to measure the prevalence of drug abuse.

All Air Force persons identified as drug abusers are entered into a rehabilitation program and are returned to duty whenever feasible. Self admissions and positive urine tests are not used to support less than honorable discharges. Our experience in identifying drug abusers is shown below:

	Calendar year—					
	1972		1973		1974	
	Number	Percent	Number	Percent	Number	Percent
Arrest/investigation	1,273	23	3,091	48	7,003	77.0
Incident to medical care	219	4	177	3	137	1.5
Urine testing	968	17	1,223	19	500	5.5
LPCP	3,199	56	1,948	30	1,465	16.0
Total	5,659	100	6,439	100	9,105	100.0

AF Discipline Rate

Senator Young. What is the discipline rate in the Air Force? Does the rate increase in certain areas over others?

General Lewis. The traditional measures of discipline for airmen are Courts-Martial and AWOL/Desertion. In CY 74, the Air Force discipline rate for Courts-Martial (.457%) and AWOL/Desertion (.212%) show a downward trend.

The trend of the Air Force discipline rate has been downward. The actual differences experienced between each measure or area of discipline are not considered to be significant or meaningful data for use in our continuing efforts to identify causative disciplinary problem factors and correct deficiencies where necessary.

Cost to Feed Airmen

Mr. Young. What does it cost to feed one airman per day today? How does this compare with last year and the year before?

General Lewis. The cost to feed one airman per day today is $2.63 in the Continental U.S. and $2.66 overseas on the average. Last year these rates were $2.23 and $2.27, respectively while the average rates were $1.81 and $1.91 respectively for FY 1973.

TDY and PCS Reduction

Senator Young. Has the Air Force reduced travel and permanent change of station of personnel? If so, to what extent?

General Lewis. Sir, the FY 1976 request for Permanent Change of Station (PCS) Travel reflects an increase of 30,689 PCS moves over the expected number in FY 1975. This increase does not stem from Air Force policies or procedures governing PCS frequency but is the direct result of the substantial realignment of our bases and organizations and the effect of deferring some of our FY 1975 requirements into FY 1976 to accommodate the impacts of significant tariff-driven cost increases. The ultimate efficiencies and economies of our base realignment efforts require an investment next year of over 15,800 PCS moves. This investment will buy substantial savings across a broad range of cost categories in the years to come. The deferral of FY 1975 PCS requirements to FY 1976 caused a switch of 17,100 moves between the years. Had this not been required to offset inflationary effects, the FY 1976 request would have been substantially below the FY 1975 budget request and 3,500 moves below the FY 1975 figure shown in the FY 1976 request even if the base realignment package is excluded.

SUBMISSION OF ADDITIONAL MATERIAL

Senator McGee. Those are all the questions we have this afternoon, General. We appreciate your cooperation and your responses. You will have the opportunity to fill out for the record any additional information that you consider relevant.

General Lewis. Yes, sir.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

Senator McGee. Chairman McClellan was unable to be present today, but he has asked that I submit these questions, which you are to answer for the record.

[The questions and answers follow:]

Incremental Value of Rifs

Chairman McClellan. What, in dollar terms, is the incremental value of the RIF's in FY 1975 and FY 1976?

General Lewis. The FY 1975 program includes $14.9 million for 1,100 RIF's, an average of $13,542 per payment. The FY 1976 program has 2,088 RIF's at a total cost of $28.7 million, an average of $13,722 per payment.

INVENTORY IMBALANCES/RATED OFFICES

Chairman MCCLELLAN. Due to increased retention and decreasing requirements, the Air Force has an overage of rated officers in the active forces which will not be balanced until the end of FY 1978. Why hasn't the proposed RIF been localized in this area, rather than decreased pilot production? If enabling legislation is required, why has it not been requested?

General LEWIS. In order to achieve the required strength reduction in fiscal year 1976, the Air Force elected to employ a combination of reduced accessions and voluntary/involuntary separation actions. The extent to which these alternatives were used, depended upon both short and long term force considerations. Specifically, our Undergraduate Flying Training (UFT) rates were reduced in order to balance rated requirements with inventories in the short run (FY 78) while at the same time keeping open an accession program that continues to feed our minimum long term rated force requirements. Hence, the UFT reduction helped reduce our strength—a short term problem—without seriously crippling long term force sustainment.

Complementing the reduction in accessions are reductions-in-force (RIF) of selected Reserve officers. Key factors in determining the type of officer to be RIF'ed are force structure, manning, quality, and equity considerations. Localization of RIF to the rated segment of the force would discount the force structure, quality, and equity factors and key solely on manning. Thus, many highly competitive rated officers would be separated while less competitive officers in other categories, who may also be temporarily surplus to certain career fields would be retained. Such a process would not only be inequitable, but would ignore the option of internal force realignment that permits redistribution to offset temporary imbalances.

To summarize, we believe we have an equitable and sound RIF policy—one that considers the long and short term requirements of the Air Force as well as credibility with our people. The fiscal year 1975 RIF reflects this policy. Of the 1,133 officers identified 337 (29.7%) are pilots. This approximates the overall percentage of pilots in the active force (30.3%).

TOP TALK

Chairman MCCLELLAN. What is the annal cost of Project TOP TALK in FY 1975 and FY 1976? Please identify these costs by appropriation and purpose.

General LEWIS. The cost of TOP TALK in FY 1975 was $1,500 for administration, preparation, and distribution of information kits to project officers at selected Air Force bases. The funds used come from the Operations and Maintenance Air Force appropriation. In FY 1976, we require $18,000 for a two-day period of indoctrination and training for the base project officers. Travel limitations imposed by Congress dictated cancellation of this training in FY 1975. The purpose of TOP TALK is to look closely at cadet candidates in terms of motivation to become a cadet and a career officer. Also, it provides them with a realistic view of the Air Force through a base visitation program. After noting a 3–4% lower attrition rate for those cadets who participated in TOP TALK as compared to the Class of 1978 as a group, a decision was made to expand the program to include all fully qualified candidates for the Class of 1979. We feel that this early exposure to the operational Air Force is a positive factor in influencing cadets to stay at the Academy.

PCS/IMPACT OF FY 76 BASE CLOSURES

Chairman MCCLELLAN. How many moves, and what cost, will be caused by FY 1976 base closures? List by base affected.

General LEWIS. Sir, current programs call for the closure of two active Air Force installations in FY 1976. These two major installations, Hamilton AFB, California and Ellington AFB, Texas, have an active Air Force population of 675 personnel who would require PCS relocation at an approximate cost of $925,000. One hundred of these personnel are stationed at Hamilton AFB and 575 are at Ellington AFB.

ADVANCED DATA SYSTEMS/WORKLOAD REDUCTION

Chairman MCCLELLAN. Which advanced data systems will reduce workloads and personnel costs at major command headquarters? Identify the commands and the reductions, as well as the cost savings.

General POSNER. For Fiscal Year 1977, the Advanced Personnel Data System (APDS) is the primary source of reduced major command headquarters manpower and workload requirements associated with Air Force advanced data systems. As a result of APDS, all major command headquarters will achieve reductions. Manpower savings will total approximately 239 authorizations with an estimated annual personnel cost savings of $2.5 million.

AFCS/MAC/ASW CO-LOCATION/SPACE SAVED

Chairman MCCLELLAN. How many additional spaces will be saved by co-location where communications, weather and other Military Airlift Command service activities are located together?

General POSNER. We have identified a savings of approximately 400 manpower spaces in the consolidation of Air Force Communications Service (AFCS) and Military Airlift Command (MAC) headquarters. This consolidation will facilitate an additional 500 space savings in the field activities of AFCS and the Air Weather Service. These 900 spaces, together with the savings from other overhead and supoprt reduction initiatives, have enabled the Air Force to program essential improvements in general purpose force capabilities, while reducing to the military and civilian end strength levels reflected in the FY 1976 budget.

AFSC LABORATORY RESTRUCTURE/SPACE SAVED

Chairman MCCLELLAN. How are the Systems Commands laboratories being restructured and what decreases will result?

General POSNER. Air Force Systems Command Laboratories are currently planned for restructuring as follows:

A. Functions and resources of the Air Force Avionics Laboratory, Aero- Propulsion Laboratory, Flight Dynamics Laboratory and Materiels Laboratory are being consolidated into a single technical center to be named the Air Force Wright Aeronautical Laboratories at Wright-Patterson AFB, Ohio. Additionally, the Aerospace Research Laboratory structure at Wright-Patterson will be disestablished and appropriate functions and resources assimilated into the newly established Wright Aeronautical Laboratories. Manpower decreases resulting from this action will be approximately 250 authorizations.

B. Major functions of the Rome Air Development Center (RADC), Griffiss AFB, New York, were planned for transfer to the newly established Wright Aeronautical Laboratories at Wright-Patterson AFB and also to L. G. Hanscom AFB, Massachusetts. Those elements of RADC to be transferred to L. G. Hanscom were to be integrated with elements of the Cambridge Research Laboratories (AFCRL) currently at Hanscom to become a newly established laboratory whose mission would be electronics technology and Command, Control, and Communications. In a related action, other elements of AFCRL involved in environmental projects were to be relocated to Kirtland AFB, New Mexico, to become the Air Force Geophysics Laboratory. Manpower decreases associated with the transfer of RADC were envisioned to be approximately 300 authorizations.

C. Other planned actions involving AFCRL activities call for the inactivation of Detachment 1 at Chico, California, with a decrease of 13 manpower authorizations; inactivation of Detachment 3 at Holloman AFB, New Mexico, with a decrease of 42 manpower authorizations; conversion of the Air Force Solar Observatory, Sacramento Peak, New Mexico, to a contractor-operated facility with a decrease of 63 mission and support manpower authorizations.

The laboratory restructuring actions relating to RADC and AFCRL at L. G. Hanscom AFB and Kirtland AFB are currently undergoing extensive review and study. As a result, implementation of these planned actions is being held in abeyance pending the outcome of these reviews. Furthermore, the specific manpower adjustments identified here are not net figures for reductions in the laboratories because there are additional actions under consideration to reach budgeted manpower levels for Air Force Systems Comamnd by the end of FY 76.

SUPPORT AIRCRAFT REDUCTION/MANPOWER IMPACT

Chairman MCCLELLAN. Are the 6,400 manpower spaces "saved" in FY 1975 as a result of support aircraft reductions actual savings, or do they represent shifts to other programs?

General POSNER. These savings are part of a gross projected reduction in total Air Force manpower between FY 1974 and FY 1976 of approximately 78,300

spaces. Of this total, about 6,400 spaces are being reprogrammed to support the initiatives we are undertaking in FY 1976 to enhance the combat capability of our general purpose forces.

JOINT SURVEILLANCE SYSTEM/PURPOSE ORGANIZATION

Chairman MCCLELLAN. Explain the purpose and organizational setup, as well as responsibilities, of the Joint Surveillance System.

General GREENLEAF. The primary mission of the Joint Surveillance System (JSS) will be to provide surveillance and peace-time control of our sovereign airspace. The JSS will replace SAGE and will consist primarily of Federal Aeronautics Administration radars and four Region Operations Control Centers (ROCCs) located at existing Airborne Warning and Control System (AWACS) capable military facilities in the NE, SE, SW, and NW quadrants of the CONUS. During times of crisis, the wartime roll of active air defense would be accomplished with dedicated interceptor forces augmented by Tactical fighters and AWACS drawn from the general purpose pool. The present Semi-Automatic Ground Environment (SAGE) system, consisting of military radars and six Regional Control Centers, was built in the 1950s to provide active air defense against the primary threat of that period. We are in the initial planning stages to incorporate Alaska and Canada in the JSS.

INTELLIGENCE AND COMMUNICATIONS ACTIVITIES/AIRCRAFT INCREASE

Chairman MCCLELLAN. Why does the number of intelligence related aircraft increase, even though there is a reduction in program 3 (intelligence and communications) of 16 percent?

General GREENLEAF. The increase in intelligence related aircraft is the result of, and is offset by, a transfer within force program three of WC–135 aircraft from Weather Activities. A revalidation of WC–135 aircraft showed these aircraft will primarily support [deleted]. The transfer reflects the redefinition of the primary mission assigned to the aircraft. This mission supports the United States national capability to [deleted]. The WC–135 aircraft have previously been doing this mission on a special tasking basis. The transfer does not involve procurement of new aircraft or modification of the aircraft. The manpower associated with the support of these aircraft has remained constant.

MANAGEMENT STANDARDS STUDIES

Chairman MCCLELLAN. Explain how management engineering standards studies are performed in order to review training personnel requirements. How long do these studies take? How much do they cost?

General POSNER. Each standard applies to a single technical training course and is used to determine manpower requirements for instructors and the necessary supervision. A separate standard is required for each course because of variations in the subject matter, equipment and facilities, and fluctuating student entry rates.

Manpower requirements for each course are computed as two separate parts: classroom/laboratory instructor hour requirements; and class support hour requirements. The classroom/laboratory hours take into consideration such factors as facility and equipment configuration limitations. Course support hours are developed by using standard times determined for pre-developed standard tasks and categories based on historical data.

The length of time to develop these standards has ranged from one to seventeen work days, depending on the size and complexity of the individual courses; the cost per study has ranged from $31 to $732.

MANAGEMENT ENGINEERING SAVINGS

Chairman MCCLELLAN. How are savings from the Management Engineering Program determined? How realistic are these estimates of savings?

General POSNER. At the time a manpower standard for a function is completed, we go through a process of "pricing out" the standard. By this I mean we look at each base where the function is performed to see what level of workload they have, how many manpower authorizations are currently allocated, and how that compares to what the new standard would allow. Current authorizations in ex-

cess of what the standard allows are withdrawn and either realigned by a major command to satisfy other mission requirements or turned into Headquarters USAF where they can be reallocated for such essential requirements as combat capability improvements, or used to reduce end strength levels.

These withdrawals are the basis for computing the dollar savings. Authorizations are identified by grade and we apply to each grade a specific cost factor to arrive at a yearly savings for each authorization. Because a standard normally has a minimum lifetime of three years, the yearly savings are multiplied by three to arrive at the total savings resulting from the standard.

Savings computed in this manner are not only realistic but, by design, on the conservative side. Many standards are valid for more than three years, so the benefit of the savings extends beyond the period for which credit is given. Further, the savings directly credited to our standards do not include additional economies achieved as workloads are reduced, which would not have been achieved in the same magnitude in the absence of a manpower standard.

Functional Management Engineering Team

Chairman McClellan. How large are functional management engineering teams? What did they cost in FY 1975 and FY 1976?

General Posner. The functional management engineering team (MET) servicing civil engineering activities has an authorized strength of 20, and the team specializing in personnel functions is authorized 29. Additional functional METs, which are planned for activation during FYs 1976 and 1977, will vary in strength with the size, scope, and complexity of the functions being covered. Functional MET personnel costs for FY 1975 are projected at $.5 million; personnel costs in FY 76 will increase in proportion with the number of new teams we are able to activate, and we plan to activate several. In any case, the manpower for functional METs is being funded by realigning authorizations from existing command management engineering teams, so the associated costs do not represent net increases. Since the functional MET concept is designed to improve the efficiency of developing manpower standards and keeping them current, we are expecting significant savings in overall standards development and maintenance personnel costs once the concept becomes fully operational.

Reimbursable Program/TAFT Support

Chairman McClellan. Are all strength-related increases under the reimbursable program attributable to TAFT support? Please describe this program and the Air Force's involvement, including the countries supported.

General Posner. All strength related increases in the reimbursable program are attributable to Technical Assistance Field Teams (TAFTS) or other Foreign Military Sales (FMS) support. Personnel performing these functions provide training and advisory support to foreign countries based upon FMS agreements between the United States Government and the countries involved.

In Iran, TAFTs will be increased in FY 1976 by 21 military personnel to 330 authorizations. These increases will provide for expanded training in aircraft maintenance, logistics, communications/electronics and aircraft control and warning systems. Additionally, a new Foreign Military Sales case involving 52 military and 66 U.S. Direct Hire civilian personnel has been opened to address improved Air Base Communications and Combat effectiveness for the Iranian Air Defense System. The program includes radar site selection, development, test and acquisition of "look down" radars, and communications systems.

In Saudi Arabia, the U.S. Air Force will provide 21 military and 33 U.S. Direct Hire civilian personnel, an increase of 15 U.S. Direct Hire personnel in FY 1976 for contract management of Royal Saudi Air Force (RSAF) supply modernization, construction, maintenance and technical training. Additionally, the USAF will provide 56 military personnel in Saudi Arabia in TAFTs for combat crew training, maintenance, logistics, intelligence, and other skills necessary to support a modern Air Force.

For NATO/SHAPE, 15 officers and eight civilians in both FY 1975 and FY 1976 perform the evaluation, source selection contract award and management of the development, procurement, launch and on-orbit support for the NATO Phase III space segment of the NATO Integrated Communications System.

Military Members Assigned to Commissary Functions

Chairman McClellan. Are military members assigned to commissary functions reimbursed from sales or are they part of the direct program?

General Lewis. Military members assigned to commissary functions are part of the direct program.

Chairman McClellan. Does the Air Force 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?

General Lewis. Yes, sir. The Air Force Procurement Management Information System (PROMIS) is designed to enable the recruiter to commit a non-prior service enlistee against a specific Air Force Specialty Code or Aptitude Area requirement as far as six months in advance of the requirement month. The use of this system enables us to fill our enlistment objectives during both the peak and the low enlistment periods. As of the end of February 1975, there were approximately 21,000 personnel in the Delayed Enlistment Program with active duty entry dates ranging from 1 March to 31 August 1975.

Voluntary Discharge/Early Point in Training

Chairman McClellan. Does the Air Force have any formal programs for the mutual and voluntary discharge of enlistees at an early point in their basic or individual training phase? This is as opposed to unilateral or punitive discharge. If so, how many enlistees are being discharged under it annually? If not, what would be the major objections to such a program?

General Lewis. The Air Force has a number of voluntary separation policies which have been in existence for some time under which any enlisted member may request termination of his enlistment agreement and early separation. While these policies are not specifically tailored for personnel at an early point in their basic or individual training phase, these personnel are eligible to apply under the provisions. These policies range from separation for hardship and dependency reasons to a very broad category entitled Miscellaneous Reasons. Approximately 2,796 enlisted personnel in pay grades E–1 through E–3 elected voluntary separation in fiscal year 1974 and 2,823 elected to separate in fiscal year 1975 (as of February 1975) under these programs. Although we are not able to specifically identify how many of these personnel were in training at the time of separation, the average years of service for personnel in these grades is less than 1.5 years. We believe our existing programs provide an adequate vehicle to allow enlisted members with valid reasons to terminate their enlistment contracts, while at the same time insuring that Air Force requirements are filed at the least cost.

Reserve Officer Training Corps/Centrally Administered Program

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?

General Lewis. In December 1973, the Office of the Secretary of Defense (OSD) proposed two test projects to consolidate ROTC units and curriculums. These projects envisioned the establishment of jointly staffed units on campuses or in urban areas with several ROTC units, using a common curriculum for the first two years of the four-year program. The Services unanimously objected to these proposals and to any consolidation of ROTC programs at the unit or OSD level. We felt, and still do, that such consolidation would ultimately lead to the consolidation of all officer procurement programs and to centralized officer production goals without due consideration for each service's unique requirements. We firmly believe that the efficient operation of ROTC and the other Service procurement programs is a legitimate responsibility of the military departments and must remain so for the departments to most effectively obtain new officers who can carry out the unique combat and support functions assigned to them.

ROTC programs combine recruitment, education, motivation, observation, evaluation, and selection of college students based on the particular needs of each service. What we might gain in manpower and cost savings would be offset by a compromised curriculum and the loss of the flexibility the Services now have in procuring the types and numbers of officers required to perform their missions. A cost benefit analysis of the OSD test proposals is now being conducted. In the

meantime, increased emphasis has been placed on improving the ROTC program through cooperative efforts such as the adoption of common manning, costing, and viability standards. We believe the Services are effectively managing their individual programs on the basis of these common standards.

MIA Amounts Paid to Families/Legal Status/Resolution

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?

General Lewis. The following table shows FY 1974 cost and estimate for FY 1975 and 1976 for those missing-in-action by Category:

[In thousands of dollars]

	Fiscal year—		
	1974	1975	1976
Officers	12,399	10,864	9,387
Basic pay	9,021	7,992	6,925
Incentive pay	1,337	1,102	923
Basic allowance for quarters	1,384	1,193	1,022
Basic allowance for subsistence	303	259	220
Social security tax—employer's contribution	354	318	297
Enlisted	854	780	726
Basic pay	617	572	534
Incentive pay	78	65	59
Basic allowance for quarters	124	110	102
Social security tax—employer's contribution	35	33	31

Full pay and allowances are credited to the accounts of Service members so long as they remain in a missing status. These amounts can be reduced only through termination of missing status under provisions of 37 United States Code 555 or 556. The legal and official status of these individuals is "missing" as defined by 37 United States Code 551. The intention of the Department of the Air Force regarding the ultimate resolution of these cases is to continue to support Government efforts to obtain as full an accounting as possible for our missing members and those who are deceased but whose remains have not been recovered. During the period 27 January 1973 through 31 March 1975, the status of 240 Air Force members has been changed to deceased. An additional 472 Air Force members remain in a missing status.

Hazard Duty Pay/Procedures To Guarantee Hazardous Duty

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 or are occupying hazardous positions?

General Lewis. Duties which qualify for hazardous duty pay in the Air Force include enlisted flight crew duty, officer and enlisted noncrew duty (ground specialties performed inflight), parachute duty, explosive ordnance demolition duty, and duties which subject the individual to environmental stress (such as pressure chamber or acceleration/deceleration experimentation). The requirement for each hazardous duty position is validated annually against specific job standards. Each individual assigned to a hazardous duty position is required by orders to perform such duty on a regular and frequent basis. These individuals receive hazardous duty pay only for those periods in which performance requirements are met in accordance with 37 U.S.C. 301, Executive Order 11157 and the DOD Pay and Allowances Entitlements Manual. Local Commanders are responsible for issuing orders and for documenting and certifying actual performance by each individual. The Air Force audits and inspects unit records to insure compliance with the established controls.

PERMANENT CHANGE OF STATION TRAVEL/DO-IT-YOURSELF MOVE PROGRAM

Chairman MCCLELLAN. Has a "do-it-yourself" move plan for military personnel been initiated? What are the basic ground rules of the program, and what has been its usage to date? Is the program available to all members of all commands? Will it be expanded further?

General LEWIS. On or about 15 May 1975 the Air Force will initiate the "Do-It-Yourself" concept of moving personal property at six installations with gradual implementation CONUS-Wide. We understand the Navy has had a similar program in operation since 1971 and that the Army's program was initiated 1 December 1974.

The rental services are to be offered to all Air Force members on a voluntary basis and are to be considered an alternative mode of shipment available for all or a portion of the member's weight allowance. The availability of the rental services offered under this program are in no way intended to eliminate the Air Force member's option to select one authorized mode of shipment over another.

The program will include rental of van type trucks, trailers towed behind a member's automobile, hand trucks/dollies and furniture pads. Various types of packing cartons, wrapping paper, sealing tape, rope and padlocks will be made available for use by the service member.

Under the Air Force concept a member desiring to utilize the "Do-It-Yourself" method will contact the Traffic Management Office (TMO) at the origin installation. The TMO, after determining that the member has been properly counseled regarding other options available, will make a cost comparison to determine that costs associated with the move will not exceed costs of other modes of transportation. The TMO then contacts the local U-Haul International representative, authorizes issue of an appropriate size truck or trailer, packing material, hand trucks/dollies, and cash allowance to cover gas, oil and servicing costs while enroute. The member is also authorized to obtain assistance in loading and unloading the rental vehicle or trailer and to be reimbursed for the costs of such labor.

The member then makes the move to the authorized destination, unloads the truck and turns it in to the destination U-Haul International representative together with supporting documents and receipts. The local supporting Finance Office receives the invoices and payment is made directly to the leasing company's home office.

FY 76 PCS PROGRAM/CATEGORIZE

Chairman MCCLELLAN. The FY 1976 program increases over 39,000 moves, mostly in the operational/rotational area. Please categorize this total by cause, and indicate that portion of the dollar increase related to price, rather than scope change. Also indicate the relationship between accession and separation moves with total accessions and separations.

General LEWIS. Sir, the operational move category increases by almost 28,000, the rotational travel area reflects slightly over a 10,000 increase, and organized unit and accession travel categories account for the remainder of the increase. There are, however, also offsetting decreases in the separation and training travel categories of nearly 9,000 moves. The net effect is an increase of less than 31,000 moves. The increases are the result of the substantial realignment of our bases and the effect of deferring some of our FY 1975 requirements into FY 1976 to accommodate the impact of significant tariff-driven cost increases. The ultimate efficiencies and economies of our base realignment efforts are expected to require over 15,800 PCS moves and the deferral of FY 75 PCS requirements into FY 1976 caused a switch of 17,100 moves between the years. These are all operational and rotational moves. The remaining increase of nearly 5,000 operational and rotational moves is the net result of program changes, changes in the distribution of personnel deployed overseas and adjustments to reflect year to year differences in rotational patterns. The FY 1976 request would have been substantially below the FY 1975 budget request had it not been for the move deferrals and base realignment actions.

Price changes applicable to the requested PCS program account for $40.2 of the $80.9 million program increase.

While there is a direct relationship between the number of accession and separation moves and total accessions and separations, all accessions and separations do not result in PCS movements. Returned from "dropped from rolls" is counted as a gain to the Air Force but it is not considered as an accession PCS move since

no PCS entitlements are involved. Likewise, separate to reenlist is a loss to the Air Force but it is not chargeable as a separation PCS move since the individual does not make an actual PCS move.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator McGee. In addition, I have questions submitted by Senator Thurmond. Will you also respond to those for the record?

General Lewis. Yes, sir.

(The questions and answers follow:)

LOCATION OF F–5E SQUADRONS

Senator Thurmond. General Posner, where will the three F–5E squadrons be located?

General Posner. The F–5E squadrons are programmed to be located at Nellis AFB, Nevada (2 squadrons) and in Europe (one squadron).

MANNING LEVEL/F–5E

Senator Thurmond. What manning level will be required to support these squadrons, both from a standpoint of organizational personnel and base support structure?

General Posner. F–5E organizational and base support manpower is:

FISCAL YEAR 1976 TO END OF PROGRAM

	Military	Civilian	Total
Organizational	954	24	978
Base support	142	76	218
Total	1,096	100	1,196

F–5E MISSION

Senator Thurmond. What will be the main mission of the F–5E squadron?

General Posner. The F–5E squadrons will provide combat training for the Air Force fighter crew members in Dissimilar Air Combat Training (DACT). Presently this type of training is being conducted in the Tactical Air Command (TAC) with T–38 aircraft, but on a less than required basis. Only 48% of the TAC dissimilar ACT requirements are being accomplished, and the T–38 aircraft performance falls short of that of the potential enemy threat. After receipt of the F–5Es which closely resemble the threat aircraft in size and performance, TAC will be able to accomplish all dissimilar ACT requirements. Additionally, USAFE and PACAF will also receive this much needed training.

F–5E MISSION TO ANG

Senator Thurmond. General Posner, it would seem that this is a mission the Air Guard could fill. Has the Air Force considered using these F–5E squadrons to replace F–100s in the Air Guard?

General Posner. Assuming the F–5E were to be employed in a day, visual tactical fighter role as it is used by our allies the Air National Guard could handle the mission very nicely. However, the F–5E is not considered suitable as a front line USAF tactical fighter or interceptor. Due to its limited range, avionics, and weapons carrying ability, it does not have the mission flexibility or capability required for USAF active and reserve forces

As we mentioned in testimony last fall, the USAF will use the F–5E to conduct Dissimilar Air Combat Training (DACT) for active and reserve force fighter, attack and reconnaissance units. This program is vital to our tactical aircrews for the development and dissemination of effective counterair tactics and permits our pilots to train against aircraft whose characteristics are similar to those of potential enemy aircraft.

F–5E MISSION/ANG HANDLE

Senator THURMOND. Do you feel the Guard could handle this mission and if not, why?

General POSNER. Since the USAF will use the F–5E to conduct Dissimilar Air Combat Training (DACT), dedicated units are required. They study the tactics used by potential adversaries and employ them in conjunction with their own dedicated controllers against our combat aircrews. Their vast knowledge of the adversaries' employment concepts leads to the development of counterair tactics which results in effective USAF empolyment doctrine.

The concept of training in the dissimilar role would require full time availability and extensive travel of the guardsmen if the Guard were to be assigned this mission which, though possible, would not be cost effective. In addition, the development of tactics and tactical employment doctrine is the responsibility of our active forces.

SAVINGS IF THE F–5E IN THE ANG

Senator THURMOND. Would you estimate for the record the savings which would accrue by the Air Force if the F–5E's were utilized by the Guard rather than the Regulars?

General POSNER. The cost to the U.S. Government is the same to initially train and equip similar squadrons, reserves or active. However, the concept of training in the dissimilar combat role would require full time availability of the guardsmen if the Guard were to be assigned this mission. The guard is not normally manned to perform a full time activity but is manned to achieve a degree of readiness needed to complement the active force. If the Guard were to accomplish the dissimilar training, additional personnel, TDY funds, and support equipment would be required, thereby reducing the cost effectiveness of the program. It was the Air Force's decision that the F–5E aircraft could do more for improving the total world-wide force capability including Guard and Reserve units, if retained in the active force.

F–5E ADDED PERSONNEL REQUIREMENT

Senator THURMOND. Where in your current or future request is the added personnel requirement of the F–5Es reflected?

General POSNER. The manpower resources required to support the F–5E program are reflected in the FY 76 President's Budget. Those command resources, to include base operating support, are:

FISCAL YEAR 1976 TO END OF PROGRAM

	Military	Civilian	Total
TAC:			
Mission	636	16	652
Support	96	51	147
Total	732	67	799
AFE:			
Mission	318	8	326
Support	46	25	71
Total	364	33	397
Total program [1]	1,096	100	1,196

[1] The existing T–38 unit manpower will be absorbed within the F–5E squadron as the conversion takes place.

RISK/REDUCED FLYING HOURS/F–100

Senator THURMOND. General Posner, do you feel the reduced flying hours will add an additional risk to flying the older F–100's?

General POSNER. The pilots flying the F–100 have been programmed to fly approximately 135 hours annually for several years. With the exception of the energy crisis months of the winter of 1973, the Air National Guard F–100 pilots have accomplished their programmed time. There is no plan to reduce the programmed hours below 135 in the immediate future and therfore, no additional risk in flying the older F–100s in apparent.

Missions for ANG Units

Senator Thurmond. I believe that Secretary Plummer testified last year that justifiable missions have been assigned the five Air National Guard units in question in FY 1975. If these units are now assigned new missions, why has the Sec. of Defense now sent to Congress a request which again proposes strength and force structure reductions in the Air Guard?

General Posner. We support the administration's position on the provisions of the Rescission Bill introduced last November. Effective management of the total force necessitates the ability to program the forces with a minimum of restrictions such as the number of units. Such flexibility would permit development of the optimum mix of forces within existing dollar, equipment, and base constraints. The request to remove the 91 unit limitation should not be construed as a lack of support of the Guard and Reserve Forces. As you are aware, the FY 1976 Budget contains a request for 91 flying units in the Air National Guard. You may be assured that the Air Force will continue to provide, as best we can, within available resources, meaningful and productive missions for the Air Reserve Forces.

Use of Ellington AFB as a Reserve Facility

Senator Thurmond. General Posner, what consideration has been given to using Ellington Air Force Base, Texas, as a Reserve facility?

General Posner. The Air Force Reserve is currently operating Ellington Air Force Base and acting as host to five other major federal users including the NASA Manned Space Flight Center. As part of the continuing Defense effort to divert resources from support and overhead activities the Air Reserve Force units will be relocated to active Air Force bases and Air Force support and host activities at Ellington Air Force Base will be terminated by early summer of 1976. Since this action was announced on November 22, 1974, by the Secretary of Defense, several alternatives have been proposed to the Air Force that would retain some Air Force component (Active/Reserve/Guard) in a host capacity for what essentially would be a Reserve center. However, no definitive data has been presented that would change our decision to terminate the Air Force presence and role as host at Ellington.

A–7s for the ANG in FY 76

Senator Thurmond. General Posner, did the Air Force consider buying additional A–7's for the Air National Guard for the FY 1976 budget?

General Posner. The Air Force did not consider the procurement of additional A–7s for the Air National Guard in FY 76. The proceurement of A–10s and F–15s will allow A–7s and F–4s from the Active Force, in conjunction with direct procurement of A–10s for the reserve forces, to modernize the present A–37, F–104, F–105 and F–100 units by FY 1980.

Additional A–7 Squadron

Senator Thurmond. Would it be prudent to buy an additional squadron of A–7s thereby enabling the retirement of 24 to 30 F–100's and at the same time keep the A–7 production line open for a contingency?

General Posner. No sir. As you may know, we considered continued production of A–7s along with other alternatives during the development of our recommended force levels. However, in competing for funds along with our ongoing modernization program, the relative priority of continued A–7 production was not sufficient to warrant continued funding. Our current program to procure A–10s and F–15s will permit us to transfer all active force A–7s to the Air National Guard and permit us to phase out all Air National Guard F–100's by FY 1979. If FY 1976 funds were provided for continued A–7 production, because of long lead production time, they would not be available to the reserve force until 1978. Since there would not be a signficant acceleration of our planned modernization program we felt continued production would not be a prudent course of action.

PCS Requirements

General Lewis. I would like to take a couple minutes, if I may, and introduce one subject that you didn't question here that I think you will hear a lot more about. The reason I bring it up at this particular

time is it is very important to us in the management of the Air Force to make the management improvements that our Chief and our Secretary have outlined to you in their appearances. It is not only a question before this committee but the Congress in general, and that is the permanent change of station funds.

You will note from my statement inserted in the record that there is a substantial sum of money requested—some $649,253,000 is our estimate. What I would like to leave with you, Mr. Chairman and committee, is the fact that we are able now with the help of computer programs and the management techniques that we have to define precisely what those requirements are.

For instance, the mere fact that you bring new people aboard breaks out to where we need 89,228 moves associated with the airmen and new officers coming to active duty. Now to get those people trained and into an operational unit, we can break that out to another 82,000 moves. As you will recall, the size of the force overseas is where the big money is involved.

You know, the people are assigned and serve complete tours and expect to come home. They have family commitments that are important to them and we have to bring them home on a continuous basis. That is another 184,000 moves from all tour areas to meet that requirement. Of course the people who are leaving the service, and retiring and completing contracts must be moved. We can compute precisely how many there are of these. They have completed the service obligation so you really can't do anything but deal with a realistic programed number.

UNIT ROTATION

Now when you put all this together, of course, it makes a rather large program. We already know that there are proposals being made that would say that an alternative to the present system would be sending people overseas without dependents on a unit rotational basis. I know this will come to the attention of the committee. We have had a lot of experience with that in the past. I will, with your concurrence, make a few comments that I would like to introduce on this point.

Separation from family is one of the greatest complaints in every survey that has been initiated by the Air Force for years and I would suggest for all of the services, but I am speaking primarily of that which we know to be the case in the Air Force.

Senator McGee. Not confined to the American forces.

General Lewis. Yes, sir.

The requirement to be able to rotate a unit forward, and I don't care where that is, is going to require—and my colleagues will agree, I am sure—a support base from which to rotate. In other words, a unit going forward must be well equipped and manned with the best people, so it would cause a tremendous amount of turmoil and turbulence in those units.

Our chief has stated that in order to put one unit forward you ought to have a base of four like units, so that you could rotate them. When you have unlike weapons systems, that becomes a management problem beyond the requirement to have a unit rotated. If you just took your airplanes and moved the combat crews to a forward location, you still must have support and you must have a group of people there in order to make them ready. So you are still going to have a great number

of people overseas with their families in order to provide support. In other words, you are just taxing your combat crew force in such a concept of unit rotation.

Now I felt obligated in bringing that up because I am sure that this will be introduced in other hearings and other parts of the Congress as an alternative trying to reduce the permanent change of station cost. I submit to you that it is a very complex problem and one that is not going to get solved very easily, no matter how you line it up.

First and foremost, we know people don't like it. I think, just a small consideration is that right now we can retain about 50 percent of our fliers. When you consider that it costs about one-half million dollars to bring a crew member to combat ready status and you create turbulence in the unit with family separation, a reduction in retention by 10 percent, just conservatively estimated on pure training cost alone would cost some additional $70 million a year. In such a case, you may be saving money in the PCS area but you are losing money in the other areas, such as the operations and training.

So I would say to you, I am sure that the Department of Defense will be looking at this as a concept and proposal. We in the Air Force think that it is not the way we want to do business with our people.

Senator McGee. Very well. We will be more interested as we go along in how that shapes up.

General Lewis. Yes, sir.

COST OF TRAINING PILOTS

Senator Young. I have one more question.

What was that $150,000 figure that you gave with respect to pilots?

General Lewis. Sir, the cost today of training a pilot through undergraduate training—in other words, where he receives a set of wings—is about $157,000 but of course that is only up to being a pilot. Now as you go on into a specific weapon system, that cost varies with the type of weapon system. I can define this by weapon system if you would like.

We estimate on the order of one-half million dollars to upgrade a new pilot to where he is qualified and combat ready on the F–4 or other types of operational airplanes. He has to go through combat crew training to raise his level of proficiency to where he can shoot, bomb, and navigate those complex weapons systems. My figure of $157,000 was the cost upon graduation from pilot school.

Senator Young. A big investment.

General Lewis. It is indeed a large investment. That is why I said we don't move people frequently from one system to another. It is not only the cost of the people nor is it a question of their not being capable of moving from one weapon system to another, it is the money consideration of increased training cost.

SUBCOMMITTEE RECESS

Senator McGee. Gentlemen, thank you again for appearing today.

The subcommittee will recess until tomorrow morning at 10 o'clock at which time the Air Force operation and maintenance request will be considered.

Thank you very much.

General Lewis. Thank you, Senator.

[Whereupon, at 3:21 p.m., Wednesday, March 19, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, March 20.]

50-479 O - 75 - 41

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

THURSDAY, MARCH 20, 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 AIR FORCE

OPERATIONS AND MAINTENANCE

STATEMENTS OF:

BRIG. GEN. CHARLES C. BLANTON, DIRECTOR OF BUDGET, HEADQUARTERS USAF

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

MAJ. GEN. PAUL F. PATCH, DIRECTOR OF TRANSPORTATION, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

BRIG. GEN. JACK I. POSNER, DIRECTOR OF MANPOWER AND ORGANIZATION, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

ACCOMPANIED BY:

COL. ROBERT L. BAKER, CHIEF, TRAINING PROGRAM DIVISION, DIRECTORATE OF PERSONNEL PROGRAMS, DEPUTY CHIEF OF STAFF, PERSONNEL

CHARLES D. McELHANON, CHIEF, MAINTENANCE/OPERATIONS AND MAINTENANCE PROGRAMS OFFICE, AIRCRAFT AND MISSILE PROGRAMS DIVISION, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

BUDGET REQUEST

Senator YOUNG. The subcommittee will come to order.

This morning the subcommittee will hear testimony in support of the fiscal year 1976 budget request for the Air Force operation and maintenance account.

JUSTIFICATION

Before we receive testimony today, I think the appropriate information from the justifications should be inserted in the record.

[The justification follows:]

Justification

For expenses, not otherwise provided for, necessary for the operation and maintenance of the Air Force, as authorized by law; and not to exceed $2,293,000 can be used for emergencies and extraordinary expenses, to be expended on the approval or authority of the Secretary of the Air Force, and payments may be made on his certificate of necessity for confidential military purposes; $7,062,030,000, of which not less than $350,000,000 shall be available only for the maintenance of real property facilities.

For expenses, not otherwise provided for, necessary for the operation and maintenance of the Air Force, as authorized by law; and not to exceed $2,333,000 can be used for emergencies and extraordinary expenses, to be expended on the approval or authority of the Secretary of the Air Force, and payments may be made on his certificate of necessity for confidential military purposes; $7,956,300,000, of which not less than $355,000,000 shall be available only for the maintenance of real property facilities and in addition $67,000,000 for "Operation and Maintenance, Air Force" for fiscal year 1972.

For "Operation and Maintenance, Air Force" for the period July 1, 1976, through September 30, 1976, $2,020,300,000, of which not to exceed $527,000 can be used for emergencies and extraordinary expenses.

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-10-3400-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. STRATEGIC FORCES	1,250,382	1,517,116	1,651,701
	2. GENERAL PURPOSE FORCES	1,074,962	1,322,429	1,433,089
	3. INTELLIGENCE AND COMMUNICATIONS	539,824	579,068	623,955
	4. AIRLIFT AND SEALIFT	192,718	277,367	504,247
	7. CENTRAL SUPPLY AND MAINTENANCE	2,435,438	2,534,150	2,556,998
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	960,132	838,700	912,692
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	224,049	257,293	272,446
	10. SUPPORT OF OTHER NATIONS	204,240	1,607	1,172
	TOTAL DIRECT PROGRAM	6,881,745	7,327,730	7,956,300
	REIMBURSABLE (TOTAL)	565,012	978,000	1,046,700
10	TOTAL OBLIGATIONS	7,446,757	8,305,730	9,003,000
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-428,312	-776,395	-801,167
13	TRUST FUNDS	-73,282	-148,285	-192,282
14	NON-FEDERAL SOURCES	-34,105	-54,300	-53,331
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR	-37,481	-8,168	-9,148
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	.....	-8,100	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR	8,168	9,148	9,148
25	UNOBLIGATED BALANCE LAPSING	19,095	.....	.....
	BUDGET AUTHORITY	6,900,840	7,319,630	7,956,300
	BUDGET AUTHORITY:			
40	APPROPRIATION	6,910,644	7,062,030	8,023,300
40	RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-40,000	.....
	PORTION APPLIED TO LIQUIDATE CONTRACT AUTHORITY	.....	.....	-67,000
41	TRANSFERRED TO OTHER ACCOUNTS	-9,804	.....	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	.....	170,400	.....
43	APPROPRIATION (ADJUSTED)	6,900,840	7,192,430	7,956,300
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	65,400	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	61,800	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	6,911,058	7,326,750	7,956,300
	OBLIGATED BALANCE, START OF YEAR			
72.40	APPROPRIATION	670,882	1,018,725	1,154,475
72.49	CONTRACT AUTHORITY	67,153	66,537	67,000
	OBLIGATED BALANCE, END OF YEAR			
74.40	APPROPRIATION	-1,018,725	-1,154,475	-1,435,775
74.49	CONTRACT AUTHORITY	-66,537	-67,000	.....
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	7,079	463	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	6,570,909	7,070,160	7,735,640
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	62,130	3,270
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL	.....	58,710	3,090

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3400-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	1,837,041	1,964,692	1,997,865
11.3	POSITIONS OTHER THAN PERMANENT	25,221	26,633	30,690
11.5	OTHER PERSONNEL COMPENSATION	40,037	41,820	42,482
	TOTAL PERSONNEL COMPENSATION	1,902,299	2,033,145	2,071,037
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	1,783,968	1,894,350	1,900,480
12.1	PERSONNEL BENEFITS: CIVILIAN	165,288	184,990	186,098
13.0	BENEFITS FOR FORMER PERSONNEL	1,818	1,900	1,900
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	180,461	158,350	199,189
22.0	TRANSPORTATION OF THINGS	335,424	377,537	362,100
23.0	RENT, COMMUNICATIONS, AND UTILITIES	409,946	504,609	525,079
24.0	PRINTING AND REPRODUCTION	38,064	47,562	49,261
25.0	OTHER SERVICES	2,416,591	2,174,935	2,432,300
26.0	SUPPLIES AND MATERIALS	1,449,323	1,905,319	2,189,255
31.0	EQUIPMENT	85,366	60,623	87,308
41.0	GRANTS, SUBSIDIES, AND CONTRIBUTIONS	385	438	438
42.0	INSURANCE CLAIMS AND INDEMNITIES	15,111	17,117	22,892
	TOTAL DIRECT OBLIGATIONS	6,881,745	7,327,730	7,956,300
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	118,331	138,795	170,557
12.1	PERSONNEL BENEFITS: CIVILIAN	10,865	13,726	16,705
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	9,772	10,944	10,911
22.0	TRANSPORTATION OF THINGS	31,214	34,959	34,854
23.0	RENT, COMMUNICATIONS, AND UTILITIES	22,341	25,022	25,097
24.0	PRINTING AND REPRODUCTION	1,990	2,230	2,236
25.0	OTHER SERVICES	297,994	653,848	639,501
26.0	SUPPLIES AND MATERIALS	68,810	94,166	142,529
31.0	EQUIPMENT	1,618	1,815	1,810
43.0	INTEREST AND DIVIDENDS	2,077	2,495	2,500
	TOTAL REIMBURSABLE OBLIGATIONS	565,012	978,000	1,046,700
99.0	TOTAL OBLIGATIONS	7,446,757	8,305,730	9,003,000

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

		TRANSITION
IDENTIFICATION CODE 07-10-3400-0-1-051		
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. STRATEGIC FORCES	418,908
	2. GENERAL PURPOSE FORCES	368,244
	3. INTELLIGENCE AND COMMUNICATIONS	155,118
	4. AIRLIFT AND SEALIFT	145,956
	7. CENTRAL SUPPLY AND MAINTENANCE	630,524
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	233,457
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	67,913
	10. SUPPORT OF OTHER NATIONS	180
	TOTAL DIRECT PROGRAM	2,020,300
	REIMBURSABLE (TOTAL)	261,900
10	TOTAL OBLIGATIONS	2,282,200
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	-192,661
11	FEDERAL FUNDS	-53,724
13	TRUST FUNDS	-13,437
14	NON-FEDERAL SOURCES	-9,148
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR	7,070
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR	2,020,300
	BUDGET AUTHORITY	
	BUDGET AUTHORITY:	2,020,300
40	APPROPRIATION	2,020,300
43	APPROPRIATION (ADJUSTED)	
	RELATION OF OBLIGATIONS TO OUTLAYS:	2,022,378
71	OBLIGATIONS INCURRED, NET	
	OBLIGATED BALANCE, START OF YEAR	1,435,775
72.40	APPROPRIATION	
	OBLIGATED BALANCE, END OF YEAR	-1,259,153
74.40	APPROPRIATION	2,199,000
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3400-0-1-051

		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	494,401
11.3	POSITIONS OTHER THAN PERMANENT	6,780
11.5	OTHER PERSONNEL COMPENSATION	10,487
	TOTAL PERSONNEL COMPENSATION	511,668
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	
12.1	PERSONNEL BENEFITS: CIVILIAN	467,592
13.0	BENEFITS FOR FORMER PERSONNEL	45,634
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	500
22.0	TRANSPORTATION OF THINGS	52,599
23.0	RENT, COMMUNICATIONS, AND UTILITIES	91,600
24.0	PRINTING AND REPRODUCTION	132,046
25.0	OTHER SERVICES	12,406
26.0	SUPPLIES AND MATERIALS	619,361
31.0	EQUIPMENT	570,793
41.0	GRANTS, SUBSIDIES, AND CONTRIBUTIONS	21,939
42.0	INSURANCE CLAIMS AND INDEMNITIES	109
		5,721
	TOTAL DIRECT OBLIGATIONS	2,020,300
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	
12.1	PERSONNEL BENEFITS: CIVILIAN	44,076
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	4,324
22.0	TRANSPORTATION OF THINGS	2,725
23.0	RENT, COMMUNICATIONS, AND UTILITIES	8,715
24.0	PRINTING AND REPRODUCTION	6,500
25.0	OTHER SERVICES	540
26.0	SUPPLIES AND MATERIALS	141,914
31.0	EQUIPMENT	51,976
43.0	INTEREST AND DIVIDENDS	410
		720
	TOTAL REIMBURSABLE OBLIGATIONS	261,900
99.0	TOTAL OBLIGATIONS	2,282,200

Personnel Summary

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Total number of permanent positions.....	166,535	163,376	157,446	157,416
Full-time equivalent of other positions...	3,265	3,197	3,122	780
Average paid employment.....	164,093	163,365	158,742	38,782
Average GS grade.....	7.40	7.44	7.49	7.51
Average GS salary.....	$12,637	$13,340	$13,649	$13,649
Average salary of ungraded positions.....	10,628	11,858	12,456	12,456

General Statement

This appropriation finances the day-to-day costs, except military personnel costs, of operating, maintaining and supporting the Air Force. This request includes amounts for pay of civilians, contract services for maintenance of equipment and facilities, fuel, supplies, and repair parts for weapons and equipment.

The justification material for this appropriation is presented in a format like that provided in previous years. Requirements, including classified data where appropriate, are displayed by major force programs which are summarized on page 18. Training and Medical requirements are separately identified under Major Force Program VIII. Requirements for the period 1 July 1976 to 30 September 1976 are separately identified for the transition period between fiscal years FY 1976 and FY 1977 (P.L. 93-344). Special exhibits address subjects in which the Congress has expressed particular interest. These exhibits identify funds as well as pertinent forces, manpower, and flying hours required for the special interest subjects regardless of the appropriation from which funded.

The Operation and Maintenance, Air Force estimate has been carefully developed and the funds requested are the amounts required for the programmed forces. The FY 1976 and FY 197T operation and maintenance estimate is in balance with the overall Air Force program of aircraft, flying hours, manpower and bases. Program data is discussed in each of the major force programs.

The FY 1975 estimate in the FY 1976 budget is adjusted to include, in addition to the appropriation, supplementals for authorized civilian pay raises, the request for transfer of funds under Sec 834 of P.L. 93-437, and the proposed recission for Real Property Maintenance.

(In Thousands of Dollars)

A Summary of FY 1975 adjustments is:

Appropriated	$7,062,030
Proposed Supplementals	+$ 127,200
Wage Board Pay Raise	$65,400
Classified Pay Raise (1 Oct 74	$61,800
Proposed Transfer	+$ 178,500
Proposed Recission	-$ 40,000
Adjusted O&M FY 1975 Program	$7,327,730

The FY 1976 column of the Justification book totals $7,956,300.

The FY 197T column of the Justification book totals $2,020,300.

New Programs
Operation and Maintenance Appropriation

(In Millions of Dollars)

Identification and Description	FY 1976 Estimate
Field Level Reparables	$+44.6
Beginning in FY 1976, all Air Force field level reparables previously funded in the procurement appropriations (Aircraft, Missile, and Other Procurement) will be integrated into the stock fund. Operating commands will reimburse the stock fund from the Operation and Maintenance appropriation beginning in FY 1976.	
Funding for C-5/C-141 Aircrew Training	+42.8
The costs of this training were previously included in ASIF tariff charges to customers. Since the training is in unloaded aircraft and does not produce revenue, these costs in FY 1976 will be charged to the Operation and Maintenance appropriation as are aircrew training programs for other types of aircraft.	
Reimbursement for Sensors	+ 2.2
In FY 1976, the Air Force will reimburse the Army for operating and maintaining down range sensors previously funded directly by the Army.	
Air Defense Augmentation	+ 4.4
Air Defense Augmentation is the training of tactical fighter units in air defense roles to provide capability to supplement dedicated air defense forces in maintaining surveillance and control of U.S. air space in the event of war.	
Intra-DOD Warehousing Services	- 15.4

(In Millions of Dollars)

In FY 1975, a common service warehousing policy was initiated whereby warehousing services provided by one DOD component to another DOD component would be funded on a common (i.e. nonreimburseable) basis. Where costs were significant, however, reimbursement was permitted, on an exception basis, until FY 1976. The decrease represents funding assumption in FY 1976 by other DOD components.

Surge Supplement Crews..... $ + 5.4

In FY 1976, aircrews assigned to the surge portion of the rated supplement will fly their respective aircraft at basic proficiency levels. This action results in an increase in real combat potential of available aircraft.

Aggressor Squadrons..... + 2.7

Beginning in the second quarter of FY 1976, F-5E tactical fighter training aggressor aircraft will be assigned to the active inventory. By the end of FY 1976, three squadrons will be engaged in Dissimiliar Air Combat Training.

(In Thousands of Dollars)

Increased liability for foreign national separation allowances..... +7,500

In its report B-179343 of October 21, 1974 "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. On a time-phased basis this will result in a gradual elimination of the unobligated liability over the years.

With regard to Air Force accounts, obligations for allowances 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.

(In Thousands of Dollars)

Accordingly, and pursuant to SECDEF guidance, Air Force 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.

	$8,300
1. FY 1976 Payments	800
2. FY 1976 liability due to FY 1976 increases	5,700
3. FY 1975 and prior liability due to FY 1976 increases	1,800

The incremental impact of FY 1976 master labor contract pay increase will be included in the FY 1976 Pay Raise Supplemental Request.

SUMMARY OF CIVILIAN MANPOWER CHANGES
FISCAL YEAR 1975 TO FISCAL YEAR 1976 TO FISCAL YEAR 197T
(O&M DIRECT-HIRE EMPLOYEES)

OPERATION OR ACTIVITY	75 to 76	76 to 7T
Combat Initiatives:		
F-5E Fighter Training Wing (Aggressor)	+100	
Crew Ratio Increase (1.1 to 1.25) for Tactical Fighters	+243	
Crew Ratio Increase (2.0 to 2.25) for C-5	+31	
Surge Supplement Aircrew Training in Mission Aircraft	+193	
Foreign Military Sales Support Personnel	+76	
Section 6 Dependents Schools		+357
Overseas Dependent Schools		+1,921
Total Increases	+643	+2,278
Less Total Decreases	-6,900	-100
Net Change	-6,257	+2,178

DIRECT HIRE CIVILIAN EMPLOYMENT

OPERATION AND MAINTENANCE APPROPRIATION AIR FORCE

(DOLLARS IN THOUSANDS - STRENGTH IN WHOLE NUMBERS)

	FY 74 Actual			FY 75 Estimate			FY 76 Estimate			FY TT Estimate		
Direct Hire Civilians	Average Strength	End Strength	Actual Oblig	Average Strength	End Strength	Estimated Oblig	Average Strength	End Strength	Estimated Oblig	Average Strength	End Strength	Estimated Oblig
Full-time permanent	160,828	166,535	$2,037,784	160,168	161,742	$2,186,305	155,620	155,549	$2,229,593	38,002	157,727*	$550,614
Other:												
Part-time, temporary or WAE	1,809	1,687	21,816	1,554	1,634	22,894	1,506	1,570	21,988	426	1,570	6,220
CONUS/Overseas Dependent Education 10 mos teachers	1,456	-	20,670	1,643	-	24,562	1,616	-	24,159	354		5,292
TOTAL	164,093	168,222	2,080,270	163,365	163,376	2,233,761	158,742	157,119	2,275,740	38,782	159,297	562,126
Detail by Budget Activity												
Strategic Forces	25,509	26,957	325,372	26,420	27,269	362,340	26,478	26,526	378,532	6,512	26,499	93,844
General Purpose Forces	24,516	25,980	208,667	24,145	23,114	249,200	20,738	19,401	226,864	4,752	19,581	53,113
Intelligence & Communications	9,848	10,095	138,500	9,634	9,685	146,174	9,120	9,100	148,554	2,192	9,078	36,083
Airlift and Sealift	9,144	9,333	110,282	9,448	9,943	122,328	11,009	12,528	147,011	3,052	12,525	41,252
Central Supply & Maintenance	54,532	56,540	792,546	53,031	52,567	804,849	50,502	50,101	804,554	12,331	50,265	197,950
Trng, Med, & Other General Personnel Activities	28,661	28,366	345,910	29,954	29,705	381,302	30,188	28,591	402,076	7,309	30,478	97,777
(Training & Other)	(23,152)	(22,603)	(286,829)	(23,934)	(23,105)	(313,327)	(23,835)	(22,277)	(326,110)	(5,760)	(24,164)	(79,137)
(Medical)	(5,509)	(5,763)	(59,081)	(6,020)	(6,600)	(67,975)	(6,353)	(6,314)	(75,966)	(1,549)	(6,314)	(18,640)
Admin & Associated Activities	11,767	10,860	157,815	10,598	10,961	165,078	10,584	10,664	165,873	2,603	10,663	41,408
Support of Other Nations	116	91	1,178	135	132	2,490	123	208	2,276	31	208	699
TOTAL	164,093	168,222	$2,080,270	163,365	163,376	$2,233,761	158,742	157,119	$2,275,740	38,782	159,297	$562,126
Reimbursable Obligations Included Above			($ 129,196)			($ 152,521)			($ 187,262)			($ 48,400)

*End Strength includes 2,827 administration and teacher spaces for Dependents Education.

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DIRECT HIRE CIVILIAN EMPLOYMENT
OPERATION AND MAINTENANCE APPROPRIATION AIR FORCE
(DOLLARS IN THOUSANDS - STRENGTH IN WHOLE NUMBERS)

Direct Hire Civilians	FY 77 Estimate End Strength
Full-time permanent	155,715*
Other:	
Part-time, temporary or WAE	1,556
CONUS/Overseas Dependent Education 10 mos teachers	
TOTAL	157,271
Detail by Budget Activity	
Strategic Forces	25,663
General Purpose Forces	18,948
Intelligence & Communications	9,043
Airlift and Sealift	12,470
Central Supply & Maintenance	49,887
Trng, Med, & Other General Personnel Activities	30,378
(Training & Other)	(24,094)
(Medical)	(6,284)
Admin & Associated Activities	10,674
Support of Other Nations	208
TOTAL	157,271

*End Strength includes 2,827 administration and teacher spaces for Dependents Education.

INDIRECT HIRE CIVILIAN EMPLOYMENT

OPERATION AND MAINTENANCE APPROPRIATION AIR FORCE

(DOLLARS IN THOUSANDS - STRENGTH IN WHOLE NUMBERS)

	FY 74 Actual			FY 75 Estimate			FY 76 Estimate			FY 77 Estimate		
Indirect Hire Civilians	Average Strength	End Strength	Actual Obligation	Average Strength	End Strength	Estimated Obligation	Average Strength	End Strength	Estimated Obligation	Average Strength	End Strength	Estimated Obligation
Strategic Forces	-	-	-	-	-	-	-	-	-	-	-	-
General Purpose Forces	12,333	12,580	$101,979	12,319	12,294	$123,489	12,118	12,212	$125,752	3,020	12,212	$30,153
Foreign Nationals Severance Pay Accrual									7,500			1,875
Intelligence & Communications	1,465	1,455	12,065	1,355	1,297	13,727	1,281	1,277	13,375	315	1,277	3,527
Airlift & Sealift	64	48	517	55	45	434	69	79	661	19	79	250
ntral Supply & Maintenance	6	2	23	1	1	5	1	1	5	0	1	2
g, Med & Other General Personnel Activities	773	756	6,080	840	934	6,131	840	761	6,330	188	759	1,636
(Training & Other)	(201)	(207)	(1,433)	(209)	(212)	(0)	(200)	(191)	(0)	(47)	(189)	(0)
(Medical)	(572)	(549)	(4,647)	(631)	(722)	(6,131)	(640)	(570)	(6,330)	(141)	(570)	(1,636)
Admin & Associated Activities	88	94	851	117	150	1,345	150	150	1,672	37	150	423
Support of Other Nations	9	3	75	3	4	21	4	4	30	0	4	5
TOTAL Air Force	14,738	14,938	$121,590	14,690	14,725	$145,152	14,463	14,484	$155,325	3,579	14,482	($37,871)
(Reimbursable Obligations Included Above)			($ 11,315)			($ 12,321)			($ 14,560)			($ 3,794)

Other Personnel Compensation

(In Thousands of Dollars)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Overtime and Holiday Pay	$ 18,924	$18,382	$17,582	$ 4,289
Sunday and Night Differentials	7,500	7,834	7,800	1,950
Post Differential and Cost of Living	3,450	3,604	3,600	900
Premium Pay (Including Firefighters)	7,877	9,300	10,800	2,700
Other Compensation	2,286	2,700	2,700	648
Total	$ 40,037	$41,820	$42,482	$10,487

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				
Strategic Forces	$1,250,382	$1,517,116	$1,651,701	$ 418,908
General Purpose Forces	1,074,962	1,322,429	1,433,089	368,244
Intelligence & Communications	539,824	579,068	623,955	155,118
Airlift Sealift	192,718	277,367	504,247	145,956
Central Supply & Maintenance	2,435,438	2,534,150	2,556,998	630,524
Training, Medical & Other General Personnel Activities	960,132	838,700	912,692	233,457
(Training & Other General Personnel Activities)	(580,578)	(625,421)	(661,910)	(171,219)
(Medical)	(379,554)	(213,279)	(250,782)	(62,238)
Administration & Associated Activities	224,049	257,293	272,446	67,913
Support of other Nations	204,240	1,607	1,172	180
TOTAL DIRECT PROGRAM	$6,881,745	$7,327,730	$7,956,300	$2,020,300
Reimbursements (Total)	565,012	978,000	1,046,700	261,900
Total Obligations	$7,446,757	$8,305,730	$9,003,000	$2,282,200

AIR FORCE STOCK FUND

(WAR RESERVE MATERIEL PROCUREMENT)

(U) For the procurement of stock funded War Reserve Materiel (WRM) required to achieve a materiel support posture to provide war reserve asset levels, inventory objectives, and war reserve build up programs for combat critical items of stock consisting of supplies, minor items of equipment and parts used in the manufacture, assembly, or repair of items of equipment. $82,100,000

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-40-4921-0-4-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	COSTS BY MATERIAL CATEGORY:			
	CLOTHING STORE	41,017	42,660	51,781
	COMMISSARY	1,174,009	1,263,584	1,351,800
	FUELS AND RELATED ITEMS	873,791	1,787,205	2,077,072
	AIR FORCE ACADEMY CADET STORE	4,365	5,089	6,219
	MEDICAL-DENTAL	69,305	69,848	75,794
	GENERAL SUPPORT	819,510	873,118	907,993
	SYSTEMS SUPPORT	424,073	423,845	389,418
	TOTAL OPERATING COSTS, FUNDED	3,406,070	4,465,349	4,860,077
	CHANGE IN SELECTED RESOURCES	159,917	214,634	527,933
	ADJUSTMENT IN SELECTED RESOURCES, INVENTORY CAPITALIZED OR DECAPITALIZED (-)	169,028	-29,483	-312,110
10	TOTAL PROGAM (OBLIGATIONS)	3,735,015	4,650,500	5,075,900
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
	SALE OF GOODS:			
	CLOTHING STORE	-41,656	-42,700	-52,900
	COMMISSARY	-1,174,852	-1,264,400	-1,353,000
	FUELS AND RELATED ITEMS	-990,687	-1,779,000	-2,125,900
	AIR FORCE ACADEMY CADET STORE	-4,394	-5,100	-6,200
	MEDICAL-DENTAL	-67,340	-69,500	-76,200
	GENERAL SUPPORT	-825,437	-885,600	-939,800
	SYSTEMS SUPPORT	-484,126	-513,500	-647,100
	TOTAL SALE OF GOODS	-3,588,492	-4,559,800	-5,201,100
11	FEDERAL FUNDS	(-2,375,745)	(-3,225,070)	(-3,770,031)
13	TRUST FUNDS	(-88,484)	(-97,449)	(-107,777)
14	NON-FEDERAL SOURCES	(-1,124,263)	(-1,237,281)	(-1,323,292)
11	INCREASE OR DECREASE IN UNFILLED CUSTOMER ORDERS, FEDERAL	-77,493	-150,700	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	.....	60,000	.....
25	UNOBLIGATED BALANCE LAPSING	-69,030	.....	207,300
	BUDGET AUTHORITY	.....	.....	82,100
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	69,030	-60,000	-125,200
	OBLIGATED BALANCE, START OF YEAR			
72.49	CONTRACT AUTHORITY	418,613	487,643	487,643
72.98	FUND BALANCE	84,502	18,363	86,563
	OBLIGATED BALANCE, END OF YEAR			
74.49	CONTRACT AUTHORITY	-487,643	-487,643	-280,343
74.98	FUND BALANCE	-18,363	-86,563	-218,363
90	OUTLAYS	66,139	-126,200	-49,700

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-40-4921-0-4-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	COSTS BY MATERIAL CATEGORY:	
	CLOTHING STORE	12,829
	COMMISSARY	353,500
	FUELS AND RELATED ITEMS	532,743
	AIR FORCE ACADEMY CADET STORE	2,000
	MEDICAL-DENTAL	14,666
	GENERAL SUPPORT	231,923
	SYSTEMS SUPPORT	72,289
	TOTAL OPERATING COSTS, FUNDED	1,219,950
	CHANGE IN SELECTED RESOURCES	58,960
	ADJUSTMENT IN SELECTED RESOURCES, INVENTORY CAPITALIZED OR DECAPITALIZED (-)	-3,610
10	TOTAL PROGAM (ORLIGATIONS)	1,275,300
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
	SALE OF GOODS:	
	CLOTHING STORE	-12,900
	COMMISSARY	-354,600
	FUELS AND RELATED ITEMS	-525,600
	AIR FORCE ACADEMY CADET STORE	-2,000
	MEDICAL-DENTAL	-18,100
	GENERAL SUPPORT	-235,000
	SYSTEMS SUPPORT	-162,200
	TOTAL SALE OF GOODS	-1,310,400
11	FEDERAL FUNDS	((-939,480)
13	TRUST FUNDS	((-27,750)
14	NON-FEDERAL SOURCES	((-343,170)
25	UNOBLIGATED BALANCE LAPSING	35,100
	BUDGET AUTHORITY	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	-35,100
	OBLIGATED BALANCE, START OF YEAR	
72.98	FUND BALANCE	498,706
	OBLIGATED BALANCE, END OF YEAR	
74.98	FUND BALANCE	-447,506
90	OUTLAYS	16,100

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-40-4921-0-4-051		1974 ACT	1975 EST	1976 EST
22.0	TRANSPORTATION OF THINGS	20,922	14,534	15,245
25.0	OTHER SERVICES	5,915	21,110	13,203
26.0	SUPPLIES AND MATERIALS	3,633,889	4,533,751	4,971,347
31.0	EQUIPMENT	74,289	81,105	76,105
99.0	TOTAL OBLIGATIONS	3,735,015	4,650,500	5,075,900

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-40-4921-0-4-051		TRANSITION
22.0	TRANSPORTATION OF THINGS	4,150
25.0	OTHER SERVICES	1,148
26.0	SUPPLIES AND MATERIALS	1,250,879
31.0	EQUIPMENT	19,123
99.0	TOTAL OBLIGATIONS	1,275,300

(In Thousands of Dollars)

Program Requirement FY 75..... -0-
Program Requirement FY 76.....$82,100
Program Requirement FY 7T..... -0-

PART I PURPOSE AND SCOPE

(U) This appropriation provides for the procurement of War Reserve Materiel (WRM) stocks required to meet war reserve asset levels, inventory objectives, and war reserve build up programs necessary to support and sustain operational force capability. Management of the overall stock fund program is facilitated by collecting, in a single appropriation, all stock funds for WRM requirements. The requirements are applicable to three divisions within the stock fund: Systems Support Division (SSD), General Support Division (GSD), and Medical-Dental Division. The following categories for both Pre-Positioned War Reserve Materiel Stock and Other War Reserve Materiel Stock are managed by applicable stock fund Divisions:

a. Systems Support Division: War Reserve Materiel Chaff required to meet sorties required by the USAF War Mobilization Plan (Prepositioned WRM); War reserve requirements necessary to insure assets are available between the day an operation commences (D-Day) and that point in time (P-Day) which the rate of production of a military item meets and will continue to meet the estimated wartime production requirement. Note: This concept will be referred to as "D" to "P" throughout the remainder of this book.

b. General Support Division: War Readiness Spares Kits items not included in any other division of the stock fund required to support wartime operations for a specified period of time, usually 30 days. Ground petroleum, oils, and lubricants (POL) requirements necessary to support ground equipment during the build-up, deployment, and wartime period.

c. Medical-Dental Division: Medical WRM kits and packages required to support forces in combat. These kits may, with proper authorization, be used for national emergencies, i.e., earthquakes, tornadoes or for international emergencies.

JUSTIFICATION OF FUNDS REQUESTED

(U) The program to be financed with the appropriation for fiscal year 1976 includes WRM chaff, and "D" to "P" War Readiness requirements for the Systems Support Division, $71.6 million; WRM Ground/Utility Fuels, War Readiness Spares Kit requirements; $6.9 million; and Medical Supplies to complete medical kits; $3.7 million.

(U) Of the total of $82.1 million requested in the fiscal year 1976 appropriation for Stock Fund War Reserve Materiel, the application of financing is required for War Readiness Spares Kits to support wartime operations; "D" to "P" requirements which represent the difference between wartime requirements and planned production capability in support of weapon systems; WRM chaff to support wartime sortie rates reflected in the War Mobilization Plan, Ground/Utility Fuels for ground vehicles used during the mobilization and wartime period and Medical Supplies for Medical kits used during wartime and emergencies.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1974 Actual	1975 Estimate	1976 Estimate	197T Estimate
System Support Division.....				
"D to P".....	-0-	-0-	60,600	-0-
WRM CHAFF.....	-0-	-0-	11,000	-0-
			71,600	
General Support Division.....				
WRSK.....	-0-	-0-	1,400	-0-
Ground/Utility Fuels.....	-0-	-0-	5,400	-0-
			6,800	
Medical-Dental Division.....				
WRM Medical Supplies.....	-0-	-0-	3,700	-0-
TOTAL REQUIREMENT			82,100	

(In Thousands of Dollars)
Program Requirement - FY 75 .... -0-
Program Requirement - FY 76 ....$71,600
Program Requirement - FY 7T .... -0-

ACTIVITY: System Support Division

PART I PURPOSE AND SCOPE

(U) This division provides for the procurement, management, financing, and inventory control of approximately 443,000 centrally procured, expense type, weapons system related items. Requirements are based primarily on Central Secondary Item Stratification Tables I, II and III as of 30 June 1974. Items managed by this division include repair parts for aircraft and missiles and their components and all other expense items which Air Force Air Logistics Center procure, store and issue.

(U) The FY 1976 program includes funds for WRM chaff and "D to P" requirements.

PART II JUSTIFICATION OF FUNDS REQUESTED

The total FY 1976 division fund requirement for procurement of War Readiness Chaff and "D to P" deficiencies is $71.6 million and is broken out as follows:

WRM Chaff (11.0 Million)

Chaff is a radar energy reflecting material which is utilized by the USAF for confusion, screening, and self-protection of our aircraft from enemy radar's recognition. Confusion by use of chaff as we employ it consists of random drops to increase radar returns for area coverage to prevent the enemy from detecting force strength/composition, and chaff corridors for possible ingress/egress routes to potential targets. This requires large amounts of chaff, as sufficient dipoles must be dispensed in each radar resolution cell to prevent the radar's detection of an aircraft flying in that cell. Chaff used for screening aircraft is usually dispensed over a corridor wide enough to protect the formation and long enough to cover the ingress/egress routes; thus, preventing ground terminal threat radar tracking as well as receipt of vital ground control intercept information.

DELETED

Large quantities of chaff are required to provide adequate protection as described above. Chaff dispensed into the atmosphere is affected by winds,

DELETED

DELETED

This WRM requirement is essential to maximize survival ability of aircraft tasked in the War Mobilization Plan while flying ingress/egress routes to potential targets. Lack of WRM chaff will result in higher aircraft losses and severe mission degradation.

"D to P" ($60.6 million)

(U) "D to P" requirements are necessary to insure assets are available between the day as wartime operation commences (D-Day) and that point in time (P-Day) at which the rate of production meets and will continue to meet estimated wartime production requirements. This concept is referred to as "D" to "P". "D" to "P" is an outgrowth of Executive Order 11490, dated October 28, 1969, under the Industrial Preparedness Planning Program, and which is implemented by DOD Directive 4005.1 The "D" to "P" optimizes the most effective balance between WRM prestockage and industrial wartime production capability. Wartime industrial capability can be increased through Industrial Preparedness measures which are measures or actions taken within industry or services to shorten wartime production leadtimes and/or increase production and repair rates. Examples include Plant Equipment Packages and Prestockage of manufacturing material and components.

(U) The WRM requirements listed below by weapon system dollar deficiency are vital to insure force readiness and combat effectiveness. Funding is necessary to minimize the risk associated with shortfalls applicable to weapons systems tasked in the War Mobilization Plan. The criticality of the requested funds is magnified when considering the role of stock funded repair parts in planned wartime depot and contractual maintenance/overhaul programs. Without these items stocked as WRM, planned maintenance/overhaul capabilities cannot be sustained; therefore, planned wartime programs will have to be reduced or the reparable inventory will have to be increased.

"D to P" Requirements

Weapon Systems by

Type of Aircraft	$ Requirement at Standard	
B-52	157,722	
C-135	109,114	
F-101	27,508	
F-100	242,419	
F-105	481,896	
B-57	8,009	
F-111	879,900	
F-4	1,610,223	
A-37	9,005	
OV-10A	2,050	
A-7D	444,690	
C-130	5,987,331	
C-5A	42,227,401	
C-123	1,068,369	
C-7	497,717	
C-141	5,940,488	
HH-53	36,722	
H-3	773,162	
C-97	456,754	
C-119	350,193	
U-10	8,110	
O-2	158,736	
Common to many type aircraft	938,556	
Requirement at Standard	$ 62,416,075	
Less % Surcharge	-8,141,228	
Requirement at Cost		$54,274,847
Modification and Program Changes		6,300,000*
Total "D to P" requirement (rounded to $60.6 million)		$60,600,000

* Modifications and changes to programs were estimated at approximately 12%. Experience will dictate whether estimate is too low.

(In Thousands of Dollars)

Program Requirement - FY 75..... -0-
Program Requirement - FY 76.....$6,800
Program Requirement - FY 7T..... -0-

ACTIVITY: General Support Division

PART I PURPOSE AND SCOPE

(U) This division provides for the procurement, management, financing and inventory control of approximately 888,000 cataloged, Air Force decentrally managed expense items for which the Air Force is recorded as a user. Items in this division are not included in any other Air Force Stock Fund division and are procured from:

a. General Services Administration, e.g. office and janitorial supplies.

b. Defense Supply Agency, e.g. electronic components and repair parts, general construction material and ground fuels and lubricants.

c. Other Military Services' stock funds, e.g. specialized automotive supplies from the Army Tank and Automotive Command, and

d. Local purchase and locally manufactured items. The FY 1976 program includes funds for War Reserve Spares Kit requirements and ground/utility fuels for vehicles.

PART II JUSTIFICATION OF FUNDS REQUESTED

The total FY 1976 division fund requirements for procurement of War Readiness Spares Kit and Ground/Utility Fuels deficiencies is $6.8 million and is broken out as follows.

WAR READINESS SPARES KITS - WRSK ($1.4 million)

(U) WRSK's are air transportable packages of spares and repair parts required to sustain planned wartime or contingency operations of a weapon system for a specific period of time pending resupply. WRSK's includes spares and repair parts for aircraft, and other equipment as appropriate. WRSK's are normally prepositioned with the using unit.

This fund requirement is vital to procure a very small percentage of items required to fully support, a unit in combat, usually for 30 days.

(U) The majority of combat unit's WRSK's contain a very high percentage of requirements necessary to sustain the units for 30 days. These requirements represent a past outlay of funds. This request of $1.4 million is necessary to procure remaining deficiencies and insure weapons system supportability and sustain combat operations.

GROUND/UTILITY FUELS ($5.4 Million)

(U) Ground/utility fuels are the basic fuels used for vehicles, i.e., cars, jeeps trucks; materials handling equipment; aerospace ground equipment; hearint; and power production. These fuels are normally prepositioned in accordance with approved war plans as consumable items directly related and absolutely essential to a weapon/support system for which consumption factors are indicated in the war mobilization plan (WMP). However, consumption factors for ground fuels are not currently indicated in the WMP, therefore, requirements were developed using installation peacetime operating stock computations adjusted to the number of days prestockage specified in AFR 400-24, War Reserve Materiel Policy. These funds will insure timely support of a specified project or designated force during the initial phase of war or contingency pending arrival of replenishment shipments. Ground/utility fuels requirements are extremely vital to maintaining combat readiness.

(In Thousands of Dollars)

Program Requirement - FY 75 .... -0-
Program Requirement - FY 76 ....$3,700
Program Requirement - FY 7T .... -0-

ACTIVITY: Medical-Dental Division

PART I PURPOSE AND SCOPE

(U) This division provides for the procurement, management, financing and inventory control of approximately 15,000 line items which are predominantly peculiar supplies and equipment used in the Medical-Dental area. Items range from aspirin tablets to operating tables and X-ray machines. Most items are procured from the Defense Personnel Support Center, Defense Supply Agency.

(U)The FY 1976 program includes funds exclusively for medical and dental supplies required to replace critical items and fill shortages in Medical WRM kits and packages.

PART II JUSTIFICATION OF FUNDS REQUESTED

WRM Medical-Dental Supplies ($3.7 Million)

(U) The total FY 1976 fund requirement for the procurement of War Reserve Medical-Dental supplies is $3.7 million and is for the following wartime/emergency programs:

PROGRAM	REQUIREMENT AT COST
* 1. Blood	.052
2. MMPNC II	2.733
3. BW/CW	.404
4. Expansion	.137
5. ASF	.262
6. ATH	.011
7. ATC	.029
8. Tac Air Evac	.057
TOTAL	3.685
TOTAL (rounded)	$ 3.7M

* Programs are defined and explained below using corresponding numerical references.

1. Blood Donor Centers and Processing Laboratories. This Program prepositions materiels required to support donor centers, processing laboratories and transhipment centers supporting the USAF Blood Program.

2. Medical Materiel Program for Nuclear Casualties. This program prepositions materiel at each CONUS and oversea base in support of the DOD MMPNC. CONUS requirements are calculated on the basis of programmed active duty military personnel strength. Overseas requirements are based on authorized strength of US military and US national civilian employees and dependents.

3. Medical Materiel Program for Defense Against Biological and Chemical Warfare Agents. This program prepositions CB defensive medical materiel at all specified overseas bases and at CONUS bases hosting units designated for deployment to overseas bases during wartime.

4. Fixed Medical Facility Expansion. This program encompasses the expanded operation of selected oversea hospitals to, or through which, battle casualties are expected to be referred for treatment in accordance with Major Command plans.

5. Aeromedical Staging Facility. This program supports post D-Day aeromedical staging activities at specified locations.

6. Air Transportable Hospital. This program provides hospital facilities designed to support approximately 3,500 personnel and includes surgical and medical capability. The portable hospitals can be used to augment existing facilities or operate from bare bases.

7. Air Transportable Clinics. These units are prepositioned in the CONUS to provide operational support for the USAF Survival Recovery and Reconstitution Operations Plan and overseas in support of contingency missions.

8. Aeromedical Evacuation. This program provides prepositioned materiel to support Military Airlift Command, Pacific Air Forces, and United States Air Forces in Europe wartime aeromedical evacuation missions.

Funds for this requirement are essential to insure wartime capability for casualty treatment and evacuation treatment of patients. Funds are required to fill medical kit shortages and to replace items withdrawn/rotated from kits due to expiration date for drugs. If non-rotational items are not replaced, medical support capability cannot be maintained. These Medical-Dental items, although designed WRM, may, with proper approval, be used for both national and international emergencies.

PREPARED STATEMENT

Senator YOUNG. The witness will be Brig. Gen. Charles C. Blanton, Director of Budget.

General Blanton, you may proceed.

You have a short statement?

General BLANTON. Yes, sir; I have a short statement which I will read or insert it in the record, whichever you choose.

Senator YOUNG. Why don't you read it?

You also have a longer one?

General BLANTON. Yes, sir.

Senator YOUNG. Without objection, we will insert your long statement in the record, and you may proceed with the short one.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to present the Department of the Air Force's Fiscal Year 1976 and 197T budget requests for the Operation and Maintenance, Air Force (O&M) Appropriation.

The FY 1976 O&M requirement is $7.956 billion. This is $628 million more than the adjusted FY 1975 program of $7.328 billion. There are only minor changes in force levels between FY 1975 and FY 1976. The additional funds are required to meet price increases for goods and services, especially fuel costs, and because of funding responsibilities that have been transferred to the Operation and Maintenance appropriation by policy decisions of the Office of the Secretary of Defense.

The FY 1975 column in the FY 1976 budget has been adjusted to include pending supplementals for civilian pay raises, for transfers of funds between appropriations and for the proposed rescission. A summary of the adjustment is:

		($ Millions)
FY 1975 Congressional Appropriation		$7,062.0
Supplemental - Civilian Pay		+ 127.2
Classified Employees	$65.4	
Wage Board Employees	$61.8	
Proposed Transfer		+ 178.5
Proposed Real Property Maintenance Rescission		- 40.0
Adjusted O&M FY 1975 Program		7,327.7

In formulating the O&M requirements for FY 1976 and FY 197T, support costs were carefully assessed and reduced wherever possible to insure sufficient resources for the accomplishment of highest priority programs and missions.

The O&M funding requirements by major program are furnished in Table 1.

MAJOR FORCE PROGRAM FUNDING
(Dollars in Millions)

	FY 1974	FY 1975	FY 1976	FY 197T
Strategic Forces	$1,250.4	$1,517.1	$1,651.7	$ 418.9
General Purpose Forces	1,075.0	1,322.4	1,433.1	368.2
Intelligence and Communications	539.8	579.1	624.0	155.1
Airlift	192.7	277.4	504.2	146.0
Central Supply and Maintenance	2,435.4	2,534.2	2,557.0	630.5
Training, Medical and Other General Personnel Activities	960.1	838.7	912.7	233.5
Administration and Associated Activities	224.1	257.3	272.4	67.9
Support of Other Nations	204.2	1.6	1.2	.2
TOTALS	$6,881.7	$7,327.7	$7,956.3	$2,020.3

FY 197T

Public Law 93-344, the Congressional Budget and Impoundment Control Act of 1974 redefines the Federal fiscal year as October through 30 September, effective with FY 1977. This budget estimate includes funds for the interim period, 1 July through 30 September 1976 which is designated FY 197T. The $2.020 billion requested is based on the same dollar factors and price and pay levels as FY 1976 and is 25.4% of the total FY 1976 requirement.

The Operation and Maintenance, Air Force (O&M) Appropriation together with the Military Personnel, Air Force Appropriation finances the day-to-day operating costs of the active Air Force. The resources are for the manpower, material and services required for the programmed forces to insure they are combat ready.

Activity Indicators

Key indicators of activity requiring O&M funds are shown in Tables 2 through 7.

TABLE 2

ACTIVE AIRCRAFT INVENTORY

	FY 75	FY 76	Change	FY 7T
TOTAL	6,740	6,666	-74	6,678

The transfer of aircraft to the Air Reserve Forces, the phase out of support aircraft, and attrition cause a net decrease of 74 aircraft taking into account the delivery of new aircraft.

Table 3 shows the budgeted flying hour adjustments from FY 1975 to FY 1976. To conserve fuel, flying training and lower priority flight operations have been curtailed to the minimum level consistent with maintaining combat readiness and flying safety. Overall, the budgeted flying hour program decreases by 242,945 hours from FY 1975.

TABLE 3

FLYING HOURS

(in Thousands)

MAJOR FORCE PROGRAM	FY 1975	FY 1976	Change	FY 197T
Strategic Forces	640,190	532,253	-107,937	130,879
General Purpose Forces	1,093,296	854,768	-238,528	231,243
Intelligence and Communications	125,593	102,860	- 22,733	25,763
Airlift and Sealift	72,660	348,984	+276,324	84,304
Central Supply and Maintenance	32,249	6,360	- 29,889	1,505
Training, Medical, and Other General Personnel Activities	769,426	694,452	- 74,974	195,802
Admin & Associated Activities	53,739	9,272	- 44,467	2,318
Support of Other Nations	5,954	5,213	- 741	1,485
TOTAL	2,797,107	2,554,162	-242,945	673,299

DIRECT HIRE CIVILIAN PERSONNEL

O&M ONLY

Civilian personnel direct hire payroll requirements for FY 1976 will be $2.089 billion or about 26.2% of the total O&M appropriation. Civilian employment financed from the O&M appropriation continues its downward trend, however, the rate of decrease has been slowed by military to civilian conversions. The FY 1976 end strength in Table 4 includes 13,862 spaces which were converted from military to civilian during the period of FY 1973 to FY 1975.

Civilian strengths, manyears and funding are summarized in Table 4.

TABLE 4
COMPARATIVE
CIVILIAN PERSONNEL DIRECT HIRE STRENGTHS, MANYEARS AND FUNDS

	FY 74	FY 75	Difference	FY 76	FY 7T
End Strengths	168,222	163,376		157,119	159,297
			-6,257		
Manyears	164,093	163,365		158,742	38,782
			-4,623		
Personnel Costs ($ Millions)	$ 1,951	$ 2,081		$ 2,089	$ 514
			- 8		
Manyear Costs (Whole Dollars)					
Graded	$14,083	$14,970		$15,179	$15,179
			+ 209		
Ungraded	$11,919	$13,613		$14,309	$14,309
			+ 696		

Active Base Structure

Decreasing activity and force levels along with continuing assessment of the base structure for effective and economic operation have resulted in a reduced number of Air Force installations, as summarized in Table 5.

TABLE 5
TOTAL AIR FORCE ACTIVE BASES

	End FY 75	End FY 76	Change	FY 7T
Major Installations Total	149	143	-6	142
Continental U.S.	108	105	-3	105
Overseas	41	38	-3	
Minor Installations Total	3,095	3,090	-5	3,090
Continental U.S.	2,218	2,216	-2	2,216
Overseas	877	874	-3	874

Of the 143 major installations, 105 are located in the Continental United States and 38 are overseas. A base is classified as a major installation if it has a permanently assigned full-time flying or missile squadron or a wing or higher headquarters on the base.

Minor installations include missile sites, radar sites, auxiliary airfields, antenna farms, navigational aids, recruiting offices, storage sites and other such facilities.

Balanced Program

The major activity determinants, i.e., aircraft, missiles, flying hours, people and bases determine O&M fund requirements. The FY 1976 and FY 197T O&M estimates are in balance with the overall Air Force program. If changes are made in the program or price levels, especially the price of fuel, the funding must be adjusted.

Major Force Programs

I will now address O&M fund requirements for each major force program. These funds are used to pay for civilian manpower, expendable supplies and equipment, fuel, utilities, rent, communications, transportation and services. Stated

another way, these funds are used to maintain weapon systems, operate bases, depots and intelligence activities.

The O&M 1976 Justification of Estimates is organized to display pertinent detailed data on forces, flying hours and manpower, key indicators of resource comsumption, together with detailed O&M dollar requirements.

MAJOR FORCE PROGRAM I

STRATEGIC FORCES

Strategic Forces encompass the two major sub-elements; offensive and defensive. These forces provide the needed capabilities for deterrence of nuclear war, warning of any impending attack, and the air defense forces to defend the U.S. air sovereignty. Funding requirements are summarized in Table 6.

TABLE 6

STRATEGIC FORCE FUNDING

($ Millions)

	FY 75	FY 76	Change	FY 7T
Strategic Offensive Forces	$1,077.8	$1,160.7	$ +82.9	$288.0
Strategic Defensive Forces	439.3	491.0	+51.7	130.9
TOTAL	$1.517.1	$1,651.7	$+134.6	$418.9

The increase of $134.6 million is the net of many changes and will be discussed in detail, first in Strategic Offensive and then in Strategic Defensive.

TABLE 7

STRATEGIC FORCE MANPOWER

	FY 75	FY 76	Change	FY 7T
Military	143,915	134,737	-9,178	134,470
Civilian	27,269	26,526	-743	26,499
TOTAL	171,184	161,263	-9,921	160,969

Table 7 summarizes Strategic Force manpower.

The manpower reduction from FY 1975 to FY 1976 results from programmed reductions across the strategic forces.

In Strategic Offensive, the Air Force is reducing from 40% to 30% the number of strategic aircraft maintained on ground alert. This has allowed a reduction of the aircrews and maintenance personnel. In addition, the Air Force will initiate a phased program to transfer 128 KC-135 aircraft from the active force to the Reserve components. In the Strategic Defensive forces, the remaining active Airborne Early Warning and Control Squadron (EC-121 aircraft) is phased out.

	FY 75	FY 76	Change	FY 7T
Strategic Offensive	$1,077.8	$1,160.7	$ +82.9	$288.0

The increase of $82.9 million for Strategic Offensive Forces includes pay raises ($+9.2), aviation fuel price increases ($+68.9), supplies and equipment price increases ($+36.6), transfer of funding responsibility for base level reparables, ($+8.2), and rehabilitation of Titan II support facilities ($+4.9). These increases are partially offset by flying hour program reductions ($-45.9).

TABLE 8

STRATEGIC OFFENSIVE FORCES

AIRCRAFT AND FLYING HOURS

Squadrons/Average Operating Aircraft	FY 75	FY 76	Change	FY 7T
B-52	23/335	22/330	-1/-5	22/330
KC-135	38/613	35/599	-3/-14	35/582
FB-111	4/66	4/66	-0-	4/66
Flying Hours				
B-52	162,783	148,464	-14,319	39,311
KC-135	235,349	216,025	-19,324	51,505
FB-111	19,400	16,814	-2,586	4,204

MISSILES

Squadrons	FY 75	FY 76	Change	FY 7T
Minuteman (Total)	20	20	-	20
Minuteman II	(9)	(9)	-	(9)
Minuteman III	(11)	(11)	-	(11)
Titan	6	6	-	6

The Strategic Offensive forces summarized in Table 8 are the Strategic Air Commands (SAC) combat aircraft, intercontinental ballistic missiles and their associated command, control, and communications systems. SAC's primary mission is to deter war through its ability to deliver the major portion of the free world's nuclear firepower to any part of the globe, even if subjected to a surprise attack. Virtually all ICBMs and the ground alert bombers and tankers can be launched within the warning time provided by the surveillance and warning systems to prevent a successful enemy surprise attack. SAC aircraft on alert are aided by the dispersal advantage provided by the satellite basing program and are effectively controlled throughout their entire mission profile by the global command, control, and communication system.

During FY 1976, the major changes planned for strategic offensive forces are as follows:

(1) The 17th Bombardment Wing, Wright-Patterson AFB, Ohio will be deactivated and the assigned aircraft and personnel will be distributed to other active B-52H and KC-135 units.

(2) Two additional squadrons of KC-135s will be deactivated to provide aircraft to form four Air National Guard Squadrons.

(3) Phasedown of Hound Dog missiles.

(4) Reductions in the crew-to-aircraft ratio for B-52, KC-135, FB-111 aircraft from FY 1 75.

(5) Reduction in the day-to-day ground alert rate from 40% to 30%.

(6) Complete deployment of the SRAM missile for all bomber units.

(7) Reduced number of satellite bases.

Aircraft and Flying Hours

During FY 1976, the strategic bomber forces will consist of 26 combat aircraft squadrons (B-52 and FB-111) and their KC-135 tankers. These strategic bomber forces will support the Single Integrated Operation Plan (SIOP) with day-to-day ground alert and have the capability for full force generation. These same forces are also capable of and do support a variety of contingency mission requirements. Flying hour reductions relate primarily to reduced crew ratios for bombers and tankers and the transfer of KC-135 to the ANG.

Intercontinental Ballistic Missile Forces are programmed to continue at the current level.

	FY 75	FY 76	Change	FY 7T
Strategic Defensive	$439.3	$491.0	$+51.7	$130.9

The increase of $51.7 million for Strategic Defensive Forces includes pay raises ($+4.4), aviation fuel price increases

($+4.1), supplies and equipment price increases ($+17.9), transfer of funding responsibility for base level reparables ($+2.1), full year procurement of Arctic POL ($+10.1), renegotiation of multiple year contracts for DEWLINE and BMEWS ($+12.7), and transfer of software support from Other Procurement Appropriation ($+4.5). The increases are partially offset by reductions in surveillance system ($-4.5).

Table 9 summarizes the principal Strategic Defensive Forces. The forces are assigned to the Aerospace Defense Command (ADC) and the Alaskan Air Command (AAC). ADC is the United States Air Force component of the Joint United States - Canadian North American Air Defense Command (NORAD) which has the function of detection, identification, interception, and destruction of any forces involved in an aerospace attack on the North American continent. ADC administers, trains, and equips Air Force aerospace defense forces for battle readiness, responsive to the operational requirement of the Commander-in-Chief, NORAD. ADC operates for NORAD all Air Force surveillance, warning and control systems such as the Semi-Automatic Ground Environment (SAGE), the Distant Early Warning (DEW) Line, the Ballistic Missile Early Warning System (BMEWS), and also operates the SPACETRACK system, the United States Air Force element of NORAD's Space Detection and Tracking System (SPADATS), which monitors all man-made objects in space. AAC's portion of the control and warning system provides atmospheric radar surveillance in and around Alaska. The AAC electronic alerting system includes the operation of aircraft control and warning squadrons under the operational control of a manual Regional Control Center (RCC).

TABLE 9

STRATEGIC DEFENSIVE FORCES

Aircraft & Flying Hours	FY 75	FY 76	Change	FY TT
Squadron/Average Operating Aircraft				
F-101	0/3	0/3	-0-	0/3
F-106	6/117	6/115	0/-2	6/114
T-33	0/12	0/12	-0-	0/12
C/EC-121	1/14	0/7	-1/-7	0/0
Flying Hours				
F-101	564	564	-0-	141
F-106	36,373	36,344	-29	9,389
T-33	8,773	7,728	-1,045	1,500
C/EC-121	11,616	5,430	-6,186	-0-
Surveillance & Warning				
Operating Location (Unless Otherwise Indicated				
Manual NORAD Control Ctr				
(CONUS)	2	2	-	2
(ALASKA)	2	2	-	2
(CANADA)	1	1	-	1
Regional Control Ctrs				
(CONUS)	6	6	-	6
(ALASKA)	1	1	-	1
(CANADA)	1	1	-	1
Surveillance Radars	91	91	-	91
Back-up Interceptor Control (BUIC)				
(CONUS)	1	1	-	1
(CANADA)	1	1	-	1
NORAD COC	1	1	-	1
Distant Early Warning (DEWLINE)	31	31	-	31
Ballistic Missile Early Warning Sys	3	3	-	3
SLBM Radar Warning Sys	6	6	-	6
Space Detection & Tracking Sys (SPACETRACK)Radars)	3	3	-	3
(OPTICAL SENSORS - Baker Nunn Cameras)	4	4	-	4
Over the Horizon Radars (OTH)	-0-	-0-	-	-0-

In the Strategic Defensive Forces, surveillance and warning locations were reduced by the phasing out of the Moorestown, N.J. and Laredo SLBM and the Over-the-Horizon Radar System (440L) at end FY 1975. An additional eleven surveillance radars phased out by end of FY 1975, (3 in Canada, 3 in CONUS, and 5 transferred to the FAA). In FY 1976 no further reductions

are planned. The active Airborne Early Warning and Control System (AEW&C) will phaseout by end FY 1976.

Tactical F-4s augment the force to maintain essential day-to-day U.S. coverage with contingency planning for additional tactical fighter augmentation during crises.

MAJOR FORCE PROGRAM II

GENERAL PURPOSE FORCES

Air Force General Purpose Forces consist primarily of the Tactical Air Command, Pacific Air Forces and United States Air Forces Europe. Tactical Air Forces provide air superiority, tactical nuclear, interdiction, close air support, reconnaissance, and in FY 75 the tactical airlift support missions in theaters of operation. General Purpose Force missions also include electronic warfare, and special operations, and in FY 1975, tactical aero-medical evacuation.

TABLE 10

GENERAL PURPOSE FORCE FUNDING

($ Millions)

Program Element Grouping	FY 75	FY 76	CHANGE	FY 7T
Tactical Fighters	$ 318.7	$ 421.9	$+103.2	$114.4
Tactical Reconnaissance and Electronic Warfare	53.6	57.6	+4.0	11.4
Tactical Airlift	78.4	0	-78.4	0
Special Operations	10.7	9.6	-1.1	2.4
JCS Directed and Coordinated Exercises	33.2	73.1	+39.9	18.2
Tactical Operations	827.8	870.9	+43.1	221.8
TOTAL	$1,322.4	$1,433.1	$+110.7	$368.2

Table 10 summarizes General Purpose Force fund requirements by Program Element Grouping. The fund requirements are explained in the individual discussions by grouping which follow.

TABLE 11

GENERAL PURPOSE FORCES MANPOWER

(End Strengths)

	FY 75	FY 76	CHANGE	FY 7T
Military	162,039	143,434	-18,605	143,811
Civilian	35,408	31,613	-3,795	31,793
TOTAL	197,447	175,047	-22,400	175,604

Manpower requirements are summarized in Table 11. The decrease in FY 1976 from the FY 1975 manpower program results from reductions in headquarters' operations, the consolidation of bases and activities in the Pacific area, the phase-out of support aircraft, the transfer of C-130 airlift resources to MFP IV. Offsetting increases are the restoration of tactical fighter crew ratios to 1.25 from the 1.1 to which they were reduced in FY 71 and second the activation of three tactical fighter (F-5E) training aggressor squadrons.

	FY 75	FY 76	CHANGE	FY 7T
Tactical Fighters	$318.7	$421.9	$+103.2	$114.4

The increase of $103.2 million includes $30.6 million to restore tactical fighter crew ratios to 1.25 per aircraft from the 1.1 level; $10.3 million for base level reparables transferred from the procurement appropriations; $2.6 million for air defense training of selected tactical fighter units; $5.4 million for the two F-15 squadrons which will enter the active inventory; and $63.4 million for fuel and supply price increases. Partially offsetting these increases is a reduced requirement for the redeployment of SEAsia aircraft (9.1 million).

TABLE 12

TACTICAL FIGHTERS FORCE

	FY 75	FY 76	CHANGE	FY 7T
Squadrons				
F-4	45	44	-1	44
F-111	12	12	0	12
F-15	0	2	+2	3
F-105	2	2	0	2
A-7	10	8	-2	7
TOTAL	69	68	-1	68
Flying Hours				
F-4	278,379	318,635	+40,256	88,188
F-111	71,824	80,187	+8,363	23,414
F-15	0	3,960	+3,960	4,950
F-105	9,642	11,952	+2,310	2,988
A-7	68,477	68,350	-127	15,345
T-33	4,316	4,804	+488	958
TOTAL	432,638	487,888	+55,250	135,843

TABLE 13

FIGHTER SQUADRONS BY COMMAND

(FY 1976)

	F-4	F-111	A-7	F-105	F-15	FY 76 TOTAL	TOTALS FY 7T
Tactical Air Command	15	9	8	2	2	36	36
United States Air Forces Europe	18	3	-	-	-	21	21
Pacific Air Forces	9	-	-	-	-	9	9
Air Defense Command (Iceland)	1	-	-	-	-	1	1
Alaskan Air Command	1	-	-	-	-	1	1
TOTAL	44	12	8	2	2	68	68

The Tactical Fighter Force and flying hour program are summarized in Table 12 with FY 76 Command assignments in Table 13.

The total tactical fighter force decreased by one squadron due to reorganizing four 18 UE squadrons into three 24 UE squadrons and converting an A-7 and a F-4 squadron to F-15s.

	FY 75	FY 76	CHANGE	FY 7T
Tactical Reconnaissance and Electronic Warfare	$53.6	$57.6	$+4.0	$11.4

Additional funds are required to provide $1.0 million for base level reparables transferred from the procurement appropriations; $8.7 million for fuel and supply price increases; and $3.0 million for RF-4 redeployments from SEAsia and Europe to CONUS. Partially offsetting the increases is a reduction of $8.3 million as a result of the transfer of four RF-4 squadrons to the Air National Guard.

TABLE 14

TACTICAL RECONNAISSANCE AND ELECTRONIC WARFARE FORCE

	FY 75	FY 76	CHANGE	FY 7T
Squadrons				
RF-4	13	9	-4	9
Tactical Drone	1	1	-	1
TOTAL	14	10	-4	10
Flying Hours				
RF-4	75,680	62,840	-12,840	13,560
Tactical Drone Support (DC-130 and CH-3)	2,538	2,892	+354	864
TOTAL	78,218	65,732	-12,486	14,424

TABLE 15

RECONNAISSANCE AND DRONE SUPPORT SQUADRONS

BY COMMAND (FY 1976)

	RF-4	Drone Support (CH-3 & C-130)	FY 76 TOTAL	FY 7T TOTAL
Tactical Air Command	5	1	6	6
United States Air Forces Europe	3	-	3	3
Pacific Air Forces	1	-	1	1
TOTAL	9	1	10	10

The Tactical Reconnaissance and Electronic force and flying hour program is summarized in Table 14 with FY 76 Command assignments in Table 15.

Reconnaissance aircraft, mobile photo processing and tactical drones are complementary to the fighter force. They provide the necessary capability to identify potential targets, their disposition and later provide post strike intelligence on effectiveness of the strike mission.

The total RF-4 force will decrease by four squadrons as the aircraft are transferred to the Air National Guard to continue the modernization of the reserve components in accord with the Total Force Policy.

	FY 75	FY 76	CHANGE	FY 7T
Tactical Airlift	$78.4	$ 0	$-78.4	$ 0

The change in fund requirements for the tactical airlift force of C-130 squadrons results from the Department of Defense decision to consolidate command responsibility for all Air Force airlift resources under the Military Airlift Command as the single manager for DOD. Effective 1 July 1975, funding responsibility for C-130 airlift missions is transferred to MFP IV. The C-130 program and resource requirements for FY 76 and FY 7T will be presented during the discussion of MFP IV.

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TABLE 16

TACTICAL AIRLIFT FORCES

	FY 75	FY 76	CHANGE	FY 7T
C-130 Squadrons				
Tactical Air Command	13	0	-13	0
Pacific Air Forces	3	0	-3	0
Alaskan Air Command	1	0	-1	0
TOTAL	17	0	-17	0
Average Operating Aircraft	271	0	-271	0
Flying Hours	183,019	0	-183,019	0

The Tactical Airlift Forces and flying hour program for FY 75 is summarized in Table 16.

The tactical airlift forces provide the capability to support in theater general purpose forces of all services. This airlift capability provides for movement of personnel and supplies to sustain deployed forces in combat zones in any theater of operation.

	FY 75	FY 76	CHANGE	FY 7T
Special Operations	$10.7	$ 9.6	$- 1.1	$ 2.4

Funds required for the operation and maintenance of Special Operations Forces decrease from FY 1975 to FY 1976. Force reduction savings are partially offset by fuel and supply price increases and the transfer of funding responsibilities for base level reparables from the procurement appropriations.

TABLE 17

SPECIAL OPERATIONS FORCES

	FY 75	FY 76	CHANGE	FY 7T
Squadrons				
Tactical Air Command	1	3	+2	3
United States Air Forces Europe	1	0	-1	0
Pacific Air Forces	3	0	-3	0
TOTAL	5	3	-2	3
Average Operating Aircraft	44	33	-11	32
Flying Hours	22,533	16,323	-6,210	4,270

The Special Operations Forces and flying hour program are summarized in Table 17.

The force level will be reduced from five to three squadrons during FY 76 by combining the assets of three Special Operations Squadrons into one squadron in FY 76. Average Operating Aircraft will decrease by 11 and flying hours by 6,210. Six UH-1N and four CH-3 helicopters will form a combined squadron to replace a CH-53 helicopter squadron. AC-130A gunships will transfer to the Reserve Forces. CH-53s will transfer to the Tactical Air Control System.

	FY 75	FY 76	CHANGE	FY 7T
JCS Directed and Coordinated Exercises	$33.2	$73.1	$+39.9	$18.2

The additional $39.9 million for joint exercise training is required to maintain operational combat readiness among the Services.

JCS Directed and Coordinated Exercises enhance combat readiness and contingency mobility by providing joint service and airlift training. The exercises are conducted in Europe (as part of the 1967 Trilateral Agreement), the Pacific, South America, and the CONUS. The Air Force's responsibility for the program consists of furnishing airlift for the deployment

of ground and air units during the exercises. The FY 1976 request includes funds for the purchase of sufficient airlift transportation from the Airlift Services Industrial Fund for all participating services.

The airlift support of JCS Exercises does not result in increased or incremental flying hours and fuel consumptions, but rather is furnished by the Air Force from within the minimum essential Strategic Airlift (C-5/C-141 aircraft) flying training program. The Strategic Airlift flying training program essential to meet national policy objectives in contingency situations is funded through the Airlift Services Industrial Fund (ASIF) which receives reimbursement for airlift services provided to various users. The resources requested for support of JCS Exercises provide a source from which to reimburse the ASIF for a portion of the minimum essential C-5/C-141 flying training program.

The application of C-5/C-141 training hours to the JCS Exercise program is dually productive; it provides for joint readiness training between Service components while, at the same time, accomplishing essential Strategic Airlift crew training.

In a peacetime environment, the JCS Exercise program is the primary source of inter-service training in integrated operations and the primary vehicle for training the personnel of the Unified and Specified Commands.

	FY 75	FY 76	CHANGE	FY 7T
Tactical Operations	$827.8	$870.9	$+43.1	$221.8

The increase in fund requirements provide for price increases for fuel and supplies, a policy change prompted by GAO which requires the obligation of severence pay for foreign national employees as the liability accrues, the transfer of base level reparables from the procurement appropriations, the

training of tactical forces in air defense roles, support of F-15, A-10 and AIM-7F tests at the Air Force Test and Evaluation Center, initial equipage and supply support for the AWACS program, and operational support for the NATO Air Weapons Training Center.

Partially offsetting the increased fund requirements is the transfer of funding responsibility to the Military Airlift Command for support aircraft and tactical airlift training, and the transfer of funding responsibility for tactical aero-medical evacuation to MFP VIII.

TABLE 18

TACTICAL OPERATIONS

	FY 75	FY 76	CHANGE	FY 7T
Squadrons	17	17	0	17
Average Operating Aircraft	918	805	-113	829
Flying Hours	376,888	284,825	-92,063	76,706

Table 18 displays the number of squadrons, average operating aircraft, and flying hours included in the Tactical Operations program. The estimate requests funds for 15 major installations in the United States, 20 in Europe, and 10 in the Pacific. In addition, the estimate provides for tactical force command and control system, operational test and evaluation, the combat crew and unit training required to maintain the tactical force, and in FY 1975, aerial port squadrons, and tactical aero-medical evacuation squadrons.

Program changes which will reduce flying hours by 92,063 and average operating aircraft by 113 are the net effect of a number of program adjustments between FY 1975 and FY 1976. These reductions are primarily the result of the deactivation of certain support aircraft, the transfer of tactical airlift training and certain support aircraft responsibility to the Military Airlift Command (Major Force Program IV), and the

transfer of responsibility for tactical aero-medical evacuation operations to Major Force Program VIII.

Offsetting increases are for F-15 aircraft and for the activation of 3 F-5E tactical training (aggressor) squadrons.

MAJOR FORCE PROGRAM III

INTELLIGENCE AND COMMUNICATIONS

Major Force Program III provides for three areas of activity. First, the conduct of National, Department of Defense, and Air Force intelligence and security programs. Second, worldwide communications required by both National Command authorities and the Air Force under all conditions of peace and war. Third, specialized functions such as Weather Service, Rescue and Recovery, Air Traffic Control, Satellite Control, and the National Military Command System.

The funding and manpower requirements for these activities are summarized in Table 19 and 20.

TABLE 19

INTELLIGENCE AND COMMUNICATIONS FUNDING

($ Millions)

	FY 75	FY 76	Change	FY 7T
Intelligence	$159.6	$179.2	$+19.6	$ 46.5
Communications	284.7	298.6	+13.9	75.6
Special Activities	134.7	146.1	+11.4	33.0
TOTAL	$579.0	$623.9	$+44.9	$155.1

TABLE 20

INTELLIGENCE AND COMMUNICATIONS MANPOWER

	FY 75	FY 76	Change	FY 7T
Intelligence				
Military	21,307	19,585	-1,722	19,544
Civilian	2,993	2,758	-235	2,757
TOTAL	24,300	22,343	-1,957	22,301
Communications				
Military	19,868	18,953	-915	18,937
Civilian	4,981	4,701	-280	4,701
TOTAL	24,849	23,654	-1,195	23,638
Special Activities				
Military	29,537	26,986	-2,551	26,999
Civilian	3,008	2,918	-90	2,897
TOTAL	32,545	29,904	-2,641	29,896

	FY 75	FY 76	Change	FY 7T
Intelligence Activities	$159.6	$179.2	$+19.6	$ 46.5

The Intelligence Program includes the collection, processing, production and dissemination of general and cryptologic intelligence. These activities develop intelligence for national intelligence strategic planning and provide intelligence for tactical commanders. There are three major programs contained in the grouping of intelligence activities: General Defense Intelligence Program (GDIP), Consolidated Cryptologic Program (CCP), and Other Intelligence Programs.

The funding for these three major groupings is summarized in Table 21.

TABLE 21

INTELLIGENCE ACTIVITIES

($ Millions)

	FY 75	FY 76	Change	FY 7T
General Defense Intelligence Program	$ 82.9	$102.5	$+19.6	$ 25.9
Consolidated Cryptologic Program	57.1	58.9	+ 1.8	15.7
Other Intelligence	19.6	17.8	- 1.8	4.9
TOTAL	$159.6	$179.2	$+19.6	$ 46.5

	FY 75	FY 76	Change	FY 7T
General Defense Intelligence Program (GDIP)	$82.9	$102.5	$+19.6	$25.9

This activity provides for the collection of intelligence through surveillance and detection, and the processing, production, and dissemination of intelligence. The collection methods used include human collection, airborne and land based sensor collection, and detection activities carried out by classified organizations.

Also included are production activities of reconnaissance technical units, scientific and technical exploitation and dissemination and general support provided by the Intelligence Data Handling System (IDHS) and Intelligence Communications.

The increase of $19.6 million provides $5.5 million for Technical Sensor program improvements, $5.5 million for Scientific and Technical external assistance and $4.1 million which will be for funding responsibilities for FOREST GREEN activities transferred from the Special Activities area in FY 1976.

	FY 75	FY 76	Change	FY 7T
Consolidated Cryptologic Program (CCP)	$57.1	$58.9	$+1.8	$15.7

The DOD Consolidated Cryptologic Program (CCP) consists of the resources required to carry out the mission of the National Security Agency which involves the performance of highly specialized technical functions by the Military Services in support of the intelligence activities of the United States. The Air Force is responsible for operation and maintenance of the resources and training of the personnel.

In line with the DOD policy to consolidate training activities, CCP training is being transferred to Major Force Program VIII effective with FY 1976. The transfer to MFP VIII is offset by price increases for fuel and supplies.

	FY 75	FY 76	Change	FY 7T
Other Intelligence Programs	$19.6	$17.8	$-1.8	$ $4.9

The Other Intelligence Programs provides for the resources to collect information through reconnaissance by technical means. The processed data produces finished intelligence for decision makers at the National level and throughout the Department of Defense. The reduction from transferring the Advanced Location Strike System to the Special Activities Program will be offset by policy, program and pricing changes.

	FY 75	FY 76	Changes	FY 7T
Communications Activities	$284.7	$298.6	$+13.9	$75.6

The communications program provides for the Air Force worldwide communications networks including the Air Force portion of the Defense Communications System (DCS).

The $13.9 million increase in FY 1976 for Communications Activities is required for civilian pay raises, the move of the Air Force Communications Service from Richards-Gebaur AFB to Scott AFB, assumption of partial funding responsibility for the Electromagnetic Compatability Analysis Center (ECAC), contractor support of communications systems, supply and equipment price increases offset by reduced communications requirements.

	FY 75	FY 76	Change	FY 7T
Special Activities	$134.7	$146.1	$+11.4	$33.0

The Special Activities funding increase of $11.4 million in FY 1976 is required for the transfer of the Advanced Location Strike System (ALSS) from the Other Intelligence Program, computer upgrade at the Global Weather Central, increased contractor support, and increased costs of POL, supplies and equipment. The surface recovery ships previously used by the Satellite Control Facility for satellite recovery operations are being replaced by aircraft.

MAJOR FORCE PROGRAM IV

AIRLIFT FORCES

The primary mission of the Military Airlift Command (MAC) is to maintain the readiness of the military airlift system in support of contingency/wartime plans and operations.

Strategic airlift consists of the continuous or sustained movement of units, personnel, and materiel in support of all Department of Defense (DOD) agencies between the CONUS and overseas theaters, between areas of command, and within an area of command when directed. Strategic airlift resources maintain the capability to land or airdrop troops, supplies and equipment for augmentation of tactical forces when required.

Tactical airlift is that airlift which provides the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas through air landing, extraction, airdrop or other delivery techniques; and the air logistic support of all theater forces, including those engaged in combat operations, to meet specific theater objectives and requirements.

The rapid mobility of combat forces made possible by the combined MAC airlift force is a major instrument of National policy. It is designed to deter aggression through its capability to rapidly deploy and logistically sustain combat forces anywhere in the world.

The Joint Chiefs of Staff (JCS) and the Military Services as well as other DOD and government agencies also utilize the airlift services provided by MAC for essential cargo movements. To assure responsiveness, MAC provides the trained personnel and equipment to operate a global, quick reacting combat airlift system. Within its mission, MAC is responsible for adequately training and equipping its forces, participating in joint training and readiness exercises with other service components to ensure the wartime capability to execute required JCS plans, maintaining and operating global command and control systems, and operating a global airlift system. The peacetime training of the strategic airlift system produces airlift capability as a by-product for use of DOD agencies to economically airlift personnel and cargo worldwide.

The Military Airlift Command is organized on a global basis, and headquartered at Scott AFB, Illinois. The airlift forces operate under the control of two MAC air numbered forces, with eleven airlift wings, one training airlift wing, one aeromedical airlift wing, the Air Weather Service, the Aerospace Rescue and Recovery Service and the Aerospace Audio-Visual Ser-

vice and effective in FY 76, the Air Force Communications Service.

The principal means of financing the direct operation of the strategic intertheater airlift forces is through the Airlift Services Industrial Fund (ASIF). The resources requested in this Major Force Program are for the operations of the tactical airlift force, initial upgrade and local area training of the crews for the C-141 and C-5 aircraft of the strategic airlift force, operation and maintenance of MAC bases, advanced helicopter crew training, command and control, and field and organizational aircraft maintenance. The funding also supports DOD requirements for specific airlift missions such as Joint Airborne/Air Transportability Training, Special Airlift missions and peacetime training hours not subscribed by strategic airlift users.

TABLE 22

AIRLIFT FUNDING

($ Millions)

Program Element Grouping	FY 75	FY 76	CHANGE	FY 7T
Assigned Airlift Mission Activities	$ 94.7	$174.1	$+ 79.4	$ 40.5
Airlift Operations	182.7	330.1	+147.4	105.5
TOTAL	$277.4	$504.2	$+226.8	$146.0

Table 22 summarizes Airlift Funding requirements which will be explained in more detail in the Program Element Grouping discussions.

TABLE 23

AIRLIFT MANPOWER

	FY 75	FY 76	CHANGE	FY 7T
Military	41,149	56,624	+15,475	56,495
Civilian	9,988	12,607	+ 2,619	12,604
TOTAL	51,137	69,231	+18,094	69,099

Table 23 summarizes Airlift Manpower changes. The additional manpower required in FY 1976 is for the tactical airlift mission transferred from MFP II, the support aircraft consolidated from all MFP's, the transfer of communications personnel to MAC, and the transfer of Hickam AFB to MAC.

	FY 75	FY 76	CHANGE	FY 7T
Assigned Airlift Mission Activities	$94.7	$174.1	$+79.4	$40.5

This activity provides funding for those portions of the strategic airlift program and other airlift related programs which have been determined to be within Air Force mission responsibilities.

TABLE 24

MAJOR AREAS OF MISSION ACTIVITIES

($ Millions)

	FY 75	FY 76	CHANGE	FY 7T
Unsubscribed Airlift Training	$39.3	$82.3	$+43.0	$16.7
Local Area Aircrew Training	0	42.8	+42.8	10.7
Other Air Force Missions	55.4	49.0	-6.4	13.1
TOTAL	$94.7	$174.1	$+79.4	$40.5

Table 24 summarizes the major areas of this activity. The increase of $79.4 million is the result of the peacetime reduction in cargo requirements causing essential strategic airlift flying training hours to be unsubscribed by airlift users ($+43); the Operation and Maintenance, Air Force funding of local area aircrew training ($+42.8) and an increase in tariff rates for other mission responsibility areas as the result of increases in the price of aviation fuels ($+4.8). The increases are partially offset by termination of the one-time requirement requested for passenger tariff increase in the Operation and Maintenance Appropriation, Air Force in FY 75.

Essential but, Unsubscribed Airlift Training

The total minimum essential flying hour program for training the global strategic airlift system has been funded through the ASIF since 1958. The ASIF is reimbursed by DOD airlift users for cargo movement accomplished as the flying hour program is executed to provide essential aircrew training and airlift system combat readiness.

Funding for the strategic airlift peacetime training flying hour program has been requested from the Congress by the Services in various line items such as second destination transportation, permanent change of station, travel of personnel, and JCS Exercises within the various appropriations comprising the President's Budget for DOD. The funds appropriated by Congress for these purposes have been used to reimburse the ASIF for the airlift services available as a by-product of required force readiness training. The ASIF and strategic airlift forces have been dependent upon numerous appropriations within DOD to provide the critical balance between essential strategic airlift aircrew training requirements and available funding.

In the current peacetime environment the strategic airlift flying hour program essential to fulfill DOD strategic airlift wartime mobility and responsiveness objectives is not fully subscribed by DOD airlift customers for cargo movement. To insure funding for these important programs, the Office of the Secretary of Defense has determined that, in FY 1976, funds to reimburse the ASIF for essential but unsubscribed strategic airlift training should be included in the Operation and Maintenance, Air Force Appropriation as is the case for aircrew training for all other aircraft programs.

Initial implementation of this policy is proposed in FY 1975 and $39.3 million is requested for that purpose in

Reprogramming Request FY 75-1 P/A now pending before the Congress.

Local Area Aircrew Training

The local area training portion of the overall training program provides for crew training in emergency procedures, instrument approach and landing, aircraft stall procedures and engine-out landings. This training is conducted in unloaded aircraft in the local flying area. DOD has determined that since this requirement is aircrew training and does not produce revenue for the ASIF, in FY 1976 it will be funded in the Operation and Maintenance Appropriation as are aircrew training programs for other types of aircraft.

Other Air Force Mission Responsibilities

Since the inception of the ASIF in 1958, the Air Force has been responsible for funding certain airlift related programs as a part of its overall mission responsibilities. Included in this area are: Joint Airborne/Air Transportability Training of Army and Marine Ground forces, Special Air Missions of the 89th Military Airlift Wing at Andrews AFB, Maryland, Other special assignment air missions in support of the 89th, and the movement of household goods for selected civilian personnel. These programs remain basically unchanged between FY 1975 and FY 1976. Fuel price increases, however, cause fund requirements to go up by $4.8 million.

($ Millions)

	FY 75	FY 76	Change	FY 7T
Airlift Operations	$182.7	$330.1	+$147.4	$105.5

The increased requirements are caused by annualized pay raises and the pay of civilian employees transferred from MFP II in conjunction with the C-130 airlift consolidation (+$20.5 million), increases in the price of aviation fuels and supplies (+$18.0 million), the pooling of support aircraft in MAC (+$23.3 million),

the transfer of base level reparables from the procurement appropriation (+$1.9 million), and the consolidation of tactical airlift assets in MFP IV (+$83.3 million).

TABLE 25

AIRLIFT OPERATIONS

AVERAGE OPERATING AIRCRAFT

Tactical Airlift Force	FY 75	FY 76	Change	FY 7T
C-130	5	271	266	261
Training				
T-39	18	106	+ 88	106
C-135A	1	1	-	1
C-135B/C	2	2	-	2
C-131	5	5	-	5
VC-118	1	-	-1	-
VC-29	11	-	-11	-
C-141	16	16	-	16
C-5	4	4	-	4
HH-53	9	8	-1	8
HH-43	4	2	-2	-
CH/HH-3E	8	8	-	8
T/UH-1FP	4	4	-	4
UH-IN	5	5	-	5
	93	432	+339	420

Table 25 summarizes the average operating aircraft required in Airlift Operations to provide the resources for the operation of the Tactical Airlift Squadrons and Aerial Ports; advanced helicopter, C-5, C-141, and C-130 crew training; command and control; and the operation of fourteen active MAC bases to provide support services required by the Strategic and Tactical Airlift Forces, the Air Weather Services, the Aerospace Rescue and Recovery Services, the Aerospace Audio-Visual Service, and Air Force Communications Service.

TABLE 26

AIRLIFT OPERATIONS

FLYING HOURS

AIRCRAFT	FY 75	FY 76	Change	FY 7T
Tactical Airlift Forces				
C-130	3,355	185,191	+181,836	43,829
Training				
T-39	22,740	127,200	+104,460	31,800
C-135A	432	1,728	+1,296	432
C-135B/C	710	2,840	+2,130	710
C-131	4,426	3,000	-1,426	750
VC-118	1,080	-	-1,080	-
VC-29	7,665	255	-7,410	-
C-141	14,488	13,040	-1,408	2,944
C-5	4,772	3,768	-1,004	856
HH-53	4,533	4,291	-242	1,080
HH-43	1,228	342	-886	-
CH/HH-3E	3,482	3,765	+283	979
T/UH-1FP	1,549	1,484	-65	384
UH-1N	2,240	2,080	-160	540
TOTAL	72,660	348,984	+276,324	84,304

Table 26 summarizes the flying hour program for Airlift Operations. The C-130 flying hour program reflects the consolidation of the Air Force Tactical Airlift Forces in MFP IV. In addition, the Air Force will pool support aircraft (C-135, C-131, and T-39) in MFP IV with MAC as the single manager to attain economies in their use. The FY 76 C-5/C-141 combat crew training program will decline as the result of simulator use in the pilot training/upgrade program.

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FORCE PROGRAM VII
CENTRAL SUPPLY AND MAINTENANCE

Central Supply and Maintenance furnishes logistical support associated with distribution of materiel, materiel management, prime procurement, contract management, depot maintenance, and second destination transportation; and support for the Eastern Test Range. Centralized logistic support is provided to the active Air Force, the Air Force Reserve, the Air National Guard, and to other DOD and government agencies. The FY 76 requirement of $2,557.0 million reflects an increase of $22.8 million over the FY 75 program of $2,534.2 million. The funding and manpower requirements for the six major activities are summarized in Tables 27 and 28.

TABLE 27
CENTRAL SUPPLY AND MAINTENANCE FUNDING
($ MILLIONS)

	FY 75	FY 76	Change	FY 7T
Depot Operations	$ 864.5	$ 873.5	$ +9.0	$211.6
Procurement Operations	86.3	87.4	+1.1	21.9
Depot Maintenance	1,100.4	1,108.6	+8.2	272.6
Transportation	318.6	311.1	-7.5	79.2
Other Logistic Support Activities	75.5	81.5	+6.0	20.4
Eastern Test Range	88.9	94.9	+6.0	24.8
TOTAL	$2,534.2	$2,557.0	$+22.8	$630.5

TABLE 28
CENTRAL SUPPLY AND MAINTENANCE MANPOWER

	FY 75	FY 76	Change	FY 7T
Military	9,330	8,924	-406	8,902
Civilian	52,568	50,102	-2,466	50,266
TOTAL	61,898	59,026	-2,872	59,168
Depot Operations	$864.5	$873.5	$+9.0	$211.6

The depot operations activity provides for the operations of seven installations of the Air Force Logistics Command. The depots are responsible for the centralized distribution of

materiel and materiel management. Distribution of materiel consists of receiving shipments from industry, storing materiel, and filling requisitions. There are over 690 thousand line items managed and maintained in a $12 billion operating inventory. Materiel management provides services for computation of requirements, provisioning, processing of requisitions, cataloging and standardization, material issue and accountability, service engineering, munitions management and maintenance, contract engineering and technical service, field service representatives, changes to technical data, and contract aircraft and drone support. Depot operations also provide for the real property maintenance of facilities, base and command communications, and base operations of the Air Force Logistics Command.

The principal item of expense funded by the Operation and Maintenance, Air Force appropriation in depot operations is the payroll of the civilian work force. In FY 76 this work force will total 41,919, down 2,221 from 44,140 in FY 75. End strength reductions reflect savings realized as the result of support aircraft reductions and reduced flying hours.

The increased requirements are for weapon systems logistically supported by contract, development of an engineering based reliability centered maintenance strategy, service engineering for systems transitioning from procurement to operations, and increased costs for stock fund materiel. These additives are offset by the reductions in the civilian work force and the phase out of support aircraft.

	FY 75	FY 76	Change	FY 77
Procurement Operations	$86.3	$87.4	$+1.1	$21.9

Procurement operations provides for prime procurement and contract management. Prime procurement is accomplished by specialists in the Air Force Logistics Command and it includes negotiation, award and subsequent amendment, revision and termination

of contracts for procurement of major electronic systems, procurement of follow-on spares, and modification and overhaul of major weapon and sub-systems. Contract management is performed by both the Air Force Logistics Command and the Air Force Systems Command to provide for the management and administration of prime and subcontracts being fulfilled at the contractors' plants. This function encompasses quality assurance, contract redetermination, property administration, overhead and sub-contract management, pricing and financial analysis, production management/industrial engineering, flight test acceptance, and contract termination. These services provide the Air Force with continuous and direct observation of contractors' performance and ensure that the Air Force receives what it pays for in terms of quality, quantity, usability, reliability,and timeliness.

The principal item of expense is the payroll of the 5,196 civilian work force. The change in funding requirements is for the annualization of the FY 75 General Schedule and Wage Board pay raises, partially offset by reductions in the civilian work force.

	FY 75	FY 76	Change	FY 7T
Depot Maintenance	$1,100.4	$1,108.6	$+8.2	$272.6

Depot maintenance provides for maintenance of aircraft, missiles, engines, command and control systems, and other equipment beyond the capability of field level maintenance organizations. Depot level maintenance requires unique skills, specialized facilities, and equipment not available in field organizations. Maintenance is accomplished in Air Force depots (organic), in private industrial facilities (contract), by other military services, and by specialized depot and contractor teams deployed to operational sites.

Depot maintenance repair and modification is managed by the Air Force Logistics Command (AFLC) through the Depot Maintenance

Industrial Fund (DMIF). The workload is accomplished in industrial plants, either by DMIF in its own facility (organic) or by private industry (contract). Operation and Maintenance, Air Force funds are used to purchase the services from the DMIF. The funding for purchases from the DMIF are categorized in Table 29:

TABLE 29
PURCHASES FROM
DEPOT MAINTENANCE INDUSTRIAL FUND
($ MILLIONS)

	FY 75	FY 76	Change	FY 7T
Aircraft Maintenance	$ 293.1	$ 319.9	$+26.8	$ 75.9
Missile Maintenance	6.2	6.5	+.3	1.6
Engine Overhaul	113.0	112.1	-.9	28.0
Other Major Items	35.8	31.7	-4.1	7.9
Exchangeables	557.1	548.2	-8.9	137.1
Area/Base Support, Local Manufacture	42.5	41.1	-1.4	10.3
TOTAL	$1,047.7	$1,059.5	$+11.8	$260.8

In addition to purchased equipment maintenance from the DMIF, depot maintenance provides for the storage of aircraft, missiles, and vehicles; for costs associated with implementation of the technology repair center concept; and for operation of the calibration program which provides the evaluation and certification of all Air Force precision measurement equipment.

	FY 75	FY 76	Change	FY 7T
Aircraft Maintenance	$293.1	$319.9	$+26.8	$75.9

The basic Air Force maintenance objective is to sustain weapon and equipment end items in a state of operational readiness consistent with mission requirements and at the least total cost. The aircraft depot maintenance program provides for inspection and repair of in-service aircraft and the installation of modifications to extend service life, increase safety, and enhance operational capability.

Additional refinements in the continuing search for the optimum inspection and repair requirements consistent with assured airworthiness have resulted in several changes to the cyclic programmed depot maintenance criteria during this past year. In addition, there have been reductions in the scope of work on those aircraft requiring cyclic depot level maintenance.

While the reductions in frequency and scope of work, coupled with the phase-out of many support aircraft, tend to reduce costs, these reductions are more than offset by the overall aging of the aircraft inventory. Retention of first-line combat aircraft in the inventory longer than ever before has significant cost implications in terms of the extension of the service life of these aircraft.

The incorporation of new capabilities into existing weapon systems in order to cope with the ever-changing threat comprises a significant portion of the depot level maintenance workload. The B-52 system capability is being upgraded by the installation of the Short Range Attack Missile (SRAM), Electro-Optical Viewing System, Phase VI ECM, cartridge starter,and Radar Homing and Warning improvements. Laser target tracking and determination, improved radar warning, secure voice and radar system improvements are capability improvements being added to the F-4. The installation of leading edge slats to improve combat maneuverability on the F-4E will finish in FY 1976. Selected F-4 aircraft will be modified to employ the Maverick missile. The F-106 is being fitted with a 20mm cannon to improve the air-to-air capability. FY 1976 will see the completion of the modification of the KC/RC-135 force with cartridge starters on all engines to improve launch time.

	FY 75	FY 76	Change	FY 7T
Missile Maintenance	$6.2	$6.5	$+.3	$1.6

Funds are required to provide maintenance, such as cyclic repair and update of the basic strategic missiles as well as various air-to-air and air-to-ground missiles, such as the SRAM, Falcon, Standard Arm and the Maverick. Funding for component parts of the missiles is not included; they are contained in the requirement for exchangeables repair. Approximately 70% of the missile maintenance funds required in FY 76 are in support of the Minuteman system.

	FY 75	FY 76	Change	FY 7T
Engine Maintenance	$113.0	$112.1	$ -.9	$28.0

The Air Force inventory of reciprocating engines for overhaul is drastically reduced in FY 1976 as many of the support type aircraft phase out. Jet propulsion systems now require over 95% of the total funds used for engine overhaul.

In FY 1976, over $77 million (69%) of the $112 million requested will be spent on engines for seven major aircraft systems, namely the A-7, B-52, C-135, C-130, F/RF-4, F-111 and F-15.

The high dollar investment in engines necessitates stringent management throughout the Air Force. Engine inventories are kept at the lowest possible levels consistent with peace and wartime needs. One method of maintaining the lowest inventory levels is through attention to the maximum times established for each type of engine.

Maximum time is an administratively established value at an age (in terms of elapsed flying hours) where flight safety or repair costs become critical. It is the maximum that the engine can age. Normally only 10% or fewer of the engines should survive to this age, and 1% is typical. The remainder were removed for cause at some lesser age intervals. Detailed analysis of the removed engines, together with those that

survived, gives valid indications of whether the maximum time should be reduced or increased.

	FY 75	FY 76	Change	FY TT
Other Major Items	$35.8	$31.7	$-4.1	$7.9

The repair of a wide range of specialized equipment such as construction equipment, training devices, locomotives, fire fighting equipment, watercraft, ground communications systems, aerospace ground equipment, flight simulators, and mobile radar sets is financed by these funds. The decrease of $4.1 million in FY 1976 is primarily caused by a reduction in the aircraft inventory and beddown locations.

	FY 75	FY 76	Change	FY TT
Exchangeables	$557.1	$548.2	$-8.9	$137.1

The repair of exchangeables consumes the majority of the depot maintenance dollars, and as such requires extensive management efforts, close scrutiny of technical and production details, and sophisticated computational systems to determine repair and overhaul requirements. Included in the category of exchangeables are those recoverable items which are repaired or overhauled and returned to service or stock. Examples of exchangeables are instruments, wheels, brakes, aircraft tires, fire control, bombing and navigation system components, missile guidance systems, engine, fuel, environmental system, ECM, radio, electrical, hydraulic, and radar components as well as structural parts. These components range in value from a few dollars to as much as half a million dollars, and the Air Force is continually striving to develop new repair processes and reduce repair costs.

Methods Laboratories have recently been established at each Air Logistics Center to find methods of repairing components which were previously not repairable, and to also reduce repair costs on these items which are expensive to repair. These labora-

tories use the talents of technicians, engineers and production personnel in reducing the repair costs. They first analyze those components which are of the nonrepairable category and then attempt to establish repair procedures for these items. They also look at those items which are consuming the largest proportion of the repair dollars and then improve methods, techniques and procedures to reduce the repair costs.

Despite the concerted management efforts expended through the various programs, the repair of exchangeables continues to demand a significant share of the Air Force program. This high dollar requirement is caused by Air Force management efforts aimed at reducing total logistics support costs. Rather than return the complete engine or aircraft to the depot for repair, we strive to transport and repair the lowest level of component which exceeds field level repair capability. The $8.9 million reduction in FY 1976 funding is a result of the programmed decrease in flying hours and aircraft inventory in addition to increased efficiency and effectiveness within the repair centers.

	FY 75	FY 76	Change	FY 7T
Area and Base Support	$42.5	$41.1	$-1.4	$10.3

Area support is equipment maintenance assistance provided by a depot to a base operating within that depot's locale. Base support is that field level maintenance assistance offered by a depot base to its tenant units (e.g., the B-52 wing assigned to Robins AFB).

The funding requirement in FY 76 for both types of support is $41.1 million, $1.4 million less than in FY 75 because of a reduction in flying hours by the using commands, a reduction in aircraft assignments (primarily EC-121s), and a reduction in manpower.

	FY 75	FY 76	Change	FY 7T
Transportation	$318.6	$311.1	$-7.5	$79.2

Second destination transportation is the life blood of the logistics system which has been successfully used by the Air Force as a trade-off for overseas depots and inventories. It provides for the movement of materials between Air Force depots/repair facilities and forces in the United States and overseas as well as movements within and between commands. Materiel is moved by commercial air and surface transportation, by LOGAIR under commercial airlift contract within the continental United States, and by the Military Airlift Command and the Military Sealift Command to overseas areas. In addition to general cargo are movements of missiles, special weapons, munitions, exchange service items, APO mail, and motion picture service items. Transportation funds also provide for associated transportation costs of port handling, stevedoring and demurrage. Second destination workload for FY 76 compared with FY 75 is shown in Table 30.

TABLE 30
SECOND DESTINATION TRANSPORTATION WORKLOAD

	FY 75	FY 76	Change	FY 7T
Commercial Transportation				
Surface (Short Tons)	269,654	250,808	-18,846	62,837
LOGAIR (Plane Miles)	14,171,953	14,271,088	+99,135	3,584,471
Comm Air (Short Tons)	2,855	2,585	-270	720
Military Sealift Command				
Cargo (Measurement Ton)	1,313,028	1,177,135	-135,893	382,914
Stevedoring (MT)	966,208	860,448	-105,760	220,970
Military Airlift Command				
Channel Cargo (ST)	104,276	95,759	-8,517	24,237
Special Asgmt (F/H)	3,626	3,425	-201	857
APO Mail (Short Tons)	28,954	26,047	-2,907	6,183

The change in fund requirements is the result of a reduction in second destination transportation program workload offset by transportation rate increases.

	FY 75	FY 76	Change	FY 7T
Other Logistic Support Activity	$75.5	$81.5	$+6.0	$20.4

Other logistics support provides for the production capability required to support major procurement programs for current, mobilization and national emergency needs. It includes the contractual operation of the Air Force Production Flight Test Facility at Palmdale, California, which augments the production potential of contractors within the aircraft industry by providing government facilities for modification, assembly, flight test, and other work. Contractual services are also provided for layaway maintenance and production for mobilization and emergency use of three industrial facilities at Chatsworth, California; Saltsville, Virginia; and Evendale, Ohio.

Logistical support also provides for departmental printing, for reimbursement to the United States Postal Service for official Air Force mail, and for reimbursement to the Bureau of Employee's Compensation for claims resulting from injury or death of civilian employees under the jurisdiction of the Department of the Air Force.

The primary change in fund requirements is the result of actual billings for the Bureau of Employee's Compensation reflecting an increase in amounts awarded in claims.

	FY 75	FY 76	Change	FY 7T
Eastern Test Range	$88.9	$94.9	$+6.0	$24.8

The Eastern Test Range (ETR) is a DOD National Range which provides trajectory measurement, telemetry, optical, range safety data processing and communications support for ballistic missiles, space programs, air launched and submarine launched weapon systems from Canaveral Air Force Station and the

NASA Kennedy Space Center and other locations. ADC Space Track and JCS directed intelligence programs are also supported. Major operating stations are at six land-based locations and augmented by ten aircraft and three ships. Services are provided to NASA, Air Force, Navy, Army, and other DOD and government agencies. The funding requirements for the Eastern Test Range are shown in Table 31.

TABLE 31
TYPES OF EASTERN TEST RANGE COSTS
($ MILLIONS)

	FY 75	FY 76	Change	FY 7T
Civilian Pay	$24.0	$24.4	$+ .4	$ 6.2
Instrumentation Ships (Military Sealift Command)	12.0	12.9	+ .9	3.6
Contract Operation and Maintenance	31.2	33.8	+2.6	9.0
Other Direct O&M	21.7	21.8	+2.1	6.0
TOTAL	$88.9	$94.9	$+6.0	$24.8

The Eastern Test Range operates under a funding policy which requires users of the range to pay the direct costs which are incurred to support their programs.

Increased costs for the Eastern Test Range are primarily due to the transfer of the Terminal Radiation Program (TRAP) aircraft from the Research and Development appropriation; increase in the range operating contract caused by cost of living increases; and a change from total user funding to institutional funding of the Range Ships Navigation Aids and Missile Impact Location Scoring systems with users paying direct costs only.

MAJOR FORCE PROGRAM VIII

TRAINING, MEDICAL & OTHER GENERAL PERSONNEL ACTIVITIES

Major Force Program VIII provides for training, medical and other activities for personnel as individuals rather than as members of organizations. The funds are needed to provide

the individual training of members of the Regular Air Force, Air Force Reserve, Air Force Academy Cadets, AFROTC, and Air National Guard. Foreign students, students from other services and government organizations and Air Force civilian personnel are included. This program also includes recruiting activities and the military personnel off-duty education program.

The medical portion provides medical care for active duty and retired military personnel and other recipients authorized by law.

The funding and manpower requirements are summarized in Tables 32 and 33.

TABLE 32

TRAINING, MEDICAL & OTHER GENERAL

PERSONNEL ACTIVITIES FUNDING

($ Millions)

	FY 75	FY 76	CHANGE	FY 7T
Training & Other General Personnel Activities	$625.4	$661.9	$+36.5	$171.2
Medical	213.3	250.8	+37.5	62.2
TOTAL	$838.7	$912.7	$+74.0	$233.5

TABLE 33

TRAINING, MEDICAL & OTHER GENERAL

PERSONNEL ACTIVITIES MANPOWER

	FY 75	FY 76	CHANGE	FY 7T
Military	119,462	117,716	-1,746	118,252
Civilian	30,639	29,352	-1,287	31,237
TOTAL	150,101	147,068	-3,033	149,489

The increase for Major Force Program VIII is the net of many changes which will be discussed in detail, first the training category and then the medical.

Specific categories of training and O&M costs are shown in Table 34.

TABLE 34

COST BY CATEGORY OF TRAINING

($ Millions)

	FY 75	FY 76	CHANGE	FY 7T
Recruiting & Examining	$ 30.3	$ 31.6	$+ 1.3	$ 6.2
Recruit & Specialized Training	85.4	96.3	+10.9	24.9
Flight Training	139.3	147.3	+ 8.0	38.8
Professional Training	34.2	37.6	+ 3.4	11.2
Training Operations	299.8	310.3	+10.5	78.4
Service Academy	21.2	23.0	+ 1.8	5.8
ROTC	15.2	15.8	+ .6	6.0
TOTAL	$625.4	$661.9	$+36.5	$171.2

Training is accomplished at Air Force installations, schools managed by other DOD services and at civilian institutions. Numbers and types of Air Force training installations for FY 76 are shown in Table 35.

TABLE 35

AIR FORCE TRAINING INSTALLATIONS

Recruit/Specialized Training Bases	5
Pilot Training Bases	9
Navigator Training Bases	1
Professional Training Bases	2
Academy	1

The number of bases is stable from end FY 75 to end FY 76.

	FY 75	FY 76	CHANGE	FY 7T
Recruiting and Examining	$30.3	$31.6	$+ 1.3	$ 6.2

The USAF Recruiting Service is responsible for recruiting all enlisted personnel entering the active Air Force, as well as selected officers and medical professionals. The non-prior service recruiting objective for FY 75 is 74,155; the FY 76 objective is 75,000; and the FY 7T objective is 24,673.

An increase of $1.3 million is required for the FY 76 program. Of that amount, $.5 million is for commercial travel to offset the loss of support aircraft and for price increases; $.4 million is for enhancement of the Airman Procurement Management Information System (PROMIS), an Air Force automated project which matches potential enlistees with available job specialties; and $.3 million for price increases for supplies, equipment and printing.

	FY 75	FY 76	CHANGE	FY 7T
Recruit & Specialized Training	$85.4	$96.3	$+10.9	$24.9

All new enlistees receive a six week recruit training course at Lackland AFB, plus screening and testing for future assignments. Following recruit training, approximately 92% are selected for initial specialized training in a particular career field at one of the five technical/specialized training centers. Courses range in length from 5 to 43 weeks. The training furnishes the individual the specific skills and knowledge needed to perform a specific job.

The Air Force requires a great variety of specialized skills. Training programs are continually revised as new weapon systems enter the inventory or as the force structure changes. Advanced and special courses are taught to individuals who already have field experience, but require a new or higher degree of skill or familiarization with new equipment and operating techniques.

Table 36 compares the FY 75 and FY 76 student loads for basic military and technical training. The load is the equivalent of a man-year in training status.

Funding requirements for this grouping increase $10.9 million from FY 75 to FY 76. The phaseout of support aircraft and the deferral of student inputs from FY 75 to FY 76 because of the FY 75 travel limitation will increase travel requirements

by $3.9 million. An additional $2.7 million is required for civilian pay raises. Price increases for supplies, equipment and services will require $2.4 million. In accordance with DOD policy to consolidate training activities, funding responsibility ($1.9 million) for cryptological training will be transferred to this program from MFP III effective 1 July 1975.

TABLE 36

BASIC MILITARY & TECHNICAL TRAINING LOADS

	FY 75	FY 76[1/]	CHANGE	FY 7T
Basic Military Training				
Regular Air Force	9,706	9,825	+ 119	2,727
ANG	387	644	+ 257	178
AF Reserve	307	364	+ 57	97
TOTAL	10,400	10,833	+ 433	3,002
Officer Training School				
Regular Air Force	441	318	- 123	145
ANG	3	1	- 2	-
AF Reserve	11	12	+ 1	4
Security Assistance Training Program	4	4		1
TOTAL	459	335	- 124	150
Basic Technical Training				
Regular AF (Airmen)	20,179	20,494	+ 315	4,947
Regular AF (Officers)	1,044	1,102	+ 58	277
ANG (Airmen & Officers)	577	903	+ 326	258
AF Reserve (Airmen & Officers)	208	288	+ 80	62

Security Assistance Training Program	256	246	- 10	61
Other	260	787	+ 527	166
TOTAL	22,524	23,820	+1,296	5,771
Advanced Technical Training				
Regular AF (Airmen & Officer)	4,229	4,666	+ 437	1,077
ANG (Airmen & Officers)	195	179	- 16	46
AF Reserve (Airment & Officers	37	32	- 5	8
Security Assistance Training Program	157	149	- 8	37
Other	799	776	- 23	185
TOTAL	5,417	5,802	+ 385	1,353

NOTE: 1/ - FY 76 data includes the cryptological student loads which were transferred from MFP III effective 1 July 1975.

	FY 75	FY 76	CHANGE	FY 7T
Flight Training	$139.3	$147.3	$+ 8.0	$38.8

Flight training includes the undergraduate training of pilots and navigators, selected advanced and specialized courses such as survival, electronic warfare officer, instructor pilot and instructor navigator courses.

Programmed undergraduate pilot production for the active force for FY 76 is 1,750, a reduction of 136 from FY 75. To meet requirements for the Reserve forces, the Air Force Reserve production will be 21 in FY 76, and the Air National Guard pilot production will be 71 in FY 76. Training is conducted at eight undergraduate pilot training bases located in the southeast and southwest areas of the United States. These areas were selected primarily for favorable weather and airspace conditions.

Undergraduate navigator production for the active force will decrease from 1,250 in FY 75 to 900 in FY 76.

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The Air Force has completed phase-in of 19 T-43A aircraft for use in the undergraduate navigator training system. These aircraft, used in conjunction with T-37s and new T-45 simulators scheduled for delivery from January through December 1975, will result in a revised undergraduate navigator curriculum. This will enable the Air Force to reduce the navigator training flying curriculum from 186 hours per student in FY 74 to 112 hours in FY 76. Overall course length has been reduced from 36 to 33 weeks.

An additional $8.0 million is required for flight training. An increase of $16.2 million is for price increases for fuel, supplies, equipment and pay raises. The transfer of fund responsibilities for base level reparables from the procurement appropriation will require $3.1 million. An increase of $.6 is required for the procurement of commercial travel to offset the loss of support aircraft. The reduction in undergraduate pilot and navigator student loads decreased requirements by $11.6 million.

Table 37 compares the FY 75 and FY 76 flight training graduates.

TABLE 37
Flying Training Student Output

	FY 75	FY 76	Change	FY TT
Undergraduate Flying Training (Fixed Wing)				
USAF	1,886	1,750	- 136	437
German Air Force	69	69		19
Defense Assistance Vietnam (DAV)	170	-	- 170	-
Security Assist. Trng Prog (SATP)	349	418	+ 69	99
ANG	115	71	- 44	18
AF Reserve	38	21	- 17	6
Total	2,627	2,329	- 298	579
Undergraduate Navigator Training				
USAF	1,250	900	- 350	225
Defense Assistance Vietnam (DAV)	8		- 8	
ANG	44	24	- 20	6
AF Reserve	12	4	- 8	1
Security Assistance Trng Prog (SATP)	37	45	+ 8	11
Total	1,351	973	- 378	243
Advanced & Specialized Fly Trng				
Specialized Flying (Pilot)	1,385	1,588	+ 203	352
Advanced Navigator	552	331	- 221	82
Specialized Flying (Nav)	341	392	+ 51	97
AFA Flight Indoctrination	531	680	+ 149	158
Total	2,809	2,991	+ 182	689
Helicopter Training				
Undergraduate	50	50		12
Conversion	40	42	+ 2	11
Total	90	92	+ 2	23
Survival Training - Total	19,182	19,100	- 82	4,559
TOTAL FLYING TRAINING	26,059	25,485	- 574	6,093

	FY 75	FY 76	CHANGE	FY 7T
Professional Training	$34.2	$37.6	$+ 3.4	$11.2

Air Force professional education is the mission of the Air University with headquarters at Maxwell AFB, Alabama. Its responsibilities include resident schools for professional military training, the Air Force Institute of Technology program at Wright-Patterson AFB, Ohio, and non-resident schools in civilian colleges throughout the country. The Extension Course Institute at Gunter Air Force Station, Alabama, provides correspondence training for Air Force military education requirements.

Medical and dental training is conducted at Brooks AFB, Texas and at various Air Force hospitals and civilian institutions throughout the country.

Professional military education (PME) is continually reevaluated to provide the capabilities needed by the military leaders of tomorrow. Ideally, all Air Force officers should receive professional military education in residence. Since 100% attendance at an intermediate and a senior service school is not feasible within current resources, attendance is afforded to only those officers with the highest potential.

The Air Force is requesting that the Airman Education and Commissioning Program be reinstated in FY 76 because of the importance of providing upward mobility for Air Force enlisted personnel.

TABLE 38

PROFESSIONAL TRAINING STUDENT LOADS

	FY 75	FY 76	CHANGE	FY 7T
Professional Military Schools	1,919	1,928	+ 9	399
AFIT Resident Schools/ Courses	900	814	- 86	209
Specialized Schools	189	250	+ 61	61
TOTAL - Service Schools	3,008	2,992	- 16	669
Civilian Institutions	1,936	1,884	- 52	451
Medical Training	3,171	3,267	+ 96	889
TOTAL	8,115	8,143	+ 28	2,009

The FY 76 O&M fund requirements for professional education are $3.4 million higher than FY 75 because of the substitution of commercial transportation for the support aircraft being deactivated, deferral of student input to FY 76 because of the FY 75 travel limitations, civilian pay raise, and price increases for tuition fees and textbooks.

	FY 75	FY 76	CHANGE	FY 7T
Training Operations	$299.8	$310.3	$+10.5	$78.4

The Air Training Command is responsible for the operation and maintenance of 15 training installations, the Air University for two installations, the Air Force Academy for one installation and the Security Service for one installation. The program activity also includes funds for the Air Training Command and Air University command headquarters and for off-duty education of service personnel throughout the Air Force.

FY 76 requirements are $10.5 million higher than FY 75. The transfer of cryptological training from MFP III to MFP VIII requires $4.5 million. An additional $2.9 million is for lease of ADPE equipment in support of the Base Level Standardization program, STALOG, and contract maintenance

for the UNIVAC 1050 II. Supply and equipment price increases, civilian personnel pay raises, and real property maintenance contracts require $4.4 million. A $1.9 million reduction realized from the phaseout of support aircraft has been offset by an increase of $.5 million for substitute transportation procured from commercial sources.

	FY 75	FY 76	CHANGE	FY 7T
Air Force Academy	$21.2	$23.0	$+ 1.8	$ 5.8

The enrollment, man-years and funding requirements of the Air Force Academy remain essentially stable in FY 76 as compared to FY 75. The authorized cadet wing strength remains at 4,417. Cadet man-year utilization for FY 75 is 4,220 and for FY 76 is 4,138.

The FY 76 fund requirements are $1.9 million higher than FY 75 principally because of fuel and supply price increases, civilian pay raises, increased ADPE requirements, and the substitution of commercial travel for airlift previously available from support aircraft.

	FY 75	FY 76	CHANGE	FY 7T
Reserve Officer Training Corps	$15.2	$15.8	$+ .5	$ 6.0

The Air Force Reserve Officer Training Corps includes Senior and Junior ROTC programs. The Senior program has a two-year and four-year program. The two-year course begins with six weeks of basic military training during the summer before the junior year in college. The four-year course includes a four-week summer camp also before the junior year. Public Law 92-166 authorizes the Air Force to grant 6,500 ROTC students financial assistance. The Senior program is essentially stable as shown by the summary data in Table 39. The additional $.4 million in the FY 76 Senior ROTC program is for increases for tuition and textbooks and increased commercial travel requirements due to elimination of support air-

craft. The increases are offset by a reduction in the number of financial grants to be awarded in FY 76.

TABLE 39

SENIOR ROTC DATA

	FY 75	FY 76	CHANGE	FY &T
AFROTC Detachments	168	168		168
Graduates Commissioned	3,855	3,285	- 570	180
Average Student Enrollment	18,807	18,209	- 598	18,914
Financial Grants Awarded	6,500	6,175	- 325	6,175
Number of Cadets to Enter Flight Instruction Prgm	2,000	2,000		100
Funds ($ in millions)	$11.5	$11.9	$+ .4	$ 5.1

The ROTC program also includes Junior ROTC units. A total of 275 are authorized. Junior ROTC data are summarized in Table 40. A $.1 million increase over FY 75 is for additional instructors because of increased student enrollments and civilian pay raise.

TABLE 40

JUNIOR ROTC DATA

	FY 75	FY 76	CHANGE	FY 7T
Number of Schools Participating	266	275	+ 9	275
Average Student Enrollment	31,891	34,925	+3,034	36,575
Funds ($ in millions)	$ 3.7	$ 3.9	$+ .2	$ .8

MEDICAL

(In Millions)

	FY 1975	FY 1976	Change	FY 197T
Air Force	$213.3	$250.8	$+37.5	$62.2

The major elements of this program provide for:

- Operation of 99 hospitals and attendant community health services in FY 1975 and 95 in FY 76.
- Operation of dental clinics integral to the hospitals
- Operation of specialized dental, radiological,

industrial medicine, environmental health, and epidemiology laboratories

- Medical care and hospitalization of authorized personnel from civilian, VA, HEW (Public Health Service), and Canal Zone sources

- Identification and rehabilitation of personnel with drug and alcohol problems

- Aeromedical evacuation for all DOD forces to include operation of six Aeromedical Staging Units

Decreases in active duty Air Force personnel and dependents are offset by increases in the number of retired, their dependents, and dependents of deceased military personnel

Increased fund requirements in FY 1976 are the result of fuel, supply, medical services cost increases, and transfer of funding responsibility for overseas intra-theater aeromedical evacuation from Major Force Programs II and VII.

Medical workload data are summarized in Table 41.

TABLE 41

MEDICAL WORKLOAD DATA

	FY 1975	FY 1976	Change
Average Daily Patient Load (ADPL)			
AF Hospitals	5,257	5,121	- 136
Outpatient Visits			
AF Hospitals	13,188,000	12,870,000	-318,000
Adjusted Admission Equivalent Workload	772,984	781,179	+ 8,195

Inpatient workload in Air Force hospitals continues to decline because of decrease in active duty strength, a decrease in the number of physicians, increased emphasis on treating patients on an outpatient basis, and a decrease in average length of hospital stay. The decline in the active duty force caused a slight decrease in outpatient visit. Ancillary workload associated with

both inpatient and outpatient care (e.g., laboratory procedures, x-ray, prescriptions, etc.) continues to increase because of the complexity and sophistication of medical care. Although the hospital workload appears to decline when measured in terms of inpatient days and outpatient visits, the total workload when measured in terms of a more meaningful output measure such as the Adjusted Admission Equivalent, which considers ancillary workloads increases approximately 1%.

The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) was transferred to OSD effective FY 1975, and the overseas portion has been identified for transfer to OSD in FY 1976.

MAJOR FORCE PROGRAM IX
ADMINISTRATION & ASSOCIATED ACTIVITIES

The FY 76 requirement of $272.4 million for Administration and Associated Activities is an increase of $15.1 million from the FY 75 amount. The funds requested for these activities are summarized in Table 42.

TABLE 42

ADMINISTRATION & ASSOCIATED ACTIVITIES FUNDING
($ Millions)

	FY 75	FY 76	Change	FY 7T
Departmental Headquarters	$ 50.9	$ 48.7	$- 2.2	$12.0
Field Headquarters & Activities	97.6	100.4	+ 2.8	24.9
Service-Wide Support	96.4	109.3	+12.9	27.5
Other Support Activities	12.4	14.0	+ 1.6	3.5
TOTAL	$257.3	$272.4	$+15.1	$67.9

Table 43 compares the FY 75 and FY 76 manpower end strengths. Pay of civilian personnel constitutes 60% of the requirement of funds in this force program.

TABLE 43

ADMINISTRATION & ASSOCIATED ACTIVITIES MANPOWER

	FY 75	FY 76	Change	FY 7T
Military Personnel	16,362	16,113	-249	16,079
Civilian Personnel	11,111	10,814	-297	10,813
TOTAL	27,473	26,927	-546	26,892

	FY 75	FY 76	Change	FY 7T
Departmental Headquarters	$50.9	$48.7	$-2.2	$12.0

The Departmental Headquarters grouping funds the operations of the Office of the Secretary of the Air Force and Headquarters United States Air Force. These offices in the Washington, D.C. area are engaged in the formulation of plans and policies and the supervision and direction of subordinate offices, agencies and commands.

Civilian personnel end strength will be 2,010 in FY 76, down 172 from 2,182 in FY 75. The related reduction in civilian man years has offset increases for civilian pay raises.

There is an increase of $.7 million for the development of studies, methodologies, and computer models to support our Studies and Analysis program. The requirements for commercial travel have increased $.4 million because of the reduction in support aircraft.

	FY 75	FY 76	Change	FY 7T
Field Headquarters and Activities	$97.6	$100.4	$+2.8	$24.9

Funds are required for the operation of the Headquarters Command activities at Bolling AFB, Washington, D.C., and Andrews AFB, Maryland; the Air Force Accounting and Finance

Center at Denver, Colorado; and the Air Force Data Automation Agency at Gunter AFB, Alabama; the USAF Southern Command, Albrook AFS and Howard AFB in the Panama Canal Zone. Requirements for Aviation POL will decrease by $4.4 million because of the deactivation of support aircraft.

The Air Force is the Executive Agent for the Tri-Service Medical Information System. Lease of automatic data processing equipment and acquisition of software to support this program will require an additional $4.4 million in FY 76. Full year rental costs and upgrading other computer systems will require an additional $1.6 million for rental and maintenance.

Civilian personnel end strengths will decrease by 89, from 5,124 in FY 75 to 5,035 in FY 76. Fund requirements for civilian pay will consequently decrease by $2.5 million in FY 76.

Equipment, furnishings, and moving costs for the new Air Force Accounting and Finance Center building at Lowry AFB, Colorado, and furniture for the new dormitories at Andrews and Bolling AFBs will require $1.7 million.

Travel requirements increase $1.1 million because the procurement of commercial transportation to offset the loss of support aircraft and for additional commercial school bus transportation for on-base school children moving into the new family housing units at Bolling AFB.

The 1 July 1975 price increase announced by the Defense Stock Fund will require $.9 million.

	FY 75	FY 76	Change	FY 7T
Service-Wide Support	$96.4	$109.3	+$12.9	$27.5

Service-wide support funds are for the operations of the USAF Auditor General, the Inspector General, the Air Force Military Personnel Center, Civil Air Patrol, Public Affairs and Real Property Maintenance Activities.

Civilian end strength for these activities will decrease by 36 from 3,310 in FY 75 to 3,274 in FY 76. Civilian pay raises and full man year utilization will require an increase of $5.2 million.

Beginning in FY 75, Public Law 92-313 required the Air Force to reimburse the General Services Administration for occupied space and services leased from GSA. This program will require an additional $1.7 in FY 76 as a result of GSA price increases.

An additional $1.9 million is required for commercial travel to offset the reduction in support aircraft; new programs in support of the volunteer Air Force; and support of the American Bicentennial Department of Defense Exhibit Van Program. The vans will travel throughout the country in four groups of four vans each.

Through the use of audio visual techniques, these vans will portray the history of the U. S. Armed Forces and their medical, social, economic, environmental, technological, and other beneficial contributions to the nation during the last 200 years. The mobility of these vans permits exhibits to be seen by many people who cannot afford to visit major Bicentennial attractions but who would like to participate locally.

There is also an increase of $1.5 million for supply price increases; $1.5 million for computer systems installed at the Air Force Military Personnel Center during FY 1975; utilities and services for construction, and contractual processing services for computer assisted audit capability and computer output microform capability development will require an additional $1.0 million.

	FY 75	FY 76	Change	FY 7T
Other Support Activities	$12.4	$14.0	$+1.6	$3.5

Included in other support activities are Headquarters Aerospace Audio-Visual requirements, the Air Force Band and funds to provide the Secretary of the Air Force with flexibility to meet emergency or extraordinary situations and to be expended solely on the authority of the Secretary. These funds will be used to maintain the standing and prestige of the United States by extending official courtesies to certain officials and dignitaries of the United States and foreign countries. The funds are also needed for special occasions, such as dedication ceremonies and Armed Forces Day activities.

The $1.6 million increase in this area will provide for fuel and supply price increases, pay raises, and relocation of the 136st Photo Squadron of the Aerospace Audio-Visual Service from Arlington, Virginia to Bolling AFB, D. C.

MAJOR FORCE PROGRAM X
SUPPORT OF OTHER NATIONS

Table 44 summarizes the funds in FY 76 for the U.S. share of support to NATO (North Atlantic Treaty Organization), CENTO (Central Treaty Organization), SEATO (Southeast Asia Treaty Organization) and SHAPE (Supreme Headquarters Allied Powers Europe) Military Headquarters and Agencies; and operating costs of Military Assistance Advisory Groups (MAAG's) and Missions in Europe, the Pacific and South and Central America.

TABLE 44

(In Thousands)

	FY 74	FY 75	FY 76	FY 7T
Vietnam	$171,476	-	-	-
Laos	31,179	-	-	-
Subtotal MASF	$202,655	-	-	-
Int'l Mil HQ & Agencies	535	$ 678	$ 660	$164
MAAG's & Missions	1,050	929	512	16
	$204,240	$1,607	$1,172	$180

VIETNAM

Support of Vietnam requirements was converted from Military Assistance Service Funded (MASF) financing to Defense Assistance to Vietnam (DAV) financing beginning FY 75.

LAOS

The Lao Air Force is no longer provided for in the MASF program. Effective with FY 75, fund support for Laos was transferred to the Military Assistance Program (MAP).

International Military Headquarters and Agencies

The Air Force support of NATO, CENTO, SEATO and SHAPE military headquarters funded in this program remains stable in FY 76.

Military Assistance Advisory Groups and Missions

The MAAG's and Missions will decrease by $417 thousand because of reduced aviation fuel requirements as newer and smaller aircraft replace the current aircraft; transfer of COMUSMACTHAI personnel costs to the Navy as executive agent for Thailand; and transfer to procurement appropriations of a portion of the training costs for USAF pilots assigned COMUSMACTHAI.

SUMMARY

In summary, the Operation and Maintenance requirements of the Air Force total $7.956 billion in FY 76 and $2.020 billion in FY 7T. These requirements have been stringently reviewed by the Air Force, OSD and OMB. The process began in January 1974 and has been continuous since that time. The funding is the minimum needed for the operation and maintenance of the Air Force program described in the budget. If adjustments are necessary, it is important they be made in both program and funding to maintain the proper balance between responsibilities and resources. Mr. Chairman, this completes my statement.

AIR FORCE FISCAL YEAR 1976 AND FISCAL YEAR 197T O. & M. REQUEST

General BLANTON. Mr. Chairman and members of the committee:

I appreciate the opportunity to present the Department of the Air Force's fiscal year 1976 and 197T budget requests for the Operation and Maintenance, Air Force (O. & M.) appropriation.

The fiscal year 1976 O. & M. requirement is $7.956 billion. This is $628 million more than the adjusted fiscal year 1975 program of $7.328 billion. There are only minor changes in force levels between fiscal year 1975 and fiscal year 1976.

The additional funds are required to meet price increases for goods and services and for funding responsibilities that have been transferred to the O. & M. appropriation.

The fiscal year 1975 column in the fiscal year 1976 budget has been adjusted to include pending supplementals for civilian pay raises, for transfers of funds between appropriations and for the proposed rescission.

This budget estimate includes funds for the interim period, July 1 through September 30, 1976, which is designated fiscal year 197T. The $2.020 billion requested is based on the same dollar factors and price and pay levels as fiscal year 1976 and is 25.4 percent of the total fiscal year 1976 requirement.

The O. & M. funding requirements by major program are furnished below.

[The figures follow:]

MAJOR FORCE PROGRAM FUNDING

[In millions of dollars]

	Fiscal year—			
	1974	1975	1976	197T
Strategic forces	1,250.4	1,517.1	1,651.7	418.9
General purpose forces	1,075.0	1,322.4	1,433.1	368.2
Intelligence and communications	539.8	579.1	624.0	155.1
Airlift	192.7	277.4	504.2	146.0
Central supply and maintenance	2,435.4	2,534.1	2,557.0	630.5
Training, medical and other general personnel activities	960.1	838.7	912.7	233.5
Administration and associated activities	224.1	257.3	272.4	67.9
Support of other nations	204.2	1.6	1.2	.2
Total	6,881.7	7,327.7	7,956.3	2,020.3

ADDITIONAL COST OF FUEL

Senator YOUNG. How much additional money are you requesting for fuel—gasoline and jet fuel?

General BLANTON. For jet fuels?

Sir, our 1976 grand total of fuel to include the flying and nonflying is $1.9 billion.

Senator YOUNG. What was your request the previous fiscal year?

General BLANTON. $1.7 billion in 1975.

It is a $200,000 increase.

If you were to go back to 1973, it would be a much more significant increase. It is a 242 percent increase in cost while our flying hours have gone down, compared to 1973, 66 percent of the 1973 program.

We have reduced our program to approximately two-thirds while we have had 242 percent increase in cost during that 2-year period.

Senator YOUNG. Is there a restriction on the number of flying hours?

General BLANTON. In 1975, we had to really carefully manage our flying hour program because of inflation. Because of that, we are before the committee for a reprograming request which, I understand, will be considered shortly to allow us to continue our flying hour program.

Senator YOUNG. You may proceed.

General BLANTON. I will now address the O. & M. funding requirements for each major force program.

STRATEGIC FORCES

Strategic forces encompass the two major subelements: offensive and defensive. These forces provide the needed capabilities for deterrence of nuclear war, warning of any impending attack and air defense forces.

An increase of $135 million is required for fuel, supply, and equipment price increases, transfers of funding responsibility for base level reparables, for civilian pay raises, real property maintenance deferred from fiscal year 1975, and rehabilitation of Titan II support facilities.

There are offsetting decreases from reductions in the flying hour programs to include the initial transfer of KC–135 aircraft to the Air Reserve Forces.

GENERAL PURPOSE FORCES

Air Force general purpose forces consist primarily of the Tactical Air Command, Pacific Air Forces, and U.S. Air Forces Europe.

During fiscal year 1976, changes of $110.7 million are programed for fuel and supply increases, full-year costs of fiscal year 1975 civilian pay raises, the transfer of funding responsibility from other appropriations for base level reparables, increased JCS exercises, the introduction of F–5E and F–15 aircraft into the active inventory, an increase in crew ratios for tactical fighter aircraft, the transfer of C–130 airlift missions to MFP IV, and the transfer of four RF–4 squadrons to the ANG.

Senator YOUNG. As you acquire more F–15 fighters, what planes do you take out of inventory? You gave some F–4's to the National Guard.

General GREENLEAF. To the Air Reserve Forces, both the Air National Guard and the Air Force Reserve.

General BLANTON. We are transferring some of the F–4C's to the modernized Guard and Reserves.

I believe the A–7's will also be phasing into the Guard Forces.

General GREENLEAF. The out-year procurement program for A–10's will consist of procuring new A–10's for the Air Reserve Forces.

INTELLIGENCE AND COMMUNICATIONS

General BLANTON. This element provides for national, DOD, and Air Force intelligence and security programs; world-wide communications; and for specialized functions such as weather, rescue, and traffic control, satellite control, and the National Military Command System.

An increase of $45 million is required for fuel, supply and equipment price increases, civilian pay raises, transfers of funding responsibilities for base-level reparables and the Electromagnetic Compatibility Analysis Center, and additional intelligence and communication support.

Senator YOUNG. Do you work through DIA on your intelligence program?

General BLANTON. Yes, sir, we do.

AIRLIFT FORCES

The airlift program provides for essential training and support requirements to insure the ready responsiveness of airlift forces. An additional $226.8 million is required for fiscal year 1976.

Major reasons for the increase are: the increases in the price of supplies and aviation fuels and the transfer of funding responsibility for base reparables.

In fiscal year 1976, the Air Force will consolidate tactical airlift and support aircraft under the Military Airlift Command. Also, local area aircrew training, and other essential C–5 and C–141 flying training hours not subscribed by DOD airlift users will be funded in the O. & M., Air Force appropriation.

CENTRAL SUPPLY AND MAINTENANCE

Provides logistical support for Air Force operations including the distribution of materiel, materiel management, prime procurement, and contract management, depot maintenance second destination transportation and operation of the eastern test range.

An increase of $22 million from fiscal year 1975 to fiscal year 1976 results from increased workload related to intelligence programs; depot maintenance rate increases, transportation tariff increases, and increased claims to the Bureau of Employment Compensation. These increases are partially offset by depot maintenance and transportation workload decreases.

TRAINING, MEDICAL AND OTHER GENERAL PERSONNEL ACTIVITIES

Provides for training, medical, and other activities for personnel, as individuals rather than members of organizations.

An additional $74 million is required for fiscal year 1976 fuel and supply price increases; civilian pay raises; commercial travel to substitute for support aircraft being eliminated; and for the transfer of funding responsibilities for base level reparables, cryptological training, and overseas intratheater aeromedical evacuation.

Senator YOUNG. You say "commercial travel to substitute for support aircraft being eliminated."

General BLANTON. Yes, sir.

Senator YOUNG. Do you plan to use the commercial airlines more?

General BLANTON. Yes, sir; we do.

We have included in our budget, because of the phaseout of 400 support aircraft, an additional amount of money for our personnel to travel commercial.

In total, I should point out that this is a program that will save substantial flying hours, about 6,000 man-years. It will also result in annual savings ultimately of about $100 million a year even after paying for this additional commercial travel. It will save something like 150,000 gallons of fuel a day.

We think it is a very cost-effective effort.

Senator YOUNG. Does the serviceman have the option?

General BLANTON. In the CONUS, he would go to our transportation request offices and they use the airline schedule to meet his travel in CONUS, principally by domestic means.

[Discussion off the record.]

General PATCH. There was a law passed January 14 that requires we fly American. So, it is exclusively American carriers registered in the United States.

General BLANTON. I should say the amount included in this overall O. & M. travel because of the phaseout is $19 million.

When I gave you the net savings of $100 million a year, that is even after paying that added cost.

Senator YOUNG. Besides saving money in the Air Force budget, it helps the airlines, too.

General BLANTON. Absolutely.

ADMINISTRATION AND ASSOCIATED ACTIVITIES

Funds are for the operation of the departmental headquarters, selected field headquarters, and operating agencies.

An increase of $15 million is required for commercial travel to offset the loss of support aircraft, and for price increases for fuel, supplies, and equipment, and annualization of fiscal year 1975 civilian pay raises.

SUPPORT OF OTHER NATIONS

The funds are for the support of units and activities providing support for international military headquarters and agencies.

SUMMARY

In summary, the operation and maintenance requirements of the Air Force total $7.956 billion in fiscal year 1976, and $2.020 billion in fiscal year 197T. These requirements have been stringently reviewed by the Air Force, OSD and OMB.

The funding is the minimum needed for the operation and maintenance of the Air Force program described in the budget.

Mr. Chairman, this completes my statement.

SUPPORT COSTS REDUCED

Senator YOUNG. You have packed a lot of information into six pages.

General BLANTON. Thank you, sir.

Senator YOUNG. Can you cite examples of areas where support costs were assessed and reduced to insure sufficient resources for accomplishment of higher priority programs?

General BLANTON. I would like to first set the scene and call on my colleagues to amplify, if I may.

The Air Force is pointing toward an objective of increase or, I should say, filling up its 26 TAC fighter wings to a fully equipped status within the manpower we have today of 590,000 end strength for military and 255,904 for civilian forces, direct hire.

We do plan to do that by enforcing actions as you cite, cutting back on support needs in order to be able to increase our combat capability.

One example of the thing we are talking about I have already stated. That is the phaseout of 400 support aircraft to allow us to save $100 million ultimately per year and allow that resource and that 6,000 end strength in manpower to be applied to combat capability, such things as mentioned in our statement, increasing crew ratio per aircraft levels back from 1.1 to 1.25 for tactical fighter forces which translate into added capability should a crisis arise.

I will call on General Greenleaf to amplify.

General GREENLEAF. We have also gone forward in disestablishing a number of management headquarters, five air divisions, and two numbered air forces which is in consonance with the direction of the conference report in the 1975 Appropriations Act which charged the Air Force to continue that kind of activity in fiscal year 1975 and fiscal year 1976.

Second, we have embarked on a number of unit realinements and the amalgamation of various Air Force commands, for example, the amalgamation of the Air Force Communications Service and the Military Airlift Command, each of which has worldwide responsibilities and units at most Air Force installations around the world.

We estimate the manpower cost avoidances of some 400 spaces at this point in time from just the disestablishment of AFCS Headquarters, and an additional 500 from the amalgamation of field activities of those two commands.

That is our preliminary estimate.

As General Blanton remarked, we have applied those kinds of manpower cost avoidances to the improvement of Air Force combat capability by transferring from support functions.

General BLANTON. Manpower, as we all know, is growing more and more costly.

One of the reasons we set ourselves to the goal of holding our manpower level is to gain some control over that cost, to apply more of that capability to combat forces.

General POSNER. I might simply point out in the aggregate the support initiatives, several of which have been mentioned, will result in a total reduction of 22,000 military and 8,200 civilian personnel in the budget period. We are talking about a 30,000-man reduction ascribed to the support initiatives which have been outlined. They run the gamut, as both General Greenleaf and General Blanton have pointed out, from headquarters reductions which resulted in an aggregate savings of more than 3800 manpower spaces, including the consolidation of Air Force Communications Service and Military Airlift Command that General Greenleaf cited, as well as others, through reductions of such activities as ceremonial guards and bands, through training establishment reductions and productivity improvements which allow us to reduce our manpower through capital investments in depot plant modernization programs which make the equipment more efficient and thus allow us to reduce our people.

As I said at the outset, in the aggregate, a reduction of 30,000 spaces is ascribed to these support initiatives.

Senator YOUNG. I wish to commend the Air Force for the savings that you have brought about. It looks like a bare-bone budget.

A combat ready Air Force is certainly necessary in the kind of world we live in today. I wish we could get the story across to the Congress and the people.

What specific decreases, military and civilian, have been made in the program involving the transfer of the KC–135's to the reserve components?

TRANSFER OF KC–135'S TO RESERVE FORCES

General GREENLEAF. This is a program to commence in fiscal year 1976 and lasting over 4 years where, in conjunction with the Air Force Reserve and the Air National Guard, we have programed the conversion of one eight UE aircraft unit per fiscal quarter to the Reserve components.

This will facilitate, with a program lasting over 4 years, the training of both Guard and Reserve aircrew and maintenance personnel and should permit the receiving Guard and Reserve organizations to attain combat ready status within 9 months of each conversion.

The manpower reductions in the active force associated with that transfer, the reduction in aircrew manning ratios for the B–52, FB–111 and KC–135 total in the aggregate some 6,000.

As General Blanton and General Posner have mentioned, we have applied those manpower authorizations to the improvement in combat capability in such organizations as the 26th existing TAC fighter wings.

Senator YOUNG. I hope in making the transfer of the KC–135 to the Air National Guard that you don't deactivate the best unit.

I had a little problem with the Air National Guard in North Dakota. They won the William Tell Trophy twice. They would not like to be deactivated or flying the KC–135's.

General GREENLEAF. Arrangements with the Guard in several States have been completed, first of all the Governor has to accept the KC–135 equippage and then, second, like the Air National Guard interceptor unit, agree to commit those tankers to SAC at a certain level of readiness and also for each of the units to maintain at least one KC–135 on alert just like the active establishment.

Senator YOUNG. They use the KC–135 to refuel the B–1, too.

General GREENLEAF. The B–1, B–52, C–5, tactical fighters, tactical reconnaissance aircraft and, hopefully, the C–141.

REDUCTIONS RESULTING FROM REDUCED ALERT

Senator YOUNG. What has been the specific reductions in air crews and maintenance personnel as a result of decreasing the percentage of aircraft on ground alert from 40 percent to 30 percent?

General GREENLEAF. In the B–52D's in the United States, there is no change.

In terms of the B–52D's in the Pacific, based at Andersen Air Force Base, Guam, the crew ratio decreased from 1.64 to 1.29.

In terms of the B–52G and H wings, the decrease is from 1.64 to 1.29.

In the case of the two FB–111 wings, it is from 1.50 to 1.27.

The KC–135's will be from 1.5 to 1.27.

Those reduced crew ratios for the B–52's, the KC–135's and the FB–111's will permit full generation of every SAC aircraft in the event the single integrated operations plan is ever ordered implemented.

So, there are sufficient crews to fully generate the SAC tanker and bomber force.

Under the earlier crew ratios SAC was able to maintain approximately 40 percent of the aircraft on alert. Under the revised crew-manning ratios SAC is able to maintain approximately 30 percent of the B–52's, the 135's, and the FB–111's on indefinite day-to-day alert.

General BLANTON. The total military and civilian reduction related to the alert rate change is about 6,300.

Senator YOUNG. You have two different alerts for the B–52?

General GREENLEAF. It is higher overseas in the Pacific area than it was here in the United States because they were participating in Southeast Asia operations.

Senator YOUNG. What is the time factor for alert, the shortest period of time? How much time do they have to take off?

General GREENLEAF. The escape times with the quick start modifications that are being made in the B–52 force and the KC–135 force, the aircraft can launch in approximately [deleted] minutes from initial notification.

Senator YOUNG. The recent position taken by Thailand will require that we get everything out of Thailand within a year; is that correct?

General GREENLEAF. I have not seen, sir, any of the State Department traffic but that is my understanding, on the assumption that the press reports are correct, and we are currently, at General Jones' instruction, developing a program to withdraw all U.S. Air Force forces within a year, should that be required.

[Discussion off the record.]

AIRLIFT SUPPORT TO MIDDLE EAST/REFUELING

General PATCH. In the operation in the Middle East, during the Israeli activity, we were dependent on the Azores for a refueling location. If we had not had the Azores, we would not have been able to use the C–141 because they just don't have sufficient range capability to fly that distance with any cargo load.

With aerial refueling in both the C–5's and C–141's, we are not dependent on bases such as the Azores for refueling, and we will have the flexibility of operating worldwide with an effective load.

Senator YOUNG. Where would you refuel the cargo planes going to Israel?

General PATCH. They will be refueled in the air, sir, with tankers.

Senator YOUNG. From what base?

General PATCH. Operating from the continental United States. The KC–135's can go out 2,000 miles and top off the transport aircraft.

COST OF ACTIVE VERSUS ANG KC–135 UNITS

Senator YOUNG. Why are there two KC–135 squadrons being deactivated and four Air National Guard squadrons being formed?

If only two Guard squadrons were formed with the same number of aircraft as in the active squadrons, what would be the cost savings?

General GREENLEAF. The inactivation of the active KC–135's and the transfer of the equipment to the Air Reserve Forces is time-phased.

Now, the determination of how many aircraft could be supported in an Air National Guard or Air Force Reserve KC–135 unit is a determination of the National Guard Bureau and the Air Force Reserve.

It is indeed sensitive to the recruiting potential at the various bases around the country to which these reserve KC–135 units will be assigned.

General BLANTON. The principal driving cost, Mr. Chairman, is the flying hour program.

The difference between the active and Guard/Reserve flying essentially derives from the capability that we translate into sortie rates and flying hours.

If you were to fly the same number of hours in the Guard unit as in the active force, there would be no savings. Since they do not fly that same flying hour program, there are savings, reductions in cost per squadron by moving the units to the Air National Guard.

When we price out the incremental cost of operating a TAC fighter unit, we don't get into that sort of allocation of fixed cost of operating to a part of the unit.

If you look at purely the incremental cost of a fighter unit or tanker unit in the Guard versus the active force flying the same number of hours, our experience over a long period of time is that there really is no difference between the two.

REDUCTION OF SATELLITE BASES

Senator YOUNG. Why is there a reduction in the number of satellite bases if these provide a dispersal advantage to the bomber fleet?

General GREENLEAF. On the assumption there will be strategic warning and with adjustments in the SAC force structure such as the reduced alert rates and in recognition of the resource constraints upon the Air Force, it was the recommendation of the Commander in Chief of the Strategic Air Command that the number of satellite bases be reduced in peacetime but the Air Force will retain reentry rights to the satellite bases so that in a worsening international situation the aircraft could deploy not only to the existing satellite bases but to a number of commercial airdromes, as well.

Senator YOUNG. What satellite bases are you planning on continuing?

General BLANTON. We are programing down to eight: [Deleted.]

On the main operating bases, we will go down to three: [Deleted.]

The reduction is about $2 million.

AUGMENTATION OF STRATEGIC DEFENSE FORCES

Senator YOUNG. How many F–4's are available for augmentation of the strategic defense forces in fiscal year 1975 and planned for the out years?

General GREENLEAF. I would like to answer that in two ways, if I may, Mr. Chairman.

As part of the Secretary of Defense's program for fiscal year 1976, for the first time there is provision made for the peacetime augmentation of the Air Defense Command by the Tactical Air Command.

General Clay, the Commander in Chief of NORAD, has identified some 26 alert locations as being necessary for the new CONUS air defense mission.

The combined Air Defense Command and Air National Guard force of F–106 squadrons, a total of 12, 6 each, can only maintain alert at 19 of those locations. So, in peacetime the Tactical Air Command will provide air defense augmentation at various bases such as Homestead in Florida, MacDill in Florida, Eglin in Florida, Holloman in New Mexico, George in California, and Seymour, Johnson in South Carolina.

Now, under wartime conditions, the number of aircraft committed by the Tactical Air Command to the Air Defense Command is planned at [deleted].

In addition, there are U.S. Navy and U.S. Marine Corps aircraft also committed to wartime augmentation.

General BLANTON. In total, we have added in the budget to provide training in this secondary role for TAC fighters about $4 million to give the flying hours the crews will need to fly intercepts and become qualified in that secondary role.

Senator YOUNG. Who will have operational control of these F–4's?

General GREENLEAF. CINCNORAD, Commander in Chief of the North American Air Defense Command.

Senator YOUNG. What type of specialized training do the Air Force units receive who will provide this augmentation?

General GREENLEAF. Air defense interceptor training.

As you know, sir, we have a number of Tactical Air Command F–4E units that are already sustaining air defense alert.

For example, four squadrons in Germany, the one squadron in Alaska, are assigned this role.

We also have programed an Air National Guard F–4C squadron to assume air defense alert in Hawaii.

So, it is not a new mission area for the Tactical Air Command.

Senator YOUNG. What is the total annual cost of such training?

General BLANTON. I got ahead of you a little bit.

In total, it is about $4.4 million for the training, as well as the TAC operation cost. It is all related to flying hours required to give these crews a full capability in this secondary mission.

FIGHTER FORCE FLYING HOUR INCREASE

Senator YOUNG. Explain why an increase of 55,000 flying hours is required in the fighter force.

General GREENLEAF. That reflects the increase in the air crew manning from a ratio of 1.1 to 1.25 increase in the number of pilots, the maintenance personnel, the flying hours associated with the training of those pilots, so that the number of sorties in a combat situation which a tactical fighter unit could generate is increased over what they are able to do today.

AIRLIFT CONSOLIDATION

Senator YOUNG. Are only Air Force airlift resources being consolidated under the Military Airlift Command as the single defense manager?

General GREENLEAF. As a single Air Force manager at this point, sir.

Senator YOUNG. Why should not airlift of other services be consolidated, as well?

General GREENLEAF. To the best of my understanding, the Secretary of Defense has that under consideration but no decision has been made.

General PATCH. The airlift requirements are being combined under the Military Airlift Command so that the Air Force assets in that one command will fulfill the airlift requirements for the other services.

Although we are not integrating the assets from the other services into the Military Airlift Command, the airlift requirements are being integrated so that MAC will perform all those airlift requirements.

The disposition of the other airlift aircraft is under consideration by the Department of Defense.

We are also consolidating the Navy's QuickTrans system which is the commercial cargo system within the continental United States with the Air Force's Logair system so that we will have one single domestic commercial cargo airlift system within the continental United States.

Senator YOUNG. Consolidation is another means here of reducing expenditures by a sizable amount.

METHODS OF SAVING

Could you make out a list of 10 or 15 major ways in which you have brought about savings?

General BLANTON. We will provide that for the record.

Senator YOUNG. Thank you.

[The information follows:]

MAJOR SAVINGS

Savings will result from the phase-out of support aircraft; realignment of active satellite bases; reduction in crew ratios for strategic aircraft; phase-out of Moorestown, N.J. SLBM radar, the Over the Horizon forward scatter radar system and Airborne Early Warning and Control System; elimination of surface recovery ships for the Satellite Control facility; consolidation of depot maintenance workload in Technology Repair Centers; the reduction in FY 1976 of undergraduate pilot and navigator student flying training loads; the reduction of repair costs resulting from the Methods Laboratories; savings resulting from the Depot Plant Modernization Program. In addition savings will result from unit realignments and the amalgamation of the Air Force Communications Service and Military Airlift Command and, from reductions in Headquarters personnel.

These savings have been applied to combat capability, such as increasing the crew ratios for tactical forces.

AWACS FISCAL YEAR 1976 FUNDING

Senator YOUNG. Describe the need for fiscal year 1976 funding for equippage and supply support for the Airborne Warning and Control System.

When will the first aircraft become operational, and why can't these supplies be deferred into fiscal year 1977?

Mr. McElhanon. Sir, the AWACS program comes into inventory during fiscal 1977. We are dealing with a factor of leadtime with a requirement to order the items of the expense type funded in this appropriation in order to get them delivered at the time the aircraft are assigned.

AIRLIFT MISSION ACTIVITIES

Senator Young. Explain what caused the peacetime reduction in cargo requirement causing essential strategic airlift flying training hours to be unsubscribed by airlift users.

General Patch. Mr. Chairman, that derived primarily from two major factors: The withdrawal of forces from overseas, the reduction of the activity in Southeast Asia, and a reduction in our overall flying hour activity of airlift overseas.

We have a lesser force deployed forward that has to be supported and lesser activity of that force that remains in the overseas area.

There is less logistics support required.

Senator Young. I wish you would furnish for the record the number of overseas air bases 5 years ago and the number planned under the budget.

General Patch. Yes, sir; we will provide that.

Senator Young. It must be a sizable reduction.

General Greenleaf. Yes, sir, since 1968, the total number of major installations in the Air Force has been reduced by 25 percent.

I will have to provide for the record the breakdown between overseas and CONUS.

[The information follows:]

Number Overseas Bases/In Budget vs. 5 Years Ago

The overseas air bases 5 years ago and those planned under this budget are:

U.S. Air Bases—Overseas

1971	52
1976	37

The breakdown of overseas and Conus bases since 1968 is:

1968:	
Overseas	69
Conus	129
Total	198
1976:	
Overseas	37
Conus	105
Total	142

LOCAL AREA AIR CREW TRAINING

Senator Young. Why is Air Force assuming funding responsibility of local area air crew training in fiscal year 1976 for the airlift forces?

General Blanton. The requirement for airlift flying hours, crew readiness; in fiscal year 1975, with the concurrence of reprograming that we have before the committee, our program will be 327,000 hours

for both the C–5 and C–141. That is a suppressed program, one that we have not had the resources to maintain the upgrading of our copilots to pilot status.

If the 1976 program were approved, there would be a nominal increase to 353,000 hours, which would give us back the capability to maintain crew readiness which is the driving force of the total program.

General PATCH. In order to maintain an ability within the Military Airlift Command to surge in a contingency situation from the minimum program which is approximately 2½ to 3 hours a day to a surge rate of 10 to 12 hours a day, we have to maintain the readiness of the crews. Now, that minimum training flying hour program cannot be sustained without being subsidized from the O. & M. account because there is insufficient revenue coming into the industrial fund to accommodate that minimum flying hour program, the matter we just discussed, the lessening of the peacetime traffic going into the system.

Senator YOUNG. What type of training is it?

General PATCH. This is local training in the local traffic pattern where they exercise landings and takeoffs, engine procedures, emergency procedures. Those are nonairlift producing flying hours.

The second kind of training is that which is performed in operating to the overseas locations. We must maintain a total system in Military Airlift Command in order to exercise it and be sure they are flyable for a contingency.

So, the aircraft operating between the continental United States and overseas locations do, in fact, generate airlift as a byproduct of that training.

This is your long-range navigational training, route familiarization, strange airfield familiarization, and this sort of thing.

Senator YOUNG. Who previously funded it?

General PATCH. As indicated by General Blanton, in fiscal year 1975 we flew a deficit; it was not funded in 1975; and we were unable to upgrade our copilots as a result of not having funded that.

General BLANTON. Actually, you compare 1975 to the 1976 flying hour programs, the increase is really only from 327,000 hours to 353,000 hours, a nominal increase.

I would point out that we are looking hard at not only training our crews but making effective use of this airlift.

As an example, we fully plan to use $24 million of the $39 million we have asked for in the 1975 reprograming to execute an additional joint exercise called gallant shield. Out of that $39 million we will get good training, good effective interservice training between Army, Navy, and Air Force.

Our exercise program for fiscal year 1976 would also allow us, if these flying hours are approved by the committee, to undertake additional training which will not only benefit the crews in realistic training exercises but also will allow the Army to participate in those exercise programs to the extent they have not been able to in the last several years.

As we move away from the experienced capability we had coming out of Southeast Asia, these kinds of exercises become more and more important. We think that is an effective way of using the flying hours that we have asked for.

PILOT TRAINING UNDER SECURITY ASSISTANCE PROGRAM

Senator YOUNG. Describe the pilot training accomplished under the security assistance program, which countries and what aircraft.

Colonel BAKER. Security assistance program pilot training, by type of aircraft, has been, or will be provided, to the following countries during fiscal year 1975.

UPT (T41/T37/T38)	El Salvador, Honduras, Indonesia Portugal, Nicaragua.	Bolivia, Thailand, Venezuela, Panama, Paraguay.	Vietnam, Chile, Kuwait, Nigeria, Iran.	Belgium, Saudi Arabia, Norway, Denmark.
Instructor pilot (T38)	Peru, Taiwan, Philippines.	Jordan, Thailand, Korea.	Pakistan, Denmark, Saudi Arabia.	Greece, Afghanistan.
T37	Chile, Honduras	Vietnam, Guatemala	Peru, El Salvador	Jordan.
C130	Venezuela, Spain	Norway, Denmark	Greece, Saudi Arabia	Japan.
F5E	Jordan	Brazil	Malaysia	Taiwan.
F104G	Germany			
RF4	do			
0-2A	Turkey			
F-4	? do	Greece	Germany	

SECURITY ASSISTANCE TRAINING

General GREENLEAF. Within the Air Force Training Command establishment, we are providing to a number of countries undergraduate pilot training as well as technical training.

General BLANTON. Colonel Baker is here with us and will provide some details.

Colonel BAKER. The security assistance training program, as far as Air Training Command is concerned, involves about 20 countries. There are several programs that apply, depending on the country. Some countries that go through our standard undergraduate pilot training program.

Almost all of these countries do participate in the initial flight training program that involves the T-41 aircraft.

Senator YOUNG. Do they pay for that?

Colonel BAKER. Yes, sir, there are some countries that do come under the grant-in-aid program. I believe the majority of them are under Foreign Military Sales.

General BLANTON. From the viewpoint of this request, it is a fully reimbursable program. We receive reimbursement for those hours from either the country or grant-in-aid. To the extent of grant-in-aid, of course, that request is part of the grant-in-aid program.

General GREENLEAF. We have other training programs in progress. For example, at George and Luke Air Force Bases, we are providing F-104 and F-4 training to the Germans.

At Williams Air Force Base, in the F-5E, we are providing grant aid and FMS training to personnel from any of the countries which have purchased the F-5E, or which have been provided the F-5E under grant aid programs.

Senator YOUNG. Such as Saudi Arabia?

General GREENLEAF. There is an obligation in the outstanding letter of offer with the Saudi Arabians to provide F-5E training for over a 3-year program. But that training program will be fully reimbursed.

General BLANTON. In other words, that training in the letter of offer stage has not yet been formalized and included in the training program. It is being negotiated at the present time.

Senator YOUNG. I note we have been training German pilots at Luke Air Force Base for quite a long while. I am wondering why they come over here. They are quite capable of training their own pilots, are they not? I am not complaining, but I am wondering why you do that.

General GREENLEAF. They seem to have a great respect for our training procedures and the quality of the training of the Tactical Air Command.

For example, at Luke, the German Government finances all the maintenance and supply of the F–104's. In the F–4 training, the German Government has provided or is in the process of providing 10 F–4F's from new production. The F–4F was initially procured for equipage of the German Air Force

Senator YOUNG. There is more room for flying at Luke without getting in trouble in Germany.

AFA FLIGHT INDOCTRINATION

What is AFA flight indoctrination and why is there an increase in fiscal year 1976?

Colonel BAKER. The AFA flight indoctrination program is the indoctrination program at the Air Force Academy.

The reason for the increase is a slightly larger enrollment plus increased interest in the program out there.

All these folks that do participate in the flying indoctrination program at the Academy do not then participate in further light airplane or T–41 training programs when they enter the undergraduate pilot training program.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. Thank you for your good, helpful testimony. We do have further questions for you to answer for the record.

[The questions and answers follow:]

CATEGORIES OF AIRCRAFT FUNDED

Senator YOUNG. Describe the various measures used to characterize the aircraft inventory (e.g., active inventory, not operationally active, total aircraft inventory), and explain the differences.

General GREENLEAF. The Total Active Inventory (TAI) consists of active aircraft currently assigned or possessed by units to support operational flying missions. TAI includes Operating Active (OA) aircraft, Non-Operating Active (NOA) aircraft and Attrition Reserve (AR) as a part of NOA.

OA aircraft are assigned, with accompanying resources, to directly support the operational mission of a flying unit. To assure that the unit has the intended capability, the number of OA aircraft should equal the authorized unit equipage (UE).

NOA aircraft are an allowance authorized over and above UE which is intended to permit heavy maintenance and modifications without reducing the number of aircraft available for assigned missions. The NOA allowance is normally 10% of UE.

Attrition Reserve are those NOA aircraft over and above the normal 10% allowance that are available as replacements for future attrition.

The Inactive Inventory consists of aircraft in storage that are excess to above authorizations, both current and projected; aircraft permanently utilized for ground training; and aircraft loaned or bailed to foreign countries or test activities.

The total aircraft inventory is comprised of both the Total Active Inventory (TAI) and the Inactive Inventory.

The Authorized Active Inventory (AAI) is the sum of unit equipage (UE) authorizations including force UE; training UE; an allowance for NOA (normally 10% for combat systems); and testing. AAI refers to authorizations only and does not include physical assets.

Funding for Base Level Reparables

Senator Young. Explain why funding responsibility for base level reparables has now been transferred to operation and maintenance funding. Where was this previously funded?

General Blanton. DOD defines investment items as those for which the depot is the highest level of repair. Only investment items can be excluded from stock fund control and issued free to requisitioners. A 1973 GAO Audit Report criticized the Air Force for managing items repaired at field level as investment items merely because the unit cost was $100 or more. A 17 July 1974 DOD memo directed the Air Force to transfer these field reparable items to the stock fund instead of continuing the practice of funding them in the investment appropriation. This will be done in a mass transfer of about 32,400 items on 31 July 1975. From that date on, Air Force requisitioners must fund these items with O&M.

Strategic Offensive Force Change Actions/17th Bomb Wing Deactivation

Senator Young. Why is the 17th Bombardment Wing being deactivated and its assets being distributed to other active B–52H and KC–135 units? Why aren't these KC–135s transferred to the reserve components?

General Greenleaf. The 17th Bombardment Wing is being deactivated at Wright-Patterson AFB to increase the number of bombers assigned to the remaining five B–52H wings and to make permanent facilities available for consolidation of Air Force Systems Command flight test and aircraft modification activities. This will be accomplished without major military construction. Some seven of the 17th Bomb Wing's KC–135 tankers currently are programmed for transfer to the Air Reserve Forces. These aircraft will be relocated to Fairchild AFB, Washington, and subsequently will be transferred to an ANG KC–135 unit to be established at that base. The remaining eight KC–135s currently are programmed for reassignment to other SAC bases.

KC–135 Squadrons/Active vs. ANG/Numbers of Units and Costs

Senator Young. Why are two KC–135 squadrons being deactivated but four Air National Guard squadrons being formed? If only two Guard squadrons were formed with the same number of aircraft as in active squadrons, what would be the cost savings?

General Greenleaf. The optimum size for a KC–135 squadron in the active force is a 15 to 20 UE aircraft unit. However, it is not normally practical to form Air Reserve Force squadrons of this size because ANG KC–135 units with 8 UE aircraft spread the personnel requirements over the available manpower pool and are more compatible with available base facilities. In fact, several projected locations are not physically capable of accepting a 16 aircraft unit. Cost differentials for a 16 vs an 8 aircraft ANG unit would not be representative since they would be based on different locations, resources, facilities, and manpower. A force structure with 8 UE KC–135 units normally provides the best balance between cost and capability while complying with Congress' desire to maintain the ANG at ninety-one flying units.

Procurement of Arctic POL

Senator Young. Explain why there is a full-year procurement of Arctic petroleum, oil and lubricants (POL) for the strategic defensive forces.

General Blanton. Petroleum, oil and lubricant (POL) requirements for the Arctic are purchased and resupplied once a year during the late spring and early summer as the port of entry is closed during the fall, winter and early spring seasons due to ice and adverse weather conditions. The deliveries made during calendar year 1974 were procured with both FY 1974 and FY 1975 funds. The deliveries which will be made during calendar year 1975 are programmed to be procured with FY 1976 funds. The result is a dollar increase in FY 1976 although the quantity of fuel required remains level.

Tactical Fighter Crew Ratios

Senator Young. Why are tactical fighter crew ratios being increased? Why were they decreased in FY 1971? What specific impact has the reduced crew ratio caused over the past four years?

General Greenleaf. The Defense Planning and Programming Guidance (DPPG) requires the Air Force to meet the requirements of Case 1 and Case 4 when sizing the force. Studies completed by Air Force Studies and Analysis indicate that a crew ratio of 1.1 does not provide sufficient crews to meet these requirements. The proposed increase of the ratio to 1.25 does not fully meet the tasking requirements of all fighter weapons systems, but does come close to fulfilling this need.

The crew ratios were reduced in FY 1971 because of resource limitations. The reduced crew ratio has placed the Air Force in the position of not being able to sustain the tasking allotted in the DPPG.

Fighter Crew Ratios/Impact of Not Increasing

Senator Young. What would be the impact of not increasing the crew ratios at this time?

General Greenleaf. If the crew ratio is not increased at this time, the Air Force will not be able to sustain the level of combat activity necessary to meet the threat in initial defense of NATO. The need for restoration of this capability is even more pressing now in view of recent improvements in the quantity and quality of Warsaw Pact land forces, particularly armor. The increased strike capability represented by these additional crews will be particularly effective in blunting armor thrusts against the NATO line during the early stages of any European conflict.

Fighter Force Reorganization

Senator Young. The total fighter force decreased when four 18 plane squadrons were reorganized into three 24 plane squadrons. Why was this change made? Are other such reorganizations possible? Did the reorganization described result in any cost savings?

General Greenleaf. Upon deploying one 24 UE A–7 squadron from TAC to Thailand, selected TAC 24 UE A–7 squadrons were reorganized into 18 UE squadrons, thus retaining the same number of CONUS squadrons and the same overall number of A–7 UE aircraft. Operational requirements and aircraft availability determine the UE per squadron. An estimated annual cost avoidance of $.6 million is associated with three 24 UE A–7 squadrons vice four 18 UE A–7 squadrons due to reduced manpower authorizations, i.e. 55 total personnel (three officers and fifty-two enlisted personnel). This cost avoidance was included in the Air Force FY 76 Budget with the 590,000 military end strength total.

RF–4 Redeployments

Senator Young. Explain which RF–4s are being redeployed from Southeast Asia and Europe to the U.S. and why $3 million is required for such redeployments.

General Greenleaf. One squadron from Thailand and two squadrons from the United Kingdom will be redeployed in FY 76 and transferred to the Air National Guard as part of the modernization of the Air Reserve Forces.

The $3.0 million is the cost of C–141 special assignment air missions required to redeploy the equipment and some of the personnel of the three RF–4 squadrons from the overseas locations to a central point in the U.S.

Special Operations Forces Missions and Aircraft

Senator Young. Explain the missions and aircraft assigned to the Special Operations Forces.

General Greenleaf. The missions of the Special Operations Force are counter-insurgency, psychological operations, unconventional warfare, and functions related to these operations. The average operating aircraft required in FY 1976 are as follows: twenty-three C/AC–130, six CH–53, two CH–3E, and two UH–1N.

These aircraft perform a variety of missions. The C–130 is equipped with state-of-the-art electronic counter-measures and navigation systems for night low level penetration into denied areas. Nicknamed Combat Talon, these air-

craft perform the classic unconventional warfare roles of direct action missions, infiltration, resupply and exfiltration. Related missions include maritime surveillance, prisoner of war and escape and evasion recovery operations, and air defense exercises. The AC–130 gunships combine detection and destruction in a single self-contained night/adverse weather attack system which is extremely effective in close air support, interdiction and base defense missions. Electronic Counter-Measure and laser designating equipment enhances use as a forward air controller for fighter equipment delivering laser guided bombs or cluster munitions. The CH–53 is an armed helicopter which performs infiltration, resupply and exfiltration of personnel/equipment into hostile or denied territory. Related missions include support to prisoner-of-war and missing-in-action recovery operations and emergency evacuation of noncombatants from hostile areas. The UH–1N/CH–3E supports unconventional warfare through infiltration and exfiltration of special forces. Related missions include humanitarian operations.

The Special Operations Force School at Hurlburt, Florida, trains US and foreign personnel in the principles of unconventional warfare, psychological operations, counterinsurgency, civic action and foreign internal defense. The school also provides area orientation to US mobile training teams being deployed to foreign countries.

JCS Directed and Coordinated Exercises

Senator Young. Describe each of the Joint Chiefs' directed and coordinated exercises that Air Force will participate in in FY 1976, and briefly explain the Air Force's mission in each one.

General Blanton. There are four JCS directed and 29 JCS coordinated exercises that the Air Force will participate in in FY 1976. The level of participation ranges from small, procedural command post type exercises to large-scale field training exercises involving as many as eight tactical fighter squadrons together with other supporting Air Force forces. Although the predominance of the exercises are conducted in the CONUS and Europe, the FY 1976 program also supports exercises in the Pacific area, Alaska and South America. A brief description of each exercise follows:

Reforger 75.— Return of Army dual-based units to the FRG for exercises. Air Force provides strategic airlift.

Crested Cap 75/Coldfire 75.—Return of Air Force dual-based tactical fighter wing to the FRG. While in the FRG, the units fly theater orientation missions, close air support for training exercises with the Army, and participate in joint/combined European area training exercises.

Bold Eagle 76.—To exercise and train Redcom active and reserve component forces in all phases of joint ground and air operations through the complete spectrum of air warfare to include air superiority, air interdiction and close air support.

Solid Shield 76.—To exercise and train Lantcom active and reserve component forces in joint operations; exercise will also provide for the demonstration and evaluation of the effectiveness of the Tactical Air Control System/Tactical Air Defense System under field conditions.

Aloud Series.—A Lantcom joint communications exercise; Air Force provides strategic airlift support.

Amalgam Mute.—A Norad exercise to evaluate the capability of selected Norad regions to perform assigned mission.

Opportune Journey.—Mobility exercise to deploy Army units from the island of Oahu to the island of Hawaii for field training exercises. Air Force provides strategic airlift support.

Vigilant Overview Series.—Train and test Norad and ADC forces in air defense operations.

Commando Elite.—Deployment of a tactical fighter element to Hawaii to provide close air support for Army field training exercises on Hawaii.

Brave Shield XII.—A Redcom medium scale exercise to train armored and tactical air units in joint operations.

Flintlock 75.—Joint and combined training for special operations forces in Europe.

Ivory Hunter.—A JCS command post procedural exercise.

Aresh 75.—Special operations training exercise. Air Force provides MAC airlift.

Captain Cook III.—An integrated air/ground exercise involving U.S. Army Support Command Hawaii brigade task force and USAF Commando Elite forces.

Deep Express 75.—Deployment of the Allied Command Europe Mobile Force to the NATO southern region for an exercise.

Brave Shield XIII.—Medium scale Redcom joint training exercise emphasizing airborne, airmobile and air defense operations.

Land/Air FTX.—Deployment of a battalion of the Army's 25th Infantry Division to and from exercise area; USAF provides MAC airlift support.

Midlink 75.—Cento maritime exercise. USAF provides tactical air sorties, airlift support.

Ocean Safari 75.—Demonstration of Atlantic command forces' ability to support the Allied Command Europe. USAF provides tactical air sorties.

Jack Frost 76.—Deployment of Redcom task force to Alaska to augment Alaskan based Army and Air Force units in a field training exercise.

Atlas Express.—Exercise NATO plans for deployment of the ACE mobile force to the northern NATO flank. USAF provides tactical air and strategic airlift support.

Black Hawk V.—Canal Zone air defense exercise. USAF provides augmentation with tactical air, air defense and airlift support.

Pole Vault 76.—JCS procedural CPX.

Flaming Lance 76.—Exercise of Eucom joint task force in minor contingency exercise. USAF provides airlift, tactical fighter and tactical reconnaissance support.

Foal Eagle.—Unconventional warfare exercise in the Pacom theater. Air Force provides airlift.

Seatex 54.—A maritime exercise incorporating search and rescue functions.

Dawn Patrol 76.—A NATO exercise in the Mediterranean area. USAF provides tactical reconnaissance, airlift support.

Captive Lightning III.—Exercises rapid response of the Pacom reserve. Air Force provides close air support, MAC airlift.

Logex 76.—A staff logistics command post exercise. Air Force provides player personnel.

Shahbaz 76.—A CENTO air defense exercise. Air Force provides tactical fighter element, strategic airlift support.

Creek Bee 76.—Deployment of a dual-based tactical reconnaissance squadron to Europe for theater orientation. MAC provides strategic deployment airlift to test procedures for redeployment of dual-based reconnaissance units to Europe.

Advent Express.—Exercise NATO plans for the deployment of the Allied Command Europe mobile force. MAC provides deployment/redeployment airlift.

Fly-a-Way 76.—Exercise contingency plans for deployment of Okinawa based Marine forces. Air Force provides airlift support.

Equipage of Airborne Warning and Control Program

Senator Young. What is the NATO Air Weapons Training Center and where is it located?

General Greenleaf. The NATO Air Weapons Training Center is a multinational aircrew weapons training installation which is being constructed at Tymbakion, Crete. The Center will initially be used by United States forces; US Air Forces, Europe; US Navy, Europe; forces of the United Kingdom, and Greece. Construction of the installation is being financed through NATO infrastructure procedures. Equipage costs and annual operating costs will be jointly funded by participating nations. When completed, the installation will provide an increased capability for training NATO tactical aircrews in air-to-ground and air-to-air delivery tactics and techniques.

Tactical Fighters vs. Tactical Operations/Explain

Senator Young. Explain what is funded under the program element "Tactical Fighters" versus the grouping "Tactical Operations."

General Greenleaf. There is no program element titled "Tactical Fighter" or "Tactical Operations." Rather, there are several program elements grouped under each of these general titles.

The "Tactical Fighter" program element grouping includes the operations of tactical fighter squadrons, associated field maintenance, and wing headquarters.

The "Tactical Operations" program element grouping includes the tactical

command and control systems of TAC, PACAF, and USAFE, unified command airborne command posts, tactical air control systems, war readiness materiel support, base operating support and the headquarters of the Tactical Air Command, Pacific Air Forces, and the United States Air Forces Europe. Several other program elements are grouped under "Tactical Operations", some of which are: Overseas Air Weapons Control System, tactical forces training and the aerial demonstration team.

Air Force Logistics Command Installations

Senator Young. Explain why there is a need for seven installations of the Air Force Logistics Command. Has any consideration ever been given to consolidation?

Mr. McElhanon. Mr. Chairman, the seven installations referred to in the justification book include five Air Logistics Centers which have the full range of logistics capabilities associated with distribution of material, storage, depot repair and maintenance, material management, and procurement functions. The sixth installation is a specialized repair point for inertial guidance and navigation systems, and precision measurement equipment. The seventh installation is at Wright Patterson Air Force Base, Ohio. This base is the some of the headquarters for our Logistics Command, and it is not a logistics installation in the usual sense. An additional logistic function, the Military Aircraft Storage and Disposition Center, is a tennant on SAC's Davis-Monthan Air Force Base, Arizona.

With regard to consolidation, the Air Force has closed or transferred nearly fifty logistics installations in the past 25 years. All overseas and several CONS depots were closed in the 1960 period. In more recent times, 1967 to 1969, the Air Force closed four major Air Logistics Centers, reducing the number from nine to five. These latter actions were based on a study which showed that five modern major centers were the minimum required to support current and projected activities. This study considered such factors as existing facilities, labor market, span of control, dispersed geographical locations, the present size of the installations, ability to meet peacetime support requirements, and surge capability to meet increased wartime demands.

Inherent in the decision to reduce the number of Air Logistics Centers to five, was the requirement to consolidate similar functions, which we are doing through the Technology Repair Centers; and to modernize facilities and equipment for increased effectiveness, efficiency and productivity. The Depot Plant Modernization Program (DPMP) has been underway for four years to achieve this modernization.

In summary, we have already made major consolidations in an endeavor to reduce the number of logistics installations to the minimum required. An evaluation was made last fall to determine if further consolidation was possible. The findings were that the existing installations were the minimum required, and that even that number has only a marginal capability to meet surge requirements in time of war.

Methods Laboratories

Senator Young. What has been the experience to date of the "methods laboratories" that have been established at Air Logistics Centers? Are they yielding any specific dollar savings?

Mr. McElhanon. The Methods Laboratories have produced very significant dollar savings in recent years. Several examples of improvements attributable to the Methods Laboratories are:

The G–200 gyro float assembly, used in the LN–12 Inertial Navigation System on F–4 aircraft, cost $1,600 each and was previously a throwaway-type item. Today we are repairing an average of 2,000 float assemblies annually at a unit cost of $760. This single repair procedure has resulted in an annual cost avoidance of approximately $1.7 million.

The film transport torque motor used in the KS–72 Camera was previously condemned due to loss of stator magnetism and brush failure. We are now capable of remagnetizing the stator and replacing the brushes, with an estimated three year cost avoidance of $728,000.

Low reliability of the crash position indicator, used on C–130, C–135 and C–141 aircraft resulted in submission of an engineering change proposal to modify the unit and improve reliability. The Methods Laboratory developed a repair

capability which resulted in a one time cost avoidance of $2.35 million due to cancellation of the engineering change proposal, and also a five year cost avoidance estimated at $2.5 million.

The compressor rear frame on the TF-39 engine, used on the C-5A aircraft, was subjected to warpage as a result of temperature extremes encountered during usage. Because of the criticality of dimensions, the only previous method for correcting the out-of-round condition was the expensive process of metallizing and resizing. A more economical repair procedure, employing solution heat treatment and cold working, has resulted in an annual cost avoidance estimated at $2.5 million.

Second Destination Transportation

Senator Young. Explain the increase in commercial air transportation in FY 1976 (99,135 plane miles).

General Patch. The increase in plane miles is attributed to the Air Force Logair operation. Since 1960, the Air Force has increasingly structured weapons system support around shorter pipelines made possible by responsive airlift such as Logair. This arrangement has not only permitted reduction of spares inventory, but was also a consideration in reducing the major Conus depots from nine to five. The current ratio of inventory to transportation is $43.4 million of inventory increase for each day of transportation time increase. Thus, the use of Logair is a trade off for spares inventory. The 99,135 miles represent an increase of only about seven-tenths of 1 percent over the Logair mileage in FY 75.

Promis

Senator Young. Describe the functions and cost of Promis, the Airman Procurement Management Information System.

General Blanton. The Procurement Management Information System (Promis) is a subsystem of our Advanced Personnel Data System and allows us to automate the matching of potential enlistees with Air Force job specialties. Our recruiting force will be able to input the individual's qualifications into the computerized job bank. The system will compare that data to all available jobs and produce a sequential list of available jobs that the potential enlistee can select from. The FY 76 cost of the system is $1.1 million.

Foreign Assistance Training and Other Training

Senator Young. Explain the types of training accomplished under "security assistance training programs," both advanced technical training and basic technical training. Which countries are involved?

Colonel Baker. We train some foreign students in nearly all our technical courses, both basic and advanced. However, this training is primarily in the categories of Maintenance, Communications/Electronics, and Logistics. Students from the following countries are programmed to receive basic and/or advanced technical training in fiscal year 1976:

Argentina, Australia, Belgium, Bolivia, Brazil, Cambodia, Canada, Chile, China (Taiwan), Colombia, Congo (Zaire), Denmark, and Dominican Republic.

Eucador, Ethiopia, France, Germany, Greece, Haiti, Honduras, India, Indonesia, Iran, Israel, Jordan, Korea, Kuwait, Laos, Malaysia, Mexico, Morocco, Nicaragua, Nigeria, and Norway.

Pakistan, Panama, Peru, Philippines, Portugal, Saudi Arabia, Spain, Tunisia, Turkey, Uruguay, Venezuela, Vietnam and Thailand.

Helicopter Conversion Training

Senator Young. What is helicopter "conversion training"?

Colonel Baker. Helicopter conversion training is the training given to fixed wing pilots to qualify them in helicopters. The training is conducted by the Army. The program is primarily being used to provide helicopter pilots for the Air National Guard and Air Force Reserve units who are transitioning from fixed wing aircraft to helicopters. Some USAF active pilots are also trained to improve the experience mix in the helicopter force and to make the number of isolated tours for helicopter pilots more in line with that experienced by the total pilot population.

Airman Education and Commissioning Program (AECP)

Senator Young. What is the additional cost associated with reinstatement of the Airman Education and Commissioning Program in FY 1976?

General Blanton. The costs of the 400 new inputs that we are requesting for FY 1976 are $318,000 in operations and maintenance (O&M) and $2,727,000 in student pay. Reinstatement of the Airman Education and Commissioning Program in FY 1976 will require about $3.0 million for the 400 new inputs. Of the total, $318 thousand is for tuition and book allowances and is requested in the estimate now before you for the appropriation, Operating and Maintenance, Air Force. The balance of about $2.7 million is for student pay and is requested in the appropriation, Military Personnel, Air Force.

Funding Responsibilities Transferred to O&M

Senator Young. What funding responsibilities have been transferred to Operations & Maintenance from other accounts?

General Blanton. Transfers of funding responsibilities to the Operation and Maintenance, Air Force Appropriation in FY 76 include: $44.6 million for field level reparables—previously considered investment items but redefined by DOD as expense-type items based on a 1973 GAO Report; $4.5 million resulting from a change in the funding policy for software support; $2.5 million related to the operational costs of the Electromagnetic Compatability Analysis Center (ECAC); and $1.2 for the Terminal Radiation Program due to the revised funding policy for test and evaluation. These funding transfers were made from Air Force investment appropriations (Other Procurement and Research, Development, Test and Evaluation) to the Operation and Maintenance, Air Force Appropriation and do not represent additive requirements to the overall Air Force Budget. In addition, effective in FY 76, the Air Force will reimburse the Army for operating and maintaining down range sensors ($2.2 million). This activity was previously funded directly by the Army.

Airlift and Sealift Flying Hours

Senator Young. Although the overall flying hour program's significantly reduced (—242,945 hours), why is the airlift and sealift category increased by 276,325 hours?

General Greenleaf. Sir, the increased airlift flying hours shown in this category are the result of the consolidation of the tactical airlift and support aircraft under the Military Airlift Command.

This is not an increase to the total USAF Flying Hour Program. It is a transfer of funding responsibility from other Major Force Programs (MFP) to Major Force Program IV. To illustrate, the C–130 tactical airlift forces are programmed to fly 209,930 hours in MFP II during FY 75. In FY 76 we have transferred the C–130s to MFP IV where they are programmed to fly 181,836 hours. The reduction of 28,101 hours is due to the transfer of two C–130 Squadrons to the Air Reserve Forces.

The transfer of hours to MFP IV, Airlift Forces, and an offsetting reduction can be seen in the following table:

Program changes	Hour changes to MFP IV fiscal year 1975–76	Reason
C–130 consolidation	+181,836	Hours transferred from MFP II.
Support aircraft pooling	+97,970	Hours transferred from all other MFP's.
C–5/C–141 helicopter training	—3,482	Reduced training requirement.
Total	+276,324	

Fuel Cost Per Flying Hour

Senator Young. In terms of only fuel costs, what is the average cost per flight hour for all Air Force aircraft?

General BLANTON. In terms of only fuel cost and based upon programmed standard prices as of 1 July 1975, the average cost per flight hour for FY 76 for all Air Force aircraft is estimated at $453.00. The average is computed from fuel consumption rates for all Air Force aircraft and ranges from $2.00 to $1,933.00 per flying hour.

COST PER FLYING HOUR/F–4, A–7, B–52, C–141, C–5A

Senator YOUNG. Also, what is the average cost (total cost) per flight hour for the following: F–4, A–7, B–52, C–141, C–5A?

General BLANTON. The average O&M cost per flight hour for the F–4 is $1,020, A–7—$598, B–52—$2,194, C–141—$1,096, and C–5A—$2,510. These flying hour factors include fuel, supplies and the variable cost of depot level maintenance. Also these factors include the 1 July 1975 price increase for fuel and supply items.

MILITARY CIVILIAN CONVERSION

Senator YOUNG. What type jobs have been converted from military to civilian? What has been the cost saving realized from such conversions?

General POSNER. The jobs which were converted involved the application of technical, trades and crafts, clerical, professional and management skills in a variety of support functions such as: supply, transportation, civil engineering, administration, communications, medical, accounting and finance, and data processing.

In general, the annual budgeted Air Force average cost of a military space is less that of a civilian space. In the President's FY 76 Budget, they are $11,185 and $14,974 respectively.

However, when consideration is given to life-cycle economic costs (that is inclusion of such economic cost items as retirement, veterans benefits, tax advantage), and when the military support space costs are added, annual cost savings to the taxpayer are estimated to be at least $1580 per military position converted. When these estimates (based upon the application of cost data provided in the report on "Economic Cost of Military and Civilian Personnel in the Department of Defense," March 1974) are extrapolated to the Air Force military to civilian conversions occurring in the Operations and Maintenance, Air Force Appropriations from FY 73 to FY 75, there is about a $21.9 million savings.

It should be noted that these are not entirely direct Air Force budget savings since such economic cost savings are retirement, veterans benefits and tax advantage are not included in the Air Force budget but are included in the DOD cost factor.

It should be noted that cost savings of a civilianization action are but one of many factors, both financial and nonfinancial in nature, which are considered in an evaluation of a civilianization action. The primary consideration is to identify authorizations requiring military incumbency by reason of combat or direct combat support, law, training, security, discipline or support of contingency and overseas rotation.

PLANNED INSTALLATION CLOSINGS

Senator YOUNG. What major installations have been or are planned to be closed in the fiscal year 1976 program?

Gen. GREENLEAF. Major installations programmed to close in FY 76 in the CONUS are Hamilton AFB, California, and Ellington AFB, Texas. Ent AFB, Colorado will be reduced to minor installation status. Overseas [deleted] will be reduced to minor status.

DEPOT MAINTENANCE BACKLOG

Senator YOUNG. What is the depot level maintenance back log for each type of active Air Force aircraft. What is considered to be an acceptable backlog level and what is considered to be an optimum level?

Mr. MCELHANON. Sir, the Air Force does not maintain a maintenance backlog on operational aircraft. The Programmed Depot Maintenance (PDM) concept employed by the Air Force annually reviews the maintenance requirements for each type of aircraft and schedules for accomplishment all maintenance essential to assure continued airworthiness and mission effectiveness. Within the

O&M, Air Force, we plan to input 1,044 aircraft for PDM in FY 76. These consist of:

84 A–7D	1 C–140
145 B–52 D/G/H	7 C–141
2 C–5A	413 F/RF–4
155 C–130 all MDS	45 F–106
192 C–135 all MDS	

In addition, 138 aircraft of 15 types not involved in a cyclic PDM will be input for analytical condition inspection to verify through sampling techniques that these types of aircraft are structurally sound. Further, we have a large workload of modifications to extend service life and increase operational capability. These modifications are accomplished concurrently with PDM, on special package programs at the depot facilities and through use of depot or contractor teams at the operational bases.

Real Property Maintenance Backlog

Senator Young. What is the real property maintenance backlog in the Air Force? Will the fiscal year 1976 improve the situation over the current year?

Major Nottingham. The current backlog of maintenance and repair (BMAR) is $159.3 million. The eroded availability of funding for projects-by-contract caused by inflation and the uncertain availability of funding as a result of the proposed $40.0 million rescission of the real property maintenance (RPM) floor were projected to cause BMAR to increase to $212.9 million by the end of fiscal year 1976. However, the approved Conference Report reduced the rescission amount to $20.0 million which will result in a projected BMAR for fiscal year 1976 of $200.5 million.

Full Cost Increase/Impact on User Charge of Airlift

Senator Young. What effect has the increased cost of fuel had on the charges to users of the services of the Military Airlift Command? What has been the increase in passenger rates and cargo rates?

General Patch. Under the Industrial Fund concept, the increase in MAC's operating expenses must be passed to the users. Increased POL fuel prices for MAC military aircraft and commercial contract carriers have resulted in increased passenger/cargo tariffs. Costs incurred by MAC in performing its airlift mission are paid from the ASIF and then recouped by billing MAC's customer through a tariff system. The following tariff increases were predominately the result of fuel price increases.

Tariff increases are as follows:

	Passenger (pax mile)		Cargo (ton mile)	
	Rate	Percent increase	Rate	Percent increase
July 1, 1973	$0.031942		$0.162921	
June 1, 1974	.035935	12.5	.207561	27.4
July 1, 1974	.038522	7.2	.270660	30.4
July 1, 1975	.049309	28.0	.316130	16.8

ASIF Subsidized

Senator Young. Has the Airlift Services Industrial Fund required additional funds other than those provided by additional costs to the subscribers?

General Blanton. The Airlift Services Industrial Fund (ASIF) has not previously required additional funds other than those provided through the normal tariff revenue system. Due to the projected FY 1975 loss resulting from reduced cargo movements, inflationary costs and CAB rate increases, the Air Force requested a transfer of funds to Operation and Maintenance, Air Force under Section 834 of Public Law 93–437. Congressional approval for the transfer of $39.3 million has recently been received.

Prior to the Air Force request for a $39.3 million transfer, the cumulative operating loss at end FY 1975 was estimated at $95.4 million based on a constrained flying hour program which did not meet minimum crew training require-

ments. The funds transferred to O&M Air Force will be applied to JCS Exercises to achieve the dual benefit of joint readiness training while moving closer to the minimum essential crew training program for strategic airlift forces. The use of the transfer will reduce the cumulative operating loss through FY 1975 to $67.9 million.

Tariffs to be effective for FY 1976 and FY 197T have been approved by OSD to recover $48.5 million over the 15 month period. It now appears that the cumulative operating loss at end FY 197T will be $19.4 million if there is no further reduction in cargo movement requirements and Congress approves the customer budgets and the funds requested in the Operation and Maintenance, AF Appropriation for the local training program and essential strategic airlift flying hours to maintain aircrew readiness not subscribed by airlift users.

QUESTIONS SUBMITTED BY CHAIRMAN MC CLELLAN

Senator YOUNG. Chairman McClellan was unable to be present at today's hearing. He has requested, however, that a number of his prepared questions be answered and inserted in the record. They will be done so at this point.

[The questions and answers follow:]

WEIGHT ALLOWANCE FOR HOUSEHOLD GOODS

Chairman MCCLELLAN. Has there been any change in the past year in the weight allowance for household goods shipments on unaccompanied tours in the Pacific?

General BLANTON. No sir, the weight allowances have remained the same and represent what is felt to be minimal for the needs of the members.

AF AGENCIES INVOLVED IN ANALYTICAL STUDIES

Chairman MCCLELLAN. Provide a list of all Air Force 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 Air Force effort, provide for FY 1975 and 1976 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.

General BLANTON. Yes, sir. The following data was collected based on the definition of the term "studies and analysis" contained in the 24 March 1975 draft revision to DOD Directive 5010.22 dated 30 October 1968. These data were current as of 1 October 1974. Data for FY 1976 is not available because studies and analysis is not a separately identified entity throughout the Air Force for budeting purposes. Consequently, there is no discrete line item, total program, identification in the budget. There are, however, a few specific identifiable items. It is anticipated that the overall level of manning and funding for FY 76 will follow the general Air Force trend.

[The information follows:]

AIR FORCE STUDIES AND ANALYSIS
FY 75

	MAJOR AIR COMMANDS TOTAL	HQ USAF	TOTAL AF
PROFESSIONAL MAN-YEARS	195	119	314
PROFESSIONAL COSTS ($50,000/MAN-YEARS)	$9,750,000	$5,950,000	$15,700,000
IN-HOUSE AUGMENTATION (MAN-YEAR)*	93	0	93
AUGMENTATION COSTS ($25,000/MAN-YEAR)	$2,325,000	0	$ 2,325,000
FEDERAL CONTRACT RESEARCH CENTERS (FCRC) COSTS**	$ 753,000	$10,787,000	$11,540,000
EXTERNAL ASSISTANCE COSTS (LESS FCRCs)	$2,616,870	$ 1,135,000	$ 3,751,870
TOTAL COSTS	$15,444,870	$17,872,000	$33,316,870

* In-house augmentation are those individuals who are not professional analysts but are assigned temporarily to a study effort to provide operational insight.

** While Federal Contract Research Centers (e.g., Project RAND, ANSER) are under the management cognizance of agencies of HQ USAF, a portion of their work is done in direct support, or at the request of, field commands of the Air Force. Listing under Hq USAF conforms to management responsibility.

AUTHORIZED AIR FORCE PROFESSIONAL MANNING OF IN-HOUSE ORGANIZATIONS PERFORMING STUDIES AND ANALYSIS

GRADE	NUMBER	
General	2	
Colonel	44	
Lt Colonel	87	
Major	113	
Captain	59	
MILITARY TOTAL	305	
PL-313	10	
GS-16	1	
GS-15	33	
GS-14	56	
GS-13	47	
GS-12	28	
GS-11	7	
CIVILIAN TOTAL	182	
AIR FORCE TOTAL		487

Major Command: Headquarters, United States Air Force

Agency Name: Studies and Analysis (AF/SA)

1. Mission Statement:

Provides illumination and visibility of major issues which affect the size and mix of future USAF forces. Formulates a study program under cognizance of the Chief of Staff and Vice Chief of Staff, USAF. Provides studies and analysis assistance in support of important major force level decisions, and in other areas requiring technical or specialized capabilities.

2. Staffing Level

Oct 74 Military 99 Civilian 22 Total 121

3. Professional Man-years[1/] 104

4. Budget (FY 75)

In-house Professional Cost[2/] $5,200,000

FCRC's None

Other Contractors $935,000 Total Cost $6,135,000

5. Access to the following computers

Honeywell 635	Honeywell 6060	IBM 370-165
Honeywell 6180	IBM 360-75	

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

Major Command: Headquarters, United States Air Force

Agency Name: Air Staff agencies other than Studies and Analysis (AF/SA). AF/ACMC, AF/CPXXA and AF/PRMS.

1. Mission Statement:

Directorate of Management Analysis (AF/ACMC) - Design, development and presentation of information and data for use by top management in maintaining a continuous and effective appraisal and control of Air Force performance and resource utilization.

Personnel Analysis Branch (AF/DPXXA) - Conducts studies entailing the application of the scientific method, analytical techniques, and data handling techniques which exceed the normal manpower resources of the functional manager.

Manpower Research and Analysis Group (AF/PRMS) - Performs statistical operations and cost effectiveness analyses in all manpower management areas.

2. Staffing Level

Oct 74 Military 28 Civilian 12 Total 40

3. Professional Man-years 1/ 15

4. Budget (FY 75)

In-house Professional Cost 2/ $750,000

FCRC's $10,797,000 (RAND Corporation)

Other Contractors $200,000 Total Cost $11,737,000

5. Access to the following computers

Honeywell 635

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead; computer and support costs.

Major Command: Air Force Systems Command

Agency Name: Analysis Division, Directorate of Advanced Systems Analysis, Office of the Assistant for Study Support

1. Mission Statement:

Analysis Division performs appropriate analyses functions for the Directorate to include monitoring deputate mission analyses activities and evaluating various criteria for comparing alternative problem solutions.

The Directorate of Advanced Systems Analysis supplies analysis techniques in support of all Deputy Development Planning needs.

The office of the Assistant for Study Support accomplishes technology application studies, participates in mission analyses, participates in the preparation of the rationale portion of inputs, and evaluates the technical feasibility of proposed techniques.

2. Staffing Level

Oct 74 Military 36 Civilian 47 Total 83

3. Professional Man-years 1/ 86*

4. Budget (FY 75)

In-house Professional Cost 2/ $4,225,000

FCRC's $753,000

Other Contractors $1,258,870 Total Cost $6,236,870

5. Access to the following computers

Burroughs 3500 CDC 600
Honeywell 6060 CYBER 73

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

* Of the 86 professional man years, 3 represent in-house augmentation (personnel assigned temporarily to work on specific studies). A costing factor of $25,000 per man year is used to compute augmentation personnel.

Major Command: Air Force Logistics Command

Agency Name: Directorate of Policy and Analysis, Systems Studies Branch

1. Mission Statement:

The Directorate of Policy and Analysis is the AFLC office of primary responsibility for logistics studies.

The Systems Studies Branch is the AFLC office of primary responsibility for studies and analyses related to automated data systems.

2. Staffing Level

Oct 74 Military 7 Civilian 23 Total 30

3. Professional Man-years 1/ 79*

4. Budget (FY 75)

In-house Professional Cost 2/ $2,300,000

FCRC's None

Other Contractors $796,000 Total Cost $3,096,000

5. Access to the following computers

IBM 360-40 IBM 1410
IBM 7080 Honeywell 635

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

* Of the 79 professional man years, 66 represent in-house augmentation (personnel assigned temporarily to work on specific studies). A costing factor of $25,000 per man year is used to compute augmentation personnel.

Major Command: Tactical Air Command

Agency Name: Force Integration Studies Directorate, Directorate of Force Development and Analysis.

1. Mission Statement:

Force Integration Studies Directorate - conducts studies to develop improved concepts and programs for integration of new USAF weapon systems, equipment, and organizational structures into tactical air forces.

Directorate of Force Development and Analysis - prepares studies and analyses which address alternative force levels and force structure mixes for the use in varying levels of conflict utilizing the resources of the "total force."

2. Staffing Level

Oct 74 Military 39 Civilian 12 Total 51

3. Professional Man-years 1/ 39*

4. Budget (FY 75)

In-house Professional Cost 2/ $1,825,000

FCRC's None

Other Contractors None Total Cost $1,825,000

5. Access to the following computers

JOSS IBM 360-75 CDC 6600
GE Time Share B-3500

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

* Of the 39 professional man years, 5 represent in-house augmentation (personnel assigned temporarily to work on specific studies). A costing factor of $25,000 per man year is used to compute augmentation personnel.

Major Command: Strategic Air Command

Agency Name: Cost and Economic Analysis Division, Aircraft Future Concepts Branch

1. Mission Statement:

Cost and Economic Analysis - Performs cost and economic analyses. Aircraft Future Concepts Branch - Identifies and evaluates the impact of systems limitations on operational capability. Develops basing concepts for positioning future and current SAC aircraft forces.

2. Staffing Level

Oct 74 Military 26 Civilian 1 Total 27

3. Professional Man-years 1/ 27

4. Budget (FY 75)

In-house Professional Cost 2/ $1,350,000

FCRC's None

Other Contractors $259,000 Total Cost $1,609,000

5. Access to the following computers

IBM 360-85 Honeywell 6080
IBM 360-44 Honeywell 800/200

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

Major Command: NORAD/ADC

Agency Name: Directorate of Analysis and Office of Operations Analysis

1. Mission Statement:

Directorate of Analysis - Responsible for providing analytic and technical support to the entire NORAD/ADC headquarters staff.

Office of Operations Analysis - Monitors, maintains and evaluates data related to four major aspects of air defense. These are interceptor sorties, weapon firings, unknown tracks, and SLBM satellite detection.

2. Staffing Level

Oct 74 Military 6 Civilian 31 Total 37

3. Professional Man-years 1/ 18

4. Budget (FY 75)

In-house Professional Cost 2/ $900,000

FCRC's None

Other Contractors $210,000 Total Cost $1,110,000

5. Access to the following computers

Philco 2000	CDC 6400
Honeywell 6080	B 3500

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

Major Command: Headquarters Pacific Air Force

Agency Name: Special Assistant for Operations Analysis

1. Mission Statement:

Performs appropriate analytical functions to include evaluating various criteria for comparing alternative problem/solution.

2. Staffing Level

Oct 74 Military 5 Civilian 10 Total 15

3. Professional Man-years 1/ 9

4. Budget (FY 75)

In-house Professional Cost 2/ $450,000

FCRC's None

Other Contractors None Total Cost $450,000

5. Access to the following computers

IBM 360-50
Honeywell 6060

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

50-470 O - 75 - 49

Major Command: Military Airlift Command

Agency Name: Directorate of Studies and Analysis, Analytical Studies and Plans Div, Special Activities Div, Operations Research Div.

1. Mission Statement:

Directorate of Studies and Analysis - Directs studies and analyses of complex command problems requiring advanced disciplines and techniques.

Analytical studies and Plans Division - Develops command positions and provides command representation on long-range planning efforts.

Operations Research Division - Develops study plans and conducts long-term designated studies utilizing analytical techniques, cost-effectiveness analysis, and simulation models.

Special Activities Division - Conducts assigned special projects not within the capabilities and resources of other directorate divisions.

2. Staffing Level

Oct 74 Military 20 Civilian 0 Total 20

3. Professional Man-years1/ 15*

4. Budget (FY 75)

In-house Professional Cost2/ $450,000

FCRC's None

Other Contractors None Total Cost $450,000

5. Access to the following computers

Not available

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

* Of the 15 professional man-years, 12 represent in-house augmentation (personnel assigned temporarily to work on specific studies). A costing factor of $35,000 per man-year is used to compute augmentation personnel.

Major Command: Air Training Command

Agency Name: Operations Analysis

1. Mission Statement:

Provides assistance to the entire command in the solution of problems requiring unusual and nonrecurring scientific techniques, conducts scientific research, analysis and evaluation of activities relating to new methods, concepts, and equipments that may enhance current and future capabilities of the command.

2. Staffing Level

Oct 74 Military 2 Civilian 3 Total 5

3. Professional Man-years 1/ 10*

4. Budget (FY 75)

In-house Professional Cost 2/ $325,000

FCRC's None

Other Contractors None Total Cost $325,000

5. Access to the following computers

IBM 360
IBM 370
WANG 600-14

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

* Of the 10 professional man years, 7 represent in house augmentation (personnel assigned temporarily to work on specific studies). A costing factor of $25,000 per man year is used to compute augmentation personnel.

Major Command: Air Force Communications Service

Agency Name: Directorate of Manpower and Organization, Directorate of Requirements, Operations Analysis, Directorate of Management Analysis

1. Mission Statement:

Directorate of Manpower and Organization - Provides analytical and special assistance to subcommand working groups dealing with cost and resource utilization studies.

Directorate of Requirements - Develops special and current studies in support of USAF and AFSC.

Operations Analysis - Conducts research and operations analysis of present and proposed communciations and flight facilities systems in support of the Air Force mission of providing responsive, high-speed telecommunications services.

Directorate of Management Analysis - Provides analytical and special assistance to subcommand agencies and working groups dealing with cost and resource utilization studies and performance evaluations.

2. Staffing Level

Oct 74 Military 18 Civilian 8 Total 26

3. Professional Man-years 1/ 3

4. Budget (FY 75)

In-house Professional Cost 2/ $150,000

FCRC's None

Other Contractors $93,000 Total Cost $243,000

5. Access to the following computers

Honeywell 6060

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

Major Command: Air University

Agency Name: USAF Six-Man Group, Directorate of Evaluation and Research, Directorate of Management Analysis, Analysis and Evaluation Div.

1. Mission Statement:

USAF Six-Man Group - Explore advanced concepts, strategic and programs for development and employment of US Air Forces.

Directorate of Evaluation and Research - Provides guidance for and engages in evaluation and educational studies and research projects pertinent to the AU mission.

Directorate of Management Analysis - Provides analytical and advisory staff services on use of resources.

Analysis and Evaluation Division - Supervises the conduct of educational research and evaluation, collection, syntheses, analyses, and presentation of data and conducts a continuous improvement program of management systems.

2. Staffing Level

Oct 74 Military 16 Civilian 6 Total 22

3. Professional Man-years 1/ 2

4. Budget (FY 75)

In-house Professional Cost 2/ $100,000

FCRC's None

Other Contractors None Total Cost $100,000

5. Access to the following computers

Not available

1/ Professional man-years: This is the time expended by professionals in the execution of specific study requirements.

2/ Professional Costs ($50,000/man-year). This is the cost determined by a DOD ad hoc committee to be a fair assessment of the man-years expended. This $50,000 per man-year includes professional, overhead, computer and support costs.

TDY Status/Amounts Paid if Provided Quarters and Meals

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.

Colonel Baker. Yes, military personnel are paid per diem allowances while in a TDY status, even if government quarters and meals are provided. The amount of per diem paid to officers is $2.00 per day if the government meals are provided without charge, or $8.30 per day if the officer is required to pay for the meals. Enlisted members are paid per diem at a rate of $2.00 per day since they are either provided meals without charge by the dining facility or they are provided a basic allowance for subsistence which covers food costs in the dining facility. The per diem rate of $2.00 per day is paid to both officers and enlisted members to cover the incidental expenses associated with being away from their home station. The additional per diem of $6.30 per day provided to an officer required to pay for his government meal is to cover the officer's expenses for eating in the dining facility—raw food costs and surcharge.

Under the Joint Travel Regulations, the basic entitlement to per diem is the same for both officers and enlisted personnel and the net result of either the $2.00 or $8.30 per diem rate is equal compensation for government meals obtained and incidental expenses incurred.

Although equal compensation under the basic per diem entitlement exists, there is both a perceived and a real difference in the total compensation an officer receives while TDY under the conditions addressed. The perceived difference arises because (1) most bases have government dining facilities available to enlisted members while very few have such facilities available to officers and (2) an officer is entitled to the $8.30 per diem rate whether he chooses to eat in the government dining facilities or not. Since per diem rates are higher when government meals are not provided, officers quite often receive the higher per diem rate of $11.80 (or $10.75 if an officers' open mess is available) while the enlisted member receives the $2.00 rate.

The real difference in total compensation exists because per diem is affected by Section 402, Title 37, United States Code, which governs basic allowance for subsistence (BAS). I have included for the record a fact sheet on this law and its effect on BAS. While the law authorizes BAS for enlisted members under certain conditions, it also prohibits the BAS entitlement to enlisted members while they are being subsisted at the expense of the United States. The definition of "being subsisted at the expense of the United States," as contained in Executive Order 11157, includes enlisted members in a travel status who are entitled to per diem. Therefore, enlisted personnel on TDY cannot receive both BAS and the subsistence portion of the per diem. Officers, however, are entitled by the same law to BAS on a monthly basis at all times. Thus, officers on TDY receive both BAS and the subsistence portion of the per diem.

The issues concerning the differences mentioned were addressed in depth in hearings before the House Armed Services Committee on the Aviation Career Incentive Act in February 1974. H.A.S.C. Report Number 73–799 on those hearings mandated two actions with repect to per diem (1) The Per Diem, Travel and Transportation Allowance Committee (PDTATAC) was directed to review the per diem for enlisted personnel on TDY, and (2) the Air Force was required to report on administrative steps taken to improve the administration of per diem in the Air Force.

In regard to the first action, an ad hoc committee was appointed by the PDTATAC to review the regulations governing the administration of per diem, and to make appropriate recommendations. The report of that committee which was forwarded to DOD contained several alternative recommendations for eliminating present differences in per diem. The primary thrust of all the recommendations concerned changes to the laws and policies governing the basic allowance for subsistence (BAS), since these are the fundamental causes of the differences in per diem. DOD currently has the report. However, because the solutions are complex and of significant budget impact, indications are that this issue will be included for review in the 1975 Quadrennial Review of Military Compensation which is currently under way.

Basic Allowance for Subsistence (BAS)

In regard to the mandate for the Air Force, I have included for the record a copy of the 6 September 1974 report furnished to the Chairman, Committee on Armed Services, House of Representatives which explains the administrative procedures implemented by the Air Force to improve the administration of per diem. The Air Force is sensitive to the concerns of both the officer and the enlisted member and will continue to strive for maximum possible equity consistent with statutory and regulatory requirements.

(The information follows:)

FACT SHEET

BASIC ALLOWANCE FOR SUBSISTENCE (BAS)

The BAS is authorized by law (Section 402, Title 37, United States Code). Under this authority, an officer who is entitled to basic pay is, at all times, entitled to the BAS on a monthly basis. For enlisted members, the law authorizes rations-in-kind (meals provided by the government) or the BAS in lieu thereof. Further, the law stipulates that enlisted members are authorized the BAS only when government dining facilities are not available or when they are permitted to mess separately even though a government dining facility is available.

The law and Department of Defense (DOD) policy pertaining to the BAS are implemented through the DOD Military Pay and Allowances Entitlements Manual (DODPM). There are three basic conditions and rates that apply to the payment of the BAS: (1) Emergency Ration Rate. This rate is payable when members are assigned to duty under emergency conditions where no government messing facilities are available. This applies to members assigned to out-of-the-way places for periods of short duration where extraordinary expenses for subsistence are experienced and the member must procure at least two meals from commercial sources. Authority for payment of this rate must be obtained from Headquarters U.S. Air Force (AF/DPXVE). The current rate payable for duty under emergency conditions is $3.61. (2) Rations Not Available. A rate of $2.71 per day is authorized where rations-in-kind are not available. This includes locations where there is no government mess or where use of an existing mess is determined impractical for use by certain members (unusual duties, distance, etc.). (3) Separate Ration Rate. This is the most common rate which is currently $2.41 per day payable to those who have been given permission, by local commanders, to mess separately even though a government mess is available.

To be authorized to mess separately and therefore qualify for BAS at the $2.41 rate, an enlisted member must meet certain criteria. DOD policy stipulates that no single factor, such as pay grade per se, can be used to authorize a member to mess separately. Commanders must determine that at least two of the following factors justify payment of BAS to an individual before permission to mess separately can be granted:

(1) marital status; (2) dependency; (3) location of residence; (4) specialized duties; (5) pay grade; (6) working hours; (7) distance to dining facility; (8) dining facility capacity. For example, a member could be given permission to mess separately if his working hours are considered unusual and his residence is a considerable distance from the dining facility. Other extenuating factors may be considered by Commanders. With respect to the eighth factor, commanders are responsible for assuring maximum use of government dining facilities (as for all government facilities) compatible with efficiency and economy. The above policy applies to all enlisted members except those who are residing with their dependents at a permanent duty station. Members in this category are automatically provided the BAS in accordance

with the DOD policy to maintain the integrity of the family unit. Married members who are serving unaccompanied tours (i.e. tours without their dependents in the vicinity of the permanent duty station) are subject to the same criteria as single members.

Authority to receive the BAS, regardless of the rate, is effected with the understanding that the member will subsist himself. Therefore, members receiving the BAS who are found to be eating more than an average of one daily meal in a government dining facility will not be considered as subsisting independently and BAS must terminate. Members receiving the BAS who do occasionally dine in a government mess, must pay for the meal(s) consumed.

Members not receiving BAS are provided all meals in a government dining facility at no cost. The BAS is paid solely for the purchase of meals not provided by the government. When meals are provided at no charge, there is no expense being incurred (except by personal desire) and thus compensation is neither warranted nor authorized. Enlisted members are not precluded from submitting an application for permission to mess separately at any time. Commanders must, however, consider each application on its own merit using the factors addressed above.

With respect to the future, the Air Force recognizes that everyone would like to eat when and where they desire. It is toward this end that a number of proposals to liberalize BAS policy are being considered. The most highly publicized is the Tactical Air Command (TAC) Feeding Test at Shaw AFB, South Carolina. This test has also been expanded to include a northern tier base; i.e. Loring AFB, Maine (different command, geographical area, size of base, etc.). Under the provisions of these tests, all enlisted members receive BAS and are given the option of eating in a government dining facility which is operating cafeteria style (i.e., food sales by item) or of procuring their meals from commercial sources. The results of these tests may provide a basis for recommending changes to current BAS policy. However, since the cost of extending this concept Air Force-wide would add many millions of dollars to our subsistence budget (which must be approved by the Congress), a phased approach to achieve the all-BAS goal is one of several alternatives under consideration.

Public Law 93-419 recently revised the method by which military pay raises are computed. The revised method provides an equal percentage increase in basic pay, the Basic Allowance for Quarters (BAQ) and the BAS. For example, the 1 October 1974 pay raise increased basic pay, BAQ and BAS <u>each</u> by 5.52%.

Dear Mr. Chairman

This report is in compliance with House Report Number 73-799, which directed that the Committee receive a report from the Department of Defense no later than September 1, 1974, on "what administrative steps are being taken to bring about substantial improvement in the administration of per diem in the Air Force."

Based on the Congressional mandate, the Air Force conducted an extensive review of current procedures, including a detailed analysis of the major command supplements to the Air Force directive governing the insuance of the adverse effect and impracticability statements. These statements are authorized in the Joint Travel Regulations (JTR) when use of available Government facilities would adversely affect the mission or when it is impractical to use available facilities because of lack of transportation, etc. Either of these statements entitles a member to a higher rate of per diem than he would receive if the facilities could be used.

The Air Force review revealed that where inter-command differences in application of these statements existed, they were attributable primarily to the uniqueness of command missions. However, we also noted that there are sufficient similarities to warrant the issuance of Air Force-level guidelines. Therefore, in the interest of standardizing procedures and ensuring that members are not inadvertently denied higher per diem rates due to administrative oversight, the Air Force has initiated action to substitute more definitive instructions in lieu of the broad guidance currently in Air Force directives. This will obviate the need for major command supplements and, to the extent permitted by varying missions, will provide a common basis for issuance of these statements to the members.

The review also revealed that some of the administrative problems occurred because members were not aware of their obligation to obtain the required statements. Without these statements, the members must be paid the lower per diem rates. To minimize this problem, procedures have been established to make members more fully aware of the initiative required of them in advance of their travel. Also, commanders, Air Force-wide, have been made aware of the problems associated with this subject and have been requested to focus their personal attention on per diem administration.

The procedures referred to in this report will substantially improve administration of per diem throughout the Air Force. Further, in appreciation of the sense of Congress, the Air Force will continue to monitor its administrative procedures to ensure maximum uniformity in per diem payments and, where appropriate, refinements to administrative procedures will be made.

Sincerely,

(signed) William K. Brehm

AF Agencies Moving in Washington, D.C. Area

Chairman McClellan. Are there any Air Force agencies moving from one building to another within the Washington, D.C. area?

General Blanton. Construction of a new (90,000 gross) square foot administrative building at Bolling Air Force Base, D.C., will be completed during May 1975. Headquarters Command USAF and supporting elements, now in older facilities at Bolling, will then move into the new building which was approved in the Fiscal Year 1972 Military Construction Program. As Headquarters Command USAF and supporting elements move into the new building, various Air Force activities, now in leased space in the National Capital Region, will relocate to Bolling into the vacated older facilities. Specific activities that will relocate have not been finalized yet, but we anticipate the moves to Bolling will affect approximately 350 people, already in the National Capital Region, and will result in a lease cost avoidance to the Air Force of approximately $0.6 million. The moves are being made to (1) realize significant dollar savings, (2) vacate a large amount of leased commercial space in the National Capital Region, and (3) further consolidate Air Force activities on fewer installations in the Washington, D.C. area.

Advertising for Recruiting Purposes

Chairman McClellan. Does the Air Force plan to use paid radio and TV advertising for recruiting purposes in FY 1975 or FY 1976? If so, how much is planned for each fiscal year? If not, why not?

Colonel Baker. The Air Force has not planned to use paid radio or television advertising because of the free public service time we receive each year. For instance, in FY 1975, we will receive approximately $12 million worth of free public service time on radio and television. Our production costs for these ads are $.9 million. As for FY 1976, our plans are uncertain at this time. We will participate in the OSD (M&RA) radio test, proposed for early FY 1976, which is being designed to determine the cost-effectiveness of paid broadcast advertising. The FY 1976 budget includes $250,000 for the Air Force's share of this test. If the test results indicate paid broadcast advertisting is cost-effective in reaching our target audiences, then we will reevaluate our planned budget and our need for broadcast advertisting. Our need, of course, will be influenced by the impact of the other Services' paid broadcast advertising on the availability of public service time and any reduction in Air Force procurement of recruits that may result from their paid campaigns.

AECP Funding

Chairman McClellan. How much is included for the Airman Education and Commissioning Program? Why must this program be funded if Air Force is reducing officers involuntarily and not bringing to active duty officers commissioned through ROTC? How many commissioned officers are not being utilized by the Air Force in FY 1975 and FY 1976, i.e., are being reduced in force, and how many ROTC graduates aren't brought on active duty in these years? Are other officer sources not being utilized by Air Force? If so, what are they, and how many officers are involved?

General Blanton. The total FY 1976 request for the Airman Education and Commissioning Program (AECP) is $7.6 million of which $1.0 million is O&M and $6.6 million is MPA. The request is for a total student load of 640 which will include carryovers from previous years and a new student input of 400 during FY 1976.

In order to achieve required strength reductions, the Air Force has elected to employ a combination of reduced accessions and voluntary/involuntary separation actions. The extent to which these alternatives are being used depends upon both short and long term force considerations. In a closed personnel system, it is essential that the force be sustained from the bottom so that there is a steady influx of new people who will grow into and fill future requirements.

Without this new input, the Air Force would lose its capacity to replenish itself systematically at the other end of the structure in the years to come. In order to protect against this risk, the Air Force has built into its Personnel Plan turnover rates that account for attrition (normal losses) from the force. In a stable force mode, the normal losses would allow us to sustain the force with

new inputs. However, in the current declining force mode, we have had to resort to managed loss programs including reduction-in-forces (RIF's) to achieve lowered strength levels, while at the same time maintaining an accessions program that supports only our most critical long term needs.

The FY 75 officer RIF is 1,133 while the FY 76 RIF is estimated at 2,088. The Selective Service Act of 1967 requires that all officers commissioned from ROTC, who are not to be utilized for 2 years, be brought to active duty for training for not less than 3 months or more than 6 months. During FY 75 we estimate 278 AFROTC commissionees will be brought to active duty for only 90 days and our estimate for FY 76 is 300 to 400. No AFROTC scholarship students are effected and the figures do not include FY 75 or FY 76 AFROTC graduates who elect or will elect to delay entry on active duty in order to obtain a graduate degree at their own expense through the Educational Delay Program.

Normally, the Air Force accommodates accession reductions by making the necessary adjustments through Officer Training School (OTS), the short lead time program. This eliminates the need to use ROTC, a long lead time program, which is extremely difficult to adjust without causing considerable turbulence. In FY 75, however, reductions taken during the energy crisis virtually eliminated the OTS pilot program. Hence, when significant losses in flying requirements were identified later in the year resulting in lower flying training rates, there was no OTS pilot program left to cut and these cuts had to come from AFROTC. FY 76 presents a similar situation; however, AFROTC is the only program under which commissionees are not being brought on extended active duty because of strength reductions.

The AECP entries planned for FY 76, because of the long lead time of the program, will not complete their education and become officer accessions until the outyears; hence, they will have no effect on the size of the FY 76 RIF. The only AECP accessions during FY 76 will be those who obtain college degrees on their own and those graduates who were sent to college largely during FY 74. Moreover, the new AECP entries will not affect the AFROTC reductions being made in FY 76 since they will not be actual officer accessions until later years when the AFROTC picture is expected to be stabilized, i.e., AFROTC production will be down by then and excessive delays in bringing AFROTC graduates to extended active duty will be reduced to normal levels and there will be no need to deny extended active duty to any graduates.

It should be further noted that the Air Force recognized the need to reduce the size of the AECP in conjunction with other procurement cuts in recent years by voluntarily reducing AECP accessions from 700 to 475 in FY 75. Planned accessions for FY 76 number 430, demonstrating an additional reduction in the program. In September 1974, however, the Congress reduced the program funding by $2.4 million and directed that there be no further inputs into schools after 1 October 1974.

The objective of the AECP is to provide a source of officers in specialized skills needed by the Air Force, an avenue through which enlisted personnel with known qualifications can augment the commissioned ranks, and a measure of motivation and upward mobility to the enlisted force. The program provides for undergraduate education at civilian educational institutions if required, followed by officer training and subsequent commissioning of carefully screened, career-minded airmen.

Selections for the program are made by a board of officers and are based upon the performance of the individual as an airman, his officer potential, and academic qualifications. Emphasis is placed upon selection of the highest qualified airmen who have completed or who can complete the academic work in the shortest period of time. Those who already have degrees are looked at first, then those who have completed three years of college and so forth. Some of our airmen participate in our off-duty educational programs for as long as ten years to become qualified for the program. For example, of the 105 who were selected by the July 1974 board, 35 had degrees, 34 had over two years of college work, and 36 had completed about two years of college credit. The average academic program length for those who are sent to college, and the majority of these are in science and engineering, is just over 20 months.

Although the initial costs are high in comparison to some other commissioning programs, the AECP is a cost effective program when viewed in totality. AECP students complete the degree program for which selected at a higher rate than other commissioning sources, perform better in OTS, and have a higher retention rate than any commissioning source.

One of the major considerations in determining the cost effectiveness of a commissioning source is the length of time the commissionees remain in the Air Force. Of all the Air Force officers entering active duty during FY 67, 44.8 percent remained beyond the seven year point. The AFROTC percentage was 51.5 percent, all OTS graduates was 39.3 percent, the Air Force Academy percentage was 71.0 percent while the AECP percentage for the same period was 95.2 percent.

The attrition rate for the AECP during the college phase of the program is currently only 3.9 percent and only 1.51 percent of the AECP entries are eliminated from OTS.

Based upon current forecast of technical and scientific production in all of the colleges in the US, we are forecasting a shortfall in officer accessions with specific types of technical backgrounds in FY 77 and the outyears. The 400 inputs that we are programming to enter during FY 76 will help meet our technical requirements in FY 78 and FY 79, including those we may be unable to meet during FY 77. During FY 75, for example, we tried to get 200 electrical engineers by recruiting college graduates through Officer Training School, but were only able to attract 37. Therefore, we feel that the crunch in the technical area is real.

The fact that the Air Force offers its enlisted members the opportunity to participate in upward mobility has long been a strong Air Force selling point to prospective recruits. The severe reduction in the AECP FY 75 funding forces the Air Force into a position of critically limiting that upward mobility, particularly to those without a degree. By every standard that we have been able to review, the AECP is a good program in terms of pay back by those professional airmen that are selected to participate, and one that we believe the Congress should reinstate so that the Air Force can honor its previous commitments as well as meet specific requirements.

Experiments With Subsistence Allowances

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 ala 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?

General Blanton. The Air Force has been operating a basic allowance for subsistence (BAS)/ala carte food service concept at Shaw Air Force Base, South Carolina since October 1972 and at Loring Air Force Base, Maine, since January 1975. Under this system, all enlisted personnel assigned to these respective bases receive a subsistence allowance, currently $2.41 per day, and food items in the dining facilities are sold on an ala carte basis. At other Air Force installations, airmen residing in on-base dormitories are normally subsisted at government expense and food service facilities are operated on a meal basis. Under the ala carte system, an airman pays only for the number of food items he selects. A meal could cost as little as forty cents if he is not very hungry or it could cost a dollar or more if he is a heavy eater. The choice, however, is up to the individual.

Food service military personnel requirements for the Shaw dining facility during the initial test period were higher than what would be required to operate a conventional dining facility. An additional 20 military personnel were assigned as training was required for completely different accounting and stock control procedures, food preparation and portion control methods. Collection of data from nutrition, food preference and airman attitude surveys also increased the workload requirements. During the past year operational procedures have been revised to reduce the food service management and accounting workload. Additional military personnel are not required to operate a dining facility under the ala carte system once the operation becomes stabilized. At Shaw, there are presently 53 military personnel assigned to the dining hall operation versus a 4th Qtr FY 1975 manning authorization of 59 military personnel.

An additional five civilian food service personnel were authorized for the purpose of operating cash registers and collecting sales data. These personnel replaced military food service personnel who were previously required to perform the headcount/cashier tasks. At Loring, an additional four military and five civilian personnel were authorized for the initial phase of the BAS/ala carte operation. Once the initial training phase is completed, food service manning will be reduced to be compatible with the number required in conventional dining facilities.

Prior to activation of the BAS/ala carte operation at Shaw, the airmens dining facility was extensively renovated. The cost of renovation was $452,700, however, only $24,000 of this amount was required to modify the dining facility for an ala carte operation. The expenditure of the additional funds was necessary to upgrade an obsolete dining facility to meet Air Force standards. Conversion to the ala carte system at Loring required only $6,300 for minor modifications of the facility and $5,800 for leasing of cash registers.

The payment of a subsistence allowance to an additional 1,250 enlisted personnel at Shaw and 829 enlisted personnel at Loring will result in increased subsistence fund expenditures in FY 1976 of $400,000 and $265,000 for Shaw and Loring respectively. Normally, these airmen would be authorized to subsist at government expense, however, they do not attend approximately 50 percent of the meals to which they are entitled. The Air Force presently does not incur an expense for meals not attended by subsistence-in-kind airmen. When an individual is authorized BAS, he receives the subsistence allowance daily.

Participation in the dining halls has increased under the ala carte system, however, this increase has been minimal. Results of the operation at Shaw do indicate that airmen prefer a subsistence allowance in lieu of meals at government expense as well as freedom of choice in selecting their place to subsist. From a consumer standpoint, the ala carte concept is the most equitable system of providing food. Airmen pay for only the food items they select and no inequities develop such as when some airmen choose to eat only the expensive meals.

While there are additional expenditures involved in a BAS/ala carte food service operation, the Air Force believes this concept eliminates present inequities and provides a feeding system more compatible with the life style and desires of today's airmen.

Manning Standards/Related to Workloads

Chairman McClellan. Recently, GAO did a report on Air Force standard manning for vehicle and maintenance operations at Air Training Command, showing that these manning standards were not directly related to workloads.

Do all commands use a similar type of manning standards for base operation and maintenance activities?

In all cases are these standards based on some fairly unique factor (e.g., base population or number of vehicles support or number of housing units maintained?)

What is the Air Force doing to attempt to get manning standards adjusted downward based on local operating conditions that permit reduced workloads even though the base population or other factor basis for manning has not been reduced?

General Posner. The particular types of Air Force manpower standards addressed in the GAO report are called Air Force Common Standards. They are developed for Air Force-wide application and reflect the amount of manpower needed to accomplish varying amounts of workload under typical operating conditions. When certain functions/activities are not sufficiently uniform throughout the Air Force to allow an Air Force Common Standard to be economically developed, another type called Command Standards are used. They are developed in essentially the same fashion and they serve the same purpose as Air Force Common Standards, but apply strictly to individual commands or bases within the Air Force.

Responding to your first question, then, our base operations and maintenance activities are covered by both Air Force Common and Command Manpower Standards. They are essentially similar in terms of both purpose and method of development, and both are subject to approval by the Air Force Director of Manpower and Organization.

The answer to your second question is, yes. Each of our base operations and maintenance standards has a definite workload factor which relates manpower requirements to the workloads accomplished. Since it is not physically possible or economically feasible to capture and maintain all the different workloads accomplished by an activity, we use a workload factor. The workload factor selected is statistically tested to insure that it is an accurate indicator of the manpower required.

Ideally, workload factors should fulfill two basic requirements. First, they must be *sensitive* to changes in workload volume, composition, or distribution and allow these changes to be readily translated into accurate manpower requirements. Secondly, they should be relatable to projected changes in force structure

and workload, thereby permitting accurate forecasts of manpower requirements in the planning, programming and budgeting process. Frequently, a trade-off has to be made from one category to the other to obtain an optimum workload factor which best satisfies the combined criteria. However, I must emphasize that in all cases, the overriding consideration is the responsiveness of the workload factor to actual changes in workload.

Finally, let me address your question on Air Force efforts to adjust manpower standards for local conditions. We employ Air Force *Common* Standards for determining manpower requirements under *typical* operating conditions and *Command* Standards when certain priorites/activities are *not sufficiently uniform* throughout the Air Force *to allow economical development* of an Air Force Common Standard. This distinction recognizes that there are variations in operating conditions at local bases in almost every function. These might occur in terms of the distribution of workloads performed, or they might exist because of climate, physical plant, distance, or facility age considerations. Variations exist not only in kind, but also in degree.

It is not economically possible to develop manpower standards which will recognize all base-by-base variations. If these variations are very minor in nature, or very limited in number, an Air Force Common Standard is developed to take advantage of the substantive economies associated with Air Force Common Standards development. If these variations do have substantive impact, adjustments are made through either a system of additives/subtractives to the basic standard or by giving authorization to certain commands to develop a Command Standard in lieu of using the Air Force Common Standard.

Let me cite some specific examples of Air Force action to adjust standards to local conditions, with particular emphasis on areas related to the GAO Report. The Laughlin Air Force Base Vehicle Operations Dispatch activity employs specialized voice recording equipment which requires less manpower in vehicle dispatch than would otherwise be allowed by the Air Force Common Standard. Therefore, a subtractive was applied to tailor the Air Force Common Standard to Laughlin's requirement. Other subtractives are in effect for Lackland, Randolph, and Sheppard Air Force Bases which recognize reduced requirements for in-house manpower because certain functions are performed on a more cost effective basis by local contractors.

Higher than normal utilization of Air Force vehicles at SAC missile sites provides another example of Air Force action to adjust standards to local operating conditions. Because these vehicles accumulate from 2 to 3½ times the average mileage for the same types of vehicles at other Air Force installations, the Air Force Common Standard for vehicle maintenance could not continue to be used. SAC was authorized to develop Command Standards for vehicle maintenance at missile sites which will take their base-peculiar conditions into full account.

In addition to specific adjustments made for local conditions, the Air Force regularly examines existing Common Standards to see where improvements can be made to make the standards more responsive to variations in workloads. Such is the case in Vehicle Operations, where an update of the Air Force Standard will be accomplished to augment the current workload factor (base population) with such factors as the number of passengers transported, number of miles driven, hours of operation and number of vehicles by type. These more definitized factors will substantially increase the standard's applicability to individual bases.

In our continued effort to improve all aspects of standards development, application and maintenance, we are restructuring our Management Engineering function to provide some Management Engineering Teams which will specialize in developing manpower standards for homogeneous groupings of Air Force functions. By concentrating full-time management engineering attention on specific functional areas we will, among other things, enhance the sensivity of our manpower standards to actual workloads as well as local operating conditions.

FMS F–5Es Transported on C–5As

Chairman McClellan. How many Foreign Military Sales F–5Es have been, or are planned to be, transported to buying countries aboard C–5 aircraft? What is the cost of such trips? How are the countries charged for these costs? Do the costs include the full cost of the delivery—including military personnel? Or strictly the additive, fuel, etc., cost?

General BLANTON. Total Foreign Military Sales deliveries of F–5E aircraft by C–5 to date are: [Deleted] to Iran and [deleted] to Saudi Arabia. The Air Force plans to airlift an additional [deleted] to Iran, [deleted] to Saudi Arabia, and [deleted] to Malaysia by August 1977.

The approximate cost for a shipment of eight F–5Es by C–5 airlift to Iran and Saudi Arabia is $402,000 and $396,000 respectively. The cost to Malaysia is estimated to be $347,400. These amounts cover all funded costs such as ferry from factory to shipping point, F–5E disassembly/reassembly, cradle manufacture, and C–5 flying hour expenses. The countries are billed by the Air Force Accounting and Finance Center.

At the time agreements with these countries were consummated, they provided for delivery to Iran and Saudi Arabia by "High Flight," i.e., aircraft individually flown by USAF pilots with provisions of enroute maintenance a USAF responsibility. Deliveries to Malaysia were to be by surface sea transportation via the Military Sealift Command. Problems were being experienced with both methods of shipment, e.g., considerable enroute maintenance during High Flight and damage and corrosion to the aircraft during sealift.

Subsequently, it was determined that eight aircraft could be transported at one time in the C–5. This method is in the best interests of the Air Force in that use of the C–5 serves a dual mission. First, it enhances the Air Force's world-wide readiness posture. The flights allow crew training and participation in strategic airlift missions similar to those which would be flown in actual wartime situations. Training of this nature is not only essential, but its cost is ordinarily borne entirely by the Air Force. Second, C–5 airlift alleviates most of the delivery problems outlined above and result in a more efficient method of delivery. In accordance with existing procedures, the Assistant Secretary of Defense (Comptroller) was advised of this opportunity for air movement of outsize cargo, for which the C–5 was uniquely designed, and the fact that it would be in the best interest of the government to make an exception to the normal pricing policies for this airlift.

Following a review of the issues, the Assistant Secretary of Defense (Comptroller) authorized the Air Force to charge for the shipments at the normal mode of transportation price (High Flight or sealift) or higher if the foreign governments were willing to pay a premium for faster, more reliable delivery. The price for shipment of the F–5Ex was established at a level which permitted the Air Force to recover the funded cost, namely $402,000 to Iran and $396,000 to Saudi Arabia. Malaysia will be charged at the sealift rate of $458,700 which exceeds the C–5 funded airlift cost by some $111,300. (Because of the distances involved, High Flight delivery is not possible in the Pacific area.)

It should be noted that the authorization for charging a rate based on the normal mode of transportation only applies to the delivery of [deleted] aircraft to Iran, [deleted] to Saudi Arabia, and [deleted] to Malaysia. Subsequent deliveries will be billed at the appropriate non-U.S. Government user rate.

REIMBURSEMENTS TO O&M APPROPRIATION

Chairman MCCLELLAN. Detail the sources of reimbursement to this appropriation, indicating what the reimbursements are for.

General BLANTON. A detailed program of the sources of actual FY 74 reimbursements earned and those anticipated in FY 75, 76, and the TT budget years will be provided for the record.

(The information follows:)

50-470 O - 75 - 50

DEPARTMENT OF THE AIR FORCE
FY 1976/197T BUDGET SUBMISSIONS
OPERATIONS, AIR FORCE

REIMBURSABLE PROGRAMS
(Dollars in Thousands)

Sales Code	Title	FY 1974 Actual	FY 1975 Anticipated	FY 1976 Program	FY 197T Program
	AIR FORCE:				
10	ACFT Procurement	3,721	7,712	8,801	1,700
12	MSLE Procurement	479	569	600	140
13	Oth Procurement	780	870	920	150
15	Mil Construction	772	242	530	100
16	Opers & Maint, AFT	8	-	-	-
17	Mil Personnel	195	366	370	60
18	RDT&E	15,590	15,500	16,400	3,200
19	Reserve Personnel	2	-	-	-
20	Mil Const, Reserve Personnel	2	-	-	-
22	O&M, ANG	44,464	47,650	50,278	11,600
23	National Guard Personnel	8	1	1	-
24	Air Force Reserve	17,029	32,590	34,400	-
	TOTAL	83,050	105,500	112,300	16,950
	AIR FORCE REVOLVING FUNDS:				
42	Fuels Division, AFSF	97	-	-	-
43	Commissary Div, AFSF	2	5	6	2
46	Printing & Dupl (AFLC)	78	51	68	20
47	Printing & Dupl (AU)	19	12	16	4
48	Lry and Dry Cleaning, AFIF	290	340	330	80
49	Airlift Service, AFIF	120,725	127,683	129,600	41,900
50	Printing & Dupl (MAC)	4	1	1	-
61	General Supt Div, AFSF	5	11	10	2
62	Alaskn Comm Sys, AFIF	-	15	15	4
63	Depot Maint, AFIF	19,875	20,395	22,350	5,100
65	Systems Supt Div, AFSF	1,618	2,226	2,200	550
66	Printing & Dupl (SAC)	4	6	7	2
	TOTAL	142,717	150,745	154,603	47,664

REIMBURSABLE PROGRAMS
(Dollars in Thousands)

Sales Code	Title	FY 1974 Actual	FY 1975 Anticipated	FY 1976 Program	FY 197T Program
	MAP OTHER:				
30	Direct Citation	13,380	13,854	14,550	4,800
32	MAP Administrative	1,348	1,546	1,600	400
	TOTAL	14,728	15,400	16,150	5,200
31	MAP COMMON ITEM ORDERS	15,334	14,000	15,000	3,800
	TOTAL	15,334	14,000	15,000	3,800
	NON-FEDERAL:				
90	Foreign Govt & Int'l OPS	2,266	2,563	2,640	600
91	Non-Appropriated Funds	4,564	7,824	7,825	1,800
92	Red Cross	19	52	52	11
93	Commercial Enterprises	9,934	17,773	18,636	4,776
94	Communications Satellite	1,247	10,253	7,328	2,000
98	All Other NON-US Govt	830	1,835	1,850	450
	TOTAL	18,860	40,300	38,331	9,637
	TRANSFER APPROPRIATIONS:				
51	Family Housing	446	298	440	110
52	Family Housing (Maint)	83,339	133,255	143,578	35,900
57	All Deposit Funds	118	452	320	80
58	Surcharge (Commissary)	2,186	2,314	2,760	690
70	Foreign Mil Credit Sales, Executive	509	500	625	180
72	Liquidation of Foreign Mil Sales Fund, Executive	331	400	552	125
73	Advances, Foreign Mil Credit Sales, Executive	94,786	145,971	189,442	53,034
82	OSD	15,114	245,315	223,257	49,720
83	Defense Supply Agency (R&M)	5,418	445	8,503	2,000
84	Defense Supply Agency (Other)	1,796	1,947	2,000	500
85	NASA	25,557	27,600	29,118	8,100
86	All Other US Govt AG (NON-Defense)	24,208	55,035	68,007	18,000
	TOTAL	253,808	613,532	668,602	168,439
80	DEPT OF ARMY	18,406	19,418	21,018	5,210
	TOTAL	18,406	19,418	21,018	5,210
81	DEPT OF NAVY	18,109	19,105	20,696	5,000
	TOTAL	18,109	19,105	20,696	5,000
	TOTAL	565,012	978,000	1,046,700	261,900

Explain Unobligated Balance

Chairman McClellan. Explain why there is an unobligated balance of $8–9 million available at the end of FY 74–75–76.

General Blanton. The $8–9 million unobligated balances available at the end of a fiscal year represent the move forward of actual (FY 1974) or estimated (FY 1975 and FY 1976) unfilled reimbursable Military Assistance Program Common item orders. At the annual certification, those validated unfilled orders which are not required to cover existing or anticipated obligations are carried forward to the new fiscal year program for execution.

Explain Projected Average GS Grade Rise

Chairman McClellan. Explain why average GS grade is projected to rise between FY 75, and FY 1976, and FY 197T. Neither Army nor Navy projects any rise in average grade. Is the Air Force taking any actions to hold the average grade of civilian levels, or to reduce it?

General Blanton. The Air Force has well managed its civilian resources and controlled its GS average grade. We will continue to exercise the control necessary to manage the program. A formal program exists to encourage managers to make maximum use of dollar resources through average salary management.

The average grade has been reduced by more than .3 of a grade in the period from FY 72–74. The projected increases are minimal in comparison, less than .1 of a grade. Several factors affect these projections:

a. The projections are based on authorizations and include vacancies. The 30 June 1974 figures reflect *actual strength*.

b. The 30 June 1974 figures reflect an unusual loss of high grade employees through retirement occasioned by a Cost of Living Adjustment (COLA). These losses were not programmed nor can they be anticipated to affect out year figures.

c. During FY 72–74 the Air Force operated under dollar ceilings. This allowed seasonal employment of youths and others at low grade levels. This in turn served to meet the aims of special emphasis programs, proved economical and at the same time helped reduce the average grade. Shift to end-year *strength* ceilings severely limits the capacity of the Air Force to utilize this resource and will inevitably raise the average grade.

Field Level Reparables Integrated Into Stock Funds

Chairman McClellan. Explain why field level reparables previously funded in procurement appropriations will be integrated in the Stock Fund in FY 76; and therefore, require Operations and Maintenance funding. Was this an adjustment in Air Force funding procedures only, or were the other services involved?

Mr. McElhanon. According to the DOD definition, investment items are those which are returned to depots for repairs. Only investment items can be excluded from Stock Fund procedures and free issues to requisitioners. A 1973 GAO Audit Report criticized the Air Force for managing items which are repaired at the field level as investment items merely because their unit cost was $100 or more. DOD directed that the Air Force transfer these field reparable items to the Stock Fund and manage them as expense items. This adjustment is DOD-wide for all services which are currently carrying field level repaired items as investment.

C–5/C–141 Aircrew Training

Chairman McClellan. $42.8 million is requested for funding aircrew training in FY 76, as a new program. To what specific extent would C–5/C–141 readiness of aircrews suffer if this amount is not funded.

General Blanton. The local area aircrew training program is not, in itself, a new program in FY 76. In the FY 75 President's Budget, the Air Force requested Operation and Maintenance funds to support local area training as a part of the strategic airlift enhancement program. This request was denied and, as a result, the local area training program, which had to be flown to maintain aircrew readiness contributed to the FY 75 loss projected for the ASIF.

The local area training program consists of proficiency training in instrument take-off, approach and landing, annual instrument checks, inflight emergency training and engine-out landings. Also included are hours for aircraft test after

maintenance and ferry of aircraft to major maintenance depots. These training, test and ferry missions are flown in unloaded aircraft and do not produce revenue for the ASIF.

The local area training program is vital to maintaining mission ready status for C–5/C–141 aircrews. It is an integral part of the overall training required. If this program is not funded, C–5/C–141 aircrews will be unable to maintain pilot skills required for safety of flight. This, in turn, would cripple the ability of the strategic airlift force to meet national objectives for wartime airlift mobility and responsiveness to such crises as the current Vietnam evacuation. The Air Force must have available trained and ready aircrews to respond to contingencies.

Tactical Fighter Units Provided Air Defense Training

Chairman McClellan. How many tactical fighter units will be provided air defense augmentation training. What is programmed for the number of tactical fighter units who will be available over the next five years for air defense augmentation.

General Greenleaf. A total of [deleted] tactical fighter units will be provide air defense training to augment other CONUS air defense forces. [Deleted] of these tactical fighter units will be trained for augmentation of other air defense forces in times of crisis. [Deleted] of these tactical fighter units will receive air defense training to support day-to-day peacetime air defense alert. The Air Force plans to continue use of this number of units over the next [deleted] years.

Common Service Warehousing Policy

Chairman McClellan. Who picked up the $15.4 million that was reduced because of the common service warehousing policy—i.e., which services and how much?

General Blanton. The $15.4 million reduction is a net change to the O&M, Air Force Appropriation. The budget realignment which was reflected as a result of the Common Service Warehousing policy decisions resulted in a zero net change to Department of Defense costs. The other Service budgets were increased to provide the Air Force the same warehousing services for which the Air Force was previously required to reimburse those services.

Surge Supplement Crews

Chairman McClellan. Explain in greater detail the requirement for surge supplement crews. Compare the flying hours that the surge supplement crews will be getting with the flying hours of the basic airscrews.

General Blanton. The surge supplement requirements were established to provide combat units aircrews required to replace crews attrited and/or fill the pipeline enroute to the combat theater. The purpose of the surge supplement is to insure that a unit in combat will have assigned (possess), at least, the number of aircrews required by the wartime crew ratio until such time as combat crew training can graduate a sufficient number of students to insure the wartime crew ratio is maintained.

Surge supplement aircrews are defined as personnel who have been mission ready in the combat force and were reassigned to a job that does not require rated officer skills or expertise. Therefore, if mobilization occurs within six months after being assigned to the supplement, they can be returned to the force as mission ready and their supplement job filled by a non-rated officer. In addition to their non-rated duties, they would continue to fly at the basic proficiency level over the rest of their tour in the supplement, thereby providing a force that could be quickly upgraded to mission ready status.

As you know, the Air Force has shifted to a sortie concept in its flying training programs. The new system is developed around three levels of proficiency: Mission Ready; Mission Capable; and Basic Proficiency. Surge supplement crews will fly at the Basic Proficiency level. The sortie criteria for this level establishes those flying activities required to be safe in operating the aircraft. They insure the necessary frequency of flight for a particular weapon system. Thus, the number of sorties varies by aircraft. For example, the B–52 requirement is approximately 2 sorties per month and for the F–4 the requirement is

approximately 6 sorties per month. These levels are arrived at by comparing average sortie length, complexity of the weapon system and uniqueness of the mission. As an average, the surge supplement aircrew will fly approximately half the amount of time allotted to the basic crew.

F–5E Aggressor Training

Chairman McClellan. In connection with the establishment of the aggressor squadrons with F–5E's, are there not now any aggressor squadrons? What type of aircraft? Won't these drop out. What is the net increase in cost due to phase-in of F–5E aggressor squadrons?

General Blanton. Yes sir, we presently have one 18 UE T–38 aggressor squadron located at Nellis AFB, Nevada. The squadron was formed in October 1972. When this squadron was formed, T–38 aircraft were the only aircraft available that would best simulate enemy (threat) aircraft. The purpose of aggressor concept is to provide our aircrews with sufficient training and experience in enemy air-to-air combat tactics. This requirement was brought out as a result of our high air-to-air losses in SEAsia.

As the F–5E's are phased in, the T–38 aircraft will be returned to the Air Training Command. The annual O&M operating cost of the present T–38 squadron is $2.0M. When the three F–5E squadrons are formed and operating, the total annual O&M operating cost will be $7.2M (two CONUS Squadrons $4.8M, and one USAFE Squadron $2.4M). The Air Force has requested $3.9M in the FY 76 Budget to provide for the phase-in of the F–5E's.

The F–5E aggressor force serves a dual purpose: It has been expanded to accommodate the training requirement for the total force (including Guard and Reserve) world-wide tactical fighter/attack and reconnaissance squadrons; and, it better simulates the MIG 21.

Crew Ratio Increase

Chairman McClellan. Why is there an increase in the number of civilian personnel associated with an increase in F–5E aggressor training, a crew ratio increase in fighters and transport aircraft, and surge supplement aircrew training? What is the relationship between the military personnel who are giving additional training and flying hours, and the number of civilians required? What is the additional number of military manyears associated with each of these increases?

General Posner. The civilian personnel increases are due predominantly to increased logistical support requirements, that is, depot level maintenance and supply support, within the Air Force Logistics Command. Civilians are also required for base operating support at the locations involved. Consistent with Defense policy for utilization of military and civilian personnel, military personnel are used in combat and direct combat support positions, while positions not requiring military incumbency are designated as civilians. FY 1976 military manyears associated with these programs are 1763 for the fighter crew ratio increase, 86 for the transport crew ratio increase, 551 for the F–5E program, and 12 for surge supplement aircrew training.

Civilian Increase in FMS Support

Chairman McClellan. What is the reason for an increase of 76 civilians for foreign military sales support?

General Blanton. These personnel are needed to support sales to Iran and Saudi Arabia. In support of Iran, 66 will be involved in radar site selection, testing and modification to improve existing radar systems, acquisition of additional radar and communications systems and contracting for the training of Imperial Iranian Air Force members. Only four of these personnel will actually be in Iran. The rest will be employed in the United States, primarily in the Boston, Massachusetts, area. For Saudi Arabia, we are requesting an increase of 15 civilians for in-country contract administration—Northrop Aircraft Corporation is the contractor—in connection with the expanding F–5 aircraft sales program. The expanded program will provide for a modernized supply system and will support operations at a new Royal Saudi Air Force Base being constructed. These increases are partially offset by the reduction of five civilians no longer needed for

F–4 logistics support of the German Air Force. No funds are requested for these personnel in the FY 1976 Budget as they are reimbursed in accordance with established Foreign Military Sales procedures.

Factors Used in Computing Aircraft POL and Direct Supply Requirements

Chairman McClellan. Provide a list of aircraft, by type, that identifies the factors used in computing aviation fuel and direct maintenance supply requirements, per flying hour. This should include all types of aircraft.

General Blanton. The flying hour factors used, by type aircraft, to compute O&M requirements for aviation fuel and direct maintenance supply for the FY 76 budget (including the stock fund price increase effective FY 76) are as follows:

[The information follows:]

TYPE AIRCRAFT	FUEL FACTOR	BASE MATERIAL DIRECT SUPPLY REQUIREMENTS
A-1	$ 76	$ 10
A-7	284	137
A-10	212	103
A-37	157	28
B-1	808	418
RB-47H	888	61
B-52D	1712	214
B-52F	1713	214
B-52G	1598	214
B-52H	1429	214
B-52A/B/C/E	1426	214
WB-57C/F	192	162
B-57(Other)	364	162
B-66	618	170
FB-111A	589	285
C-5A	1454	249
VC-6A	36	46
C-7	52	38
C-8	82	8
C-9	434	24
C-12	25	4
C-47	49	28
C-54	123	27
C-97G/K	295	39
KC-97L	608	39
C-118	201	160
C-119G	147	27
C-119K	339	27
C-119L	104	27
C-121	260	85
C-123B	118	31
C-123J/K	191	31
C-124	287	52
WC-130B/H	309	81
WC-130E	299	81
HC-130H/N/P	345	90
C-130A	345	81
C-130E	345	77
DC-130E	345	81
C/AC/DC-130H	345	81
C-130B	345	77
C-130D	345	77
C-131H	152	5
C-131(Other)	108	5
EC-135	823	162
RC-135	740	75
C/NC/VC-135	690	51
KC-135A	1085	143
KC-135Q	1017	143
KC-135R	926	143
WC-135	842	56
VC-137	797	28
C/VC-140	292	15
C/NC-141	914	109

TYPE AIRCRAFT	FUEL FACTOR	BASE MATERIAL DIRECT SUPPLY REQUIREMENTS
E-3A	701	205
E-4A/B	1931	77
F-4C	595	216
RF-4C	542	210
F-4D	588	216
F-4E	635	216
F-4F	556	216
F/RF-5A/B	237	38
F-5E/F	231	38
F/TF-15	448	283
F-100	379	133
F-101	518	166
RF-101	518	223
F-102	313	122
F-104	302	99
F-105B	499	286
F-105D/F	531	286
F-105G	561	286
F-106	404	168
EF-111A	645	202
F-111(Other)	620	232
UH-1N	31	31
H-1(Other)	27	31
CH-3B/C	76	51
CH/HH-3E	63	51
H/CH-34	42	15
HH-43	30	11
CH-47A	191	35
CH/HH-53B/C	114	57
O-1	2	2
O-2	10	2
OV-10	38	4
T-28	25	2
T-29	83	30
T/AT-33	146	18
T-37	78	15
T-38	163	45
T-39	131	16
T-41	4	3
T-43	455	100
U-1	17	2
U-3	12	2
U-4	17	4
U-6	12	11
U-10	7	2
HU-16	81	2
U-17	2	2

Breakout of Strategic Offensive Aircraft Expenses

Chairman McClellan. Provide a breakdown of the FY 74–75–76–7T request for strategic offensive aircraft into the expenses for civilan personnel, fuel, supplies and equipment, other B–52/F–111 expenses, SR–71 costs, KC–135 costs, wing headquarters costs, field level maintenance and advanced flying training costs.

General Blanton. The O&M, AF expenses for strategic offensive aircraft follows:

[In thousands]

	Fiscal year—			
	1974	1975	1976	197T
Civilian personnel	$10,142	$9,233	$10,062	$2,516
POL	282,849	476,089	502,140	126,372
Supplies	58,261	66,016	81,347	19,354
Equipment	2,459	2,547	2,812	667
Other B–52, FB–111, SR–71, and KC–135 costs	62,900	58,526	55,555	13,836
Total	416,611	612,411	651,916	162,745

The increase in FY 76 over FY 75 includes pay raises, aviation fuel price increases, supplies and equipment price increases, and transfer of funding responsibility for base level reparables. These increases are partially offset by flying hour program reductions and a revised SR–71 program. Included within the above are the estimated costs for aircraft wing headquarters, field level maintenance, and advanced flying training costs as follows:

	Fiscal year—			
	1974	1975	1976	197T
Wing headquarters	$1,372	$1,342	$1,424	$371
Field level maintenance	58,455	66,792	77,288	19,401
Advanced flying training	37,043	59,563	62,530	15,731

The flying training O&M costs include the direct costs of the CCTS. Aircraft maintenance costs are included within the field level maintenance totals. Excluded are base support and depot maintenance cost. The CCT mission costs also provide the necessary resources for support of the SIOP mission. The costs related to these different missions are not separately identifiable.

Increase in Civilian End Strength/Strategic Aircraft *OPS*

Chairman McClellan. Why is there an increase in civilian end strengths for strategic offensive aircraft operations. (FY 75–76) Since fewer aircraft are in the program, and there is a reduction in flying hours, why doesn't civilian personnel decrease?

General Posner. The 18 space increase is the net result of the loss of four civilian authorizations in the KC–135 program and an increase of 22 authorizations in the B–52 program. The four space reduction was the result of the transfer of tanker aircraft to the Air Reserve Forces and the increase was for Air Force Engineering and Technical Service (AFETS) personnel for the Avionics Maintenance function. The AFETS personnel are highly skilled, technical people who are used in the indoctrination and training of the airmen who maintain SAC's Electronic Counter Measures (ECM) equipment. The introduction of new, more sophisticated ECM equipment necessitated this small increase. Aircraft and flying hour reductions have resulted in a decrease in military personnel rather than civilian, since the relatively few civilians in the strategic offensive aircraft operations category are predominately in clerical and specialized maintenance positions which are not impacted by such changes.

UH–1 in Strategic Missile Forces

Chairman McClellan. Explain what the UH–1 aircraft do in the Strategic Offensive Missile Forces.

General BLANTON. Helicopters are used to provide Strategic Missile Wings a rapid response capability to a number of situations. They provide rapid transportation for maintenance personnel to respond to missile "NO-GO" status to return sorties to alert. We also use helicopters to provide continuous surveillance of armed convoys engaged in nuclear weapons movement from the support base to the missile launch facility. Security strike teams are moved by helicopter to rapidly respond to security alarms in our missile fields on some occasions. Helicopters are also used to provide emergency transportation for sick or injured personnel from our remote missile installations to the base hospital. Occasionally we transport missile combat crews to a launch control facilitiy when prolonged adverse road conditions prevent ground travel. Although not a primary purpose, having helicopters available at our Strategic Missile Wings provides the Air Force the capability to assist in local community disaster relief in situations such as floods, severe snow storms, and other emergency conditions.

INCREASE IN CIVILIAN END STRENGTH/STRATEGIC MISSILE OPS

Chairman MCCLELLAN. Why is there a small increase in civilian end strengths in the offensive missile program elements?

General POSNER. The additional three spaces, two in the Titan II program and one in Minuteman, are required in support of the missile test program.

SRAM DEPLOYMENT INCREASE

Chairman MCCLELLAN. Why does SRAM deployment increase, even though the number of B-52 aircraft actually decreases?

General BLANTON. A comparison of total B-52 aircraft assets against SRAM unit equipage should not be made since only the B-52G and H models are being modified and programmed for SRAM employment. The unit equipage of B-52G and H aircraft remains constant at 255.

The total SRAM procurement of 1500 missiles allocated [deleted] for unit equipage, 113 for command support and 247 for testing. Unit equipage was based on [deleted] SRAM each for 17 B-52G/H squadrons and [deleted] SRAM each for four FB-111 squadrons. The increase in total equipped units and total numbers of SRAM is the deployment of contractor delivered missiles as we progress to programmed force levels.

RC-135 FLYING HOUR INCREASE

Chairman MCCLELLAN. Why do RC-135s in the strategic offensive operations program elements more than double their number of flying hours between FY 75 and 76?

General BLANTON. The aircraft are budgeted in FY 76 for modification to tanker configuration. Until modified they are being used in an administrative support role. The increase in flying hours is to partially offset the loss in airlift capability created by the reduction of over 400 administrative support aircraft from the Air Force inventory.

INCREASES IN EQUIPMENT SUPPORTING WWMCCS/B3500/STALOG

Chairman MCCLELLAN. There is an increase of $6.2 million in FY 76 for "augmentation of equipment supporting WWMCCS and subsystems of the Base level data automation Standardization B3500 and lease of additional EDPE to support STALOG system near term improvements." Provide a greater description of the systems involved, particularly the STALOG system, and an explanation of these increased requirements.

General BLANTON. The System to Automate Logistics at Base Level (STALOG) is designed to improve the operation of base level supply, maintenance, transportation and procurement. The system provides for the integration and interface of these logistics systems, including the crossing of functional boundaries, both horizontally and vertically. The program is being implemented in an incremental, modular approach. FY 76 monies requested are to provide an initial STALOG automated capability on the base level Burrough B3500 computer in support of Communications, Electronic and Meteorological equipment maintenance and for the automation of vehicle operator records.

The Base Level Data Automation Standardization Program (B3500) provides support for the recurring management and reporting requirements of the various base level functional activities, as well as satisfying various unique processing requirements, at Air Force bases world-wide. Requested FY 76 funding will continue the on-going implementation of a Maintenance Management Information and Control System in support of the aircraft maintenance area.

For the World-Wide Military Command and Control System (WWMCCS), the FY–76 increase is required for lease of augmentation equipment installed in FY–75. The augmented equipment was acquired in support of increased automated processing requirements for; (1) Increased Single Integrated Operations Plan (SIOP) processing and the associated additional SIOP War-Gaming increase; (2) Maintenance of required on-line response times for the SAC Automated Command and Control System (SACCS); and, (3) Major expansion of National Target Attack Policy (N/TAP) production requirements in support of the National Command Authorities and/or enhancement of a National Flexible Response capability.

Support Aircraft Phasedown

Chairman McClellan. For the entire O&M Air Force appropriation provide a summary table showing cost decreases as a result of support aircraft phasedown, then show a breakdown of cost increases for additional commercial (or other) travel requirements resulting from this phasedown, coming to a net saving in FY 76.

General Blanton. Sir, the following table outlines the changes to the FY 76 Air Force O&M appropriation as a result of the support aircraft phasedown:

[In millions of dollars]

	Gross savings	Increased commercial transportation	Increased utilization of T–39/C–135 A/C	Net savings
Civilian personnel	10			10
POL	19		−6	13
Depot maintenance	20		−3	17
Base supplies and other	14		−1	13
Travel and per diem		−19		−19
Total	63	−19	−10	34

Corresponding decreases in military personnel, aircraft procurement, the Guard O&M, and Reserve O&M appropriations, plus a portion of the UPT/UNT reductions will result in an ultimate annual savings approaching $100 million per year.

F–101 In Strategic Defensive Mission

Chairman McClellan. Why is there a small number of F–101s in strategic defensive forces, where are they, and what is their mission?

General Greenleaf. There are three F–101 aircraft located at the Air Defense Weapons Center, Tyndall AFB, FL which are used in supporting operational test and evaluation (OT&E) projects. The test missions which the F–101s support include project evaluations using its radar/infrared (IR) search and track system, evaluations using the F–101 as a tractor aircraft for tow target system development, and missions which provide photo/safety chase aircraft coverage for other projects. The power, speed, fuel load, radar/IR tracking system, and instrumentation and data recording systems of the F–101 make it an ideal test bed aircraft for all types of evaluations.

Increases in Support For F–106 Subsystem

Chairman McClellan. Why are there increased requirements for purchased equipment maintenance and contractor technical services for F–106 AIM 4F/G and M61 gun systems in FY 76.

General Blanton. The increased requirements for purchased equipment maintenance is for the full year requirement to service vehicles and other equipment at the alert detachment, 84th Fighter Interceptor Squadron, which was activated during FY 75.

The contract technical services are necessary to instruct and train military personnel in the maintenance and operation of these systems due to the constant turn-over of personnel. These weapons mechanics are then assigned to each of the F–106 fighter units.

PHASEOUT OF EC–121s

Chairman MCCLELLAN. What is the plan for phaseout of the EC–121s. Why are 5430 flying hours shown for these aircraft in FY 1976, even though the average operating aircraft is zero in this fiscal year.

General GREENLEAF. The EC–121s will phaseout in FY 4/76. The average operating aircraft shown on page 33 of the Budget justification book is in error. The correct average operating aircraft is fourteen for FY 75 and seven for FY 76. The 5430 flying hours in FY 76 is required to support the phasedown of the EC–121 aircraft during the first three quarters of FY 76.

POLICY CHANGE IN SOFTWARE PROCUREMENT

Chairman MCCLELLAN. Explain the policy change pertaining to software procurement that resulted in transfer of $4.5 million from the procurement appropriations for the Surveillance and Warning Program. Doesn't this policy affect other operating programs as well?

General BLANTON. The $4.5 million transferred from the procurement appropriations is for application software for use on computers supporting the Defense Support Program, an operational system. The Department of Defense funding policy provides for funding this type of software from the operating accounts. The procurement appropriations support existing executive Software that is procured with a computer on which the software would operate. Examples of other Air Force programs which have been impacted by the change in software funding policy include: Tactical Information Processing and Intrepretation (TIPI), Spacetrack, Joint Surveillance System and the Tactical Air Control System (TACS).

INCREASE IN DEWLINE AND BMEWS CONTRACT

Chairman MCCLELLAN. Explain the $14.1 million increase for contractual services associated with renegotiation of the DEWLINE and BMEWS contract. How much was the FY 74 & 75 contract. How much in FY 76. What is the planned manyears funded in the contract for each of those years. Is there a workload increase or decrease. What other program requirements are funds requested for?

General BLANTON. The increase of $14.1 million for contractual services is associated primarily with renegotiation of DEWLINE and BMEWS contracts, although there are also increases totaling $3.6 million for NORAD-COC, SPACETRACK, SLBM and Defense Support Program. The total DEWLINE and BMEWS contract costs included in the budget are as follows:

[In thousands]

	Fiscal year—			
	1974	1975	1976	Difference
Dewline	$21,043	$20,309	$29,516	+$9,207
BMEWS	14,979	14,367	17,827	+3,460

However, the operating portion of the contract is included within the Surveillance and Warning grouping while the Civil Engineer portion is included in Defensive Operations.

The contracts are not negotiated on a manyear basis but on a minimum manning level concept. The FY 76 manning level will not be known until the contract is awarded. Due to the varied work week, depending on location, it is not possible to equate exact manning per month or manyear. For example, at project headquarters the work week is 40 hours. In Alaska it is 54 to 56 and in Greenland from 54 to 84 hours. For FY 74 and FY 75 the average employee manning per month is as follows:

	Fiscal year—	
	1974	1975
Dewline	926	877
BMEWS	588	563

The monthly average manning for FY 75 is based on nine months actual experience.

The current contracts which run from FY 73 through FY 75, are firm fixed price contracts and include no provision for price escalations. However, individual projects within the Annual Maintenance Plan are not included in the fixed price contracts and will cause the total contract price to fluctuate. Examples of this would be emergency repairs such as storm or fire damage.

The FY 76 increase incident to renegotiation of the contracts results from increased labor costs over the past three years now being included within the new contracts. In addition, there is also increased workload or level of effort for the new DEWLINE contract. For example, depot level maintenance responsibility has been transferred from AF Logistics Command (AFLC) to this program. The depot no longer has the capability or skills required to perform this maintenance due to the general obsolescence of the equipment across the DEWLINE. Retooling by subcontractors would be required to provide for the maintenance of current equipment. This is particularly true of generators and communications equipment. Also there is additional workload which requires additional Civil Engineer personnel at various sites, in order to effectively accomplish requirements of the Installation Work Plan and Facility Maintenance Plan.

Requirement for Arctic POL

Chairman McClellan. Explain the $10.1 million requirement for Arctic POL, an item that was partially procured during FY 1974.

General Blanton. The Arctic POL requirement is an annual POL resupply effort in support of the DEWLINE system. The POL is purchased and delivered during the spring and summer when weather conditions are favorable. The deliveries made in the summer of calendar year 1974 were procured with both FY 1974 and FY 1975 funds. The deliveries to be made in calendar Year 1975 are programmed for procurement with FY 1976 funds and result in a $10.1 million dollar increase in FY 1976 over FY 1975 although the quantities of Arctic POL programmed for procurement remain relatively stable.

Increase in Goods Purchased From Stock Fund/TAC Fighters

Chairman McClellan. Under the tactical fighter program elements, provide the total dollar value of goods purchased from the Defense Stock Funds, FY 74, FY 75, and planned in FY 76. (An increase of $62.4 million is shown in FY 76 for stock fund price increases.)

General Blanton. In the tactical fighter program elements, $185 million of goods were purchased from the Defense Stock Funds in FY 1974, $293 million and $393 million are programmed to be purchased from the Defense Stock Funds in FY 1975 and FY 1976, respectively. Of the $100 million increase between FY 1975 and FY 1976, $62.4 million is for the Stock Fund price increase, $1.0 million is for the 1 November 1974 fuel price increase and common service warehousing, $10.3 million is for base level reparable funding responsibility transfer from the Procurement Appropriations, and $26.3 million is programmed for the increased tactical fighter crew ratio and other program changes.

Explain Decreased TAC Fighter Redeployment

Chairman McClellan. Explain the decreased redeployment requirements that reduced tactical fighter program elements by $9 million in FY 76.

General Blanton. In FY 75, A–7s, F–105s, F–4s, and F–111s were redeployed from PACAF. The total redeployment cost for these aircraft was $9.9 million. In FY 76, the only programmed tactical fighter redeployment, A–7s from PACAF to the CONUS, will cost $.6 million.

Increase In DC–130 Average Operating Aircraft

Chairman McClellan. What accounts for the increase in DC–130 average operating aircraft in the tactical reconnaissance/Electronic warfare program elements (FY 76)?

Colonel Sechler. The DC–130A UE for the 11th Tactical Drone Squadron, Davis Monthan AFB, Arizona, was increased from two to three aircraft in FY 3/75 producing an increase in average operating aircraft (AOA) from two in FY 75 to three in FY 76. The UE increase was necessary to enhance the wartime mission and peacetime training capabilities of our tactical drone launch forces.

SOF Mission Responsibilities

Chairman McClellan. Describe the mission responsibilities of the Special Operations Forces. Why were CH–3 and UH–1 helicopters added to the Special Operations Forces operating program in FY 76, when they had been deleted in FY 75.

General Greenleaf. The President's budget for FY 1976 shows the USAF Special Operations Force (SOF) with an active duty force of 33 aircraft. Special Operations forces are maintained to perform counterinsurgency, psychological operations, unconventional warfare (UW), and/or functions related to these operations.

Special operations aircraft

Average operating aircraft:	*Fiscal year 1976*
C/AC–130	23
CH–53	6
CH–3E	2
UH–1N	2
Total	33

SPECIFIC MISSIONS

C–130 E/H—These aircraft are equipped with state-of-the-art ECM and navigation systems for night/low level/adverse weather penetration into denied areas. Nicknamed Combat Talon, these aircraft perform the classic UW roles of direct action missions, infiltration, resupply and exfiltration. Related missions include maritime surveillance, POW recovery operations, and air defense exercises.

AC–130 A/H—Gunships combine detection and destruction in a single self-contained night/adverse weather attack system which is extremely effective in close air support, interdiction and base defense missions. ECM and laser designating equipment enhances its use as a forward air controller for fighter aircraft delivering laser guided bombs or cluster munitions.

CH–53/UH–1N/CH–3E—Armed helicopters perform infiltration, resupply and exfiltration of personnel/equipment into hostile or denied territory. Related missions include support to POW/MIA recovery operations and emergency evacuation of non-combatants from hostile areas. The Air Force retains Special Operations helicopters to support UW through infiltration and exfiltration of special forces. In addition, they are capable of performing armed reconnaissance and base area defense missions during low level conflicts such as counter-insurgency operations. Related missions include logistic support to forward elements as well as humanitarian operations.

Special Operations Forces experience indicates that the mix of fixed wing and rotary wing helicopter forces provides not only flexibility but an extremely cost effective method of performing its mission. For example, while armed reconnaissance or base defense can be performed by an AC–130, there may be times when this degree of fire power/speed is not necessary and the armed helicopter would be tasked for the mission.

The Special Operations Force School at Hurlburt, Florida, trains US and foreign personnel in the principles of UW, PSYOP, counterinsurgency, civic action and foreign internal defense. The school also provides area orientation to US mobile training teams being deployed to foreign countries.

In FY 75, the CH–3 and UH–1N helicopters were removed from the active CONUS Special Operations Force (SOF). The CH–3s were programmed to modernize a reserve unit as part of the Air Reserve Force modernization effort.

The UH–1Ns were retained in the active force in a support role instead of SOF forces. This action achieved a modest cost savings and retained a SOF capability for use in exercises and mobilized contingencies.

In FY 76, the Air Force will realign its helicopter assets. CH–53s which are currently assigned to the Active SOF will be reassigned to the Tactical Air Control System (TACS). Also in FY 76, a Special Operations unit, minus its equipment (CH–53s), will be returned to the CONUS from SEAsia. We are planning to reequip this unit with CH–3s from other mission areas, and UH–1Ns which will once again be realigned under the SOF mission area. This reequipped unit will provide the active force with a small force for participation in exercises and non-mobilized as well as mobilized contingencies.

Common Service Warehousing/Reductions

Chairman McClellan. Several programs show reductions resulting from common service warehousing. To what extent did the Air Force assume costs that formerly were borne by other services as a result of this policy change? Which services and what amounts, if any, are involved?

General Blanton. The Air Force assumed costs of $7.0 million that formerly were borne by the Defense Supply Agency. In total, the Air Force effected a net reduction of $15.4 million for common service warehousing.

Minimum Essential C–5/C–141 Flying Training Program

Chairman McClellan. What is the minimum essential C–5/C–141 flying training program in FY 76. Indicate the sources of funds to support this flying hour program, as well as the exercises in which the planes will be involved, by number of flying hours.

General Blanton. The minimum essential C–5/C–141 flying training program for FY 76 is 353,359 hours. This program is required to maintain aircrews in the mission ready status necessary to respond and sustain strategic mobility in contingency situations. The need for this training and readiness is being effectively demonstrated during the current Vietnam evacuation.

Since 1958, the flying hour program required for strategic airlift flying training has been funded through the Airlift Services Industrial Fund (ASIF). The ASIF is reimbursed by airlift users for cargo movement and support of joint readiness training accomplished as a by-product of the required aircrew training program.

The funds to reimburse the ASIF for the strategic airlift flying training program are requested from the Congress by the Services in various line items, such as second destination transportation, permanent change of station of personnel, JCS Exercises and Joint Airborne/Air Transportability Training, within the various appropriations comprising the President's Budget for the DOD. A summary of the sources of ASIF revenue, by category and funding source for FY 76 is provided below.

	Fiscal year 1976		
	Flying hours	Cost (millions)	Principle funding source
Total ASIF program	353,359	$1,058.0	
Channel cargo missions (Army, Navy, Air Force, other DOD).	173,844	427.5	Service/agency O. & M. accounts.
ASIF commercial buy (primarily passenger movement)		292.2	Service military personnel accounts.
JCS exercises	29,633	66.8	O. & M. AF.
Local area crew training:			
Active Forces	28,544	42.8	O. & M., AF.
Reserve Forces	27,797	44.0	O. & M. AFR.
Special assignment air mission	39,380	86.7	Service O. & M. accounts.
Joint airborne training	6,800	15.6	O. & M., AF.
Essential training unsubscribed	47,361	82.3	O. & M., AF.

In the current peacetime environment and associated declines in force levels throughout the Military Services, the strategic airlift training program essential to meet national wartime mobility and responsiveness objectives is not fully

subscribed by DOD airlift customers. Funds to reimburse the ASIF for the unsubscribed portion of the essential aircrew training program are included in the O&M, AF appropriation as is the case for aircrew training for other weapon systems.

A detailed list of JCS Exercises in which the Air Force will participate in FY 76 will be provided for the record.

JCS Exercises

Chairman McClellan. Provide a list of JCS directed and coordinated exercises that the Air Force will participate in FY 76, show cost and number of flying hours of each aircraft associated with such exercises, and compare with similar exercises in FY 75.

General Blanton. There are four JCS directed and 29 JCS coordinated exercises that the Air Force will participate in FY 76. This listing shows the exercises, programmed Air Force costs and the estimated number of C–5 and C–141 flying hours to support each exercise. The actual amount of C–141 and C–5 support will not be determined for each exercise until after the transportation planning conference, normally approximately 90 days before the exercise begins.

[The listing follows:]

Exercise	Fiscal year 1976			Fiscal year 1975		
	Cost (millions)	Flying hours		Cost (millions)	Flying hours	
		C–141	C–5		C–141	C–5
Reforger	$14.0	4,850	754	$13.4	6,018	569
Bold Eagle	6.1	2,091	277			
Crested Cap	2.0	769				
Solid Shield	10.4	3,110	704	5.1	2,333	
Aloud Series	.5	275				
Amalgram Mute	.1	71				
Vigilant Overview	.1					
Opportune Journey	.1					
Cope Elite	1.5	726		1.4	588	
Flintlock	.9	413				
Ivory Hunter	.1					
Brave Shield	11.8	3,546	800	11.0	4,064	784
Captain Cook	2.7	1,352				
Deep Express	1.9	268	182			
Foal Eagle	.1					
Midlink	2.3	1,083		2.2	1,138	
Ocean Safari	.1					
Jack Frost	2.3	912	70	1.9	813	65
Black Hawk	1.0	107	113			
Dawn Patrol	1.2	578				
Aresh	.6	345				
Atlas Express	1.4	182	100			
Flaming Lance	3.1	1,626				
Shahbaz	1.0	463		1.3	380	
Creek Bee	.2					
Captive Lightning	2.3	1,157				
Fly-A-Way	1.2	633				
Logex	.1					
Pole Vault	.1					
Land/Air FTX	2.0	1,076				
Advent Express	1.9	1,000				
Ember Dawn				1.6	740	
Gallant Shield				23.2	11,004	1,168
Northern Merger				.8	202	23
Total	73.1	26,633	3,000	61.9	27,250	2,636

Within the FY 75 JCS Exercise program shown above, 14,482 hours and $26.9 million were applied to Gallant Shield and Solid Shield from the $39.3 million Operation and Maintenance, AF reprogramming action (MFP IV) approved by the Congress. The application of the additional FY 1975 flying hours made possible by the reprogramming approval provided the dual benefit of urgently needed joint readiness training while accomplishing required training for strategic airlift aircrews. (Note that the total flying hours in FY 75 (29,886) are about the same as in FY 76 (29,633).

The difference between the JCS Exercise programs for FY 75 and FY 76 results primarily from increases in the price of aviation fuels and flying hour related

supplies and equipment. The overall program is essentially the same in FY 75 and FY 76.

In peacetime, joint training exercises become a principle means to insure that forces are combat ready. Since the overall FY 76 flying hour program (C–5/C–141) of 353,359 hours is required to maintain ready aircrews, the Air Force plans to allocate a portion of the essential, but unsubscribed strategic airlift flying training program to JCS Exercises. Specifically, the following additions or expansions to the above FY 76 JCS Exercise program would be undertaken.

[The information follows:]

Exercises	Additions		Expansions	
	Hours	Cost	Hours	Cost
Bold Eagle			15,000	$27,975
Vigilant Overview	620	$1,156		
Opportune Journey	503	947		
Captain Cook			1,400	2,611
Foal Eagle	350	653		
Jack Frost			3,200	5,968
Black Hawk			570	1,063
Flaming Lance			2,200	4,103
Creek Bee	708	1,320		
Captive Lightning			1,000	1,865
Total	2,186	4,076	23,370	43,585
Total training flying hours applied		25,556		
Total dollars applied		47,661		

ASIF Increase in Flying Hour Rate

Chairman McClellan. Explain why there is an increase in Airlift services industrial fund billing rate per flying hour in FY 76. Does this reflect any additional price increase announced for the Defense Stock Fund POL costs during FY 76.

General Blanton. The tariff established for 1 July 1975 were structured to: (1) recognize the FY 76 increase in prices for aviation fuel and supplies announced by the Defense Stock Fund and, (2) recover the cumulative Airlift Services Industrial Fund (ASIF) operating loss projected for FY 75 over a 15 month period (by end FY 7T).

In FY 75, as the result of reduced cargo movement requirements as DOD Force levels declined in the peacetime environment, the ASIF was unable to recover, at the established tariff rate, the cost of a constrained strategic airlift flying hour program (299,000 hours). This constrained program met user requirements but did not meet minimum aircrew training requirements. The cumulative loss projected at end FY 75, on the basis of this constrained flying hour program, was $95.4 million. As a result, the Air Force received Congressional approval for a $39.3 reprogramming action under Section 834, Public Law 93–437.

After the application of the $39.3 million reprogramming to move closer to the minimum strategic airlift training program of 327,000 hours, including airlift support for JCS Exercises Gallant Shield and Solid Shield, it now appears that the cumulative ASIF operating loss at the end of FY 75 will be $67.9 million. The tariff increase for FY 76 was designed to recover $48.5 by the end of FY 7T. Therefore, assuming no further declines in cargo requirements and Congressional approval of strategic airlift funding requested on the various line items of the overall DOD Budget for FY 76 and FY 7T, it now appears that the cumulative loss for the end of FY 7T will be $19.4 million.

While the overall impact is uncertain at the current time, the Vietnam evacuation could result in both an FY 75 flying hour program in excess of 327,000 and a reduction in the cumulative ASIF operating loss. It was the availability of trained and ready-to-go strategic airlift aircrews, not yet reduced below the minimum essential level, which enabled the Air Force to fully respond to this latest contingency requirement.

ASIF Billing Rate Per C–5 Flying Hour

Chairman McClellan. What is the billing rate, (Airlift services industrial fund) per C–5 flying hour. FY 74–5–6.

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General BLANTON. The ASIF Special Airlift Mission Rate for the C–5 per flying hour is:

Effective July 1, 1973, $3,078.
Effective January 1, 1974, $3,918.
Effective July 1, 1974, $4,837.
Effective July 1, 1975, $5,650.

TACTICAL OPERATIONS/INCREASE IN STOCK FUND PURCHASES

Chairman MCCLELLAN. There is a $52.9 million increase in FY 76 for purchases from the stock fund—tactical operations program elements. What is the total value of purchases made from the stock funds for these elements, in FY 74–75–76?

General BLANTON. For the tactical operations program elements, purchases from the Defense Stock Funds in FY 74, FY 75 and FY 76 are $247 million, $279 million, and $319 million, respectively. Of the $40 million increase from FY 75 to FY 76, $52.9 million results from the 1 July 1975 price increase announced by the Defense Stock Fund, $5.8 million results from transfer of funding responsibility for base level reparables from the procurement appropriations, a decrease of $7.6 million results from the loss of support aircraft, and a decrease of $11.1 million results from the transfer of Pope/Little Rock AFBs to MFP IV, decreased PACAF base structure and other program changes.

REDUCTIONS IN SEA LEASE STRUCTURE

Chairman MCCLELLAN. Describe the specific reductions in Southeast Asia Base Structure, FY 75–76, that result in a decrease of $15.2 million in operations fundings.

General BLANTON. Four Southeast Asia bases, all located in Thailand, were reduced or are scheduled to reduce in FY 75–76. USAF activities at Takhli Air Base were terminated in September, 1974, and Ubon Airfield was placed in caretaker status in November, 1974. The latter base is scheduled to [deleted]. Additionally, Nakhon Phanom Airport is programmed to [delete] and Udorn Airfield is programmed to [delete].

DESCRIBE TACTICAL OPERATIONS INCREASES

Chairman MCCLELLAN. Tactical operations describe an increase of $3.6 million for NATO Air Weapons Training Center support, A–10 contractual services, decreased reimbursements from the foreign sales program; and increased training activity of the tactical fighter weapons center range. Where is the NATO Air Weapons Training Center, what is its annual operating cost, and how much training is annually accomplished there? Same question for the tactical fighter weapons center range. Why are A–10 contractual engineering technical services funded in Operations and Maintenance? How much do they amount to in FY 76? Provide a breakdown of workload and reimbursements for the foreign military sales training program. It would seem that due to the very large increases in sales of fighters over the past two years, the training program would increase, not decrease. What is the total load of pilots trained under the FMS program, FY 74–75–76?

General BLANTON. The NATO Air Weapons Training Center will be located on Tymbakion, Crete. The center is programmed to support air-to-air and air-to-ground training for 36 US Air Force aircraft. Similar training will also be accomplished by the U.S. Navy and the Air Forces of the United Kingdom and Greece. The annual operating cost of approximately $7.7 million is anticipated to be shared by the U.S. Air Force (estimated at 60%), the US Navy, the United Kingdom and Greece. The FY 76 O&M, AF Budget includes $1.7 for the Air Force's share of initial range equipage costs.

The Tactical Fighter Weapons Center (TFWC) Range is located 30 miles North of Nellis AFB, Nevada. The FY 76 operating cost for the range, including direct user costs of $1.3 million which is reimbursed to the TFWC, is $7.8 million. The range will support approximately 11,200 Operational Test and Evaluation (OT&E) sorties. In addition, large scale joint tests and exercises conducted at the Range will include another 4,200 aircraft sorties.

The A–10 contract field service assistance, for which the Air Force is requesting $410 thousand in FY 76, will provide Air Force personnel with the essential training necessary to achieve the level of organic maintenance capability required to operate and maintain the aircraft in the active inventory.

The level of reimbursable Foreign Military Sales (FMS) training programs is projected to decline as the cost of such training rises primarily due to increased costs of aircraft fuels and supplies. The FMS workload included in the FY 76 President's Budget, for pilot and navigator training in the F–5E, F–104, F–4 and T–38, as compared to FY 74 and FY 75 is:

	Fiscal year—		
	1974	1975	1976
Student input	342	292	201
Student output	296	296	237
Reimbursements (millions)	$6.3	$5.4	$4.2

Wake Island Support Contract Increase

Chairman McClellan. Please explain the $3 million increase in tactical operations for "Wake Island support contract price increase, purchase of micro publishing equipment and additional mobility bag requirements".

General Blanton. Wake Island is a contractor-operated installation. It is maintained for contingency deployments, serves as an emergency landing field and as a POL storage site. An increase of $500 thousand for contract costs is required for increased wages which the contractor must pay. There is no change in scope of the contract.

The increased requirement of $1,573,000 is for microfiche viewers and printers to be used with manuals published and to be published on microfiche; microfiche is a 4'' by 6'' piece of film on which printed pages are recorded in greatly reduced form. One microfiche contains 270 8'' x 10'' pages of printed material. The viewers required to support micropublishing will also be used to view computer output products which are also being converted to microfiche products. Microfiche printing of manuals and computer products is far more economical than conventional paper products (the cost of which continues to increase); microfiche publishing is faster, and distribution and storage costs are lower.

Mobility bags are required for unit deployments in support of approved JCS contingency plans. The Type "A" bag contains survival and personal equipment while the Type "B" bag contains extreme cold weather equipment including arctic parkas, trousers, gloves, and boots. The requested funding is primarily for parkas in the "B" bags and would partially alleviate the shortage of fully equipped mobility bags. This shortage limits readiness of deployment to areas of extreme cold. Completion of the "B" bags on hand would require approximately $900,000; the Air Force is requesting $615,000 to partially reduce this shortage in FY 1976.

Travel Increases Resulting From Roth Amendment

Chairman McClellan. What is the estimate of total Air Force wide travel increases required in FY 76 as a result of limitations placed on FY 75 travel by the Roth Amendment.

General Blanton. The Roth Amendment had a temporary, but severe impact on Air Force travel during FY 75. Since no funds were withdrawn when the Roth Amendment was enacted, funds previously programmed for essential travel were reapplied to other priority unfunded requirements resulting from the effects of inflation. The subsequent repeal of the Roth Amendment permitted reapplication of funds to urgent travel requirements. However, due to the timing of the repeal, the TDY travel associated with student input for formal training courses, totalling $2.6 million, which was curtailed when the Roth Amendment was enacted, could not be rescheduled during FY 75 and must be accomplished in FY 76.

Joint Airborne/Air Transportability Training

Chairman McClellan. In connection with assigned airlift mission activities, explain what joint airborne/air transportability training is. Also explain what is meant by "payments to the ASIF" for maintenance of non-industrial fund aircraft overseas movement of household goods for Air Force civilian personnel.

General Blanton. Joint airborne/air transportability training provides mobility readiness training for U.S. Army, U.S. Air Force, and Marine Forces. Training is accomplished in the following airborne functions: aerial delivery of

paratroopers, aerial delivery of cargo and equipment, air/land operations by airborne troops and/or air transportable units, and aircraft loading exercises for heavy/outsized equipment. The Air Force has been assigned the mission responsibility to provide airlift support for this training from within the flying hour program required to maintain the readiness of strategic airlift aircrews. Support of the joint airborne/air transportability training does not cause an increase to the overall flying hour program.

The ASIF operates maintenance organizations at 22 locations worldwide. These organizations provide transient maintenance to non-ASIF aircraft landing at these locations. The reverse is also true; non-ASIF organizations perform transient maintenance for ASIF aircraft. The amount shown for payment to the ASIF is the net difference between ASIF maintenance provided to non-ASIF aircraft and the non-ASIF maintenance provided to ASIF aircraft.

As the single manager operating agency for airlift, the Military Airlift Command has the mission responsibility to fund the air transport of household goods and unaccompanied baggage for USAF civilian personnel moving to and from overseas areas where surface transport is lacking or inadequate, i.e., the "hardlift areas", "Hardlift areas" include Labrador, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Columbia, Bolivia, Ecuador, Paraguay, Ethiopia, Somali, Zaire, Chad, Bahrain, Iran, Malagasy, Singapore, Australia, New Zealand, Jordan, Saudi Arabia, Afghanistan, Pakistan, India, Nepal, Seychelles, Wake Island, and Azores.

Local Area Aircrew Training/Funded Prior Years

Chairman McClellan. Explain how local area aircrew training for which $43 million is requested in FY 76 was funded in previous years.

General Blanton. The costs of this training was previously included in ASIF tariff charges to customers. Since the training is accomplished in unloaded aircraft and does not produce revenue to the ASIF, it is appropriate to fund the program in the O&M appropriation as is the case for aircrew training for other weapon systems.

The change in funding responsibility does not increase the overall DOD Budget. If the program was not funded in Air Force O&M, the ASIF tariff rate for FY 76 would have to be increased, and the Services, including the Air Force, would require additional transportation funds to provide for essential cargo movement.

Local area training is an integral and vital part of the overall aircrew training program. It provides aircrews with training in aircraft emergency procedures which are required for safety of flight. Without such training strategic airlift aircrews cannot maintain a mission ready status.

ASIF Flying Hour and Revenue Program

Chairman McClellan. Compare the airlift services industrial fund flying hour and revenue program shown on page 68 of the justification book with the same program in FY 75 and 74.

General Blanton. Yes, sir I will provide the data for the record.

[The information follows:]

ASIF FLYING HOUR AND REVENUE PROGRAMS

	FY 1974		FY 1975		FY 1976		FY 197T	
	Flying Hours	($ Thous)	Flying Hours	($ Thous)	Flying Hours	($ Thous)	Flying Hours	($ Thous)
Total Program	342,944	$663,880	327,335[1]	$881,300	353,359	$1,058,000	89,248	$271,636
Channel Cargo (Army, Navy, Air Force, Other DOD)	207,593	267,716	189,933	379,731	173,844	427,533	47,377	115,849
ASIF Commercial Buy	-	216,626	-	281,468	-	292,200	-	75,500
JCS Exercise	21,584	26,994	29,886[2]	55,196[2]	29,633	66,847	7,636	16,712
Local Area Crew Training:								
Active	23,124	23,478	28,544	36,647	28,544	42,804	7,541	10,700
Reserve	22,794	23,143	23,636	30,965	27,797	44,000	6,544	10,400
Special Assignment Air Missions	62,781	99,818	39,380	73,311	39,380	86,734	9,900	21,880
Joint Airborne Training	5,068	6,105	6,855	11,606	6,800	15,582	1,700	3,895
Unsubscribed Hours	-	-	-	-	47,361	82,300	8,550	16,700
Reprogrammed	-	-	9,101	12,376	-	-	-	-

1/ This flying hour and revenue program may be adjusted as the result of current Vietnam evacuation requirements.

2/ Includes 14,482 flying hours for JCS Exercises that were applied to this program from the approved Congressional reprogramming. Revenue from this application ($26.9 million) is included in the revenue column.

ASIF Commercial Buy

Chairman McClellan. What is meant by ASIF commercial buy ($292 million in FY 76).

General Blanton. It is the amount required by the Airlift Service Industrial Fund (ASIF) for the procurement of commercial augmentation from the U.S. air industry. Based on present Department of Defense (DOD) forecasted requirements for the international air movement of passengers, cargo, and mail, it is anticipated that the ASIF will procure $292 million of commercial airlift to augment MAC's military airlift force. The majority of the commercial augmentation will be for the movement of passengers and mail. The following is the detailed breakout of the forecasted expenditures.

Airlift service industrial fund—estimated commercial augmentation

	Thousands
International passenger	$196,525
International cargo	8,343
Courier	1,650
Subtotal	206,518
Common carriage mail:	
Air mail	36,091
Ordinary	15,710
Parcel	33,894
Total mail	85,695
Total commercial augmentation	292,213

Increased Requirements in Depot Operations Area

Chairman McClellan. Discuss the increased requirements in the depot operations area for weapon system contractor logistic support, development of engineering based/reliability centered maintenance strategy, service engineering, transition from procurement, and contractor maintenance support of the AN/TPN 19 landing control system. In each case identify the total amount of the increase requested, and provide a brief explanation.

Mr. McElhanon. Sir, the requirements for weapon system contractor logistic support (CLS) have increased a total of $5.121 million for several reasons. The E–4A (Advanced Airborne National Command Post) has increased $1.316 million due to an increased flying hour program and increased contractor costs. The T–43 trainer has increased $.242 million because of increased contractor costs. The VC–9C has increased $1.640 million due to the delivery of the full inventory of aircraft (3) and a significantly increased flying hour program. The C–12 MAAG/Air Attache aircraft will be delivered to a variety of operating locations during the first half of FY 1976 and the $.700 million requirement provides the Air Force portion of the total CLS cost for contractor support. The remainder of the total $2.2 million cost is reimbursable. This is a new requirement from FY 1975. Another new requirement in FY 1976 is $.900 million in support of the E–3A AWACS. To provide for increased contractor costs, as well as increased drone maintenance requirements, some of which were deferred from FY 1975, an increase of $1.497 million is required. These increased costs are partially offset by a reduction of $1.174 million for the C–9A Aeromedical Evacuation aircraft due to a reduced flying hour program and the transfer of certain funding requirements to MFP VIII.

There is a $6.5 million increase to provide contractual support to develop an improved maintenance inspection requirement package for each major weapon system. These work packages are to be developed using an engineered based/reliability centered maintenance strategy which has been developed and proven by the airline industry. This new strategy identifies all essential maintenance actions, selects for each the appropriate maintenance policy, distributes each to the proper level for accomplishment, and provides a decision logic/methodology for continually updating the resulting maintenance plan. The airlines have realized improved operational performance and significantly reduced costs with this concept. The U.S. Navy, which initiated contractual support for the new strategy

last year, has had similar success. Therefore, we are convinced that application of the new concept to the Air Force weapon systems will pay off in improved operational capability and reduced maintenance cost.

Items transitioned from the procurement to the operation and maintenance appropriations are included in the service engineering program. An increase of $2.8 million on the F/FB–111 can be attributed to additional systems engineering and Aircraft Structural Integrity Program precipitated by transition from procurement. The F–111 Dynamic Simulator, which provides realtime verification and validation of operational flight programs, accounts for $1.3 million of the increase. Organic capability for the Minuteman was supplemented by a contractor to accomplish an evaluation of service-revealed deficiencies and a sub-system integration study (+$2.9M). An increase of $1.6 million is due to additional C/KC–135 Aircraft Structural Integrity Program requirements generated by the update of life analysis studies and the major wing modification. A $1.5 million increase is required to provide for increased engineering efforts leading to improved reliability of a number of aircraft engines. Increased contractor engineering support for the Titan missile (+$.2M), increased avionics testing support at the new avionics facility at Warner-Robins ALC (+$.6M), increased EW systems engineering support required by the transition of six major systems to AFLC (+$.5M), and sundry other engineering expenses (+$.3M) complete the list of requirements reflected by the $11.651 million increase in service engineering.

The increase of $.797 million in contractor maintenance for the AN/TPN 19 is caused by the increase in number of sets to be supported from two in FY 1975 to 11 in FY 1976.

Additional Printing Funds in Depot Operations

Chairman McClellan. Additional printing funds are requested in depot operations for conversion of computer data paper products to microform and to support the technical order miniaturization system. Explain what this system is, and why such actions are being taken.

General Blanton. Computer Output Microform (COM) is the process of replacing paper computer printouts with microfilm. The Technical Order Miniaturization System (TOMS) is the replacement of paper Technical Orders with microfilm.

Computer output on microfilm is being employed at AFLC as an economy measure, since the production of microfilm is cheaper and faster than tabulating paper. AFLC has consolidated their COM operations with their industrially funded printing plants and COM services are charged to printing funds.

The Technical Order Miniaturization System (TOMS) was a result of a cost analysis by the Warner Robins ALC to reduce paper consumption. Previously the cost of converting from paper to microfilm was done by Material Management. Now the conversion to microfilm is done in AFLC printing plants and is charged to 501 printing funds.

Annual Operating Cost for MASDC

Chairman McClellan. What is the total annual operating cost of the Military Aircraft Storage and Disposition Center at Davis-Monthan AFB, Arizona? Provide a general breakout of the aircraft in storage there.

General Blanton. The total annual operating cost of the Military Aircraft Storage and Disposition Center at Davis-Monthan AFB, Arizona for FY 75 is $13.2 million. Distribution of this cost is:

	Million
Civilian personnel	$11.9
Supply and materiel	.9
Miscellaneous	.4

The inventory of aircraft stored at the Military Aircraft Storage and Disposition Center as of March 31, 1975, consisted of 68 different types of aircraft totaling 5,528. These are broken out as: Air Force, 2,598; Navy, 1,890; Army, 1,028; Coast Guard, 12.

Classified Intelligence Program

Chairman McClellan. Provide for the committee's files a description of the classified intelligence program that has been expanded at a cost of $7.4 million in FY 76.

General BLANTON. This program covers cargo-type aircraft of various types which have been modified for the collection of intelligence and for other missions which require security safeguards. Program funds for these aircraft include modification, programmed depot maintenance, and logistics support for aircraft systems.

TECHNOLOGY REPAIR CENTERS/ELIMINATE NONRECURRING COSTS

Chairman MCCLELLAN. Explain how technology repair centers in the logistics command eliminates nonrecurring costs. What was the cost of implementing the Technology Repair Center concept, and what is the recurring annual savings?

Mr. MCELHANON. The basic Technology Repair Center (TRC) concept requires that reparable items returning to a depot facility be consolidated at a single facility when similar skills, equipment, and tools are required in the repair process of the item. Prior to TRC, items requiring the same basic resources in the repair process were often supported from five depot facilities. The specialization through TRC reduces the requirement for bits and pieces, bench stock, common parts, overhead support skills and the basic resources to support an industrial shop. This reduction of duplicate resources does provide savings to the Air Force over time. Savings in the area of nonrecurring costs were related to facilities and equipment that would not be required at multi locations when workloads were consolidated at a single facility. In these cases, the requirements were not funded and the savings related to an avoidance of the need. It was originally estimated that the cost of relocating six million manhours of workload to achieve the TRC structure would require a one-time cost of $26.0 million. We have moved 90 percent of the manhours, the items are inwork at the new location and the cost to date has been $21.4 million. The annual recurring savings includes the reduction of 1153 overhead support manpower spaces. This represents an annual $18.0 million in payroll savings.

JUSTIFICATION FOR DEPOT MAINTENANCE REPAIR

Chairman MCCLELLAN. Provide further justification material to support the request for $1,059 million for depot maintenance repair. This should include a general description of major items funded, significant numbers of larger systems (e.g., engines, and aircraft) undergoing maintenance, overhaul or modification. In each case show the FY 76 program in comparison with FY 75 and 74.

Mr. MCELHANON. Sir, this program provides for repair, overhaul or modification of all weapon systems and equipment of the active Air Force which are supported from the O&M Appropriation. In the aircraft area most of the requirements are for work on the B–52, C–130, C/KC–135, F/RF–4 and F/FB–111. The costs are driven to a large extent by the need for modifications to extend the service life on B–52Ds, C/KC–135s and F/RF–4s, and to upgrade systems capability on B–52 G/H and the F/RF–4 force. Programmed Depot Maintenance (PDM) on a cyclic basis has been discontinued on those types of aircraft with no hard core depot level tasks, although Analytical Condition Inspections (ACI) are done each year on a random sample basis to verify the conditions of each type. During FY 1974, 1,245 aircraft were processed through depot or contractor facilities for PDM or ACI. The number was reduced to 1,111 in FY 1975, and we are programming 1,182 aircraft in FY 1976. Major changes in funding requirements in FY 1976 relate to the B–52D structural modification and PDM (+$31.0 million), F–4 modification, including fatigue life extension (+$12.7 million), offset by reductions in modification work on B–52 G/H, C–130 and F–106 (—$13.5 million), and phaseout of support aircraft (—$3.4 million).

Funds are required for cyclic repair and update of missiles, including strategic, air-to-air and air-to-ground. Most of these funds are for support of the Minuteman, including work done at the launch locations. In FY 1974 all missile work cost $7.1 million, reducing to $6.2 million in FY 1975, and increasing slightly to $6.5 million in FY 1976.

Engines are managed through an actuarial system which maintains serial number tracking on each engine. During FY 1974, we overhauled 5,126 aircraft and missile propulsion engines. In FY 1975 we are overhauling 4,698, and we are requesting funds in FY 1976 to overhaul 4,625.

Other major equipment items encompass a wide range of specialized end items such as construction equipment, aerospace ground equipment, flight simulators and other training devices, ground communications systems, mobile radar sets,

railway rolling stock, fire trucks and snowplows. A reduction in dollar requirements for FY 1976 of $4.0 million is the result of an overall reduction in the aircraft inventory and the number of operating locations. The reduced requirements are primarily such items as GCA vans and generator sets.

The funding requirements for the repair of exchangeable components decreases by $8.9 million in FY 1976. The repair of exchangeables consumes the major portion of the depot maintenance dollars, and requires concerted management efforts. The large funding requirement for exchangeables is the result of management efforts in reducing total logistics support costs. Rather than return the complete engine or aircraft to the depot for repair, we endeavor to transport and repair the lowest level of components which exceeds the field level repair capability. In addition, the supply leveling policies of the Air Force are so austere, with respect to the number of items purchased for stockage and pipeline, that it becomes essential to move and repair items rapidly in order to maintain adequate logistical support. Despite significant management innovations and improvements in effectiveness, the repair of exchangeables continues to require well in excess of half a billion dollars annually. The requirement for the repair of exchangeables in FY 1976 is $548.2 million, compared with $557.1 million in FY 1975 and $569.6 million in FY 1974. The reduction in FY 1976 is the result of the programmed decrease in flying hours and aircraft inventory in addition to increased efficiency and effectiveness within the repair centers.

Area support is assistance provided by a depot in the maintenance of equipment assigned to a base operating within that depot's locale. Base support is that field level maintenance assistance provided by a depot base to its tenant units. The decreased flying hour program, phaseout of support type aircraft, reduction in aircraft operating locations, plus a reduction in command end strengths, have reduced the Area/Base Support requirements from $42.5 million in FY 1975 to $41.1 million in FY 1976, a reduction of $1.4 million. The FY 1974 requirement was $45.8 million.

In order to provide a ready reference for the record, I will provide a chart which depicts the dollar value for each area of maintenance by fiscal year.

[The information follows:]

PURCHASED EQUIPMENT MAINTENANCE

[In millions of dollars]

Functional repair group	Fiscal year—			
	1974	1975	1976	197T
Aircraft maintenance and modification	247.0	293.1	319.9	75.9
Missile maintenance	7.1	6.2	6.5	1.6
Engine overhaul and repair	100.9	113.0	112.1	28.0
Other major equipment items	32.6	35.8	31.7	7.9
Exchangeables	569.6	557.1	548.2	137.0
Area/base support	45.8	42.5	41.1	10.3
Total	1,003.0	1,047.7	1,059.5	260.8

Computation of Requirements for Transportation Funding

Chairman McClellan. Explain how requirements for transportation funding ($311 million in FY 76) are computed. Break down the request into amounts requested for commercial surface transportation, commercial airlift, Military Sealift and Airlift commands (personnel and material shown separately), "associated costs" including port handling, demurrage and mail charges.

General Patch. Second destination fund requirements are calculated on the basis of Air Force programs that generate transportation support requirements; for example, the Air Force flying hour program, specific centrally managed programs (ammunition, vehicles, LOGAIR, missiles, etc.), and force geographical population and beddown locations. Refined mathematical applications are used to compute the transportation workload, by mode and cargo category, required in support of Air Force programs. Weighted average tariffs are then applied to the workloads to calculate the funding requirement. Second Destination Transportation funding is not used to move personnel. A breakdown of funding required for the categories of transportation follows:

Transportation funding breakdown

	Thousands
Commercial surface transportation	$23,629
Commercial Airlift	44,296
Subtotal	67,925
Military Sealift Command (MSC)	64,905
Airlift Service Industrial Fund (ASIF)	166,570
Port Handling	11,696
Total	311,096
Demurrage	[1] 300
Mail	[2] 25,529

[1] Included in MSC ($64,905).
[2] Included in ASIF ($166,570).

EXPAIN LOGAIR

Chairman MCCLELLAN. Explain what LOGAIR commercial transportation is.

Gentral PATCH. Logistics Air (LOGAIR) is a scheduled cargo airlift system operating within the Continental United States (CONUS) excluding Alaska and Hawaii. The system utilizes commercial air carriers (Overseas National and Saturn) under contract to the United States Air Force and operates daily flights over regular routes primarily between Air Force bases. Although the LOGAIR route structure is designed to provide service to Air Force activities, its service is also available to all Department of Defense activities within CONUS.

PRODUCTION FLIGHT TEST FACILITY

Chairman MCCLELLAN. Explain exactly how the Air Force production flight test facility at Palmdale works, what its size and work force is, and who is currently using the facility.

General BLANTON. Air Force Plant #42, Palmdale, CA, provides a unique final assembly, checkout, and acceptance flight test facility for high performance aircraft. The Air Force needed such a facility located in a remote, sparsely populated area to perform these tasks since our contractors were being frozen out of such activities at the Los Angeles area airports which they had been using in the past. The plant consists of 5,832 acres of land containing two 12,000 foot runways, extensive taxiways, runout zones, etc., surrounded by five industrial sites. Sites 1, 2 and 3 are on the north side of the runways. Site #4 is on the west and Site #5 is south of the runways. These five sites are made available to the various contractors under terms of a special facilities contract and the maintenance and operating costs are paid for through the facilities and/or aircraft contract procurement account.

Site #1 contains 198 acres of land and two major buildings containing approximately 147,612 square feet of floor space. Both buildings are being used by Rockwell International, one for the B–1 effort and the other for final assembly and checkout of NASA's Space Shuttle Vehicle. Site #2 consists of 191 acres of land and six buildings containing approximately 231,000 sq ft of floor space. This facility is being used by Lockheed for classified projects. Site #3 consists of 192 acres of land and ten buildings containing approximately 522,919 sq ft of floor space. This faciilty is being used by Rockwell International for the B–1 effort. Site #4 consists of 29 acres of land and one major building containing approximately 491,000 sq ft of floor space. This building is a warehouse which is made available for storage needs of Lockheed and other contractors at Air Force Plant #42. Site #5 consists of 237 acres of land and 16 buildings containing approximately 443,012 sq ft of floor space. This site is shared by Northrop Corporation and McDonnell-Douglas Aircraft for the F–5 and A–4 programs.

The operation and maintenance of common facilities, that is, the area outside the sites including runways, taxiways, aprons, parking areas, fuels, munitions, storage, etc., are contracted out to a service contractor using O&M funds. The present contractor is ITT Technical Services which has 131 employees. Rockwell International has 1458 employees, Lockheed has 223 employees, Northrop has 810 employees, McDonnell-Douglas has 478 employees and there are 50 military and direct hire civilians engaged in contract administration activities, including four assigned to NASA and eight to the Navy. One of the unique features of this plant permits the Air Force to move contractors in and out and around the sites as programs commence, phaseout, or increase and decrease in scope.

KC–135 Flying Hours at ETR

Chairman McClellan. Why do KC–135A flying hours at Eastern Test Range increase by 240 in FY 76 over 75?

General Blanton. The additional 240 hours are required to meet forecast mission requirements of the Terminal Radiation Program and the Midcourse Target Signature Program. An estimated 83 sorties are to be flown in FY 75 in support of the Terminal Radiation Program as compared with 97 in FY 76. An estimated 17 sorties are to be flown in FY 75 in support of the Midcourse Airborne Target Signature Program with 24 forecast for FY 76.

COLA Increase for ETR Contract

Chairman McClellan. Explain what the specific amount for cost of living increases are for the Eastern Test Range operation and maintenance contract. How much of an FY 76 cost increase does it cause. Also discuss the changes in funding policy for ship navigation, missile impact scoring systems and terminal radiation program, and aircraft instrumentation contract. Why is there an increase for provision of periodic maintenance for hydrostatic testing of high pressure gas and fuel storage trailers in FY 76.

Lieutenant Colonel Kuhlman. The amount requested in the budget for Eastern Test Range includes a 7% cost of living increase for the Range Operation and Maintenance Contract and is based on the union wage agreements at the time the budget was prepared. The specific amount for this purpose is $2,398,000. In addition to this amount, we have been informally advised that additional union wage increases are being sought effective in FY 76 and that there would also be increases in the amounts the contractor would be required to pay for employee life, health, accident and liability insurance and Pension Reform Act retirement benefits.

Funding policy changes effective in FY 76 for ship navigation, missile impact scoring system and the terminal radiation program (TRAP) aircraft instrumentation contract occur because prior to FY 76 funds for operation and maintenance of these resources were totally provided by the users on the basis that the systems were dedicated to and operated solely for the benefit of a single program. The Navy Fleet Ballistic Missile Program funded for ship navigation and missile impact location systems, and the Air Force Advanced Ballistic Reentry Systems Program funded for the TRAP contract. Beginning in FY 76 these range systems will no longer be dedicated to a single user program but will also support several other DOD test and evaluation programs. In accordance with the DOD Uniform Funding Policy each of the users will reimburse the ETR for their share of the direct costs and the indirect (or institutional) costs ($2,200,000) will be funded in the ETR program.

Hydrostatic testing of high pressure gas and fuel storage trailers is required to insure that safety requirements are met. The testing cycle varies for specific items and is not conducted on an annual basis. The number of trailers tested varies from year to year. The FY 76 requirement is $134,000 greater than in FY 75 because of an increase in the number of trailers to be tested.

Increase in ANG Training Loads

Chairman McClellan. Why is there a large increase in the basic and technical training loads of Air National Guard personnel from FY 75 to 76. Also explain the increase load in regular Air Force advanced technical training in FY 76.

General Blanton. The Air National Guard increase in basic and technical training loads from FY 75 to FY 76 was to: (1) Maintain a proper balance in overall grade structure. (2) In anticipation of a reduction in the prior service pool of those available for enlistment, and (3) To maintain a young viable force for the Air National Guard.

The Roth amendment resulted in the deferral of 3,824 officer/airman TDY quotas in Advanced Technical Training from FY 1975 to FY 1976. Although this amendment was subsequently repealed, it was then too late to reschedule these students to attend classes in FY 1975. Also a portion of the overall increase is attributable to including 541 cryptological training students in this budget program element for the first time in FY 1976.

Students Deferred from Scheduled Training

Chairman McClellan. How many students were deferred from being placed into scheduled training programs in FY 75 as a result of the travel limitation?

Colonel Baker. There were approximately 8500 students deferred from being placed into scheduled training programs in FY 75 as a result of the travel limitation. Due to class size and scheduling limitations only 6800 of these students were rescheduled in FY 76.

Pilots Trained/Security Assistance Training

Chairman McClellan. Provide the countries and numbers of Pilots being trained, by fiscal year 1974–76, under Security Assistance Training Program.

General Blanton. Yes, sir.

[The information follows:]

PROGRAMMED ENTRIES INTO USAF FLYING TRAINING

1. UNDERGRADUATE PILOT TRAINING

Country	FY 74	Programmed FY 75	Projected FY 76
Afghanistan	1	0	0
Belgium	2	2	2
Bolivia	12	2	3
~~Cambodia~~	~~0~~	~~0~~	~~6~~
Chile	27	0	0
Columbia	0	0	0
Denmark	18	26	15
Dominican Republic	0	0	0
El Salvador	6	8	2
Guatemala	10	2	0
Honduras	0	0	4
Indonesia	4	2	3
Iran	188	223	256
Italy	0	0	0
Mexico	0	0	0
Morocco	0	0	0
Nicaragua	4	3	6
Nigeria	12	24	24
Norway	17	25	34
Panama	0	2	2
Paraguay	0	0	2
Portugal	1	2	4
Republic of Mali	0	0	0
Saudi Arabia	8	13	11
Turkey	2	2	1
Thailand	0	0	1
Venezuela	0	30	0
Kuwait	0	54	30
Germany	80	80	72
Vietnam	318	68	0

2. SPECIALIZED FLYING TRAINING (Any postgraduate pilot training conducted by Air Training Command)

Country	FY 74	FY 75	FY 76
Peru	0	1	2
Thailand	8	1	1
Germany	3	0	0
Guatemala	4	0	0
Honduras	4	2	6
Portugal	2	0	4
Turkey	1	5	4

Country	FY 74	FY 75	FY 76
Australia	1	0	0
Jordan	6	1	7
Nigeria	6	0	0
Saudi Arabia	1	9	9
Canada	2	0	0
Denmark	1	1	5
Philippines	1	1	0
Greece	1	0	1
Taiwan	4	0	3
Japan	2	0	0
United Kingdom	1	0	0
Laos	0	2	0
Uruguay	1	0	0
Chile	0	0	2
Argentina	0	0	1
Indonesia	0	0	1
Korea	0	0	2
Pakistan	0	0	5
Venezuela	0	0	1
Norway	2	1	2
Pending Foreign Military Sales		35	90

3. F-5E FLYING TRAINING

Country	FY 74	FY 75	FY 76
Jordan	0	2	2
Argentina	0	0	1
Vietnam	38	0	0
Korea	2	0	0
Taiwan	2	6	0
Saudi Arabia	2	0	4
Iran	2	0	0
Brazil	0	6	0
Malaysia	0	5	0

4. C-130 PILOT TRAINING

Country	FY 74	FY 75	FY 76
Morocco	9	0	6
Greece	9	0	6
Saudi Arabia	0	12	7
Venezuela	0	2	0
Spain	0	2	0
Japan	0	1	0
Denmark	0	12	0
Chile	0	4	0

5. F-104 PILOT TRAINING

Country	FY 74	FY 75	FY 76
Germany	177	141	64
Italy	1	0	0
Canada	2	3	0
Netherlands	2	1	
Belgium	0	1	

6. F-4/RF-4 PILOT TRAINING

Country	FY 74	FY 75	FY 76
Germany	5	10	22
Turkey	8	0	0
Greece	19	0	0
Japan	2	0	0

7. A-37 PILOT TRAINING

Country	FY 74	FY 75	FY 76
Chile	1	3	0
Vietnam	80	0	0
Peru	0	6	0
Honduras	0	3	0

8. O-2 PILOT TRAINING

Country	FY 74	FY 75	FY 76
Turkey	1	1	0

9. C-47 PILOT TRAINING

Country	FY 74	FY 75	FY 76
Panama	2	0	0
Dominican Republic	1	0	0

Flight Training/Purchased From Stock Fund

Chairman McClellan. What is the total amount of supplies purchased from the stock fund for flight training in FY 74–75–76? (This is a $14.6 million increase in FY 76).

General Blanton. The total amount of supplies, including Aviation POL, being purchased from the stock fund for flight training is $73.9, $106.1 and $113.7 million for FY 74, 75 and 76 respectively. The increase of $14.6 million in the budget justification for Defense Stock Fund price increases includes $3.4 million for supplies and $11.2 for Aviation POL. These increases are partially offset by the decreases associated with the reductions in UPT and UNT training loads.

Requirement for ANG and AFR Flight Training

Chairman McClellan. Why is it necessary for Air National Guard and Air Force Reserve personnel to undergo undergraduate pilot and navigator training. Are there not sufficient active personnel moving into the reserve to meet pilot/navigator requirements.

Colonel Baker. Sir, the undergraduate flying training programs meet three important requirements. First and foremost, it provides a geographical distribution of rated assets. Rated personnel coming off active duty tend to settle in major population centers because that is where the higher paying jobs are generally found. As a result, units away from the major populations centers have a more difficult time recruiting desirable candidates. Secondly, UPT is the only input of lieutenants into the rated force. These young officers are required to provide a force balance and assure promotion visibility. Thirdly, these programs serve as an incentive for highly motivated young airmen who want to be military pilots and navigators and who have commitments to the local community. This has proved to be a very effective means of recruiting qualified officers for the ANG/USAFR.

The ANG/USAFR undergraduate flying training programs serve as a supplement to the regular procurement programs. In the past, recruitment of prior service rated personnel has been the major source of pilots and navigators in the ANG/USAFR. Annually, approximately 25 percent of the pilots leaving active duty associate with the reserve force and participate actively. With the reduced active force UPT production rates, procurement of 25 percent of the end of obligation losses from the active force would result in a rated deficit for the reserve forces without an undergraduate flying training program.

Specialized Flying Pilot Training

Chairman McClellan. Explain what specialized flying pilot training is, and why there has been a significant increase in load FY 74–76. Also explain why AFA pilot indoctrination loads increase from 163 to 222 in FY 76.

Colonel Baker. Specialized flying pilot training is all post undergraduate pilot training conducted by Air Training Command. The reason for the increase in load from FY 74 through FY 76 is primarily due to increase foreign requirements. For example, there will be approximately 256 Iranian and Kuwait students entering special T–38 training during FY 76. There were no students in this course in FY 74. However, there are no O&M dollars in the Air Force budget for this increase, because foreign training is done on a reimbursable basis.

The Air Force Academy Pilot Indoctrination loads have increased due to the increase in the number of first class cadets who are eligible for this training. The first class size has increased from 774 in the class of 1972 to 825 in the class of 1974 and is projected to increase to 945 with class of 1976.

Conversion Helicopter Training

Chairman McClellan. What is conversion helicopter training?

Colonel Baker. Helicopter conversion training is the training given to fixed wing pilots to qualify them in helicopters. The training is conducted by the Army. The program is primarily being used to provide helicopter pilots for the Air National Guard and Air Force Reserve units who are transitioning from fixed wing aircraft to helicopters. Some USAF active pilots are also trained to improve the experience mix in the helicopter force and to make the number of isolated tours for helicopter pilots more in line with that experienced by the total pilot population.

AU Institute of Professional Development

Chairman McClellan. Explain what the AU institute of professional development is, and why student loads increase in FY 76 from 83 to 118.

Colonel Baker. The Air University Institute of Professional Development (AUIPD) is a major component of the Air University, located at Maxwell AFB, Alabama. Its mission is to provide instruction in special education courses and to conduct research and provide consultant services in subject areas of special AUIPD competence. Examples of course offerings of the AUIPD are the USAF Commanders' Seminar, the Professional Personnel Management Course, and the Professional Military Comptroller Course. The AUIPD also provides courses in the Judge Advocate and Chaplain career areas.

The increase in load from FY 75 to FY 76 in AUIPD is the result of deferral of a load of 14 due to the FY 75 travel fund limitation plus additional load of 7 for implementation in FY 76 of a JAG Direct Appointment Orientation Course and a training course for Historians.

"Academic Instructor and Allied Off"

Chairman McClellan. Explain what is meant by "academic instructor and allied off," and indicate why training loads increased by 26, from 106 to 132 in FY 76.

Colonel Baker. The Academic Instructor and Allied Officer School (AIAOS) is a component of the Air University, located at Maxwell AFB, Alabama. The AIAOS has a dual mission. The school is responsible for conducting the Academic Instructor Course, which satisfies requirements of the USAF for trained instructors, and for preparing allied officers in communication skills for advanced training at the Air University and the School of Aerospace Medicine.

The increase in student load from FY 75 to FY 76 was the result of deferral of a load of 13 due to the FY 75 travel fund limitation; also, class rescheduling resulted in 13 man-years being transferred from FY 75 to FY 76.

Explain Education With Industry Programs

Chairman McClellan. Explain the education with industry programs of the Air Force.

Colonel Baker. The objectives of the Education with Industry Program are: to provide Air Force officers with the educational background necessary for them to develop effective management and technical leadership; and to provide understanding of organizational structure and management methods used in the administration, research, development, manufacture, and procurement of Air Force hardware. Officers are assigned to industrial and consulting firms which collectively represent a cross-section of the nation's industries which serve the Air Force for aerospace systems development and production, or which provide technical services. The education is provided by these concerns at no cost to the Air Force. Included in this program is the Air Staff Training Program for junior officers who serve an internship of one year learning about the functions of the Air Staff.

Students receive training in one of about 25 different areas such as engineering, cost analysis management of research and production and procurement. Average program length is 10 months. The Education with Industry Program continues to lend economies to the overall fulfillment of Air Force educational requirements. Where possible the program is used to meet requirements that might otherwise have to be met through more expensive graduate education or in-service programs.

Annual inputs are derived from requirements submitted by Air Staff functional managers. Selections are made by a board of officers and are based upon past performance and promotion potential of the individual applicants. Selectees are assigned to the Air Force Institute of Technology during the period they are in training and their programs are carefully monitored to assure education objectives are achieved. Upon completion of their programs, officers are assigned to Air Force jobs where this education can be directly applied.

Military Personnel Off-Duty Education Program

Chairman McClellan. How much is requested for military personnel off-duty education programs in FY 76? Compare with two previous fiscal years.

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Major FINON. The Air Force request for military personnel off-duty education programs in FY 76 (tuition assistance, group study classes, and direct support contractual services) is $11.7 million. This is the same amount as for FY 75. The amount for FY 74 was $9.3 million.

INSTITUTION ADDED TO JROTC PROGRAM

Chairman MCCLELLAN. What institutions will be added to the JROTC program in FY 76?

Colonel BAKER. The following institutions will be added to the JROTC program in FY 76:

Liverpool High School, Liverpool, N.Y.
Ballou High School, Washington, D.C.
Neshaminy Senior High School, Langhorne, Pa.
Pacific High School, San Bernardino, Calif.
Wayne High School, Dayton, Ohio.
Patchogue-Medford Senior High School, Medford, N.Y.
Newburgh Free Academy, Newburgh, N.Y.
Arlington High School, Riverside, Calif.
West Philadelphia High School, Philadelphia, Pa.
Bolingbrook High School, Bolingbrook, Ill.
Minidoka County High School, Rupert, Idaho.
High Point High School, Beltsville, Md.
Western High School, Las Vegas, Nevada.
Selma High School, Selma, Ala.
Oak Ridge High School, Orlando, Florida.
Judson High School, Converse, Texas.
Dunbar High School, Washington, D.C.
Eagle Pass High School, Eagle Pass, Texas.

ROTC DECLINE IN FY 76

Chairman MCCLELLAN. Student enrollments and graduates of Senior ROTC decline in FY 76, yet there is no decline in the number of cadets to enter flight instruction. Please explain.

Colonel BAKER. The decrease in total student enrollment reflected in the President's Budget was predicated on the disestablishment of five low-producing detachments in June 1975 and a smaller graduating class in FY 76. However, while we expected decreases in some categories of graduates in FY 76 (e.g., missile launch officers and nontechnical support officers), the anticipated resource available for participation in the Flight Instruction Program (FIP) remained approximately the same (2,000) for both FY 75 and FY 76. Actual participants in the FY 75 FIP are 2,023. Subsequent to the submission of the budget, decreases in Air Force flying requirements caused us to reduce pilot candidate production in AFROTC, and we now have a resource of 1,868 candidates for the FY 76 FIP.

INCREASE IN MILITARY PERSONNEL AT MAJOR FIELD HQS

Chairman MCCLELLAN. Although there is a large reduction in operating aircraft for major field headquarters, number of military personnel actually increases. Please explain.

General POSNER. Military manpower authorizations associated with the reductions of aircraft supporting field headquarters and activities were deleted by the end of FY 1975 and, therefore, are not included in the military end strengths for either FY 1975 or FY 1976. The slight increase in military manpower for field headquarters and activities between FY 1975 and FY 1976 is associated primarily with the Base Automated Systems for Total Operations (BASE–TOP) Program, under development to ultimately replace existing base level Automated Data Processing (ADP) systems. BASE–TOP is expected to result in manpower savings in future years.

DECLINE IN SERVICE WIDE SUPPORT AIRCRAFT

Chairman MCCLELLAN. Service wide support aircraft also declines, but there is no drop in military personnel (only a 16 man drop). Why?

General POSNER. Military manpower authorizations associated with the reduc-

tion of aircraft in the Service-wide Support program element grouping were deleted by the end of FY 1975 and, therefore, are not included in the military end strengths for either FY 1975 or FY 1976.

Explain Increase/Photo Squadron/ISD Program/Band

Chairman McClellan. Why is there an increase in other support activities for relocation of the 1361st Photo squadron, expanded instructional systems development program, the travel of the USAF band. Explain each item of increase.

General Blanton. At the time the budget was prepared, the 1361st Photo Squadron was programmed to move from the present location in Arlington, Virginia, to Bolling Air Force Base, Anacostia. However, subsequent to submission of the budget, because of reorganizations at Bolling, the space to have been occupied will not be available and the move will not be made.

The additional funds for the expanded instructional systems development program are to provide for travel and supplies for script research, validation, and on location photography. The instructional systems development program is a new training technique, similar to flight simulators, which utilizes film strips, slide tape, and narrative tapes. This training technique is being expanded to cover many areas of training, i.e., safe driver education, general explosive safety education, and tech training.

The increase in travel funds for the USAF Band is because of the loss of support aircraft. While utilizing military aircraft to the maximum extent possible, the phaseout of support aircraft will necessitate greater utilization of commercial air.

Strengths/International Military HQs and Agencies

Chairman McClellan. Provide a list of Air Force personnel strengths, by organization, assigned to international military headquarters and agencies.

General Posner.

[The information follows:]

FY 1976

ORGANIZATION	OFF	ENL	T/MIL	USDH	FNDH	FNIH	AGG
Southeast Asia Treaty Organization (SEATO)	2	2	4				4
Central Treaty Organization (CENTO)	5	4	9	1	4		14
Supreme HQ Allied Powers Europe (SHAPE)	69	72	141				141
Allied Forces-Northern Europe (AFNORTH)	29	50	79				79
Allied Forces-Central Europe (AFCENT)	37	194	231				231
Allied Forces-Southern Europe (AFSOUTH)	36	193	229				229
NATO Military Committee	22	12	34				34
LANDSOUTHEAST/6 ATAF/Jt Signal Spt Gp	5	107	112				112
SHAPE Intl HQ Support Command	5	20	25				25
Fourth Allied Tactical Air Forces	47	191	238				238
Sixth Allied Tactical Air Forces	37	61	98				98
HQ Allied Air Forces Central Europe (AAFCE)	20	17	37				37
LANDSOUTH	1		1				1
AIRSOUTH	61	55	116				116
Fifth Allied Tactical Air Forces	25	26	51				51
LANDSOUTHEAST	4	25	29				29
SHAPE Signal Support Group		10	10				10
HQ BALTAP (HQ Baltic Approach)	3	5	8				8
HQ LANDSOUTH/5 ATAF/Jt Signal Spt Gp	1	39	40				40
AIRBALTAP (Air Baltic Approach)	3	2	5				5
COMIBERLANT	1	9	10				10
SATCOM (Satellite Communications)	1		1				1
NATO Programming Center	9	11	20				20
NATO Weapons School	7	8	15				15
"LIVE OAK"(SHAPE Special Plng Staff)	4	9	13				13

	FY 1976						
	OFF	ENL	T/MIL	USDH	FNDH	FNIH	AGG
1141st Special Activity Squadron 1/	4	34	38	2			40
7104 Air Base Wing 2/	2	50	52			2	54
Advisory Group-Aeronautical R&D (AGARD)	3	2	5	2			7
Allied Command-Atlantic	6		6				6
NATO Air Defense Ground Environment Office (NADGE)	1		1				1
USAF R&D Offices	3		3	1			4
SHAPE Technical Center	1		1	20			21
	454	1208	1662	26	4	2	1694

1/ The 1141st Special Activity Squadron provides administrative support for Air Force personnel assigned to International Military Headquarters.

2/ A detachment of the 7104th Air Base Wing (USAFE) provides facility support at Chievres, Belgium, for personnel assigned to SHAPE Headquarters.

ANG Non-Flying Units

Chairman McClellan. Provide a table of non-flying units in the Air National Guard, FY 74–76, by type of units.

General Blanton. Sir I will provide that for the record.

[The information follows:]

	Fiscal year—	
	1974–75	1976
Aircraft control and warning	3	3
Tactical control	42	36
Communications	71	68
Weather	40	40
Bands	12	12
Civil engineering	3	3
Field training	1	1
State headquarters	52	52
State headquarters detachments	15	15
Total number of units	239	230

ANG Depot Maintenance

Chairman McClellan. Provide a breakdown of depot maintenance FY 74–76, showing major items undergoing maintenance by category of maintenance.

General Blanton. Sir I will provide that for the record.

[Information follows:]

[In thousands]

Major item and category of maintenance	Fiscal year—		
	1974	1975	1976
Aircraft:			
Programed depot maintenance	$32,051	$32,261	$28,766
Analytical condition inspection	387	1,411	2,102
Modification	1,241	3,588	2,884
Major repair	932	851	798
Engines:			
Overhaul	24,356	26,262	28,474
Modification	1,901	1,318	283
Specialized vehicle: Overhaul	755	584	550
Ground communications/electronics equipment:			
Programed depot maintenance	0	0	600
Emergency depot level maintenance	0	0	200

Increases in ANG Technicians

Chairman McClellan. Provide details on the specific increases in technicians required to "support a more modern force and allow all units to attain and maintain a high level of combat readiness."

General Blanton. Sir, the Air National Guard has a requirement for 25,430 Air Technicians in FY 76. The FY 76 budget provides for 22,273 or 87.6% of those required, which is an increase of 167 direct hire technicians over FY 75. Air technician requirements are driven by the significant modernization of the Air National Guard that has occurred during the past several years.

ANG Flying Hour Cost Increases

Chairman McClellan. Operation of aircraft figures shown on page 220 of the justification book show a disparity between the percentage cost increase per flying hour for different types of aircraft. If these operating figures principally relate to fuel costs, wouldn't application of average fuel price increases result in approximately equal percentage increases in the cost per flying hour? Provide an analysis showing increases in cost per flying hour by type of aircraft, and explain the variances.

Mr. Henshaw. The operating figures represent the fuel cost of the flying hours listed. However, there are several reasons why the percentage of cost increase differs between the categories shown on page 220. The primary reason would be a

change in the mix of type aircraft within a category. For example, an overall reduction in flying hours in the Air Defense category was primarily due to conversion of F–102 units. Since the F–102 is the lowest cost interceptor, this decrease in hours results in an increase in the average cost of the remaining hours. The opposite is true in the tactical fighter category, where the largest increase in hours is in A–7s, which cost approximately $100 less than F–100 hours, which have decreased. In addition to force changes, the phasing of the flying hour program in FY 1975 has an impact on the percentage of increase, due to the mid-year price increase. Any variation in the proportion of hours flown at the prices in effect on July 1, 1974 and those in effect after November 1, 1974 changes the average cost in FY 1975 and influences a comparison of average costs for the two years. Finally, the percentage of fuel price increases since July 1974 has been approximately four times as great in aviation gasoline as in jet fuel. This effects the percentage of change when comparing categories including reciprocating engine aircraft with categories of all-jet or mixed aircraft. I will provide a breakout by type aircraft, explaining the significant variances.

(The information follows:)

Type aircraft	Percentage increase	Reason for significant variances
F–102	14.2	Fiscal year 1975 program phasing.
F–101	12.6	
F–106	12.8	
EB–57	13.1	
A–7	12.5	
A–37	13.2	
F–4	11.1	Do.
F–100	13.2	
F–104	13.0	
F–105	15.2	Do.
RE–101	13.0	
RF–4	13.2	
KC–135	(1)	New weapon system.
C/KC–97	17.0	Fiscal year 1975 phasing; AVGAS.
EC–121	15.9	AVGAS.
U–10	18.7	Fiscal year 1975 phasing; AVGAS.
C–119	16.0	AVGAS.
C–123	16.5	AVGAS.
C–130	13.1	
C–7	17.2	Fiscal year 1975 phasing; AVGAS.
O–2	13.0	
C–124	(1)	Phased out.
C–121	(1)	Do.
C–131	14.4	Fiscal year 1975 phasing; AVGAS.
T–29	(1)	Phased out.
T–33	13.0	
T–39	12.8	
C–54	(1)	Do.
HH–3	11.2	Fiscal year 1975 phasing.
HC–130	11.3	Do.

[1] Not applicable.

AFR Non-flying Units

Chairman McClellan. Provide a breakdown of non-flying Air Force Reserve units for FY 74–76.

General Blanton. The breakdown of USAFR non-flying units is as follows:

	Fiscal year 1974	Fiscal year 1975	Fiscal yea 1976
Air reserve regions	3	3	3
Aerial port squadron	44	44	47
Maintenance and supply squadron (mobile)	14	14	14
ALC squadrons	6	6	6
Medical services units	13	13	13
Aero medical evacuation units	20	20	20
Civil engineering flights	35	35	35
Civil engineering squadron (heavy repair)	1	1	1
Total	136	136	139

INCREASE IN AFR TECHNICIANS

Chairman MCCLELLAN. What accounts for the large increase in Air Reserve technicians in FY 1976? (From 6889 to 7217)

General POSNER. The increase of 328 Air Reserve Technicians is primarily related to two weapon system conversions programmed in FY 1976. 153 additional technicians are required due to the conversion of a C–130 airlift squadron to an AC–130 gunship squadron. 136 additional technicians are required due to conversion of another C–130 airlift squadron to a WC–130 weather mission. In addition, 66 additional technicians are required in the F–105 program to provide adequate maintenance manning. These increases were partially offset by a net reduction of 27 technician spaces in other weapons systems.

CONVERSION TO AC–130 AND WC–130/CIVILIAN INCREASE

Chairman MCCLELLAN. Explain why conversion from C–130 to AC–130 and WC–130 requires increases of 153 and 136 civilian permanent employees. In what category are these personnel?

General POSNER. The AC–130 Special Operations and WC–130 Weather Recon missions are different from the C–130 Tactical Airlift Mission and require increased personnel to attain their combat readiness. For example, the AC–130 unit has 10 aircraft, a 2.0 crew ratio, a 14-man crew and a maintenance manhour factor of 42. The WC–130 unit has 7 aircraft, a 1.8 crew ratio, an 8-man crew and a maintenance manhour factor of 26. The C–130 units have 8 aircraft, a 1.5 crew ratio, a 5-man crew and a maintenance manhour factor of 28. The smaller maintenance manhour factor for the WC–130 aircraft would normally result in a decreased maintenance requirement. However, the annual flying hour requirement has been increased to provide the capability to respond to the peacetime requirements of the National Hurricane Operating Plan and the East Coast Winter Storm Plan. This resulted in an overall increased maintenance manpower requirement as well as crew increases. In addition, there is a requirement for a 24-hour 7-day per week command post operation to respond to the peacetime requirements. Also, there is a requirement for munitions handlers for the AC–130 which was not required for the C–130. FY 1976 civilian personnel increases associated with these conversions are 246 for aircraft maintenance, 32 for additional crews, 6 for munition handlers, and 5 for command post personnel.

INCREASE IN NON-FLYING UNITS

Chairman MCCLELLAN. Why is there an increase of 3 non-flying units in FY 76? Which units?

General BLANTON. In order to provide the aerial port manpower support, certain program actions involving changes to the active/reserve mix have resulted in the transfer of manpower spaces related to the tactical aerial port function to the Air Force Reserve. Both strategic and tactical air mobility capability increase significantly on mobilization. With the increase in flying hours per day in strategic airlift, the aerial port elements supporting these airlift forces will increase. USAFE representatives have indicated the need to operate intra-theater using many airfields that are not involved in peacetime activities. These actions were taken to permit rapid deployment of forces.

Because the capability is not required to support a peacetime requirement, it is cost effective to place this additional responsibility upon the Air Reserve Force.

The non-flying units to be activated in FY 76 are as follows: 94th Aerial Port Squadron, Robins AFB, GA; 95th Aerial Port Squadron, G. B. Mitchell Field, WI; 96th Aerial Port Squadron, Little Rock, AR.

FULL YEAR MANNING OF ASSOCIATE UNITS

Chairman MCCLELLAN. Explain what is meant by "full year manning of associate units."

General BLANTON. The increased surge requirement is effective in the fourth quarter of FY 1975. Thus, a manning increase will span one quarter of FY 1975 and four quarters FY 1976.

ASIF REIMBURSEMENT

Chairman MCCLELLAN. Provide a breakdown explaining the $13.8 million increase for other services increases due to increased strategic flying hours and

related increase in reimbursement to the Airlift Service Industrial Fund. What is the total reimbursed to the ASIF, FY 74–76.

General BLANTON. The Air Force Reserve reimburses the Airlift Service Industrial Fund for that non-revenue producing portion of the total Air Force Reserve airlift flying hour program required for training of reservists. The reimbursement compensates for depot maintenance and aviation fuel costs incurred during these training hours. The increased reimbursement of $13.8 million in FY 1976 reflects the full year cost impact of the expanded strategic airlift mission assigned to the Air Force Reserve in FY 1975 plus the effects of inflation on depot maintenance and aviation fuel costs. The expanded mission required crew ratio increases in Reserve C–141 and C–5 Associate Airlift units. C–141 crew ratios were increased from 1.0 to 1.5 and C–5 crew ratios were increased from 1.0 to 1.25 effective in the fourth quarter of FY 1975. Flying hours for these aircraft were increased accordingly. Flying hours for the C–141 increase from 57,072 in FY 1975 to 72,751 in FY 1976, C–5 flying hours increase from 16,884 to 19,908.

Approximately $8.2 million of the $13.8 million increase is associated with the flying hour increases. The balance of $5.6 million is associated with fuel and maintenance cost increases. The total amount reimbursed by the Air Force Reserve to the ASIF in FY 1974 is $23.2 million. Programmed reimbursements for FY 1975 and FY 1976 are $30.9 million and $44.7 million, respectively.

AFR Depot Maintenance

Chairman MCCLELLAN. Provide a breakdown of the depot maintenance, FY 74–76, showing major items undergoing maintenance by category of maintenance.

General BLANTON. Yes Sir.

[The information follows:]

[In thousands of dollars]

	1974	1975	1976
Aircraft repair/modification	$13,482	$12,953	$14,578
Engine overhaul	4,844	6,955	8,890
Other major end items	180	151	250
Exchangeables	13,113	11,351	12,349
Area support	64	150	230
In-service engineering	1,628	1,030	762
Total	33,311	32,590	37,059

Personnel/Increases in Command Support

Chairman MCCLELLAN. Explain the large increases in civilian personnel and military personnel in the command support line. Why is the Office of Air Force Reserve now funded in this appropriation for the first time in FY 76?

General BLANTON. The increase in command support is for the transfer of the Office of the Chief of Air Force Reserve from major force program #9 to major force program #5 and the caretaker package for base closure of Hamilton AFB Calif. and Ellington AFB Texas. The caretaker package is for a maximum of two years until the property is disposed of. The Office of the Chief of Air Force Reserve, an integral part of the Headquarters USAF Air Staff, is charged with overall policy-making and administration of the Air Force Reserve exclusively. In fiscal year 1973 Congress enacted a separate appropriation for operation and maintenance activities of the Air Force Reserve. Moreover, Congressional interest in headquarters activities required more precise delineation within the respective O&M appropriations. Accordingly, the Office of Chief of Air Force Reserve is considered to be an activity properly identifiable in the Air Force Reserve O&M appropriation rather than that of the active Air Force and this concept will be implemented in fiscal year 1976.

Hamilton and Ellington AFB/Cost of Closure and Moves

Chairman MCCLELLAN. What is the total cost of the closure and various moves associated with the closure of Hamilton and Ellington Air Force Bases? List by fiscal years and expense elements.

General BLANTON. Yes, sir.

[The information follows:]

[In thousands of dollars]

Appropriation	Fiscal year— 1976	197T	1977	1978	1979
O. & M., Air Force Reserve:					
Civilian pay [1]	$7,517	$1,447	$5,012		
Travel	752				
Transportation	915				
Communications			100		
Other purchased services	287	133	458		
Supplies	170		461		
Total costs, 3,740	9,641	1,580	6,031		
O. & M., Air Force: Civilian pay	23				
O. & M., Air National Guard:					
Civilian pay	836				
Travel	119				
Transportation	475				
Total costs, 3,840	1,430				
Military personnel, Air Force	925				
Military Construction, Air Force Reserves			[2] 2,775		
Military Construction, Air National Guard	2,800		[2] 600	[2] 600	[2] 500

[1] Includes 165 and 152 caretaker personnel respectively at Ellington and Hamilton until end fiscal year 1977.
[2] These items will require individual approval, based on existing facility availability and updated requirements, prior to inclusion in future MCP submittals.

QUESTIONS SUBMITTED BY SENATOR THURMOND

Senator YOUNG. Senator Thurmond, who is an ex officio member of this subcommittee, has submitted questions relating to Air Force Operations and Maintenance. Would you please respond to those for the record.

[The questions and answers follow:]

WHICH PRICE INCREASES CAUSE GREATEST IMPACT ON O. & M.

Senator THURMOND General Blanton, what particular goods and services price increases have impacted greatest on the higher operations and maintenance costs?

General BLANTON. Sir, price increases for fuel, consumable supplies and for civilian pay are those which principally account for the higher operation and maintenance request for FY 1976. Fuel and supply price increases require $348 million and civilian pay raises $101 million of the increase over FY 1975. These items constitute over 70 percent of the increase requested for FY 1976.

INFLATION FACTOR FOR FISCAL YEAR 1976 AND 197T

Senator THURMOND. General, what inflation factor are you using for FY 1976 and FY 197T?

General BLANTON. Sir, there is no inflation factor for FY 1976 and FY 197T. Under the budgeting procedures established by the Office of Management and Budget, and the Office of the Secretary of Defense the budget for FY 1976 and FY 197T is based on prices in effect in the fall of calendar year 1974 or those announced to be effective at a later date. The use of price indices is not permitted in the operating appropriations. Only known or announced price increases are permitted.

ITEMS AND JUSTIFICATION/AIRLIFT INCREASES

Senator THURMOND. Break out for the record the items and justification for the increase in the airlift account from $277 million in FY 1975 to $504 million in FY 1976?

General BLANTON. The principal reasons for the increase of $226,880 in the airlift account are as follows:

	Millions
(*a*) Aviation fuel price increases effective July 1, 1975	$14.1
(*b*) Supply and equipment price increases effective July 1, 1975	4.0
(*c*) Transfer of funding responsibility for base level reparables from the procurement accounts	1.9
(*d*) Transfer of the Tactical Airlift function from Major Force Program II to Major Force Program IV as a result of the DOD decision to consolidate all airlift forces under a single manager	101.8
(*e*) Consolidation of T-39 and C-135 support aircraft from all Major Force Programs to Major Force Program IV	23.3
(*f*) Funding of non-revenue-producing local area crew training and other essential, but unsubscribed crew training flying hours in the Operation and Maintenance, AF Appropriation, to attain minimum required level of Strategic Airlift Readiness; as is the case for combat crew training on other operational weapon systems	85.8
(*g*) Net reductions, principally increased flying hours offset by elimination of commercial augmentation	−4.1
Total	226.8

EXPLAIN DECLINE IN SUPPORT OF OTHER NATIONS

Senator THURMOND. Explain for the record the decline in the "Support of Other Nations" account for FY 1976?

General BLANTON. The decline in the "Support of Other Nations" account is caused primarily by the transfer to the procurement accounts of a portion of the training costs for USAF pilots assigned to USMACTHAI (U.S. Military Assistance Command, Thailand); reduced aviation fuel requirements as newer and smaller aircraft used by the MAAGS and Missions replace the current aircraft; and the full year impact of the FY 75 transfer of funding responsibility to the Navy for civilian personnel assigned to USMACTHAI.

ACTIONS TO EFFECT ECONOMIES IN O. & M.

Senator THURMOND. General Blanton, what actions have been taken by the Air Force in the last year to effect economies in the O. & M. account?

General BLANTON. In the past year the Air Force has had to absorb over $500 million in inflation. Field commanders have been required to complete their highest priority programs and to absorb many of the price increases by deferring or eliminating lower priority programs. Actions commanders have had to take include: limiting Real Property Maintenance by contract to only emergency projects, deferring or cancelling travel, decreasing stock levels for supplies to the lowest prudent operating levels and reducing contractual services so that only the essential operational needs are met.

SUBCOMMITTEE RECESS

Senator YOUNG. The subcommittee will recess, subject to the call of the Chair.

[Whereupon, at 10:50 a.m., Thursday, March 20, the subcommittee was recessed, to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1976

TUESDAY, MAY 20, 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 and Young.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

NATIONAL GUARD PERSONNEL, AIR FORCE

OPERATION AND MAINTENANCE, AIR NATIONAL GUARD

STATEMENT OF BRIG. GEN. JOHN T. GUICE, DEPUTY DIRECTOR, AIR NATIONAL GUARD

ACCOMPANIED BY:

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS
BRIG. GEN. CHARLES C. BLANTON, DIRECTOR OF BUDGET
COL. WILLIS D. MUIR, COMPTROLLER, AIR NATIONAL GUARD
COL. EDWARD L. LEWIS, DEPUTY FOR AIR NATIONAL GUARD, DIRECTOR OF BUDGET, HEADQUARTERS, USAF

JUSTIFICATION

Chairman MCCLELLAN. The committee will receive testimony in support of fiscal year 1976 budget request for the Air National Guard and Air Force Reserve.

The witnesses will be Brig. Gen. John T. Guice, Deputy Director, Air National Guard and Brig. Gen. William J. Crandall, Deputy Chief, Air Force Reserve.

Before we begin hearing testimony, I think it appropriate to include the material from the justifications which relates to the Air National Guard and the Air Force Reserve. Without objection, it will appear at this point in the record.

[The justification follows:]

Justification

For pay, allowances, clothing, subsistence, gratuities, travel, and related expenses for personnel of the Air National Guard on duty under section 265, 8033, or 8496 of title 10 or section 708 of title 32, United States Code, or while undergoing training or while performing drills or equivalent duty, as authorized by law [$204,527,000] $213,200,000.

For "National Guard Personnel, Air Force" for the period July 1, 1976, through September 30, 1976, $61,100,000. (10 U.S.C. 261-81, 510, 591-95, 597-600, 651, 671-85, 2511, 3015, 8012, 8033, 8062, 8077-78, 8224-25, 8261, 8351-54, 8356, 8358-63, 8365-68, 8371-81, 8392-95, 8491, 8496, 8722, 9301, 9561-63, 9741; 31 U.S.C. 698; 32 U.S.C. 101-11, 301-05, 307-08, 312-33, 501-07, 701; 37 U.S.C. 201, 203-06, 301, 309, 402-11, 414-18, 501-02, 1002; 50 U.S.C. App. 2201-09, 2213-16: Department of Defense Appropriation Act, 1975; additional authorizing legislation to be proposed.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3350-0-1-051	1974 ACT	1975 EST	1976 EST
PROGRAM BY ACTIVITIES:			
DIRECT PROGRAM:			
1. RESERVE COMPONENT PERSONNEL	182,319	206,740	213,200
REIMBURSABLE (TOTAL)	225	240	240
10 TOTAL OBLIGATIONS	182,544	206,980	213,440
FINANCING:			
RECEIPTS AND REIMBURSEMENTS FROM:			
11 FEDERAL FUNDS	-33	-36	-36
14 NON-FEDERAL SOURCES	-192	-204	-204
25 UNOBLIGATED BALANCE LAPSING	2,764	.....	.....
40 BUDGET AUTHORITY (APPROPRIATION)	185,083	206,740	213,200
BUDGET AUTHORITY:			
40 APPROPRIATION	185,083	204,527	213,200
44.10 PROPOSED SUPPLEMENTAL FOR MILITARY PAY RAISES	.....	2,213	.....
RELATION OF OBLIGATIONS TO OUTLAYS:			
71 OBLIGATIONS INCURRED, NET	182,319	206,740	213,200
72 OBLIGATED BALANCE, START OF YEAR	16,467	22,716	30,456
74 OBLIGATED BALANCE, END OF YEAR	-22,716	-30,456	-31,656
77 ADJUSTMENTS IN EXPIRED ACCOUNTS	-1,567	.....	.....
90 OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	174,504	196,898	211,889
91.10 OUTLAYS FROM MILITARY PAY RAISE SUPPLEMENTAL	.....	2,102	111

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3850-0-1-051		TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. RESERVE COMPONENT PERSONNEL	61,100
	REIMBURSABLE (TOTAL)	60
10	TOTAL OBLIGATIONS	61,160
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-9
14	NON-FEDERAL SOURCES	-51
40	BUDGET AUTHORITY (APPROPRIATION)	61,100
	BUDGET AUTHORITY:	
40	APPROPRIATION	61,100
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	61,100
72	OBLIGATED BALANCE, START OF YEAR	31,656
74	OBLIGATED BALANCE, END OF YEAR	-25,756
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	67,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3850-0-1-051		1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	158,261	172,629	176,988
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	11,296	17,107	17,694
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	6,757	8,764	9,726
22.0	TRANSPORTATION OF THINGS	256	284	270
26.0	SUPPLIES AND MATERIALS	5,680	8,287	8,453
42.0	INSURANCE CLAIMS AND INDEMNITIES	69	69	69
	TOTAL DIRECT OBLIGATIONS	182,319	206,740	213,200
	REIMBURSABLE OBLIGATIONS:			
26.0	SUPPLIES AND MATERIALS	225	240	240
99.0	TOTAL OBLIGATIONS	182,544	206,980	213,440

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3850-0-1-051		TRANSITION
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	48,886
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	6,528
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	3,171
22.0	TRANSPORTATION OF THINGS	72
26.0	SUPPLIES AND MATERIALS	2,425
42.0	INSURANCE CLAIMS AND INDEMNITIES	18
	TOTAL DIRECT OBLIGATIONS	61,100
	REIMBURSABLE OBLIGATIONS:	
26.0	SUPPLIES AND MATERIALS	60
99.0	TOTAL OBLIGATIONS	61,160

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3850-2-1-051		1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
10	TOTAL OBLIGATIONS	.....	-2,000	.....
	FINANCING:			
40	BUDGET AUTHORITY (APPROPRIATION)	.....	-2,000	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	.....	-2,000	.....
72	RECEIVABLES IN EXCESS OF OBLIGATIONS, START OF YEAR	.....	.....	-200
74	RECEIVABLES IN EXCESS OF OBLIGATIONS, END OF YEAR	.....	200	.....
90	OUTLAYS	.....	-1,800	-200

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SUMMARY OF REQUIREMENTS
(In Thousands of Dollars)

	Actual	Estimate		
	FY 1974	FY 1975	FY 1976	FY 197T
Reserve Component Personnel	$182,544	$206,980	$213,440	$ 61,160
TOTAL PROGRAM REQUIREMENTS (Obligations)	$182,544	$206,980	$213,440	61,160
Less Actual/Anticipated Reimbursements	- 225	- 240	- 240	- 60
Unobligated balance lapsing	2,764	---	---	---
TOTAL DIRECT OBLIGATIONS/APPROPRIATIONS	$185,083	$206,740	$213,200	$ 61,100

Budget Program 1
Reserve Component Personnel
SUMMARY OF REQUIREMENTS BY BUDGET ACTIVITY
(In Thousands of Dollars)

Budget Activity	Actual FY 1974	Estimate FY 1975	Estimate FY 1976	Estimate FY 197T
Direct Program				
Training, Pay Group A	$145,431	$160,138	$161,248	$ 48,382
Training, Pay Group F	5,910	9,144	14,456	4,184
School Training	12,930	13,537	12,582	3,147
Special Training	14,831	20,339	21,223	4,417
Administration and Support	3,217	3,582	3,691	970
Total Direct Program	$182,319	$206,740	$213,200	$ 61,100
Reimbursable Program				
Training, Pay Group A	$ 225	$ 240	$ 240	$ 60
Total Reimbursable Program	$ 225	$ 240	$ 240	$ 60
Total Program				
Training, Pay Group A	$145,656	$160,378	$161,488	$ 48,442
Training, Pay Group F	5,910	9,144	14,456	4,184
School Training	12,930	13,537	12,582	3,147
Special Training	14,831	20,339	21,223	4,417
Administration and Support	3,217	3,582	3,691	970
Total Obligations	$182,544	$206,980	$213,440	$ 61,160

Personnel in Paid Status

Pay Groups	Paid Drills	Paid Days of Active Duty For Training		FY 1974 (Actual) Begin	FY 1974 (Actual) Average	FY 1974 (Actual) End	FY 1975 (Estimate) Average	FY 1975 (Estimate) End	FY 1976 (Estimate) Average	FY 1976 (Estimate) End	FY 197T (Estimate) Average	FY 197T (Estimate) End	FY 1977 (Estimate) Average
A	48	15	Off	11,564	11,623	11,669	11,790	11,920	11,763	11,774	11,756	11,742	11,721
			Enl	77,954	79,645	81,175	81,948	82,664	81,161	80,591	80,520	80,388	80,430
F	0	90 - 180	Enl	853	857	1,040	1,262	1,416	1,955	2,209	2,267	2,389	2,351
Paid Drill Training Plus Non-Prior Service			Off	11,564	11,623	11,669	11,790	11,920	11,763	11,774	11,756	11,742	11,721
			Enl	78,807	80,502	82,215	83,210	84,080	83,116	82,800	82,787	82,777	82,781
			Total	90,371	92,125	93,884	95,000	96,000	94,879	94,574	94,543	94,519	94,502

Averages computed by doubling the end strengths of the months of July through May, adding 30 June strengths of the previous year and the year under consideration, and dividing the total by 24.

FY 1976 STRENGTH PLAN

	Pay Group A		Total Paid	Reserve Enlistment	Total Selected
	Officer	Enlisted	Drill	Program	Reserve
June 30, 1975	11,920	82,664	94,584	1,416	96,000
July	11,800	81,972	93,772	1,663	95,435
August	11,780	81,590	93,370	1,775	95,145
September	11,770	81,429	93,199	1,861	95,060
October	11,760	81,092	92,852	2,108	94,960
November	11,740	80,940	92,680	2,175	94,855
December	11,730	81,021	92,751	1,994	94,745
January	11,735	80,886	92,621	1,994	94,615
February	11,740	80,867	92,607	1,958	94,565
March	11,745	80,906	92,651	1,994	94,645
April	11,750	80,865	92,615	2,025	94,640
May	11,760	80,740	92,500	2,100	94,600
June 30, 1976	11,774	80,591	92,365	2,209	94,574
(Average)	(11,763)	(81,161)	(92,924)	(1,955)	(94,879)
June 30, 1976	11,774	80,591	92,365	2,209	94,574
July	11,764	80,562	92,326	2,230	94,556
August	11,753	80,575	92,328	2,212	94,540
September 30, 1976	11,742	80,388	92,130	2,389	94,519
(Average)	(11,756)	(80,520)	(92,276)	(2,267)	(94,543)

FY 1975 STRENGTH PLAN*

	Pay Group A		Total Paid	Reserve Enlistment	Total Selected
	Officer	Enlisted	Drill	Program	Reserve
June 30, 1974	11,669	81,175	92,844	1,040	93,884
July	11,640	80,833	92,473	1,108	93,581
August	11,640	80,865	92,505	1,130	93,635
September	11,668	80,885	92,553	1,132	93,685
October	11,715	81,237	92,952	1,263	94,215
November	11,770	81,688	93,458	1,312	94,770
December	11,810	82,139	93,949	1,261	95,210
January	11,845	82,368	94,213	1,332	95,545
February	11,875	82,677	94,552	1,323	95,875
March	11,900	82,928	94,828	1,272	96,100
April	11,910	83,031	94,941	1,369	96,310
May	11,915	82,804	94,719	1,416	96,135
June 30, 1975	11,920	82,664	94,584	1,416	96,000
(Average)	(11,790)	(81,948)	(93,738)	(1,262)	(95,000)

* Actual data thru Sept 1974.

OPERATION AND MAINTENANCE, AIR NATIONAL GUARD

For operation and maintenance of the Air National Guard, including medical and hospital treatment and related expenses in non-Federal hospitals; maintenance, operation, repair, and other necessary expenses of facilities for the training and administration of the Air National Guard, including repair of facilities, maintenance, operation, and modification of aircraft; transportation of things; hire of passenger motor vehicles; supplies, materials, and equipment, as authorized by law for the Air National Guard; and expenses incident to the maintenance and use of supplies, materials, and equipment, including such as may be furnished from stocks under the control of agencies of the Department of Defense; travel expenses (other than mileage) on the same basis as authorized by law for Air National Guard personnel on active Federal duty, or Air National Guard commanders while inspecting units in compliance with National Guard regulations when specifically authorized by the Chief, National Guard Bureau; [$642,500,000] $723,500,000, of which not less than [$5,000,000] $8,500,000 shall be available only for the maintenance of real property facilities.

For "Operation and Maintenance, Air National Guard" for the period July 1, 1976, through September 30, 1976, $189,200,000 (5 U. S. C. 3101, 3109, 4101-18, 4501-03, 5332-36, 5702-04, 5722-31, 5742, 5911, 5941, 7903; 10 U. S. C. 261-280, 2231-38, 2511, 8012, 8721-22, 9741, 9743; 31 U. S. C. 638a; 32 U. S. C. 106, 107, 320, 701-03, 709; 37 U. S. C. 404-11, Department of Defense Appropriation Act, 1975.)

FY 1974 STRENGTH PLAN*

	Pay Group A		Total Paid	Reserve Enlistment	Total Selected
	Officer	Enlisted	Drill	Program	Reserve
June 30, 1973	11,564	77,954	89,518	853	90,371
July	11,530	77,507	89,037	854	89,891
August	11,546	77,384	88,930	879	89,809
September	11,559	77,944	89,503	966	90,469
October	11,559	78,723	90,282	910	91,192
November	11,613	79,521	91,134	835	91,969
December	11,658	80,088	91,746	725	92,471
January	11,652	80,468	92,120	750	92,870
February	11,684	80,696	92,380	754	93,134
March	11,699	81,038	92,737	817	93,554
April	11,727	81,577	93,304	898	94,202
May	11,630	81,243	92,873	945	93,818
June 30, 1974	11,669	81,175	92,844	1,040	93,884
(Average)	(11,623)	(79,645)	(91,268)	(857)	(92,125)

* Actual data

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-18-3840-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. OPERATION OF AIRCRAFT	80,591	128,570	152,700
	2. LOGISTICAL SUPPORT	84,099	89,852	88,254
	3. TRAINING SUPPORT	383,338	446,836	478,548
	4. MEDICAL SUPPORT	611	633	685
	5. SERVICEWIDE SUPPORT	2,824	3,209	3,313
	TOTAL DIRECT PROGRAM	551,463	669,100	723,500
	REIMBURSABLE (TOTAL)	9,113	10,900	10,650
10	TOTAL OBLIGATIONS	560,576	680,000	734,150
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-8,760	-10,465	-10,215
14	NON-FEDERAL SOURCES	-353	-435	-435
25	UNOBLIGATED BALANCE LAPSING	1,462	.....	.....
	BUDGET AUTHORITY	552,925	669,100	723,500
	BUDGET AUTHORITY:			
40	APPROPRIATION	552,925	642,500	723,500
40	RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-500	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	.....	12,000	.....
43	APPROPRIATION (ADJUSTED)	552,925	654,000	723,500
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	8,200	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	6,900	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	551,463	669,100	723,500
72	OBLIGATED BALANCE, START OF YEAR	48,316	59,543	69,643
74	OBLIGATED BALANCE, END OF YEAR	-59,543	-69,643	-75,143
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	-5,281	.....	.....
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	534,955	644,655	717,245
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	7,790	410
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL	.....	6,555	345

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3840-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	275,698	317,152	330,792
11.5	OTHER PERSONNEL COMPENSATION	2,892	3,584	3,566
	TOTAL PERSONNEL COMPENSATION	278,590	320,736	334,358
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	273,311	314,280	328,083
12.1	PERSONNEL BENEFITS: CIVILIAN	26,330	31,265	33,829
13.0	BENEFITS FOR FORMER PERSONNEL	36	438	78
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	3,873	4,055	6,838
22.0	TRANSPORTATION OF THINGS	4,128	5,502	5,606
23.0	RENT, COMMUNICATIONS, AND UTILITIES	4,345	5,742	7,164
24.0	PRINTING AND REPRODUCTION	25	70	70
25.0	OTHER SERVICES	120,717	131,976	139,698
26.0	SUPPLIES AND MATERIALS	115,450	172,525	197,918
31.0	EQUIPMENT	3,248	3,247	4,216
	TOTAL DIRECT OBLIGATIONS	551,463	669,100	723,500
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	5,279	6,456	6,275
12.1	PERSONNEL BENEFITS: CIVILIAN	475	579	569
13.0	BENEFITS FOR FORMER PERSONNEL	5	5	5
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	15	22	22
22.0	TRANSPORTATION OF THINGS	16	76	76
23.0	RENT, COMMUNICATIONS, AND UTILITIES	215	267	267
25.0	OTHER SERVICES	2,451	2,680	2,677
26.0	SUPPLIES AND MATERIALS	596	768	712
31.0	EQUIPMENT	61	47	47
	TOTAL REIMBURSABLE OBLIGATIONS	9,113	10,900	10,650
99.0	TOTAL OBLIGATIONS	560,576	680,000	734,150

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-18-3840-0-1-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. OPERATION OF AIRCRAFT	40,169
	2. LOGISTICAL SUPPORT	23,961
	3. TRAINING SUPPORT	124,076
	4. MEDICAL SUPPORT	171
	5. SERVICEWIDE SUPPORT	823
	TOTAL DIRECT PROGRAM	189,200
	REIMBURSABLE (TOTAL)	2,785
10	TOTAL OBLIGATIONS	191,985
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-2,670
14	NON-FEDERAL SOURCES	-115
	BUDGET AUTHORITY	189,200
	BUDGET AUTHORITY:	
40	APPROPRIATION	189,200
43	APPROPRIATION (ADJUSTED)	189,200
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	189,200
72	OBLIGATED BALANCE, START OF YEAR	75,143
74	OBLIGATED BALANCE, END OF YEAR	-97,343
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	167,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3840-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	82,861
11.5	OTHER PERSONNEL COMPENSATION	895
	TOTAL PERSONNEL COMPENSATION	83,756
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	82,183
12.1	PERSONNEL BENEFITS: CIVILIAN	8,257
13.0	BENEFITS FOR FORMER PERSONNEL	19
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	1,717
22.0	TRANSPORTATION OF THINGS	1,471
23.0	RENT, COMMUNICATIONS, AND UTILITIES	1,913
24.0	PRINTING AND REPRODUCTION	18
25.0	OTHER SERVICES	41,317
26.0	SUPPLIES AND MATERIALS	51,399
31.0	EQUIPMENT	906
	TOTAL DIRECT OBLIGATIONS	189,200
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	1,573
12.1	PERSONNEL BENEFITS: CIVILIAN	143
13.0	BENEFITS FOR FORMER PERSONNEL	1
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	6
22.0	TRANSPORTATION OF THINGS	19
23.0	RENT, COMMUNICATIONS, AND UTILITIES	66
25.0	OTHER SERVICES	786
26.0	SUPPLIES AND MATERIALS	179
31.0	EQUIPMENT	12
	TOTAL REIMBURSABLE OBLIGATIONS	2,785
99.0	TOTAL OBLIGATIONS	191,985

PERSONNEL SUMMARY

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Total Number of Permanent Positions	23,032	23,567	23,703	23,703
Average Paid Employment	22,392	23,438	23,581	23,584
Average GS Grade	7.67	7.65	7.65	7.65
Average GS Salary	$12,866	$13,525	$13,863	$13,867
Average Salary of Ungraded Positions	$12,540	$13,538	$14,189	$14,189

JUSTIFICATION OF ESTIMATES FOR FY 1976

APPROPRIATION: Operation and Maintenance, Air National Guard

INTRODUCTORY STATEMENT

The justification material for this appropriation is presented in a format similar to that provided in FY 1975.

The FY 1975 estimate for the Operation and Maintenance, Air National Guard appropriation has been adjusted to include supplementals for authorized Air Technician and other civilian pay raises, proposed Section 834 of Public Law 93-437 transfer, and the pending Presidential recision. A summary of adjustments follows:

(In Thousands of Dollars)

Appropriation	$642,500
Proposed Supplementals	$ 15,100
Wage Board Pay Raise	$8,200
Classified Pay Raise (1 Oct 74)	$6,900

Proposed Transfer..... $ 12,000

Increase price of fuels..... $ 5,332
Increase price of supplies..... $ 4,768
Increase price of purchased utilities..... $ 1,900

Presidential Recision (Real Property Maintenance Activities)..... $ -500

Adjusted FY 1975 O&M Program..... $669,100

The FY 1976 estimate includes funds for continued conversion to more modern weapon systems and for maintaining readiness required under the Total Force Policy.

The FY 197T estimate exceeds 25% of FY 1976 requirements in several areas due to seasonal variations in Air National Guard level of training and base maintenance and support activities.

The most signifioant programmed force change in FY 1976 is the introduction of the KC-135 strategic air refueling aircraft. A comparison of the flying unit force structure for the prior, current and budget years follows:

	Flying Units (End Year)			
Weapon System	FY 1974	FY 1975	FY 1976	FY 197T
Air Defense	21	16	13	12
TAC Fighter	27	29	28	28
TAC Recon	7	7	9	9
Air Refueling (KC-97)	9	9	8	8
Air Refueling (KC-135)	-	-	4	5
Electronic Warfare	1	1	1	1
Special Operations	3	2	-	-
TAC Airlift	13	15	17	17
TAC Air Support	5	7	7	7
Strategic Airlift	3	-	-	-
Rescue/Recovery	-	2	2	2
Combat Crew Training	3	3	2	2
Total	92	91	91	91

Consolidation of two collocated TAC airlift units for reduced total flying units to 91 in FY 1975.

SUMMARY OF SIGNIFICANT CIVILIAN MANPOWER INCREASES

Fiscal Year 1975 to Fiscal Year 1976

(Full-time Permanent Employees)

Operation or Activity	Year-End Increases
Improved level of manning required to support a more modern force and allow all units to attain and maintain a high level of combat readiness.	+ 167
Reduction in reimbursable program.	- 31
Net Change.	+ 136

DIRECT HIRE CIVILIAN EMPLOYMENT
OPERATION AND MAINTENANCE, AIR NATIONAL GUARD
(Dollars in Thousands - Strength in Whole Numbers)

	FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate		
	Average Strength	End Strength	Est Oblig	Average Strength	End Strength	Est Oblig	Average Strength	End Strength	Est Oblig
Direct Hire Civilians									
Full-time permanent	23,438	23,567	$353,023	23,581	23,703	$368,839	23,584	23,703	$ 92,176
Technicians	(22,433)	(22,550)	($339,195)	(22,151)	(22,273)	($348,361)	(22,154)	(22,273)	($ 87,047)
Non-technicians	(1,005)	(1,017)	($ 13,828)	(1,430)	(1,430)	($ 20,478)	(1,430)	(1,430)	($ 5,129)
Detail by Budget Activity									
Mission	21,842	21,957	$330,438	22,002	22,124	$345,611	22,005	22,124	$ 86,360
Other Support	1,084	1,096	$ 15,545	1,096	1,096	$ 16,379	1,096	1,096	$ 4,099
Reimbursables	512	514	$ 7,040	483	483	$ 6,849	483	483	$ 1,717

OTHER PERSONNEL COMPENSATION
(In Thousands of Dollars)

	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Overtime and Holiday Pay	$ 541	$ 571	$ 145
Sunday and Night Differential	1,529	1,607	404
Premium Pay	717	736	182
Other Compensation	797	652	164
Total	$3,584	$3,566	$ 895

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROGRAM NO.	TITLE		FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
410	Operation of Aircraft	Direct	$ 80,591	$128,570	$152,700	$ 40,169
430	Logistical Support	Direct	84,099	89,852	88,254	23,961
440	Training Support	Direct	383,338	446,836	478,548	124,076
		Reimbursements	9,111	10,897	10,648	2,784
		Total	392,449	457,733	489,196	126,860
470	Medical Support	Direct	611	633	685	171
		Reimbursements	2	3	2	1
		Total	613	636	687	172
480	Service-wide Support	Direct	2,824	3,209	3,313	823
	Total	Direct	$551,463	$669,100	$723,500	$189,200
		Reimbursements	9,113	10,900	10,650	2,785
		Total	$560,576	$680,000	$734,150	$191,985

RESERVE PERSONNEL, AIR FORCE

For pay, allowances, clothing, subsistence, gratuities, travel, and related expenses for personnel of the Air Force Reserve on active duty under sections 265, 8019, and 8033 of title 10, United States Code, or while undergoing reserve training, or while performing drills or equivalent duty, and for members of the Air Reserve Officers' Training Corps, as authorized by law; ~~$147,865,000~~ $160,700,000

For "Reserve Personnel, Air Force" for the period July 1, 1976, through September 30, 1976, $51,100,000. (10 U.S.C. 261-80, 591-95, 597-600, 651, 671-85, 687, 715, 1475-80, 2031, 2101-11, 2120-27, 2511, 8012, 8019, 8062, 8076, 8221-23, 8259-60, 8351-54, 8356, 8358-63, 8365-68, 8371-81, 8392-95, 8491, 8687, 8722, 9301, 9411-14, 9561-63, 9741, 9743; 37 U.S.C. 204, 206, 209, 301, 309, 401-11, 415-18, 1002; 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 07-05-3700-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. RESERVE COMPONENT PERSONNEL	103,564	123,107	136,857
	2. RESERVE OFFICER CANDIDATES	22,129	24,758	23,843
	TOTAL DIRECT PROGRAM	125,693	147,865	160,700
	REIMBURSABLE (TOTAL)	479	713	728
10	TOTAL OBLIGATIONS	126,172	148,578	161,428
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-458	-693	-708
14	NON-FEDERAL SOURCES	-21	-20	-20
25	UNOBLIGATED BALANCE LAPSING	8,154	.....	.....
	BUDGET AUTHORITY	133,847	147,865	160,700
	RELATION OF OBLIGATIONS TO OUTLAYS:			
71	OBLIGATIONS INCURRED, NET	125,693	147,865	160,700
72	OBLIGATED BALANCE, START OF YEAR	21,384	30,140	42,605
74	OBLIGATED BALANCE, END OF YEAR	-30,140	-42,605	-50,705
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	1,633	.....	.....
90	OUTLAYS	118,571	135,400	152,600

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 97-05-3700-0-1-051			TRANSITION
	PROGRAM BY ACTIVITIES:		
	DIRECT PROGRAM:		
	1. RESERVE COMPONENT PERSONNEL		44,899
	2. RESERVE OFFICER CANDIDATES		6,201
	TOTAL DIRECT PROGRAM		51,100
	REIMBURSABLE (TOTAL)		182
10	TOTAL OBLIGATIONS		51,282
	FINANCING:		
	RECEIPTS AND REIMBURSEMENTS FROM:		
11	FEDERAL FUNDS		-177
14	NON-FEDERAL SOURCES		-5
	BUDGET AUTHORITY		51,100
	RELATION OF OBLIGATIONS TO OUTLAYS:		
71	OBLIGATIONS INCURRED, NET		51,100
72	OBLIGATED BALANCE, START OF YEAR		50,705
74	OBLIGATED BALANCE, END OF YEAR		-43,805
90	OUTLAYS		58,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3700-0-1-051		1974 ACT	1975 EST	1976 EST
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	86,037	102,197	114,451
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	25,413	30,129	29,005
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	8,458	9,903	11,354
22.0	TRANSPORTATION OF THINGS	125	154	171
26.0	SUPPLIES AND MATERIALS	5,617	5,429	5,661
42.0	INSURANCE CLAIMS AND INDEMNITIES	43	53	58
	TOTAL DIRECT OBLIGATIONS	125,693	147,865	160,700
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	404	616	649
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	38	56	36
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	16	21	23
26.0	SUPPLIES AND MATERIALS	21	20	20
	TOTAL REIMBURSABLE OBLIGATIONS	479	713	728
99.0	TOTAL OBLIGATIONS	126,172	148,578	161,428

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3700-0-1-051		TRANSITION
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	38,787
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	6,305
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	4,217
22.0	TRANSPORTATION OF THINGS	54
26.0	SUPPLIES AND MATERIALS	1,718
42.0	INSURANCE CLAIMS AND INDEMNITIES	19
	TOTAL DIRECT OBLIGATIONS	51,100
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	163
12.2	PERSONNEL BENEFITS: MILITARY PERSONNEL	8
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	6
26.0	SUPPLIES AND MATERIALS	5
	TOTAL REIMBURSABLE OBLIGATIONS	182
99.0	TOTAL OBLIGATIONS	51,282

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SUMMARY OF REQUIREMENTS (In Thousands)

Program Number	Title	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
	(1)	(2)	(3)	(4)	(5)
720	Reserve Component Personnel.....	$ 104,043	$ 123,820	$ 137,585	$ 45,081
780	Reserve Officer Candidates.....	22,129	24,758	23,843	6,201
TOTAL PROGRAM REQUIREMENTS (OBLIGATIONS).....		126,172	148,578	161,428	51,282
Less Actual/Anticipated Reimbursements.....		- 479	- 713	- 728	- 182
Unobligated balance lapsing.....		8,154	-	-	-
Total Direct Obligations/Appropriations.....		$ 133,847	$ 147,865	$ 160,700	$ 51,100

Budget Program 1
Reserve Component Personnel
SUMMARY OF REQUIREMENTS BY BUDGET ACTIVITY

(In Thousands of Dollars)

Budget Activity	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Direct Program				
Training, Pay Group A	$ 61,417	$ 66,962	$ 70,765	$25,744
Training, Pay Group B	7,541	10,115	12,830	3,511
Training, Pay Group D	1,584	3,684	3,629	909
Training, Pay Group F	3,122	6,072	9,910	2,973
School Training	11,487	13,936	13,706	4,638
Special Training	15,516	19,031	22,479	6,225
Administration and Support	2,897	3,307	3,538	899
Total Direct Program	$103,564	$123,107	$136,857	$44,899
Reimbursable Program				
Training, Pay Group A	$ 479	$ 713	$ 728	$ 182
Total Reimbursable Program	$ 479	$ 713	$ 728	$ 182
Total Program				
Training, Pay Group A	$ 61,896	$ 67,675	$ 71,493	$25,926
Training, Pay Group B	7,541	10,115	12,830	3,511
Training, Pay Group D	1,584	3,684	3,629	909
Training, Pay Group F	3,122	6,072	9,910	2,973
School Training	11,487	13,936	13,706	4,638
Special Training	15,516	19,031	22,479	6,225
Administration and Support	2,897	3,307	3,538	899
Total Obligations	$104,043	$123,820	$137,585	$45,081

PERSONNEL IN PAID STATUS

Pay Groups	Paid Drills	Paid Days of Active Duty for Training		FY 1974 Actual Begin	FY 1974 Actual Average	FY 1974 Actual End	FY 1975 Estimate Average	FY 1975 Estimate End	FY 1976 Estimate Average	FY 1976 Estimate End	FY 197T Estimate Average	FY 197T Estimate End	FY 1977 Estimate Average
A	48	15	Off	6,774	6,769	6,871	6,839	7,207	6,935	7,109	7,116	7,123	7,229
			Enl	31,852	31,891	33,740	34,905	36,338	35,811	36,034	36,540	36,785	37,487
B	24	15	Off	3,451	3,463	3,529	4,278	5,137	5,137	5,137	5,137	5,137	5,137
			Enl	1,461	1,438	1,390	1,436	1,626	2,433	3,060	3,070	3,073	3,072
F	0	(4 mos min)	Enl	247	459	808	878	1,368	1,473	1,870	1,779	1,625	1,470
Paid Drill Training Plus Non-Prior Service			Off	10,225	10,232	10,400	11,117	12,344	12,072	12,246	12,253	12,260	12,366
			Enl	33,560	33,788	35,938	37,219	39,332	39,717	40,964	41,389	41,483	42,029
			Tot	43,785	44,020	46,338	48,336	51,676	51,789	53,210	53,642	53,743	54,395
Paid Active Duty Training Only													
D	0	14	Off	1,242	1,535	1,535	2,855	2,855	2,855	2,855	715	715	2,855
			Enl	94	121	121	482	482	482	482	121	121	482
			Tot	1,336	1,656	1,656	3,337	3,337	3,337	3,337	836	836	3,337
Total Paid Status			Off	11,467	11,767	11,935	13,972	15,199	14,927	15,101	12,968	12,975	15,221
			Enl	33,654	33,909	36,059	37,701	39,814	40,199	41,446	41,510	41,604	42,511
			Tot	45,121	45,676	47,994	51,673	55,013	55,126	56,547	54,478	54,579	57,732

NOTE: Averages computed by doubling the end strengths of the months of July through May, adding June 30 strengths of the previous year and the year under consideration, and dividing the total by 24, except for Pay Group D. Pay Group D represents the total number of personnel participating during the fiscal year, and average and end strengths are identical in any one year.

FY 1976 STRENGTH PLAN

	Pay Group A			Pay Group B			Total Paid Drill	Reserve Enlistment Program	Total Selected Reserve
	Off	Enl	Total	Off	Enl	Total			
June 30, 1975	7,207	36,338	43,545	5,137	1,626	6,763	50,308	1,368	51,676
July	6,934	35,901	42,835	5,137	1,758	6,895	49,730	1,373	51,103
August	6,918	35,729	42,647	5,137	1,896	7,033	49,680	1,336	51,016
September	6,897	35,543	42,440	5,137	2,034	7,171	49,611	1,419	51,030
October	6,888	35,655	42,543	5,137	2,172	7,309	49,852	1,445	51,297
November	6,891	35,711	42,602	5,137	2,310	7,447	50,049	1,468	51,517
December	6,896	35,791	42,687	5,137	2,448	7,585	50,272	1,430	51,702
January	6,919	35,763	42,682	5,137	2,586	7,723	50,405	1,492	51,897
February	6,925	35,804	42,729	5,137	2,724	7,861	50,590	1,523	52,113
March	6,931	35,843	42,774	5,137	2,862	7,999	50,773	1,504	52,277
April	6,937	35,891	42,828	5,137	3,000	8,137	50,965	1,514	52,479
May	6,941	35,922	42,863	5,137	3,060	8,197	51,060	1,550	52,610
June 30, 1976	7,109	36,034	43,143	5,137	3,060	8,197	51,340	1,870	53,210
Average	6,935	35,811	42,746	5,137	2,433	7,570	50,316	1,473	51,789

FY 197T STRENGTH PLAN

	Pay Group A			Pay Group B			Total Paid Drill	Reserve Enlistment Program	Total Selected Reserve
	Off	Enl	Total	Off	Enl	Total			
June 30, 1976	7,109	36,034	43,143	5,137	3,060	8,197	51,340	1,870	53,210
July	7,114	36,548	43,662	5,137	3,072	8,209	51,871	1,845	53,716
August	7,119	36,661	43,780	5,137	3,072	8,209	51,989	1,724	53,713
September 30, 1976	7,123	36,785	43,908	5,137	3,073	8,210	52,118	1,625	53,743
Average	7,116	36,540	43,656	5,137	3,070	8,207	51,863	1,779	53,642

FY 1975 STRENGTH PLAN 1/

	Pay Group A			Pay Group B			Total Paid Drill	Reserve Enlistment Program	Total Selected Reserve
	Off	Enl	Total	Off	Enl	Total			
June 30, 1974	6,871	33,740	40,611	3,529	1,390	4,919	45,530	808	46,338
July	6,791	33,624	40,415	3,826	1,360	5,186	45,601	850	46,451
August	6,746	33,847	40,593	3,802	1,355	5,157	45,750	882	46,632
September	6,653	33,475	40,128	3,542	1,272	4,814	44,942	993	45,935
October	6,643	33,485	40,128	3,564	1,272	4,836	44,964	998	45,962
November	6,680	33,593	40,273	3,576	1,247	4,823	45,096	959	46,055
December	6,864	34,890	41,754	4,003	1,350	5,353	47,107	713	47,820
January	6,939	35,566	42,505	4,412	1,452	5,864	48,369	714	49,083
February	6,939	36,338	43,277	4,814	1,539	6,353	49,630	753	50,383
March	6,936	36,338	43,274	5,155	1,626	6,781	50,055	776	50,831
April	6,933	36,338	43,271	5,155	1,626	6,781	50,052	781	50,833
May	6,938	36,338	43,276	5,155	1,626	6,781	50,057	1,034	51,091
June 30, 1975	7,207	36,338	43,545	5,137	1,626	6,763	50,308	1,368	51,676
Average	6,839	34,905	41,744	4,278	1,436	5,714	47,458	878	48,336

1/ Actual Data Through 30 June 1974

FY 1974 STRENGTH PLAN 1/

	Pay Group A			Pay Group B			Total Paid Drill	Reserve Enlistment Program	Total Selected Reserve
	Off.	Enl.	Total	Off.	Enl.	Total			
June 30, 1973	6774	31852	38626	3451	1461	4912	43538	247	43785
July	6712	31620	38332	3432	1457	4889	43221	221	43442
August	6730	31473	38203	3425	1431	4856	43059	230	43289
September	6750	31379	38129	3420	1414	4834	42963	294	43257
October	6749	31313	38062	3435	1388	4823	42885	327	43212
November	6770	31325	38095	3456	1468	4924	43019	342	43361
December	6752	31424	38176	3481	1465	4946	43122	378	43500
January	6750	31700	38450	3458	1449	4907	43357	439	43796
February	6781	31747	38528	3451	1431	4882	43410	529	43939
March	6781	32109	38890	3447	1404	4851	43741	650	44391
April	6796	32630	39426	3540	1429	4969	44395	765	45160
May	6810	33131	39941	3529	1499	5028	44969	806	45775
June 30, 1974	6871	33740	40611	3529	1390	4919	45530	808	46338
Average	6769	31891	38660	3463	1438	4901	43561	459	44020

1/ Actual through 30 June 1974

OPERATION AND MAINTENANCE, AIR FORCE RESERVE

For expenses, not otherwise provided for, necessary for the operation and maintenance, including training, organization, and administration, of the Air Force 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: [$286,680,000] $343,800,000 of which not less than [$4,200,000] $10,500,000 shall be available only for the maintenance of real property facilities. For "Operation and Maintenance, Air Force Reserve" for the period July 1, 1976 through September 30, 1976, $87,700,000. (5 U.S.C. 3101, 3109, 4101-18, 4501-03, 5332-36, 5702-04, 5722-31, 5742, 5911, 5941, 7903, 10 U.S.C. 264, 276, 510-11, 1124, 1481-88, 2231-37, 2511, 8012, 8541-42, 8721-23, 9301-04, 9411-14, 9531, 9536, 9561-63, 9593, 9741, 9743; 31 U.S.C. 638a; 37 U.S.C. 404-11; Department of Defense Appropriation Act, 1975.)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-18-3740-0-1-051	1974 ACT	1975 EST	1976 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. MISSION FORCES	163,478	201,728	235,521
	2. DEPOT MAINTENANCE	31,011	32,590	37,059
	3. OTHER SUPPORT	44,412	63,662	71,220
	TOTAL DIRECT PROGRAM	238,901	297,980	343,800
	REIMBURSABLE (TOTAL)	7,590	3,114	3,587
10	TOTAL OBLIGATIONS	246,491	301,094	347,387
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-7,384	-3,034	-3,080
13	TRUST FUNDS	-18	.....	-427
14	NON-FEDERAL SOURCES	-188	-80	-80
25	UNOBLIGATED BALANCE LAPSING	199	.....	.....
	BUDGET AUTHORITY	239,100	297,980	343,800
	BUDGET AUTHORITY:			
40	APPROPRIATION	239,100	286,680	343,800
40	RECISION OF ENACTED APPROPRIATION NOW PENDING	.....	-400	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	.....	4,500	.....
		239,100	290,780	343,800
43	APPROPRIATION (ADJUSTED)	.....	3,600	.....
44.10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	3,600	.....
44.20	PROPOSED SUPPLEMENTAL FOR CIVILIAN PAY RAISES	.....	.....	.....
	RELATION OF OBLIGATIONS TO OUTLAYS:	238,901	297,980	343,800
71	OBLIGATIONS INCURRED, NET	11,698	20,891	31,871
72	OBLIGATED BALANCE, START OF YEAR	-20,891	-31,871	-36,671
74	OBLIGATED BALANCE, END OF YEAR	530	.....	.....
77	ADJUSTMENTS IN EXPIRED ACCOUNTS	230,238	286,160	338,640
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	.....	3,420	180
91.10	OUTLAYS FROM WAGE-BOARD PAY RAISE SUPPLEMENTAL	.....	3,420	180
91.20	OUTLAYS FROM CIVILIAN PAY RAISE SUPPLEMENTAL			

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-10-3740-0-1-051	TRANSITION
	PROGRAM BY ACTIVITIES:	
	DIRECT PROGRAM:	
	1. MISSION FORCES	61,179
	2. DEPOT MAINTENANCE	11,545
	3. OTHER SUPPORT	14,976
	TOTAL DIRECT PROGRAM	87,700
	REIMBURSABLE (TOTAL)	934
10	TOTAL OBLIGATIONS	88,634
	FINANCING:	
	RECEIPTS AND REIMBURSEMENTS FROM:	
11	FEDERAL FUNDS	-770
13	TRUST FUNDS	-144
14	NON-FEDERAL SOURCES	-20
	BUDGET AUTHORITY	87,700
	BUDGET AUTHORITY:	
40	APPROPRIATION	87,700
43	APPROPRIATION (ADJUSTED)	87,700
	RELATION OF OBLIGATIONS TO OUTLAYS:	
71	OBLIGATIONS INCURRED, NET	87,700
72	OBLIGATED BALANCE, START OF YEAR	36,671
74	OBLIGATED BALANCE, END OF YEAR	-38,371
90	OUTLAYS, EXCLUDING PAY RAISE SUPPLEMENTAL	86,000

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3740-0-1-051		1974 ACT	1975 EST	1976 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	125,043	146,547	155,053
11.3	POSITIONS OTHER THAN PERMANENT	368	400	.....
11.5	OTHER PERSONNEL COMPENSATION	2,084	2,329	2,438
	TOTAL PERSONNEL COMPENSATION	127,495	149,276	157,491
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	123,785	148,126	156,341
12.1	PERSONNEL BENEFITS: CIVILIAN	11,882	14,364	19,998
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	2,510	2,503	3,678
22.0	TRANSPORTATION OF THINGS	446	542	2,120
23.0	RENT, COMMUNICATIONS, AND UTILITIES	2,593	6,946	6,805
24.0	PRINTING AND REPRODUCTION	149	179	194
25.0	OTHER SERVICES	60,660	70,113	92,433
26.0	SUPPLIES AND MATERIALS	32,550	52,797	59,829
31.0	EQUIPMENT	4,326	2,410	2,402
	TOTAL DIRECT OBLIGATIONS	238,901	297,980	343,800
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	3,710	1,150	1,150
12.1	PERSONNEL BENEFITS: CIVILIAN	336	110	110
23.0	RENT, COMMUNICATIONS, AND UTILITIES	1,117	950	1,000
25.0	OTHER SERVICES	1,495	500	500
26.0	SUPPLIES AND MATERIALS	932	404	827
	TOTAL REIMBURSABLE OBLIGATIONS	7,590	3,114	3,587
99.0	TOTAL OBLIGATIONS	246,491	301,094	347,387

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3740-0-1-051		TRANSITION
	PERSONNEL COMPENSATION:	
11.1	PERMANENT POSITIONS	39,001
11.3	POSITIONS OTHER THAN PERMANENT	.....
11.5	OTHER PERSONNEL COMPENSATION	611
	TOTAL PERSONNEL COMPENSATION	39,612
	DIRECT OBLIGATIONS:	
	PERSONNEL COMPENSATION	39,324
12.1	PERSONNEL BENEFITS: CIVILIAN	3,979
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	1,063
22.0	TRANSPORTATION OF THINGS	273
23.0	RENT, COMMUNICATIONS, AND UTILITIES	1,317
24.0	PRINTING AND REPRODUCTION	46
25.0	OTHER SERVICES	24,059
26.0	SUPPLIES AND MATERIALS	16,511
31.0	EQUIPMENT	1,128
	TOTAL DIRECT OBLIGATIONS	87,700
	REIMBURSABLE OBLIGATIONS:	
	PERSONNEL COMPENSATION	288
12.1	PERSONNEL BENEFITS: CIVILIAN	27
23.0	RENT, COMMUNICATIONS, AND UTILITIES	250
25.0	OTHER SERVICES	125
26.0	SUPPLIES AND MATERIALS	244
	TOTAL REIMBURSABLE OBLIGATIONS	934
99.0	TOTAL OBLIGATIONS	88,634

Personnel Summary

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Total Number of Permanent Positions	11,487	11,558	11,502	11,502
Full Time Equivalent of Other Positions	437	197	....	....
Average Paid Employment	10,749	11,548	11,609	11,500
Average GS Grade	6.75	6.95	7.00	7.04
Average GS Salary	$12,231	$12,525	$12,953	$13,033
Average Salary of Ungraded Positions	$11,958	$12,509	$13,324	$13,398

Department of the Air Force
Justification of Estimates for FY 1976 and FY 197T

Appropriation: Operation and Maintenance, Air Force Reserve

Introductory Statement
(Dollars in Thousands)

The justification material for this appropriation is presented in a format similar to that provided in previous years. Requirements are displayed by budget programs which are summarized on page 192. Mission Forces, Depot Maintenance, and Other Support requirements are separately identified. Special exhibits address subjects in which the Congress has expressed particular interest.

The Operation and Maintenance, Air Force Reserve estimate has been carefully developed and the funds requested are the amounts required for the forces programmed in the budget. The FY 1976 Operation and Maintenance appropriation supports flying hours, aircraft, people and bases. In addition, this appropriation supports the operation of the Air Reserve Personnel Center. The appropriate program data is indicated in the discussion of each of the sub-categories within budget activities.

The FY 1975 estimate in the FY 1976 budget is adjusted to include, in addition to the appropriation, supplementals for authorized civilian pay raises and a transfer to cover price increases in fuel, utilities, and supplies. A summary of adjustments is:

Appropriated		$286,680
Proposed Supplementals		+7,200
Wageboard Pay Raise	$3,600	
Classified Pay Raise (1 Oct 74)	3,600	
Proposed Transfer		+4,500
Proposed Recision due to reduction in Real Property Maintenance Floor		-400
Adjusted O&M FY 1975 Program		$297,980

The FY 1976 and FY 197T columns of the Justification Book total $343,800 and $87,700, respectively.

The FY 197T requirements are based on normal first quarter programming. For the Operation and Maintenance, Air Force Reserve Appropriation the first quarter program exceeds 25% of the annual. This is due to the greater availability of personnel for training. The flying hour program and related costs both exceed 25%.

For several years the Air Force Reserve has been converting to more modern weapon systems to the extent aircraft have been released by the active Air Force. A comparison of the Air Force Reserve flying unit force structure for the prior, current and budget years follows:

Weapon Systems	FY 1974	FY 1975	FY 1976	FY 197T
C-130 Tactical Airlift	16	16	14	14
C-123 Tactical Airlift	4	4	4	4
C-7 Tactical Airlift	2	2	2	2
WC-130 Weather Service			1	1
Aerospace Rescue and Recovery				
HH-1/HH-3		1	1	1
HH-1	2	1	1	1
HC-130	2	2	2	2
Special Operations Forces				
CH-3	1	1	1	1
AC-130			1	1
EC-121 Airborne Early Warning and Control	1	1	1	1
F-105 Tactical Fighter	3	3	3	3
A-37 Tactical Fighter	4	4	4	4
Total Equipped Units	35	35	35	35
Associate Units (non-equipped)				
C-141 Strategic Airlift	13	13	13	13
C-9 Aeromedical Airlift	1	1	1	1
C-5 Aeromedical Airlift	4	4	4	4
Total Associate Units	18	18	18	18
Total Flying Units	53	53	53	53

The civilian personnel provide the full-time support to maintain aircraft and facilities and administrative continuity to support training of Air Force Reservists. Included are Air Reserve Technicians serving in the dual capacity of full-time civilian employees, as well as occupying military spaces as Reservists in the units. Upon activation of the unit, these key employees are mobilized in their Reserve positions. The civilian personnel requirements are summarized as follows and include the Air Force Reserve Personnel Center:

	Civilian Personnel (End Strength)			
	FY 1974	FY 1975	FY 1976	FY 197T
Air Reserve Technicians	6,233	6,889	7,217	7,217
Other	5,256	4,669	4,285	4,285
Total	11,489	11,558	11,502	11,502

The FY 1975 civilian totals in this Budget differ from those originally contained in the FY 1975 Budget. The elimination of support aircraft at the end of FY 1975 and the related end strengths are offset by an end strength and manyear increase for surge capability in the strategic airlift Associate units. Reservist flying training must meet standards set by the active Air Force major air command to which their unit will be assigned upon mobilization. The total flying hours programmed for Air Force Reserve equipped units is 141,932 in FY 1975, 142,123 in FY 1976 and 38,945 in FY 197T. The Associate units, being non-equipped, are not included in the Air Force Reserve flying hour program, but rather in the overall program of the Air Force Airlift Service Industrial Fund (ASIF) which owns the aircraft. However, to the extent Reserve aircrews utilize the aircraft in their training, reimbursement is made to ASIF and provision for this cost is included in this justification.

The value of a Reserve Force ultimately depends on its ability to respond immediately to a wide range of needs and to maintain this capability at a minimum of expense. During the transition to more modern weapon systems, this operational readiness temporarily lags; however, continuous effort is made to minimize the time frame necessary to reacquire the level of pre-conversion readiness. Readiness ratings are dependent upon on-hand versus authorized aircraft and support equipment, as well as the required number of proficient aircrews and support personnel. These ratings are tested through Operational Readiness Inspections conducted by the gaining active Air Force major air command.

In addition to the training of Reserve unit personnel, this justification includes requirements for operation of the Air Reserve Personnel Center. This activity maintains master records on all Air Force Reserve personnel and Air National Guard officers both in an active Reserve and retired status. The work force is predominantly civilian with command and certain key administrative positions occupied by active Air Force military personnel.

Base closure actions impact significantly on the Operation and Maintenance, Air Force Reserve appropriation. Due to the timing of the closures at the end of FY 1976 any dollar savings due to end strength reductions are more than offset by the one time costs associated with movement of mission forces located on the affected bases and separation of civilian employees.

SUMMARY OF SIGNIFICANT CIVILIAN MANPOWER INCREASES

Fiscal Year 1975 to Fiscal Year 1976

(Full-time Permanent Employees)

Operation or Activity	Year End Increases
Conversion of C-130 to AC-130	+153
Conversion of C-130 to WC-130	+136
Increased maintenance manning for F-105	+66
Transfer of funding responsibility from O&M Air Force	+44
Hamilton and Ellington Base Closure	-455
Net Change	-56

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Direct Hire Civilian Employment

Operation and Maintenance, Air Force Reserve

(Dollars in Thousands - Strength in Whole Numbers)

	FY 1974 Actual			FY 1975 Estimate			FY 1976 Estimate			FY 197T Estimate		
	Avg Str	30Jun74 End Str	Act Oblig	Avg Str	30Jun75 End Str	Est Oblig	Avg Str	30Jun76 End Str	Est Oblig	Avg Str	30Sep76 End Str	Est Oblig
Direct Hire Civilians												
Full-time Permanent	10,412	11,152	$136,447	11,451	11,558	$162,526	11,609	11,502	$177,599	2,877	11,502	$43,618
Other	437	686	3,266	197		1,224						
Total Direct Hire Civilians	10,849	11,838	139,713	11,648	11,558	163,750	11,609	11,502	177,599	2,877	11,502	43,618
Detail by Budget Activity												
Mission	7,879	8,594	$103,076	8,387	8,403	$118,190	8,481	8,751	$128,760	2,186	8,751	$33,325
Other Support	2,970	3,244	36,637	3,261	3,155	45,560	3,128	2,751	48,839	691	2,751	10,293
Reimbursable Obligations (included above)			($4,046)			($1,260)			($1,260)			($315)

OTHER PERSONNEL COMPENSATION

(Dollars in Thousands)

	FY 1974 Actual	FY 1975 Estimate	FY 1976 Estimate	FY 197T Estimate
Overtime and Holiday Pay	$ 720	$ 808	$ 820	$206
Sunday and Night Differential	83	90	100	25
Post Differential and Cost of Living	-	-	-	-
Premium Pay (including firefighters)	441	490	500	125
Other Compensation	840	941	1,018	255
Total	$2,084	$2,329	$2,438	$611

PREPARED STATEMENT

Chairman McCLELLAN. The first witness will be General Guice.

General, I notice you have a prepared statement. Would you like to insert it in the record and then highlight it?

General GUICE. Yes, Mr. Chairman. I would like to make the prepared statement available for the record and I would like to read our very short summary statement.

Chairman McCLELLAN. Without objection, it will appear at this point in the record.

[The statement follows:]

Mr. Chairman and Members of the Committee:

I am delighted to have this opportunity to appear before your committee to discuss the Air National Guard funding requirements for FY 76. In my capacity as the Deputy Director of the Air National Guard I look forward to discussing with you the many facets of the Air National Guard and its important role in our nation's security.

STATE AND COMMUNITY PARTICIPATION IN THE NATION'S DEFENSE

The Air National Guard has units in every state, Puerto Rico and the District of Columbia. Although the federal mission of the Guard is identical to that of its active and reserve counterparts, it is a state organization in peacetime, as established by the Constitution and reaffirmed numerous times by the Congress. States and communities where the Guard is located share in the responsibility for providing the resources and facilities necessary to man and train combat organizations. We firmly believe that the Air National Guard has been sustained as a strong and viable force because of this local government involvement.

FORCE STRUCTURE

Our units are truly part of the Total Force, with missions in strategic offense, strategic defense, tactical fighter, airlift, tactical reconnaissance, refueling, rescue and training. In FY 75, 14 of our units will convert to newer aircraft. This force modernization program continues next year with 17 units converting in FY 76 and TT. In July 1975, we will receive our first unit of KC-135's, the all jet four engine tankers, to be followed by four other KC-135 unit conversions through the transition quarter. These tankers will provide refueling support for both strategic and tactical missions.

Air National Guard flying units for FY 76 and 7T are programmed to remain at 91. Nonflying units are scheduled to remain constant throughout FY 75, with a slight reduction in tactical control and mobile communications units in FY 76 due to decreased force structure requirements.

MISSION CAPABILITY

The primary mission of the Air National Guard is to provide combat ready forces available to augment the Active Air Force. Its highly qualified units, both flying and nonflying, stand ready to respond immediately to mobilization requirements and to deploy to any location. Today, with more modern equipment on hand and with additional modernization in the program this fiscal year and next, we have a capable and useable force that is better organized and better trained than at any time in our history. In short, the Air Guard is a totally professional force capable of fulfilling its commitment in support of this nation's defense requirements.

The Air National Guard has demonstrated its ability to support the active force whenever called upon. Combat ready units were mobilized and performed with distinction in World War II, Korea, the Berlin Call Up, the Cuban Crisis, and in Southeast Asia.

Today, the Air National Guard provides interceptors for North American Aerospace Defense, ready to go in minutes, 24-hours a day, seven days a week. Next year, the Air Guard will begin supporting the Strategic Bomber Force with KC-135 refueling. We in the Guard look forward to establishing the same response capability in support of the Strategic Air Command that has existed for over twenty years in the Aerospace Defense Mission.

In addition, the Air National Guard has provided continuous refueling support with its KC-97 tankers for U. S. Tactical Aircraft

in Europe. This mission, known as "OPERATION CREEK PARTY" has been in operation for the past eight years. It provides excellent operational training for Air National Guard aircrews and essential support for U. S. Forces in Europe.

This year we will convert two units to an Aerospace Rescue and Recovery mission. These units, equipped with HC-130's and HH-3 helicopters, will provide vital Aerospace Rescue and Recovery capability on both the east and west coasts.

The Air National Guard participates in Joint Chief of Staff (JCS) exercises on a regular basis. During FY 74, we took part in 10 exercises and are scheduled for eight this year. These exercises permit our units to train side by side with all other active and reserve components. This training, conducted under realistic field conditions, allows our units to be involved in all phases of simulated combat.

ANG READINESS

The criteria used in determining the combat readiness of the Air National Guard are identical to those of the Active Air Force. Active Air Force gaining major commands validate the Air Guard's ability to mobilize and deploy through operational readiness inspections. A successful inspection pass rate of 96% was achieved in FY 74.

Approximately ninety percent of the flying units in the Air National Guard are presently combat ready. This high level of readiness has been maintained despite the programmed elimination of five units in FY 75 and the subsequent restoration by Congressional action. Although we are converting 30 percent of our units during FY 76 and 7T, we project a 90 percent readiness throughout this

period. This again demonstrates the Air Guard's adaptability to new roles and missions.

I must add that our success in converting to new aircraft and then rapidly achieving a combat ready status is indicative of the excellent assistance provided to the Air Guard by the Active Air Force. Air Force Headquarters here in Washington and the Major Commands in the field have given us strong support and help every step of the way.

OVERSEAS TRAVEL RESTRICTION

The ability of the Air National Guard to achieve and maintain a high state of combat readiness is contingent upon its ability to participate in essential training exercises. The restriction on overseas travel, and particularly on travel aboard active force aircraft, precludes the Air National Guard from participating in important exercises outside the contiguous 48 states.

This is a vital part of our total training requirements and is structured to permit the use of our forces integrated with the active forces in a peacetime mode, in the same manner as they would be used in wartime.

FY 1976 REQUIREMENTS

Gentlemen, I will devote the remainder of my time to the funding aspects of our FY 76 program.

MILITARY PERSONNEL

I am pleased to report that the Air National Guard has continued to meet its strength requirements. Our end strength in FY 74 exceeded the program by 1,411. Our manning for this fiscal year calls for a 95,000 average and a 96,000 end strength. We presently have over 95,000 personnel on board, including those awaiting initial training, and are confident that we will achieve our end strength.

Funding required in the National Guard Personnel, Air Force appropriation is $213.2 million in FY 76 to support an average strength of 94,879 and $61.1 million to support an average strength of 94,543 in FY 7T. This will provide for pay and allowances of officers and airmen on inactive and active duty training; special tours of active duty in support of active force exercises; clothing, subsistence, travel and other personnel expenses. The FY 76 appropriation request compares with $206.7 million in FY 75.

The FY 75 estimate includes a 2 million supplemental request for the October 1974 military pay raise. The increase of $6.5 million in FY 76 is primarily due to an increase in the number of basic airmen entering training, a carryover into FY 76 of basics who entered training in the latter part of FY 75, and annualization of the October 1974 military pay increase.

I will discuss the scope of the Air National Guard programs, including an explanation of the difference in costs between FY 75 and FY 76.

ANNUAL FIELD TRAINING/UNIT TRAINING ASSEMBLIES

Air National Guardsmen are required to perform 15 days of annual active duty training and to attend 48 unit training assemblies. Aircrews also perform 36 additional flying training periods, which are essential to combat readiness. The $1.1 million increase in FY 76 reflects the full year impact of the military pay raise and increased commercial transportation costs associated with a reduction in support aircraft, partially offset by a slight decrease in average strength.

NON-PRIOR SERVICE BASIC AND TECHNICAL TRAINING PROGRAM

During FY 75, 3,384 non-prior service members are scheduled for basic training. Our FY 76 program calls for 5,412 recruits to

enter initial training. It will cost an additional $5.3 million in FY 76 for an increase of 2,028 basics entering training, for the carryover of basics entering training late in FY 75 and for the full year effect of the October 1974 military pay increase.

SCHOOL TRAINING

During FY 75, 6,108 officers and airmen will attend school training at active military installations. We have programmed 5,912 officers and airmen in FY 76. The FY 76 requirements will decrease $.9 million because of a reduction in the number of officers requiring training, including initial officer qualification training and advance technical courses, and because of decreases in the number of enlisted personnel entering the Air Guard commissioning program, and of prior service enlisted personnel requiring retraining courses. These reductions are partially offset by the full year effect of the military pay raise. The school training requirements in this program are essential to achieve and maintain combat capability.

SPECIAL TRAINING

The special training program provides for training and active force support not contained in other programs. It includes Air Guard participation in JCS exercises, "OPERATION CREEK PARTY", aerospace defense alert and other special exercises.

The $.9 million increase in this program reflects additional participation in JCS exercises and joint Army/AF/ANG special operations, partially offset by a reduction in the aerospace defense mission. It also includes the full year effect of the military pay raise.

ADMINISTRATION AND SUPPORT

This program is for the pay and allowances of Air National Guard officers serving under Sections 265, 8033 and 8496 of Title 10, and Section 708 of Title 32, United States Codes. It also includes disability pay and death gratuities for survivor's benefits. FY 76 costs will increase a nominal $.1 million.

In summary, the increases in the National Guard Personnel, Air Force appropriation are directly related to pay raises, the basic military training program, additional commercial transportation resulting from the loss of support aircraft, and expanded participation in joint exercises.

Now turning to the financial requirements for our Operation and Maintenance appropriation. I will discuss the Air Technician program and the funding necessary to support the operation of the Air Guard in FY 76.

OPERATION AND MAINTENANCE

The total request for our Operation and Maintenance appropriation is $723.5 million in FY 76 and $189.2 million in FY 7T. This compares with $669.1 million in FY 75, which includes a $15.1 million supplemental for pay raises.

The increases in the Operation and Maintenance appropriation are required to support the full year costs of weapons system modernization occurring this fiscal year, and of those conversions scheduled for FY 76. They also provide for a small increase in technician manning, essential to the maintenance of Air National Guard forces, and for civilian personnel necessary to support the operation of three Air Force bases now operated by the Air Guard. I will identify the major changes within each portion of the appropriation.

OPERATION OF AIRCRAFT

This program is for the purchase of aviation fuel which will cost $152.7 million in FY 76, $24.1 million more than in FY 75. Of this amount, $18.5 million is due to fuel price increases and $5.6 million is the result of changes in Air National Guard forces and in the mix of flying hours.

LOGISTICAL SUPPORT

The logistical support program includes airframe repair, engine overhaul, and repair of major components. The requirements for FY 76 are $88.3 million, a reduction of $1.6 million. A $3.9 million decrease in programmed aircraft depot maintenance is partially offset by a $1.5 million increase in the engine and exchangeable item overhaul programs and a new requirement of $.8 million to fund for the repair of ground communications equipment.

TRAINING SUPPORT

The training support program provides for base and unit operation and maintenance. This includes air technician and civilian pay, base operation and maintenance agreements, travel and transportation, rentals and services, supplies and equipment, and major repair and minor construction. The total program requirement is $478.5 million, $31.7 million more than in FY 75.

In the air technician program, the Air National Guard is requesting $345.6 million to support 22,124 end strength and 22,002 manyears. The technicians, who are also military members of the unit they support, are the full time force that maintains the equipment and conducts the training for units which they support. Included in this request is $13.5 million to support 938 end strength and 938 manyears for Department of the Air Force civilians that

operate and maintain facilities at three bases previously operated by the Air Force.

There is an overall increase of $16.0 million for personnel in FY 76. Of this amount, $11.1 million is for annualization of FY 75 wage rate increases, classified pay raises, and programmed step increases. An additional $4.9 million increase is associated with the cost of 172 manyears required to support our modern force, one additional work day, increased government contribution to Federal Employees Health Benefits, and the one-time cost of relocation of units.

The cost of base operation and maintenance agreements is up $4.8 million due to the full year impact of essential flight line security requirements and increases in the cost of building materials, purchased utilities and maintenance agreements.

Travel costs increase by $2.7 million. This is directly related to the impact of the reduction in organic support aircraft in the Air Guard inventory.

Automatic data processing equipment rental increases by $1.3 million for implementation of the Remote Job Entry Terminal System, the one-time cost of dual operation during conversion, and for the installation of remote terminals.

The amount requested for supplies and equipment increases by $2.2 million in FY 76 primarily due to force changes and price increases.

The $.4 million increase in recruiting and advertising is essential to maintain our drill strength requirements.

Major repair and minor construction requirements are up $4.0 million. This will provide for repairs and alterations associated with energy conservation and airfield pavement/repairs,

but will still result in a $2.1 million increase in the backlog of projects in FY 76.

MEDICAL SUPPORT AND SERVICE-WIDE SUPPORT

In FY 76, requirements in the medical support program increase $.1 million as a result of increases in the price of medical supplies. The request for the service-wide support program, which includes command administrative costs, is $.1 million higher in FY 76. This increase is driven by civilian pay raises and higher travel costs caused by a reduction in support aircraft.

COMMITTEE SUPPORT

I want to express to this committee the great appreciation of the entire Air National Guard for your funding support of 91 units and for additional flying hours for FY 75. Your help and assistance over the years has been an essential ingredient in sustaining and increasing the capability of the Air National Guard. The evidence of your support is clearly shown by our high manning level and combat readiness ratings. We are grateful for your help and will strive to justify your continued trust and confidence.

ANG COMBAT READY

Chairman McClellan. You may proceed.

General Guice. Mr. Chairman and members of the committee, I am pleased to appear before this committee to present the Air National Guard funding request for fiscal year 1976 and the transition period 197T.

The Air Guard is an excellent shape. Approximately 90 percent of our units are combat ready despite a number of ongoing aircraft conversions. In addition, the skill level of our members is now at an all-time high. We project our readiness posture to continue at this high level through 197T.

Our units continue to fly full-time operational missions such as Aerospace Defense alert. Next year we will be assigned a new mission, a strategic offensive role with KC–135 tankers. The Air National Guard is a mobilization ready, professional force immediately available for this Nation's defense.

Our funding request for military personnel is $213.2 million in fiscal year 1976 and $61.1 million in 197T. This will support an average drill strength requirement of slightly less than 95,000 in fiscal year 1976 and the transition quarter.

Our operation and maintenance funding request is $723.5 million in fiscal year 1976 and $189.2 million in 197T. These funds are essential to support training requirements in the higher performance aircraft in our more modern Air National Guard.

We are grateful for your support and thank you for your actions to sustain the Air National Guard as a viable part of the total force.

That concludes the summary.

Chairman McClellan. You stated that you are 90-percent combat ready now?

General Guice. Yes, sir, that is correct.

Chairman McClellan. And if you get the appropriations requested here, you could be 100-percent combat ready?

General Guice. No, sir. We would continue at about the 90-percent level because of a number of ongoing conversions and a number that are projected for 1976.

UNIT CONVERSIONS

Chairman McClellan. What type of conversions?

General Guice. Converting type of equipment and in some cases, mission of Air National Guard units.

Chairman McClellan. In other words, replacing equipment, modernizing weapons?

General Guice. That is correct.

Chairman McClellan. Are those conversion keeping you below actual capacity?

General Guice. That is right.

Chairman McClellan. That is all that is involved; otherwise you would be 100-percent combat ready?

General Guice. That is correct, sir.

Chairman McClellan. We must have been very good to you in the past.

General GUICE. You have been, sir. We appreciate that very much.
Chairman MCCLELLAN. Senator Young.

KC–135'S IN THE ANG

Senator YOUNG. How many tankers do you have and how many fighter squadrons?
General GUICE. Total tanker program will include for Air National Guard as it stands now, [deleted] units of KC–135's.
Senator YOUNG. How many fighters?
General GUICE. That increases to [deleted] by fiscal year 1980 the number of fighter units.
Chairman MCCLELLAN. General Guice, is there anything further you wish to add?
General GUICE. No, sir. I will respond to any questions the committee might have.

BUDGET CUT POSSIBLE

Chairman MCCLELLAN. Could you withstand a reduction?
General GUICE. I believe our request is essential, sir to maintain the force.
Chairman MCCLELLAN. You know we are under pressure to cut the budget as much as possible. We need you to review and reexamine, and if there is any place where you can make a reduction, we need to know it, because it is going to be hard to hold this budget.
General GUICE. I understand that. I think you will find this to be a well-defined budget. Working with the budget director of the Air Force we refined it to the bare essentials.
General BLANTON. I would endorse those comments, Mr. Chairman. We think the Guard and Reserve offer a very cost-effective way of maintaining capability for our country. We have scrubbed their budget for fiscal year 1976 and 197T, and this budget represents a barebones budget for the Guard and the Reserve.
Chairman MCCLELLAN. I hope we can get what you need. But it will be very difficult this year.
General BLANTON. Thank you, sir.
Chairman MCCLELLAN. Very well, Gentlemen, thank you.

QUESTIONS SUBMITTED BY CHAIRMAN M'CLELLAN

I have a few more questions that I am going to submit to you for response in the record. Will you please see that they are answered for the record, General.
General GUICE. Of course, Mr. Chairman.
[The questions and answers follows:]

FORCE STRUCTURE

Chairman MCCLELLAN. Discuss generally the flying and non-flying unit force structure in the Air National Guard, and provide a table listing all units for the record. Explain the missions of the nonflying units.
General GUICE. Sir, our units are truly part of the total force with missions in strategic offense, strategic defense, tactical fighter, airlift, tactical reconnaissance, refueling, rescue and training. Air National Guard flying units for FY 76 and 7T are programmed to remain at 91. Non flying units are scheduled to remain constant throughout FY 75, with a reduction in tactical control and

mobile communications units in FY 76 due to decreased force structure requirements. I'll provide a table listing all units for the record with an explanation of the missions of the nonflying units.

[The information follows:]

ANG forces—by type of mission

Flying units:	
ADC	17
TAC fighter	31
TAC recon	7
Refueling	9
SOF	2
TAC airlift	15
Other TAC	8
Rescue/Recovery	2
Total	91
Nonflying units:	
Aircraft control and warning	3
Tactical control	42
Communications	71
Weather	40
Bands	12
Civil engineering	3
Field training	1
State headquarters	52
State headquarters detachments	15
Total	239

NON-FLYING UNIT MISSIONS

Aircraft Control and Warning units provide ground control intercept direction for air defense units in Hawaii and Puerto Rico.

Tactical Control units provide facilities, equipment, and personnel needed to coordinate and control tactical air support of ground forces.

Communications. Mobile Communications Groups provide command and control communications in support of the operation of an Air Force component headquarters and also provide the capability to enter the Defense Communications Systems. Other Mobile Communications units provide emergency mission support in the specialties of air traffic control, navigational aids and related communications. Electronic Installation units have the mission to perform installation and repair of ground communications and electronic equipment.

Thirty-two weather units provide forecasting and observing services to collocated ANG flying units. Eight units provide staff weather service to Army National Guard division headquarters.

FORCE STRUCTURE/DECREASED REQUIREMENTS/NON-FLYING UNITS

Chairman MCCLELLAN. Explain why there are "decreased force structure requirements" for non-flying units.

General GUICE. Sir, during a force sizing exercise in early 1974 the decision was made that [deleted] Tactical Control Groups were required to support the revised war plan. Up until that time [deleted] groups had been required. Accordingly, the Program Objective Memorandum (POM) to OSD for FY 76 recommended a decrease in the ANG force including: the elimination of [deleted] Tactical Control Group Headquarters [deleted] Tactical Air Control Squadrons (TACCs), [deleted] Air Force Component Headquarters (AFCH) Squadrons and the conversion of [deleted] Tactical Control Squadrons to Tactical Control Flights with reduced manning. These realignments will result in a reduction of [deleted] UDL spaces in the Air National Guard Program.

PARTICIPATION IN JOINT-CHIEFS OF STAFF EXERCISES

Chairman MCCLELLAN. Describe the types of joint exercises the Guard participated in FY 1975 and what is planned for FY 1976. What was the Guard's portion of the cost of these training exercises?

General GUICE. Sir, the Guard participates in a variety of exercises designed to train combat and combat support elements in combined operations with the Army, Air Force, Army National Guard and NATO Allies under realistic combat and environmental conditions. Exercises in Europe and Alaska test mobility as tactical airlift units transport other participating units to forward operating locations where they conduct tactical fighter, reconnaissance and forward air control operations to provide close air support for Army maneuvers. Tactical aircraft and tankers gain valuable Air Refueling training enroute. Other exercises test and train ANG weather, communications and tactical air control units. We generally plan to participate in the same types of exercises in FY 1976 as we did in FY 1975.

The total Air Guard cost of these exercises is not specifically identified, since a portion of our participation is accomplished as an adjunct to normal annual training. The only funds requested by the Air National Guard specifically to support JCS exercises are $3.0 million in FY 75 and $3.7 million in FY 76, for special military training pay and associated costs.

OVERSEAS TRAVEL

Chairman MCCLELLAN. Describe the areas overseas where the Air National Guard is precluded from training but where you would like to train. How large a program would be required to meet these desires in FY 1976, and what specific overseas training travel is required?

General GUICE. Sir, the Air National Guard is currently restricted from traveling overseas on other than reserve force aircraft. Due to the heavy training commitments of our airlift units which limits their availability, this restriction precludes overseas deployment of civil engineer and communcations units in support of the active forces. In the past such deployments provided extremely valuable and realistic training which is needed.

Although overseas aircraft operations are permitted, the travel restriction also limits our capability in this area, since supporting maintenance personnel are precluded from traveling on active force aircraft. I will provide a listing of needed overseas training in FY 1976.

[The information follows:]

CIVIL ENGINEERING DEPLOYMENTS

Alaska:

Elmendorf AFB.
Eielson AFB.

Iceland: Rockville AS.

These deployments support major air command priority repair/alteration projects.

COMMUNICATIONS AND ELECTRONICS UNITS

Approximately 14 Communication Flights require airlift on an annual basis to receive hands-on training for 15 days at communication centers world-wide as requested by AFCS.

Approximately 800 EI personnel in various engineering, installation and maintenance disciplines related to electronics communications equipment, antennas, and inside/outside cabling will be airlifted to assist active EI units world-wide, as requested by AFCS, for periods of 15 days including travel.

JCS EXERCISES[1]

Flintlock 75, Europe; Reforger, Europe; Jack Frost, Alaska; Black Hawk, Panama; Flaming Lance, Mediterranean Area.

INCREASE OF AIRMEN ENTERING TRAINING

Chairman MCCLELLAN. Would you please explain why your FY 1976 program calls for over 2,000 more new recruits entering basic training in FY 1976, even though total average and end-strengths are declining. What is the situation in FY 1975 when the opposite appears to be true?

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[1] Includes Air National Guard Tactical Units both flying and non-flying with all their required ground support equipment and personnel.

General GUICE. Sir, non prior service recruits are essential to our program because we must maintain a proper balance in our force. A balanced force in age and military grade can only be achieved by a continual input of new personnel. In FY 1974 and FY 1975, a large proportion of our total gains have been prior service airmen. The ANG anticipates exceeding the FY 75 non-prior service programmed level of 3384 and should experience no problems in recruiting the higher level programmed for FY 76.

REDUCTION IN SUPPORT AIRCRAFT

Chairman MCCLELLAN. How many Air National Guard Support Aircraft were reduced?

General GUICE. Fifty-two sir.

RELOCATION OF UNITS

Chairman MCCLELLAN. Discuss the units being relocated in FY 1976 and the number of people and costs involved.

General GUICE. Sir, three Air National Guard relocations were announced by the Department of Defense last November. They are: the 163 Tactical Air Support Group from Ontario, California, to March AFB; the 142 Fighter Interceptor Wing from Spokane, Washington, to Fairchild AFB with a concurrent conversion of KC–135's; and the 147 Fighter Interceptor Group from Houston, Texas, to Bergstrom AFB with a concurrent conversion to RF–4's.

The short moves to March AFB and Fairchild AFB will not have a significant personnel or cost impact. Because of the distance involved, some personnel turbulence will be generated by the relocation to Bergstrom, and some construction will be required. We estimate that the additive cost of moving the unit from Houston to Bergstrom AFB will be $4.2 million in FY 76.

RECRUITING ADVERTISING PROGRAM

Chairman MCCLELLAN. What is the total cost of the Guard's recruiting and advertising program in FY 1975 and FY 1976?

General GUICE. Sir, it's four million seven hundred thousand in FY 75 and four million seven hundred fifty-three thousand in FY 76.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator YOUNG. I have some more questions also. Could they be included with this set?

Chairman MCCLELLAN. Certainly, Senator. General Guice, please respond to Senator Young's questions as well.

[The questions and answers follow:]

ANG READINESS

Senator YOUNG. What is the state of readiness in the Air Guard today?

General GUICE. Sir, all of our units are combat ready except those undergoing conversion. In spite of the fact that seventeen of our units are converting during FY 76 and the transition quarter, we will maintain about a 90% readiness level throughout the period.

DETERMINATION OF ANG READINESS

Senator YOUNG. Is the Air Guard readiness determined in the same way that readiness is determined in Air Force units? Does it include personnel, training, maintenance and operations?

General GUICE. Sir, the criteria used to determine the readiness of Air National Guard units and active Air Force units are identical and include those items you mentioned.

READINESS/ANG COMPETE WITH ACTIVE UNITS

Senator YOUNG. Does the Air Guard compete with regular Air Force units designed to promote readiness?

General GUICE. Sir, the Air National Guard competes with the active Air Force for many awards including Outstanding Unit Awards, William Tell

Weapons Meet, Daedalian Trophy Awards and Hughes Achievement Awards as well as many others. As you know the unit from your state has been very successful in these competitions. I think this competition reflects the Air Forces' positive attitude toward the total force policy and improves individual unit readiness by providing the motivation to excel that results from good healthy competition.

ANG Recruiting/Objective Accomplished

Senator Young. Is the Air Guard able to recruit sufficient personnel for all Guard units? What percent of the recruiting objective was accomplished last year?

General Guice. Yes, sir. The ANG attained 94.6 percent of its recruiting objective last year. However, due to a high retention rate, we were able to achieve 101.5 percent of our authorized end strength.

F–100 Aircraft in ANG

Senator Young. How many aircraft of the old F–100 series are being operated by the Air Guard?

General Guice. Sir, as of the first of this month, we had four hundred and two F–100 U.E. Aircraft.

ANG Utilize More A–7s

Senator Young. Can the Air Guard utilize more A–7 aircraft if provided by Congress as they have been for the last two years?

General Guice. Sir, the current USAF program provides substantial modernization of ANG assigned equipment. During FY 76 and the transition quarter, seventeen units will convert to new missions or newer equipment. The A–7s already provided by the Air Force and by the Congress the last two years either have or are programmed to replace much older, less capable equipment. We in the Air National Guard would welcome additional A–7 aircraft and utilize them to accelerate the essential modernization program for our fighter units. We are very grateful for this committee's past support in this regard.

Reserve Personnel, Air Force

Operation and Maintenance, Air Force Reserve

STATEMENT OF BRIG. GEN. WILLIAM J. CRANDALL, DEPUTY TO THE CHIEF, AIR FORCE RESERVE

ACCOMPANIED BY:

MAJ. GEN. ABBOTT C. GREENLEAF, DIRECTOR OF PROGRAMS
BRIG. GEN. CHARLES C. BLANTON, DIRECTOR OF BUDGET
COL. ORLANDO P. LORETTI, COMPTROLLER, OFFICE OF AF RESERVE
COL. BORIS C. CHALEFF, CHIEF, PROGRAMS & RESOURCES DIVISION, OFFICE OF AF RESERVE
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COL. JAMES F. WITTMER, CHIEF, MEDICAL PLANS AND HEALTH PROGRAMS DIVISION, OFFICE OF THE SURGEON GENERAL
MR. ROBERT McHALE, FINANCIAL PROGRAMS DIVISION, OFFICE OF THE SURGEON GENERAL

PREPARED STATEMENT

Chairman McClellan. Now we will hear General Crandall, Deputy Chief of Air Force Reserve Headquarters USAF.

General Crandall. Good morning, Mr. Chairman and Senator Young. We are very glad to be here with you. We have also submitted a long statement for the record.

Chairman McClellan. The statement submitted will be printed in full. You may proceed with the abbreviated version, if you will.

[The statement follows:]

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE

It is a pleasure to appear before this Committee to present the Fiscal Year 1976 and 197T (Transition Year) financial requirements for the Reserve Personnel, Air Force and Operation and Maintenance, Air Force Reserve appropriations. The Reserve Personnel appropriation includes pay, allowances and related expenses for Reservists and similar expenses for students enrolled in the Reserve Officers' Training Corps and Health Professions Scholarship programs. The Operation and Maintenance appropriation provides funds for the day to day operating expenses of Reserve bases and units including civilian personnel, POL, supplies and other resources required to carry out our activities.

Our mission in the Air Force Reserve is to provide trained units and personnel for active duty in the United States Air Force in time of national emergency or war and on such other occasions as our national security requires. To accomplish this mission, our objectives include the designing of training programs that will produce and maintain combat-ready personnel able to carry out their assigned tasks in JCS-approved war plans; the acquisition of more modern weapon systems which will enhance our contribution under the Total Force Policy and the recruitment of quality personnel to provide the necessary stability in maintaining our readiness. Our training must meet the same stringent criteria as for like units in the active force.

Before presenting our requirements in detail, I will review our accomplishments during the past year and the forces programmed for the budget year and transition period.

ACCOMPLISHMENTS

During Fiscal Year 1974 and the first half of Fiscal Year 1975, several of our flying units converted to more modern weapons systems. Over the past few years, this modernization has substantially improved our unit combat capability.

From January 1970 to date, over 89% of our flying units have experienced activation or conversion. As of 25 March 1975, 100% of the Air Force Reserve flying units were combat ready and we expect to remain 100% combat-ready through 30 June 1975.

During Fiscal Year 1974, USAFR units flew 5,210 missions which were passenger and/or cargo productive. This figure includes both direct training--for example, hauling of exercise personnel and cargo, and by-product airlift--that is, airlift which was not an integral and essential factor of mission accomplishment. Of those 5,210 missions, Air Force Reserve crews logged 35,959 flying hours, airlifting 6,558 tons of cargo over 6 million ton miles and 61,385 passengers for over 49 million passenger miles. Reserve crews also airdropped 318 tons of cargo and 35,198 troops.

During the first half of Fiscal Year 1975, USAFR flew 2,753 such missions, carrying 46,301 passengers for over 31 million passenger miles. They also airlifted 4,511 tons of cargo equating to more than 3 million ton miles for the Department of Defense and other Federal agencies. 279 tons of cargo and 16,201 troops were airdropped.

JOINT EXERCISES

Air Force Reserve units have participated in several JCS directed or coordinated exercises in the past year. For example, in February 1974, six C-130 aircraft participated in PUNCH CARD XX/ACE CARD VII in Alaska. In March 1974, two C-130 aircraft participated in CRESTED CAP 74 in Europe. In March and April 1974, one C-123 took part in BLACK HAWK III in Panama. In May and June 1974, fifteen C-130 and four A-37 aircraft were involved in SOLID SHIELD 74 in North Carolina. In June 1974, sixteen F-105 aircraft participated in BRAVE CREW 74 in Texas. In September 1974, sixteen C-130 aircraft supported exercise EMBER DAWN 75 in Alaska.

TRAINING SUPPORT

In addition to our own personnel, the Air Force Reserve supports the active force, Air National Guard, Military Assistance Program (MAP) and the other armed services by training aircrew members at two aircrew training centers. During the first half of Fiscal Year 1975, the C-130A Tactical Aircrew Training Squadron (TATS) upgraded 265 pilots and 80 flight engineers. The A-37 Operational Training Course trained 36 pilots during the same period. The remaining Reserve requirements for school training are satisfied by attendance at formal schools operated by the Air Training Command, Air University, and other Major Air Commands.

Increased emphasis on manning the Reserve forces with fully qualified personnel ready to respond immediately to any wartime contingency has resulted in increased use of ATC facilities, Combat Crew Training Schools, flight simulators, and Air Force professional military schools on a co-equal basis with the active force--often integrating Reserve crews with active duty crews for maximum effectiveness at minimum cost.

FORCE STRUCTURE

As I previously mentioned, we are making continuous efforts to modernize equipment and to improve combat readiness. During the first half of Fiscal Year 1975, we converted one A-37A unit to A-37B and an Air Rescue HH-1 unit to a composite of HH-1s and HH-3s. In the fourth quarter we will increase the crew ratio of the C-141 associate force from 1.0 to 1.5 and that of the C-5 from 1.0 to 1.25. In Fiscal Year 1976, we will convert one C-130 unit to AC-130 Gunships and one unit to WC-130s performing Weather Reconnaissance. No changes are programmed in FY 197T.

FLYING UNITS

Table I depicts the Force Structure of our flying units for Fiscal Years 1975, 1976 and 197T.

TABLE I

DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE UNIT FORCE STRUCTURE

EQUIPPED UNITS	END OF FISCAL YEARS FY 1975	FY 1976 & FY 197T
C-130 TAC Airlift	16	14
C-123K TAC Airlift	4	4
C-7 TAC Airlift	2	2
Aerospace Rescue & Recovery	4	4
WC-130 Air Weather Service	0	1
CH-3 Special Operations Force	1	1
AC-130 Special Operations Force	0	1
EC-121 Airborne Early Warning & Control	1	1
A-37 Tactical Fighter	4	4
F-105 Tactical Fighter	3	3
Total Equipped Units	35	35
ASSOCIATE UNITS		
C-141 Mil Airlift	13	13
C-5A Mil Airlift	4	4
C-9A Aeromed Evac	1	1
Total Associate Units	18	18
TOTAL UNITS	53	53

NON-FLYING UNITS

I will now address our non-flying unit force structure. The Air Force Reserve support force structure is based upon Air Force wartime requirements in response to the national defense strategy. These requirements are specified in the USAF War and Mobilization Plan and in Theater Command contingency plans.

At the end of Fiscal Year 1975, we will have 136 non-flying units and we will have 139 at the end of Fiscal Year 1976. The increase in

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force structure in Fiscal Year 1976 was brought about by the activation of three Aerial Port squadrons. No further changes in our non-flying unit forces are programmed for FY 1976 and FY 197T.

TABLE II

DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE UNIT FORCE STRUCTURE

NON-FLYING UNITS	END OF FISCAL YEARS FY 1975	FY 1976 & FY 197T
ALC Augmentation	6	6
Aeromedical Evac Sqs/Flts	20	20
Med Service Units	13	13
Aerial Port Sqs	44	47
Civil Engr Flights	35	35
Maintenance Sqs (Mobile)	7	7
Civil Eng Sqs (Heavy Repair)	1	1
Supply Sqs (Mobile)	7	7
Air Force Reserve Regions	3	3
TOTAL	136	139

RESERVE PERSONNEL STRENGTHS

I will now review our Reserve Personnel strengths.

For Fiscal Year 1976, we have programmed for a Selected Reserve average strength of 51,789, based upon an end strength of 53,210 and for FY 197T the average strength is 53,642 with an end strength of 53,743. These strengths are required to support the force structure shown in Tables I and II. These strengths will provide for 93% and 94% manning for Fiscal Years 1976 and 197T, respectively, in all Air Force Reserve units. In flying units, the strengths will provide for 94% manning in FY 1976 and FY 197T, and in the non-flying units for 92% manning in FY 1976 and 94% in FY 197T. Our request includes individual Reservists who will be paid only for their active duty training tours; 3,337 tours for FY 1976 and 836 for FY 197T.

RECRUITING

We have made recruiting and retention our first priority. We are continuing our maximum efforts to attain the projected personnel strengths for this fiscal year. We have placed the responsibility for recruiting with the Senior Unit Commander. One hundred and fifty-six recruiters are now assigned to the Unit Commanders. We are receiving excellent support in our recruiting efforts from Active Force recruiters in filling unit vacancies. The recruiters refer prospects to us in those cases where the person may not be interested in their program but shows interest in ours. We continue to assist the MAJCOMs in filling their individual mobilization augmentee positions.

In addition to recruiting activities, the USAFR continues to maintain an effective retention program. Increased efforts on the part of each Commander have been successful. Also, we have Counselors at selected active duty facilities to offer Reserve assignments to active duty personnel in advance of their separation from the Air Force.

Since the beginning of the fiscal year, the USAFR has surpassed expectations for procurement of women and minorities. For the first half of Fiscal Year 1975, 13% of all enlistments were women and 17% were minority personnel.

OVERSEAS TRAINING

We have programmed a number of our non-flying units to perform training at overseas locations. We will utilize our own aircraft for transportation to and from these locations. The aircrews will be performing their own training during the course of these flights. Thus, no additional travel costs will be incurred for this program. Let me expand a bit on this matter.

We are constantly seeking to train our people in an environment that is as realistic to their mobilized mission as possible. Necessarily, this

involves working side-by-side with the active Air Force on many occasions in the accomplishment of its peacetime mission. In selecting locations for training, we seek the best training opportunity for the Reservists while at the same time affording a by-product benefit to the Air Force. In some instances, the optimum locations to fulfill these requirements will be overseas. Those overseas locations for which we have programmed a number of our units have been selected on the basis of these considerations.

Let me give you examples of what I have in mind. In Alaska, the construction season is short and a large force can be employed for the short period using pre-positioned material. In some locations, the use of Reservists during their annual training provides a significant dollar saving over the use of indigenous contractors. In other locations, there are no local contractors available. Our engineering units can fill the void. Similarly, our Aerial Port units can assist greatly during peak periods of overseas rotation of personnel.

FINANCIAL ASPECTS - FY 1975

Before I review the FY 1976 and 197T Budget Request, I would like to highlight the revised FY 1975 dollar requirements for each appropriation.

RESERVE PERSONNEL APPROPRIATION

Based on the FY 1975 Defense Appropriation Act (PL 93-437), the FY 1975 dollar requirement for the Reserve Personnel Appropriation has been revised to $147.9 million, including $4.2 million to cover costs of the military pay increase effective October 1, 1974. We are not requesting a supplemental this year in this appropriation.

OPERATION AND MAINTENANCE APPROPRIATION

The Operation and Maintenance appropriation of $286.7 million has been increased $7.2 million for the FY 1975 anticipated wageboard locality and graded pay raises effective in October 1974. A supplemental request for the pay increase has been submitted separately to the Committee. In addition, $4.5 million was proposed for transfer

from other appropriations to offset inflationary impacts. The proposed transfer has since been adjusted to $2.6 million by the Appropriations Committees with the balance of $1.9 million to be absorbed within the appropriation.

FINANCIAL ASPECTS - FY 1976 AND FY 197T

RESERVE PERSONNEL APPROPRIATION

The FY 1976 request is $160.7 million of which $23.8 million is for the Reserve Officers' Training Corps and Health Professions Scholarship programs while $136.9 million is for Reserve Component personnel. Our request for the July - September 1976 Transition Period totals $51.1 million including $6.2 million for ROTC and Health Professions Scholarships while $44.9 million is for Reserve Component personnel. I will now review our request by pay group.

Pay Group A

This category includes those Reservists authorized 48 drill periods and 15 days annual active duty training--and, for certain personnel on flying status, 36 additional drill periods. Approximately 52% of our request, or $70.8 million, is for these personnel whose average strength totals 42,746 or 83% of the total Selected Reserve strength of the Air Force Reserve. The increase of $3.8 million over FY 1975 is due to pay raises and an increase in average strength of 1,002 primarily for airlift surge capability and conversion to newer aircraft as well as better manning. $25.7 million is requested for this pay group for the three month Transition Period which encompasses that time frame during which a relatively greater number of annual two week tours are accomplished.

Pay Groups B and D

The great majority of Reservists assigned to these pay groups are individuals assigned to mobilization positions with active Air Force major commands. Pay Group B Reservists perform 24 drill periods and 14 days of annual active duty training. We are requesting $12.8 million

for this pay group which represents an increase of $2.7 million over FY 1975 and is due to pay raises and an increase in average strength of 1,856. We are placing heavy emphasis on recruiting these personnel which includes the Reserve Supplement Officer program. Pay Group B requirements for the Transition Period amount to $3.5 million. Category D personnel perform annual active duty tours, but no drills, and we are requesting $3.6 million in FY 1976 and $.9 million in the Transition Period for these Reservists.

Pay Group F

This group includes our non-prior service enlistees who undergo basic training and initial skill qualification training at formal Air Force schools. They train right along with active Air Force enlistees. They help to fill those vacancies in our units where prior-service personnel cannot be obtained. We are requesting $9.9 million in FY 1976 representing an increase of $3.8 million over FY 1975 due to pay raises and an increase in average strength of 595. We are placing heavy emphasis on recruiting in this area as well. Our Transition Period requirements are $3.0 million with a heavier input to training scheduled during this three month period.

Schools and Special Tours

In order to obtain and maintain our readiness, it is necessary for our Reservists to attend formal school training or engage in additional days of active duty training in excess of the annual two week tours of duty and monthly drills. Those requirements are included in these two pay groups for which we are requesting $36.2 million in FY 1976 representing an increase of $3.2 million over FY 1975. Pay raises and an additional 52,000 mandays account for this increase which includes our assumption of the strategic airlift surge responsibility, as well as conversion to aircraft of higher technology. Our Transition Period requirements are $10.9 million for schools and special training tours.

Administration and Support

Here, we are requesting $3.5 million in FY 1976 to provide a staff of 108 statutory officers who are serving under Sections 265, 8019 and 8033 of Title 10, USC. This pay group also includes provision for death gratuities, as well as disability and hospitalization benefits for those Reservists entitled to such. Our Transition Period requirements are $.9 million.

ROTC

There is a decrease of $1.0 million in FY 1976 over FY 1975 due to a reduction in enrollment. The FY 197T requirement is $2.8 million.

Health Professions Scholarship Program

FY 1976 requirements are $.1 million over FY 1975. FY 197T requirement is $3.4 million.

OPERATION AND MAINTENANCE APPROPRIATION

The Operation and Maintenance appropriation request for FY 1976 is $343.8 million, an increase of $45.8 million over FY 1975. Our requirements for FY 197T are $87.7 million. I will now review the Operation and Maintenance request by budget activity.

Mission Forces

This program provides for the direct operating costs of Reserve units, other than depot maintenance, and consists of two sub-divisions: mission training and aviation fuel and oil.

Mission training costs increased $33.8 million over FY 1975 to $235.5 million. The principal increases are in reimbursements to the Airlift Service Industrial Fund, $13.8 million for associate unit flying training due to increased costs of aviation POL and depot maintenance; annualized civilian pay raises, $3.5 million; manning increases from conversions and maintenance requirements, $4.2 million; one-time costs of moving units due to closure of Hamilton and Ellington AFBs, $4.4 million; increased supply funds, including aircraft POL of $6.5 million

for additional flying hours and inflation, $7.1 million; and finally, $.8 million in various other areas resulting from program changes.

Depot Maintenance

The Air Force Reserve reimburses the Air Force Logistic Command for maintenance beyond unit capability which is provided by the Air Force Depot Maintenance Industrial Fund. It includes Programmed Depot Maintenance (PDM), Analytical Condition Inspections (ACI), engine overhauls, repair of other major end items, repair of exchangeable components, area support and in-service engineering. The increase of $4.5 million over FY 1975 is due to our higher flying hour program, deferred maintenance from FY 1975 and higher prices charged by the Depot Maintenance Industrial Fund.

Other Support

The remaining FY 1976 Operation and Maintenance requirement is $71.2 million, which is $7.5 million more than FY 1975 and includes requirements for the sub-activities of command support, the Air Reserve Personnel Center, base operating support and medical support. The increase is primarily due to one-time costs related to closure of Ellington and Hamilton Air Force Bases, $1.4 million; annualized civilian pay increases, $.9 million; facility maintenance, $2.8 million; stock fund price increases, $1.4 million; and finally, a net of $1.0 million for all other items, including transfer of funding for expenses of the Office of the Chief, Air Force Reserve, second destination transportation, increased custodial services, increased GSA rental, all offset by savings from elimination of support aircraft.

SUMMARY

In summary, Mr. Chairman, I have highlighted the current status of the Air Force Reserve, its recent accomplishments and its programmed requirements for FY 1976 and FY 1977. A strong Air Force Reserve has much to offer toward our nation's security, and I hope I have been able to convey this message in my remarks to you.

BUDGET REQUEST

General CRANDALL. Mr. Chairman, members of the committee, it is a pleasure to appear before this committee to present the fiscal year 1976 and 197T (transition year) financial requirements for the Reserve personnel, Air Force and Operation and Maintenance, Air Force Reserve appropriations.

The Reserve personnel appropriation includes pay, allowances and related expenses for reservists and similar expenses for students enrolled in the Reserve Officers' Training Corps and health professions scholarship programs.

The operation and maintenance appropriation provides funds for the day-to-day operating expenses of Reserve bases and units including civilian personnel, POL, supplies and other resources required to carry out our activities.

FLYING UNITS

We are making continuous efforts to modernize equipment and to improve combat readiness. We have 100 percent of our flying units that are combat ready at this time.

Chairman MCCLELLAN. One hundred percent?

General CRANDALL. Yes, sir.

Chairman MCCLELLAN. You don't even have a gap of 10 percent?

General CRANDALL. No, sir, and we are proud to be able to say that and we expect to retain that through June 30 of this year when we, like General Guice, will have two conversions coming up and we will slide back at that point while we are converting.

Chairman MCCLELLAN. The conversion will be the only reason for the slide?

General CRANDALL. That is correct.

Chairman MCCLELLAN. I commend both of you for having your commands in such excellent condition with respect to capability and readiness. It is very gratifying to get this report.

General CRANDALL. We have had a lot of people work mighty hard on this. We have had a lot of support from the active Air Force and we have had a lot of people in the field that worked like the dickens.

Chairman MCCLELLAN. You may proceed.

UNIT CONVERSIONS

General CRANDALL. During the first half of fiscal year 1975, we converted one A–37A unit to A–37B and an air rescue HH–1 unit to a composite of HH–1's and HH–3's. In the fourth quarter we will increase the crew ratio of the C–141 associate force from 1.0 to 1.5 and that of the C–5 from 1.0 to 1.25. In fiscal year 1976, we will convert one C–130 unit to AC–130 gunships and one unit to WC–130's performing weather reconnaissance. No changes are programed in fiscal year 197T.

Senator YOUNG. You mentioned C–5. How many C–5's are in reserve?

General CRANDALL. We have four C–5 units. Two at Dover and two at Travis, that are colocated with active units at those same locations.

At the end of fiscal year 1975, we will have 136 nonflying units and we will have 139 at the end of fiscal year 1976.

NON-FLYING UNITS

Chairman McClellan. What are nonflying units?

General Crandall. Units such as aerial port, civil engineering flights and squadrons, and similar units that are combat supporting units.

The increase in force structure in fiscal year 1976 was brought about by the activation of three aerial port squadrons. No further changes in our nonflying unit forces are programed for fiscal year 1976 and 197T.

RESERVE PERSONNEL STRENGTHS

For fiscal year 1976, we have programed for a Selected Reserve average strength of 51,789, based upon an end strength of 53,210 and for fiscal year 197T the average strength is 53,642 with an end strength of 53,743.

OVERSEAS TRAINING

We have programed a number of our nonflying units to perform training at overseas locations. We will utilize our own aircraft for transportation to and from these locations. The aircrews will be performing their own training during the course of these flights. Thus, no additional travel costs will be incurred for this program.

Financial Aspects—Fiscal Year 1976 and Fiscal Year 197T

RESERVE PERSONNEL APPROPRIATION

The fiscal year 1976 request is $160.7 million of which $23.8 million is for the Reserve Officers' Training Corps and health professions scholarship programs while $136.9 million is for Reserve component personnel. Our request for the July–September 1976 transition period totals $51.1 million including $6.2 million for ROTC and health professions scholarships while $44.9 million is for reserve component personnel.

OPERATION AND MAINTENANCE APPROPRIATION

The operation and maintenance appropriation request for fiscal year 1976 is $343.8 million, an increase of $45.8 million over fiscal year 1975. Our requirements for fiscal year 197T are $87.7 million.

SUMMARY

Mr. Chairman. I have briefly highlighted the Air Force Reserve force structure, personnel strengths and fund requirements. I shall be happy to answer any questions concerning the Air Force Reserve.

O. & M. INCREASE

Chairman McClellan. General, why is there so great an increase for operations and maintenance? What is that $45.8 million for?

General CRANDALL. The price for the mission forces POL, has gone up. The depot maintenance figure has gone up. The price we pay for those things that are done to the airplanes, bringing the airplanes up to a better level, making changes in the airplanes.

Chairman MCCLELLAN. Don't you have your own mechanics?

General CRANDALL. Yes, sir, but these are the things that are outside of the capability at the unit level. They are major maintenance items.

General BLANTON. The bulk of that can be attributed to price increases and pay raises. Fourteen million dollars alone just for fuel price increases and civilian pay increases. Another $16 million for increased C–5/C–141 flying hours.

Chairman MCCLELLAN. That accounts for most of it, doesn't it?

General BLANTON. Yes, sir.

Chairman MCCLELLAN. The only way you can reduce that figure is to cut down on the fuel and not fly as much.

General CRANDALL. That is right, but readiness would then suffer.

FLYING TIME REQUIREMENTS

Chairman MCCLELLAN. How much training do they have to have? How much flying time do they need?

General CRANDALL. For example, let's take the C–130. Those pilots get 180 hours per year. That is the number of hours that the gaining command, MAC says this fellow must have to maintain proficiency so that when he is mobilized he can do the job.

Chairman MCCLELLAN. That is about one-half hour a day?

General CRANDALL. Yes, sir; it would be about that, sir.

But, of course, they fly longer flights, but they don't fly every day.

Chairman MCCLELLAN. They probably take one flight a week for 2 or 3 hours?

General CRANDALL. Yes, sir. So when you get much below——

Chairman MCCLELLAN. I imagine one flight a week is about the minimum that would be required to really keep them in top training, top condition.

General CRANDALL. Particularly when you get in the fighter areas. It is very important you have this frequency of flying. When you get down much below those figures you are running into safety problems. You are running into people who don't maintain the currency that they should and you are asking for accidents.

Also, particularly in the C–141 and the C–5, we give these people a considerable amount of simulator time, which adds to their proficiency.

Chairman MCCLELLAN. Is that expensive?

General CRANDALL. The initial purchase of the simulator—I don't have a figure on that.

Chairman MCCLELLAN. But is it expensive to operate?

General GREENLEAF. Not compared to actual flying hours.

Chairman MCCLELLAN. Does it burn fuel?

General CRANDALL. No, sir.

Chairman McClellan. It is operated electrically?
General Crandall. Electric and hydraulic; yes, sir.
Chairman McClellan. Senator Young.

VOLUNTEER PROGRAM

Senator Young. What has been the Air Force Reserves' experience with the volunteer program?

General Crandall. I am pleased to say I was hoping you would ask me that because we have made big improvements.

As of the end of April we had 48,698 aboard. We were short about 2,978, but we believe by the end of the fiscal year—we are in the fourth quarter—we are going to come very close to making our end strength.

With respect to your question on the all volunteer force, I guess the best area there would be the non-prior-service fellow. We had a quota for that this year and we wanted to access 2,712 non-prior-service people. As of the end of April we had 1,943 aboard. We were 769 behind as of the end of April and we have a number of high school students who are waiting to come aboard and we think we are going to do very well there.

For a time it looked like with the all volunteer force that the non-prior-service folks were really going to shrink, but now it seems to be on the upturn and we are very pleased.

Senator Young. Do you do much work in recruiting?

General Crandall. Yes, sir, it is a very strong effort in recruiting.

Senator Young. How much does that program cost?

General Crandall. The recruiting program for 1975 is $6.4 million. For 1976, the recruiting budget will go up to $6.9 million.

PHYSICIANS IN THE AIR FORCE RESERVE

Senator Young. You have doctors in the reservists, too?

General Crandall. Yes, sir, we have a considerable number of doctors in reserve status.

Senator Young. They practice part time and are part time with the reserves?

General Crandall. Yes; they do their normal civilian job and train on the weekend or in the case of individuals they come out on a training weekend and work with hospitals and so on.

Senator Young. Do you have a shortage of doctors?

General Crandall. No; I believe we are in pretty good shape with doctors.

Colonel Wittmer. In terms of reserve personnel we are in good shape, active duty physician shortages are a different story.

Senator Young. What incentive is there for a doctor to be in the reserve?

General Crandall. This is an opinion. I think he certainly likes the comradeship he has serving with this unit that is in his home locality where he practices medicine. I think he gets a variety of experiences and an opportunity to diagnose things that he might not get in the civilian community. They like to fly with our crews. They like to be with people of their own kind.

Senator YOUNG. Do you have any program to assist them through medical school?

General CRANDALL. Yes, sir, we do. The health scholarship program.

Colonel WITTMER. That is the health professions scholarship program which falls under the reserve personnel appropriation. There are 5,000 total scholarships for all three services. The Air Force has been allocated 1,575 of these to cover 4 years of school for physicians, dentists, veterinarians, and other medical service officer type training. Most of these are physician training scholarships. It is very well subscribed to and it is a very successful program.

Senator YOUNG. I think that is all I have.

Chairman MCCLELLAN. General, is there an advantage for physicians in the reserves in that some of the reservists will patronize him in civilian practice?

General CRANDALL. I certainly think so. When I was at Andrews as a Wing Commander my wife went to my flight surgeon as her doctor. That is a good case in point.

Chairman MCCLELLAN. I think there is an incentive there.

Senator YOUNG. Does the Colonel have any more you want to add?

[Discussion off the record.]

Chairman MCCLELLAN. Back on the record.

Colonel WITTMER. I would like to clear up the point about the health professions scholarship program. This program is for reserve officers while they are in medical school, but in fact, it is furnishing physicians for active duty.

These people are reserve second lieutenants and this is why they fall within the reserve personnel appropriation. They serve a year on active duty for each year of training, so they serve then four years on active duty if they in fact have been sponsored throughout medical school for 4 full years.

QUESTION SUBMITTED BY CHAIRMAN M'CLELLAN

Chairman MCCLELLAN. General, I do have additional questions for you to answer for the record.

[The questions & answers follow:]

UNIT CONVERSIONS

Chairman MCCLELLAN. Describe the flying units converted to more modern weapon systems in FY 1974 and FY 1975. Can you generally discuss the improvements in unit combat capability.

General CRANDALL. During FY 1974 and FY 1975, the Air Force Reserve converted five of our units into more modern weapon systems. These conversions were made to make our weapon systems more compatible with the gaining commands. The 301st and 304th Aerospace Reserve and Recovery Squadrons converted from the HH–34J helicopter to the HH–1H and HH–3 helicopter to realign the Reserve rescue force with the active rescue force. The conversion of the 302 Special Operations Squadron from the HH–34J to the CH–3 helicopter resulted in a similar realignment with the active Special Operaitons force. These conversions from piston driven helicopters to turbine power improved the maintenance capability of these units and eliminated a complex logistical/supply problem in trying to maintain the HH–34J. In the strategic airlift force, the 312th Military Airlift Squadron converted from the C–141 to the C–5. This conversion was made to enhance the strategic airlift capability of the Military Airlift Command. All these units are now maintaining a combat readiness status of C–2 or better.

Criteria for Combat Readiness

Chairman McClellan. Are the criteria for Reserve unit readiness similar to those used by the Air National Guard and the Active Forces? Generally describe these criteria.

General Crandall. The criteria which is utilized in establishing the Combat Readiness Status of Reserve units is the same as that used by the Air National Guard and the Active Force. This standard is described in detail in JCS Pub 6 Vol. II.

The basic criteria measures four resource areas: Personnel, equipment/supplies on hand, equipment readiness, and training. All these measured areas, except training, compare authorized against actual, assigned/ready, depending on which area is being measured. Training is measured by prescribed directives issued for organization training.

Air Force Reserve Missions

Chairman McClellan. What is the split between direct training missions and by-product airlift missions? For whom were by-product airlift missions accomplished?

General Crandall. The Air Force Reserve has actively supported the active force in a wide range of Department of Defense (DOD) missions with our Tactical Airlift force of C–130, C–123, and C–7 aircraft. In fact, during FY 1974 the Air Force Reserve contributed 14%, 11,143 hours, of their allocated tactical airlift flying hour program to support a wide range of diversified missions. Joint Military Exercises, Coronet Satellite for the Strategic Airlift Command, CONUS Spray for the DOD, Coronet Roundup in support of the Department of Agriculture, and SOUTHCOM Rotation for Southern Command, are all examples of requirements which have been supported by Reserve aircraft. These missions were flown by our tactical airlift crews and aircraft while accomplishing normal contingency training requirement.

Military Assistance Program Support

Chairman McClellan. Describe the Security Assistance Program (MAP/FMS) support that the Air Force Reserve provides in the form of training foreign aircrews. Pilots from which countries are planned in FY 1975 and FY 1976? Provide the countries and the numbers, as well as the aircraft on which they are being trained. What kind of reimbursement is received for this training of foreign aircrews?

General Crandall. The Air Force Reserve provides Security Program training in cases where the active force does not possess the aircraft or the capability. In the past training was provided in C–119s and also in C–130As during Vietnamization. Currently the only MAP training being provided or programmed by the Air Force Reserve is on A–37s to Honduras, Chile and Peru. Chile, Ecuador, Honduras, Peru and Uruguay have purchased pilot and maintenance training in support of FMS acquisition of the A–37B. Pilot training is conducted by the Air Force Reserve at Barksdale AFB, while maintenance training is performed by the Inter American Air Forces Academy at Albrook AFB, Canal Zone. (Limited maintenance training conducted for AGE and Officer specialties in the CONUS).

Status of Training

Chile. Three pilots completed training January 1975. Maintenance training for 12 technicians completed February 1975. USAF Instructor pilot (IP) and maintenance mobile training teams to deploy to Chile, FY 4/75.

Ecuador. Training for 4 pilots and 25 technicians, and USAF IP and maintenance MTTs programmed for FY 76.

Honduras. Three pilots completed training January 1975. Maintenance training for 18 technicians completed March 1975. USAF IP and maintenance MTTs to deploy to Honduras in FY 1/76.

Peru. Six pilots completed training January 1975. Maintenance training for 25 technicians completed March 1975. USAF IP and maintenance MTTs to deploy to Peru in FY 4/75.

Uruguay. Training for 2 pilots and 25 technicians programmed for FY 76 No MTTs desired by Uruguayan Air Force.

The U.S. Government is being fully reimbursed for the training provided under Foreign Military Sales procedures.

Training Requirements

Chairman McClellan. How many reservists are attending formal schools operated by the Air Training Command, Air University and other major air commands? Compare FY 1975 and FY 1976.

General Crandall. 3843 Air Force Reserve members attended formal school training in FY 1975. This compares with 4371 students in FY 1976. Broken down by Commands and other agencies operating the schools they are:

Command operating school	Students, fiscal year—	
	1975	1976
Air Force Systems Command	125	182
Air Training Command	1,817	1,647
Military Airlift Command	778	866
Headquarters Command	12	89
Tactical Air Command	217	563
Air Force Logistics Command	20	25
Headquarters Air Force Reserve	12	0
Air University	208	287
Air National Guard	25	30
Air Force Office of Special Investigations	4	2
Army	100	129
Navy	16	37
U.S. Coast Guard	8	0
Defense Intelligence Agency	6	0
Defense Civil Preparedness Agency	205	419
Defense Race Relations Institute	28	24
Defense Information School	0	20
Armed Forces Institute of Pathology	11	25
School of Aerospace Medicine	48	0
National War College	34	34
Armed Forces Staff College	10	10
Industrial College of the Armed Forces	134	0
University of California at Los Angeles	25	0

Training Requirements/Funds Program

Chairman McClellan. Have additional funds been programmed by the active forces for training support (e.g., simulators, use of Air Training Command facilities) provided to the Reserves? Estimate the amount.

General Blanton. There have been no additional funds programmed specifically for the Reserve Forces in the FY 76 budget. However, Reserve Forces training requirements at active Air Force training installations, along with the active forces, and other government agencies requirements, are considered in developing the overall training program. Funds for this training are included in the Operations and Maintenance, Air Force budget.

End Strength Increase/Increase of Three Non-Flying Units

Chairman McClellan. Your programmed end-strength for FY 1976, at 53,210, increases by over 1,500 from FY 1975. How much of this increase is related to the force increase of three non-flying units?

General Crandall. Approximately 22% of the 1,534 net programmed Selected Reserve end strength increase is attributed to the increase of three non-flying units.

Crew Ratio Increase

Chairman McClellan. Describe the reason for the crew ratio increase in C–141 associate units. What additional capability will be obtained? How many additional individuals does this increase entail?

General Crandall. In his 1974 posture statement the Secretary of Defense stated a requirement to reduce the time required to deploy conventional forces to Europe. The primary way to reduce the deployment time is to increase our strategic airlift capability. One of the methods selected to increase the airlift capability was to increase the C–141 wartime sustained utilization rate. Public Law 93–365 directed that any increase above the currently approved strategic airlift manning should be made, to the maximum extent possible, through components of the selected reserve. The additional C–141 capability will be 234 Reserve aircrews. The additional individuals this increase entails are 1,268.

Aerial Port Squadrons

Chairman McClellan. Why is there an increase in three aerial port squadrons in FY 1976?

General Crandall. In order to provide the aerial port manpower support, certain program actions involving changes to the active/reserve mix have resulted in the transfer of manpower spaces related to the tactical aerial port function to the Air Force Reserve. Both strategic and tactical air mobility capability increase significantly on mobilization. With the increase in flying hours per day in strategic airlift, the aerial port elements supporting these airlift forces will increase. USAFE representatives have indicated the need to operate intra-theater using many airfields that are not involved in peacetime activities. These actions were taken to permit rapid deployment of forces. Because the capability is not required to support a peacetime requirement, it is cost effective to place this additional responsibility upon the Air Reserve Force.

Requested Strength Levels/Compare to Prior Years

Chairman McClellan. Requested strength levels will enable a 93% manning level in FY 1976 for all Reserve units. How does this compare with prior years? What is your manning goal?

General Crandall. The manning level for all Reserve units in the FY 1975 Budget Request was 90%. The actual manning level in FY 1974 was 91%, while in FY 1973 it was 87%. Our manning level goal is 100%.

Recruiting

Chairman McClellan. What has been your experience so far this year, as compared to last, in numbers of accessions, both in total and in relation to goals?

General Crandall. Our recruiting experience so far as compared to last year in relation to goals is as follows:

	Fiscal year 1974		Fiscal year 1975	
	Nonprior service	Prior service	Nonprior service	Prior service
Programed to:				
Achieve end June	1,912	12,004	2,712	10,956
Actual end June	1,543	7,105		
Actual end April 1975			2,000	7,033

Women and Minority Personnel

Chairman McClellan. What percent of the total force is comprised of women and minority personnel?

General Crandall. The minority and women personnel in the USAF Reserve-Selected Reserve Force are comprised of 8.3% minority and 5.7% women.

Recruiting and Counseling

Chairman McClellan. Explain how Reserve forces recruiters are assigned to unit commanders and for what period of time. What is the cost of all of the Air Force Reserve recruiting activities in FY 1975 and FY 1976?

General Crandall. In October 1974, the Reserve recruiters were placed under the day-to-day supervision of the local senior reserve commanders. The senior recruiter is placed on orders to report directly to the commander and all the other recruiters, within the office, report to the senior recruiter.

The number of full-time recruiters (365 days) is 55 in FY 1975 and 186 in FY 1976. All other recruiters will continue on a part time basis. The cost for all recruiting activities is $6,350,000 in FY 1975 and $6,926,000 in FY 1976.

Air Force Reserve Counselors

Chairman McClellan. How many counselors does the Air Force Reserve have at selected active duty facilities, and where are they serving? What has been their input into the Reserves?

General CRANDALL. We are authorized 35 reserve counselors at selected active duty facilities and there are 29 currently assigned at the following bases.

Prime base	*Bases served*
Andrews [1]	Bolling and Langley.
McGuire	Dover.
Wright-Patterson	Grissom and Rickenbacker.
Charleston	Shaw and Myrtle Beach.
MacDill	Patrick and Homestead.
Eglin	Tyndall and Keesler.
Pope	Seymour Johnson.
Pease	Hanscom Field, Otis, and Loring.
Lowry [1]	Peterson Field, USAF Academy, ARPC and AFAFC, and FE Warren.
Ellsworth	Offutt.
Kirtland	Cannon, Holloman, and Reese.
Barksdale	Dyess, Carswell, and England.
Kelly	Laughlin, Randolph, and Bergstrom.
Lackland	Brooks, Webb, and Goodfellow.
Grand Forks	Minot and Duluth.
Scott	Chanute, Whiteman, and Richards Gebaur.
Little Rock	Blytheville and Columbus.
Travis [1]	Castle.
McChord	Fairchild.
McClellan	Mather, Beale, and Kingsley Field.
Hill	Malmstrom and Mt. Home.
Luke	Williams and Davis Monthan.
Norton	March, George, and LA AF Station.
Edwards	Vandenberg and Nellis.
Hamilton	

[1] Two currently assigned.

Effective January 1, 1975 program goal was shifted from informative to procurement; therefore, assignment statistics from January 1, 1975 to date are most significant. These statistics are provided below:

	(Jan. 1–May 15, 1975)
Number assigned to Reserve units	445
Number assigned to ANG units	119
Number assigned to mobilization augmented (MA) positions	83
Total assigned	647
Total referred to Reserve recruiters, ANG recruiters and MAJCOM's for subsequent assignment	2,848

OVERSEAS TRAINING ACTIVITY

Chairman MCCLELLAN. Provide a list for the record of all overseas training in FY 1976 programmed for non-flying units. Also discuss the training activity overseas for flying units.

General CRANDALL. The following non-flying units are currently scheduled for training outside the Continental United States during FY 1976:

54th Aerial Port Squadron.
65th Aerial Port Squadron.
68th Aerial Port Squadron.
82nd Aerial Port Squadron.
907th Civil Engineering Flight.
914th Civil Engineering Flight.
915th Civil Engineering Flight.
921th Civil Engineering Flight.
930th Civil Engineering Flight.
933rd Civil Engineering Flight.
934th Civil Engineering Flight.

Fying units will be participating in a Joint Chiefs' of Staff sponsored exercise "Flaming Lance" in the Mediterranean area during FY 76. During this exercise, Air Force Reserve C–130 aircraft will conduct tactical training and airlift training missions in support of the active force.

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Reserve C–123 aircraft will continue to support the Southern Command mission in the Panama Canal Zone. Crews rotating to the Canal Zone conduct tactical missions, airdropping paratroopers and cargo, and airlifting cargo and personnel in South America. The 303rd Air Rescue and Recovery Squadron will augment the air rescue mission in Alaska with an aircraft and crew at prescheduled times throughout the year. In addition, certain Reserve aircraft are configured for aerial spray. These aircraft respond, on an unscheduled basis, to insect control requests from Countries around the world. Training is conducted in actual mission accomplishments. C–5 and C–141 Associate units also provide individual aircrews for the Military Airlift Commands scheduled overseas traffic.

Reserve Officers Training Corps

Chairman McClellan. Discuss inputs into ROTC in FY 1976 compared with previous years.

General Crandall. We expect total beginning enrollment in Air Force ROTC to be 19,231 in Fiscal Year 1976, compared to a beginning enrollment of 19,860 in Fiscal Year 1975. This decrease was predicated on a reduction in enrollments in the AS 300 (junior year) and AS 400 (senior year) classes resulting from a decrease in officer production objectives for Air Force ROTC from 4,500 in Fiscal Year 1975 to 3,600 in Fiscal year 1976 and 3,000 in Fiscal Year 1977 and beyond.

ROTC Eliminated at Any Institutions

Chairman McClellan. You indicate declining enrollment in this program. Is this program being eliminated at any institutions?

General Crandall. At the time the FY 76 budget was formulated, five units were scheduled for disestablishment by June 30, 1975. Subsequently, six additional institutions have agreed to disestablish their units in June 1975. The following units will be disestablished in June 1975, with reasons indicated:

School	Reason
Drake University, Iowa	Low enrollment.
St. Louis University, Missouri	Do.
Fordham University, New York	Mutual agreement.
Otterbein College, Ohio	Low enrollment.
University of Tulsa, Oklahoma	Do.
Willamette University, Oregon	Do.
Duquesne University, Pennsylvania	Do.
University of the South, Tennessee	Do.
Southern Utah State College, Utah	Do.
Davis and Elkins College, West Virginia	Do.
Catholic University, Washington, D.C.	Do.

In addition, the following six units will be disestablished in June 1976. Thus, we will enter Fiscal Year 197T with 156 units, compared to 173 in Fiscal Year 1975.

School	Reason
Livingston University, Alabama	Low enrollment.
University of Arkansas, Monticello, Ark.	Do.
Butler University, Indiana	Do.
University of Detroit, Michigan	Do.
University of Montana, Montana	Do.
Sul Ross State University, Texas	Do.

Financial Aspects FY 75

Chairman McClellan. How was the $4.2 million impact of military pay raises accommodated without supplemental funding?

General Crandall. As a result of strength shortfalls in Pay Group B personnel OSD reduced the FY 1975 Reserve Personnel average strength program by 2,616. However, OSD allowed the funds for this average strength to remain in the Reserve Personnel appropriation to cover the military pay raise requirement. This negated the need for a supplemental appropriation.

Closure of Hamilton and Ellington AFB

Chairman McClellan. Explain the one-time costs associated with the closure of Hamilton and Ellington Air Force Bases. How many individuals are being moved, where, and why?

General Crandall. One-time costs associated with base closures at Hamilton and Ellington Air Force Bases total $9.6 million in the Air Force Reserve O&M appropriation. These funds provide for caretaker forces. (322 civilian personnel) shipment of excesses and reduction-in-force expenses as well as costs to relocate mission units.

Relocation costs provide for movement of 550 civilian mission personnel. Ellington will transfer 256 to Bergstrom and 75 to Kelly, while Hamilton will transfer 219 to McClellan.

Movement of individuals is a result of the announced realignment actions by the Secretary of Defense in November 1974.

QUESTIONS SUBMITTED BY SENATOR YOUNG

Senator Young. Mr. Chairman, I also have further questions to be submitted for the record.

Chairman McClellan. Without objection, those questions and answers will appear at this point in the record.

[The questions and answers follow:]

AFR Strength

Senator Young. What is the strength of the Air Force Reserve today?

General Crandall. The Air Force Reserve Selected Reserve strength as of 30 April 1975 was 48,698.

AFR Recruiting Under All Volunteer Force

Senator Young. What has been the experience of the Air Force Reserve in recruiting under all-volunteer force?

General Crandall. The strength of the Selected Reserve went down initially after the start of the volunteer environment. We acted quickly to counter this downward trend. We moved energetically to build up a recruiting staff and started to use modern advertising techniques.

The Air Force Reserve has had difficulties in attracting and retaining personnel for certain "critical skills." The recruiting difficulties being encountered are in specialties such as loadmasters, flight engineers and certain maintenance skills, primarily in the C–5 associate units and to a lesser extent in the C–141 units. We have been overcoming these problems gradually. Since January 1975 we have made significant progress and we are confident our manning goals will be achieved.

Air Force Strength Decline/Result of Decrease in Reserve Volunteers

Senator Young. Has the Air Force strength declined because of a decrease in the number of volunteers for the reserve?

General Crandall. No, sir, it has not.

Combat and Combat Support in Air Force Reserve

Senator Young. How many combat and combat support units are in the Air Force Reserve?

General Crandall. In FY 1976, the Air Force Reserve has 53 combat flying units and 139 combat support units.

AFR Aircraft Units/Readiness Status

Senator Young. What is the readiness status of the aircraft units in the Air Force Reserve?

General CRANDALL. All Air Force Reserve flying units are presently reporting combat ready. The following is a recap of the Air Force Reserve units readiness as of May 20, 1975.

COMBAT READINESS

Gaining command aircraft	Number of units	C-1	C-2	C-3	C-4
MAC:					
C-141	13	1	9	3	0
C-5	4	0	4	0	0
C-9 [1]	1				
C-130A/B	16	6	6	4	0
C-123	4	2	2	0	0
C-7	2	2	0	0	0
HC-130	2	1	1	0	0
HH-1/HH-3	2	1	1	0	0
TAC:					
F-105B/D	3	2	1	0	0
A-37	4	1	1	2	0
CH-3E	1	0	1	0	0
ADC: EC-121	1	0	1	0	0
Total	53	16	27	9	0

[1] Unit not required to report.

AIRCRAFT IN AFR UNITS

Senator YOUNG. What type of aircraft are provided Air Force Reserve units?

General CRANDELL. The mission role of the Air Force Reserve covers a broad spectrum: Tactical Airlift, Tactical Fighter, Airborne Early Warning, Aerospace Rescue, Special Operations, Weather Service, Strategic Airlift, and Aeromedical Evacuation. A conglomerate of aircraft are flown by our units in meeting these diversified missions. Included in this amalgamation are the C-123K, C-130, C-7, A-37, F-105, EC-121, HC-130, HH-3E, HH-1H, AC-130, CH-3E, and the WC-130. Associate aircraft utilized by the Air Force Reserve include the C-141, C-5, and C-9 aircraft.

SUBCOMMITTEE RECESS

Chairman MCCLELLAN. Thank you, General.

Very well, if there is nothing further the subcommittee will stand in recess until tomorrow morning at 10 o'clock. We will resume in this room.

Thank you, gentlemen.

[Whereupon, at 10:30 a.m., Tuesday, May 20, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, May 21.]

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