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Department of Defense Appropriations

Fiscal Year 1974

93*d* CONGRESS, FIRST SESSION

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1974

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETY-THIRD CONGRESS

FIRST SESSION

ON

H.R. _____

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF DEFENSE FOR THE FISCAL YEAR ENDING JUNE 30, 1974, 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 1974

MONDAY, APRIL 2, 1973

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, Young, Hruska, and Fong.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

STATEMENT OF HON. ROBERT C. SEAMANS, JR., SECRETARY OF THE AIR FORCE

ACCOMPANIED BY:

LT. GEN. GEORGE S. BOYLAN, JR., DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES
LT. GEN. OTTO J. GLASSER, DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT
LT. GEN. DUWARD L. CROW, COMPTROLLER OF THE AIR FORCE
MAJ. GEN. JOSEPH R. De LUCA, DIRECTOR OF BUDGET

BUDGET REQUEST PRESENTATION

Chairman MCCLELLAN. The subcommittee will come to order.

This morning we will hear testimony from the Secretary of the Air Force and supporting witnesses with respect to the budget request for the Department of the Air Force.

Our first witness this morning is Dr. Robert C. Seamans, Jr., Secretary of the Air Force.

Mr. Secretary, we welcome you and your associates who are supporting you in your budget request. We shall be very glad to hear you, and we invite you to make the best case you can, because we are going to be confronted with challenge, strong opposition and a number of efforts, no doubt, in different areas to make substantial reductions. Therefore, if you are concerned that you need money at a given point, and you would be very apprehensive if the Congress denied you in that particular area, or for that particular item, we urge you to emphasize your testimony in those areas and with respect to those items.

There is a compelling necessity, as I see it, to make some reductions in military spending. I do not go along with those who want to sacrifice our military posture in defense capabilities solely to accommodate other needs. But there are heavy demands on us for appropriations. We already, in trying to respond to those demands in the last few years, have gone heavily in debt. It is our duty, as I see it, to try to get our fiscal situation under better control.

Very well, Mr. Secretary, we welcome you. You have a prepared statement?

INTRODUCTION OF ASSOCIATES

Secretary SEAMANS. Mr. Chairman and members of the committee, I do have a prepared statement which I would like to submit for the record.

Chairman MCCLELLAN. Before you proceed, you might identify the others of your Air Force command who are going to testify.

Secretary SEAMANS. With me today, Mr. Chairman, is General Ryan, the Chief of Staff. On my right, General Crow, our Comptroller. General Boylan and General Glasser are with me at the table. And behind me General Giraudo and General De Luca, Director of the Budget.

Chairman MCCLELLAN. You say you would like to place your statement in the record?

Secretary SEAMANS. I would like to place my full statement in the record, and then I would like to go through and excerpt part of my statement in order to do the best job I can of outlining to you and your committee what I believe is a very important and well thought out fiscal year 1974 program for the Air Force.

Chairman MCCLELLAN. I would suggest, if it is agreeable to you, that you read those excerpts from your statement that you wish to read and emphasize. As you read the statement, that part which you omit will be inserted in the record at that point to keep the continuity. I think it would make a better record that way, Mr. Secretary, if that is agreeable with you.

Secretary SEAMANS. That is entirely acceptable to me.

Chairman MCCLELLAN. That is the way we have handled the others.

Are there any statements by members of the committee?

Senator YOUNG. Not at this time, Mr. Chairman.

BIOGRAPHY

Chairman MCCLELLAN. Mr. Secretary, your biographical sketch will appear in the record at this point.

[The biography follows:]

DR. ROBERT CHANNING SEAMANS, JR., SECRETARY OF THE AIR FORCE

Dr. Robert Channing Seamans, Jr., Secretary of the Air Force since February 15, 1969. Born in Salem, Massachusetts on October 30, 1918. Harvard University B.S. 1939; Mass. Inst. Tech., M.S. 1942, Sc.D. 1951. Honorary Doctor of Science, Rollins College and New York University.

Professorial and laboratory-staff positions at M.I.T., 1941–1955. Engineering and managerial duties in the Airborne Systems Department of the Radio Corporation of America, 1955–1958. Chief Engineer of Missile Electronics and Controls Division at RCA, 1958–1960. Joined NASA as Associate Administrator,

1960; Deputy Administrator, Dec. 1965–Jan. 1968. Appointed visiting professor at M.I.T., Mar 1968, became Jerome Clarke Hunsaker Professor, Jul 1968.

Served on technical committees of NASA's predecessor organization, the National Advisory Committee for Aeronautics, 1948–1959. Served as consultant to the Scientific Advisory Board of the Air Force, 1957–1959; as member of the board, 1959–1962; and as associate advisor, 1962–1967. He was a National Delegate, Advisory Group for Aerospace Research and Development (NATO), from 1966 to 1969.

Member of Sigma Xi; the American Association for the Advancement of Science; American Astronautical Society; American Society for Public Administration; American Academy of Arts and Sciences (Boston); National Space Club; Foreign Policy Association; National Academy of Engineering; and International Academy of Astronautics.

DEPARTURE OF SECRETARY SEAMANS AND GENERAL RYAN

Secretary SEAMANS. This is the last time that General Ryan and I will be testifying on the Air Force budget.

Chairman MCCLELLAN. You mean at this session of Congress? We may have to call you back.

Secretary SEAMANS. I will be happy to come back at any time if I can be helpful, Mr. Chairman.

Senator YOUNG. Are you leaving?

Secretary SEAMANS. Yes; Senator Young, I will be leaving in about a month and a half, I expect. It has not been announced yet because my successor's name has not been announced, but I expect to become the President of the National Academy of Engineering, which has not been announced, either.

Senator YOUNG. I am sorry you are leaving. You have been doing a good job.

Chairman MCCLELLAN. We regret your leaving. That gives us the problem of becoming acquainted with your successor. And that may give us another problem, because he may not be thoroughly familiar with this budget, not as much so as you. So, we all have our problems. We have lived with them and we will live with this one.

Proceed.

ENDING OF WAR IN SOUTHEAST ASIA

Secretary SEAMANS. Four years ago the major issues were the war in Southeast Asia, the F–111, and the C–5. Today the war is drawing to a close; negotiations have brought the return of our prisoners of war, and we expect a full accounting for all our missing men.

ACCOUNTING OF MIA'S

Chairman MCCLELLAN. You say that you expect a full accounting for all of the Air Force men who were lost in Southeast Asia. Upon what facts or circumstances do you base your optimistic expectation?

Secretary SEAMANS. There are three avenues we are pursuing to secure an accounting of our men not returned:

The provisions of the Agreement signed in Paris on January 27, 1973;

Debriefing of returned men; and

Activities of the Joint Casualty Resolution Center.

Article 8 of the agreement and the related protocol concerning the return of captured military personnel and foreign civilians call for

the exchange of information and a cooperative effort with regard to the satisfactory accounting of the men who have not returned. We are working through the Four-Party Joint Military Team, which was a successor to the Four-Party Joint Military Commission. The sole purpose of the Team is accounting for the missing in action and according to the agreement, the forum will remain in existence as long as necessary. It should be noted that the operations of the Four-Party Joint Military Team pertain only to North and South Vietnam. Separate negotiations are provided for in the Laotian cease-fire agreements, and those negotiations are under way between the Pathet Lao and Royal Laotian Government. Our Government is working closely with the Laotian Government to assure that the subject of accounting for our missing men in Laos is fully considered. It is our intention that the same will apply in Cambodia when a cease-fire agreement is reached.

The men who have returned have and are providing some information which will be used to clarify the status of some MIA personnel. While some information is firsthand personal testimony, other information is hearsay. All of the information we receive pertaining to an individual must be carefully evaluated. If there is any conflict or question on information pertaining to an individual, the returnees are being asked for clarification of the information provided by them. This is a time consuming but necessary process. We want to be sure that before any status change is made, we have all of the information available to support that change and to inform the families of the exact reasons for the status change.

The third method we hope to use in clarifying the status of MIA personnel is the Joint Casualty Resolution Center which is currently located at Nakhon Phanom Air Base in Thailand. The Center is headed by an Army brigadier general and he has under his command experts in grave registration activity; experts in crash site inspection—men who are trained to identify aircraft when the obvious signs of identification, such as serial number, are not easily readable or have been obliterated. They know what parts of the aircraft to look at to identify the aircraft and match it with the men who flew it. They can look at the aircraft and determine whether or not the men ejected and got out of the aircraft prior to impact. We also have identification specialists, anthropologists, forensic pathologists, who are experts in the identification of remains. These teams are organized and equipped to go out into the field in areas where Americans have been lost and carry out the search to resolve the fate of missing personnel.

With regard to men we have carried as missing in action and whom we subsequently find to have been killed, a status change will be made to "killed in action." In cases where we are unable to find any information with regard to a man, there is no indication that a man may be alive, and we don't have any realistic prospect of receiving more information, a presumptive finding of death will be made, as required by law. We realize that, just as in other conflicts, a presumptive finding of death will be difficult for some families to accept. On the other hand, after every available source of information has been thoroughly assessed, it does not seem humane that a family should continue in a state of anxiety and uncertainty which attends the MIA status.

STRATEGIC WAR DETERRENCE, AID, AND TECHNOLOGICAL SUPPORT

The F–111's have served well in Southeast Asia and are deployed in Europe for the defense of NATO. The C–5 has accomplished important missions that no other aircraft could undertake, and the last C–5 has been assembled. It is now time to turn our full attention to the goal of insuring a stable peace in future years.

As a first priority, the United States will continue to provide for the deterrence of strategic war. But the responsibility for lower levels of conflict must be shared. In accordance with the Nixon Doctrine, we will depend on our allies to supply most of the manpower for their own defense while we provide necessary aid and technological support.

NIXON DOCTRINE

Chairman McCLELLAN. You say that the Nixon Doctrine calls for our allies to provide most of the manpower for their own defense while we provide necessary aid and technological support. What are the Air Force roles and missions within the Doctrine?

Secretary SEAMANS. The Air Force's role with respect to the Nixon Doctrine is essentially twofold. First, through security assistance, the Air Force assists in equipping recipient nations with aircraft and supporting systems appropriate to their capabilities and their self defense and internal security needs. We also assist as necessary in the training of their forces in the use of this equipment. Secondly, the presence of our theater tactical air forces and the rapid deployment capability of those based in the United States provide assurance to our allies of continued U.S. commitment and act as a major deterrent to external aggression. The primary mission of our tactical air forces is to maintain a credible capability that could be used to complement and supplement the capabilities of indigenous forces in dealing with external aggression. The availability of our airpower to assist the indigenous forces of friendly nations who have the will and determination to defeat aggression is fundamental to the Nixon Doctrine and the strategy of realistic deterrence.

Chairman McCLELLAN. Proceed.

MODERNIZATION PROGRAMS

Secretary SEAMANS. In order for the Air Force to carry out its assigned role in implementing these broad strategies, its operational units must have effective weapon systems and must maintain a high state of readiness. Air Force people are conscious of the costs involved in every phase of this assignment and they are doing their best to achieve essential operational capability with minimum expenditures of human and dollar resources. This requires a careful balance between programs required to maintain our current operating capabilities and those designed to provide modern systems in the years ahead.

A number of important new modernization programs have been started in the past 4 years, including the F–15 air-to-air fighter, B–1 strategic bomber, A–10 close support aircraft, and the Airborne Warning and Control System. We have adopted management policies for

these new programs which give us more flexibility and better control. They are all progressing at close to target costs and schedules, and our goal now is to achieve continuity and stability in carrying these programs through to completion.

AIR FORCE RESERVE AND AIR NATIONAL GUARD

In another area of critical importance for the conservation of our defense resources, we are taking steps to increase the role of the Air Force Reserve and Air National Guard. Some 4.4 percent of the fiscal year 1974 Air Force budget is allocated to the Reserve Forces, and they now have greater responsibilities and better equipment than ever before.

1974 AIR FORCE BUDGET FOR RESERVE FORCES

Chairman McClellan. I note that 4.4 percent of the fiscal year 1974 Air Force budget is for the Reserve Forces. How does this figure compare with recent budgets?

Secretary Seamans. The Reserve Forces constitute a percentage of the Air Force budget as follows:

	Percent
Fiscal year 1971	3.2
Fiscal year 1972	3.6
Fiscal year 1973	3.9

GUARD AND RESERVE READINESS

Chairman McClellan. Proceed.

Secretary Seamans. They have made excellent progress in improving combat readiness and recruiting, and today nearly 140,000 ready reservists have been assigned to units which are available for immediate mobilization as required. In Tactical Air Command both the number of personnel and combat aircraft could be doubled.

Many Guard and Reserve organizations have made important contributions to the Air Force, including F–100 tactical fighter and AC–119 gunship squadrons in Vietnam.

RESERVE FORCES IN SOUTHEAST ASIA

Chairman McClellan. How many Air Reserve and Air National Guard personnel and units were activated during hostilities in Southeast Asia? How many served in that theater of operation?

Secretary Seamans. During this period 14 Air National Guard units and 12 Air Force Reserve units were ordered to active duty. The mobilization was in two increments during January and May of 1968.

On January 26, 1968, 11 Air National Guard tactical fighter and reconnaissance squadrons were mobilized, involving 9,178 officers and airmen. On May 13, 1968, two additional Air Guard tactical fighter squadrons and one aeromedical airlift squadron were mobilized with an additional 1,333 officers and airmen, for a combined total of 10,511 personnel mobilized. These mobilizations supplied the active Air Force with combat ready crews and 315 combat ready aircraft. The recalled

units brought to the active forces 200 F–100 aircraft, 65 RF–101's, 50 F–86H's, and eight C–121 aeromedical airlift aircraft. As of September 1, 1968, seven of the 14 recalled units were serving overseas in the Far East, with four of the F–100 units in combat in South Vietnam. Two additional F–100 units served on duty in Kunsan Air Base, Republic of Korea and one RF–101 unit was at Itazuke, Japan, on temporary duty. Two other RF–101 units rotated on temporary duty to Japan. Of the 10,511 officers and airmen mobilized, 4,903 served at overseas locations with Guardsmen being located at 12 Korean bases, 11 bases in South Vietnam, seven bases in Japan, three in Thailand, two bases in the Philippines, and one base each in Taiwan, Okinawa, Greenland, and Libya.

The Air Force Reserve units ordered to active duty on January 26, 1968, totaled five military airlift groups and one aerospace rescue and recovery squadron. The mobilized strength from these units was 4,847. On May 13, 1968, the Air Force Reserve mobilized an additional six units with 784 personnel for a combined total of 5,631 personnel. These six units included one tactical airlift unit, three aerial port units, one medical service unit, and one aeromedical evacuation unit. Of these units, only four or elements thereof were directly stationed in the Southeast Asia theater. The aeromedical evacuation unit was stationed in Yokota, Japan, and its personnel flew medical evacuation missions from Vietnam to the United States. Members of one aerial port unit were deployed on temporary duty to the Republic of Korea to augment the aerial port functions there. The aerospace rescue and recovery unit deployed its HC–97 aircraft and aircrews literally all over the world. Two of these aircraft participated in the search mission in the Sea of Japan following the shootdown of the Navy EC–121 by North Korea. Following activation of the tactical airlift unit, an element thereof was retrained and redesignated as a special operations unit. This activity was deployed to Nha Trang Air Base, Republic of Vietnam, where it flew armed combat missions utilizing AC–119 aircraft. Although not deployed to Southeast Asia as units, aircrews of the mobilized military airlift units flew missions in direct support of Southeast Asia operations.

In addition to personnel mobilized with Air National Guard and Air Force Reserve units, many other members voluntarily participated in the SEA theater of operation in an unmobilized status.

GUARD AND RESERVE CONTRIBUTIONS TO AIR FORCE

Chairman McClellan. Proceed.

Secretary Seamans. Other units and individuals participated in vital airlift missions to Southeast Asia and throughout the world. Currently, 30 percent of our strategic airlift aircrew capability is provided by the Reserves, and almost three-quarters of the air defense interceptor mission is assigned to the Air Guard. In addition, our Reserve Force units regularly participate in joint training exercises and significant daily support activities. The current status of the Air Force Reserve and Air National Guard will be discussed further by General Ryan.

As we look to the future, we know that budgets will continue to be tight. Taking into account legislated pay raises and inflation, the resources allotted to national defense are at the lowest level in over 20 years. The only way that we can get the job done within the funds available is to make even greater improvements in the efficiency of management in both the personnel and materiel areas. Table I shows the fiscal year 1974 budget request as well as comparisons with previous appropriations.

As you can see from the table, the previous years are fiscal year 1964, fiscal year 1968, which was the peak year in Southeast Asia, and fiscal years 1973 and 1974.

Chairman McCLELLAN. This table will be printed in the record, of course.

Secretary SEAMANS. You can see from the table that in constant fiscal year 1974 dollars, fiscal year 1964 was $32 billion. We are now at $23 billion. We believe these are comparable years, since neither one includes a major amount for Southeast Asia.

[Table I follows:]

TABLE 1.—TOTAL OBLIGATIONAL AUTHORITY

[In millions of then year dollars]

	Fiscal year—				
	1964	1968	1972	1973	1974
Military personnel	4,428	5,656	7,040	7,373	7,532
Reserve and Guard	414	510	847	959	1,114
Operations and maintenance	4,270	5,764	6,438	6,696	6,680
Aircraft procurement	3,617	5,313	3,043	2,640	2,913
Missile procurement	2,218	1,409	1,680	1,686	1,573
Other procurement	928	2,358	1,574	2,080	2,005
R.D.T. & E	3,626	3,412	2,928	3,130	3,240
Military construction	517	495	309	292	342
Total (TOA)	20,018	24,917	23,859	[1] 24,856	[2] 25,399
Constant fiscal year 1974 dollars	32,412	35,216	26,506	26,018	25,399

[1] Includes $300,000,000 for Jan. 1, 1973, pay raise.
[2] Includes $393,000,000 for Jan. 1, 1974, anticipated pay raises and proposed legislation.

II. PERSONNEL

Secretary SEAMANS. The Air Force has developed improved recruiting and assignment policies and procedures in order to meet its personnel objectives in an all-volunteer era. We have also worked to achieve better human relationships, and to further strengthen education and training programs.

IMPROVEMENT OF PROCEDURES AND POLICIES IN ALL VOLUNTEER FORCE

Senator YOUNG. Mr. Secretary, on page 5 of your statement, you state that the Air Force has developed improved procedures and policies in order to attain personnel objectives in an All-Volunteer Force era.

Please, explain briefly the Air Force objectives.

Secretary SEAMANS. Our primary objective is, of course, to attract the quantity and quality of people we need to sustain the Air Force, Active and Reserve Forces, in the absence of the draft. To meet this objective, we have improved the quality of Air Force life to make service careers more appealing to young people and made our recruiting service more responsive to the needs and desires of potential recruits.

ENLISTED RECRUITING GOAL FOR FISCAL YEARS 1973 AND 1974

Senator YOUNG. What is the recruiting goal for fiscal year 1973 and fiscal year 1974?

Secretary SEAMANS. The Air Force enlisted recruiting goal for fiscal year 1973 is 103,670; and for fiscal year 1974, it is projected to be 80,861. These figures include nonprior service, prior service, and WAF objectives, as shown on this chart:

	Fiscal year—	
	1973	1974
Nonprior service (male)	90,357	65,361
Nonprior service (female)	6,172	8,000
Prior service	7,141	7,500
Total	103,670	80,861

EXPERIENCE IN ATTAINING OBJECTIVES

Senator YOUNG. What has been the Air Force's experience to date in attaining the fiscal year 1973 recruiting objective?

Secretary SEAMANS. The fiscal year 1973 recruiting objective has been met to date as indicated on this chart:

FISCAL YEAR 1973 ENLISTED RECRUITING RESULTS (JULY THROUGH MARCH)

	Objective	Production
Nonprior service (male)	68,948	69,547
Nonprior service (female)	3,932	4,028
Prior service	4,635	4,635
Total	77,515	78,210

QUALIFICATIONS OF RECRUITS—INCENTIVES NEEDED

Senator YOUNG. Is the Air Force able to recruit sufficient individuals with the qualifications needed to maintain and operate the more sophisticated equipment?

Secretary SEAMANS. Although it is becoming increasingly difficult to recruit sufficient numbers of individuals with the required qualifications to operate and maintain the more sophisticated Air Force equipment, we have been generally successful thus far. We will need the incentives contained in the Uniformed Services Special Pay Act of 1973 if we are to continue to be successful in meeting our quality requirements in the future.

MILITARY PAY COSTS

As indicated in table II, military pay costs have increased by 70 percent since fiscal year 1964. This increase has been due to both inflation and the need to bring military pay into parity with the civilian sector. The fiscal year 1974 military personnel end strength will be about 4 percent lower than the previous year; however, pay costs will increase slightly because of the January 1974 anticipated pay raise.

PAY RAISE COSTS NOT INCLUDED IN THE FISCAL YEAR 1974 BUDGET

Chairman McCLELLAN. Am I correct that the January 1, 1974, pay raise costs are not included in the fiscal year 1974 budget as submitted to the Congress?

Secretary SEAMANS. The fiscal year 1974 budget does provide for a projected pay raise for classified civilian and military personnel to be effective January 1, 1974. Provision for this requirement is included within the $2.885 billion DOD-wide undistributed allowance shown for civilian and military pay raises on page 215 of the budget of the U.S. Government, fiscal year 1974. The projected pay raise, however, is not distributed by appropriation nor included in the justification books before your committee.

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. Civilian strengths will decrease only slightly because of offsetting increases that result from converting appropriate jobs from military to civilian workers.

Then follows table II, which shows personnel strength for both military and civilian members of the Air Force.

[Table II follows:]

TABLE II

	Fiscal year—			
	1964	1968	1973	1974
Military personnel strengths and costs:				
End strengths (thousands)	856	905	692	666
Costs (millions of then-year dollars)	$4,428	$5,656	[1] $7,373	[2] $7,532
Civilian personnel strengths and costs:				
End strengths (thousands)	338	356	294	292
Cost (millions of then-year dollars)	$2,243	$2,724	[1] $3,374	[2] $3,579

[1] Includes Jan. 1, 1973, pay raise.
[2] Includes Jan. 1, 1974, anticipated pay raise.

LONG-RANGE AIR FORCE PERSONNEL PLAN

Secretary SEAMANS. To better identify personnel requirements we are using our long-range Air Force personnel plan. It has specific objectives, with a personnel manager responsible for managing and reporting progress toward each. The objectives cover all facets of personnel matters, from recruitment to retirement, for Active, Reserve, and civilian components.

We are now meeting our enlistment goals and expect to achieve a first-term reenlistment rate of 26 percent in fiscal year 1973. The career reenlistment rate recently reached an all-time high of 94 percent.

ALL-TIME HIGH CAREER REENLISTMENT RATE

Chairman McClellan. To what do you attribute your success in achieving an all-time high career reenlistment rate of 94 percent?

Secretary Seamans. During the past few years numerous congressional legislative actions ranging from comparability of pay to improved living and working conditions have been enacted. These legislative actions have made possible numerous Air Force "people programs" that are designed to improve stability, career visibility and reduce career irritants and have resulted in measurable progress in our efforts to make an Air Force career more attractive.

Chairman McClellan. Proceed.

Secretary Seamans. We plan to expand the opportunities for women to serve in noncombat fields. By June 30, 1973 we expect the number of women in the Air Force to increase by more than 20 percent from the previous year, reaching a total of approximately 16,000. And we expect to treble this figure by 1978.

OFFICER AND ENLISTED SPECIALTIES OPEN TO WOMEN

Chairman McClellan. What percentage of Air Force specialty code designations are now open to women? Do you plan to increase this?

Secretary Seamans. Ninety-two percent of the officer specialties and 98 percent of the enlisted specialties are open to women. The small percent of jobs that remain closed involve combat. In view of the limitations imposed by law, no further increases are foreseen at this time.

Chairman McClellan. Proceed.

JOB SATISFACTION

Secretary Seamans. With respect to the treatment of our people, we are allowing more participation in those decisions that most affect them. For example, through the guaranteed enlistment option about 35 percent of enlistees are now selecting their jobs before entering the Air Force. This should increase to approximately 65 percent by the end of 1973.

GUARANTEED JOB ENLISTMENT OPTION

Chairman McClellan. Will the significant increase this year, in that some 65 percent of the enlistees will be able to select their job prior to enlistment, result from the wind-down of hostilities in Southeast Asia?

Secretary Seamans. The anticipated increase in the guaranteed job enlistment option by the end of 1973 is not directly related to the wind-down of hostilities in Southeast Asia. We project the increase because of two factors: The program has proven to be very popular as an enlistment incentive, and initial evaluation of the pilot program has shown that we are able to honor the guarantee in almost 100 percent of these enlistments. It is extremely important that the Air Force be able to live up to our part of any contract made with a new enlistee in the all-volunteer environment. The guaranteed job program, because of its popularity and manageability, will remain a viable part of our recruiting program, and will be increased as far as the stability of our personnel programing will permit.

Chairman McClellan. Proceed.

Secretary Seamans. We are placing heavy emphasis upon improving job satisfaction. To help in this effort, job survey data have been gather from over 100,000 airmen in 120 career fields. In each area individual job content, level of interest, and Air Force training quality and requirements have been carefully evaluated. Intensive studies are now underway to improve conditions in specialties which have a disproportionate number of people reporting poor job satisfaction. We are seeking better methods for matching assignments with individual interests, and bringing aptitude requirements into line with job demands.

It might interest you to know that a young man or woman coming into our recruiting office is given an opportunity to select his or her field if they are going into the Air Force, and we can tell them in less than 24 hours whether we can honor their request or not.

Chairman McClellan. Does that hold true throughout his period of enlistment?

Secretary Seamans. Yes, sir.

Chairman McClellan. You cannot assign him to some other duty?

Secretary Seamans. That is not true.

General Ryan. Generally, Mr. Chairman, he will stay in that field. But if shortages develop in other fields, then we do cross-train him in another field. But here we are talking about his original training.

Chairman McClellan. Does that invite later dissent and complaint, that the enlistment agreement has been broken or violated?

General Ryan. It could, Mr. Chairman. With our first term enlistees we have not had too much problem with this. It is on the following enlistment. On our first term enlistee, by the time he has finished his indoctrination at Lackland AFB and goes to a technical school it is generally a year to a year and a half before he goes to a unit. His term of enlistment is four years. So switching out of his career field in the first term of enlistment is really the exception.

Chairman McClellan. Do you make this a positive guarantee when they come in and say, "I want to be a mechanic"?

General Ryan. We tell them we will honor it insofar as we can.

Chairman McClellan. I think you had better say, "This we will undertake to do consistent with necessary military requirements."

General Ryan. Yes, sir.

Chairman McClellan. I agree that this is a wonderful innovation, and it should be conducive to a greater number of enlistments. There is no doubt about that. I am in accord with what you are undertaking to do. However, I do think that we ought not to be exposing ourselves to any charge that "I've been misled, I was told I was going to be a mechanic, and now they have me doing something I don't wish to do at all."

Secretary Seamans. I agree with you, Mr. Chairman. As I said, we have honored the request from the standpoint of training. When a man is trained of course it is to our interest to have him normally continue in that specialty. At the same time, we must maintain flexibility in the use of our personnel. If we have to shift them we should not leave them with the view that they have been disillusioned.

Chairman McClellan. I think you would have little trouble, barring a great emergency, in carrying out the original agreement to give him training in a certain field. In the course of his enlistment you may well have to call on him to perform other duties.

General RYAN. That is correct.
Senator YOUNG. Mr. Chairman?

RECOGNITION OF TALENT: COLONEL BRADLEY HOSMER

Chairman MCCLELLAN. Senator Young?

Senator YOUNG. You must do a pretty good job of recognizing talent in the Air Force. To give you an example, I had a young fellow named Bradley Hosmer at the Air Force Academy a few years ago. He was a first honors graduate. As a result of this he got a Rhodes Scholarship. I didn't see him until I had lunch with him the other day. I understand he is working with the Chief of Staff.

General RYAN. He is my executive officer. He is a fine officer.

Senator YOUNG. I asked him, "How is it you did not leave the Service? You could have made two or three times as much money." I forget how he put it, but he did not have a high regard for anyone who just went for money and did not go for what he was suited for in life. He liked the Air Force. I am pleased that you recognized his talents. He is a brilliant officer.

General RYAN. He is a fine officer.

General CROW. He was promoted to a full colonel this morning.

Senator YOUNG. He is a young man for full colonel.

General RYAN. Yes. He was one of a few officers in his year group of about 5,000 to be promoted to colonel from what we call below the zone.

Senator YOUNG. You recognized his talents, which we don't always do in politics.

Chairman MCCLELLAN. You may proceed.

LIVING CONDITIONS

Secretary SEAMANS. We must continue to improve living conditions for our personnel. Housing is now being accorded a high priority within the Department of Defense. Over the past 4 years we have made progress toward providing adequate quarters for all personnel, but more needs to be done. The Air Force does not have adequate housing for some 20,000 families, 8,000 bachelor officers, and 35,000 bachelor airmen. Against these shortages, we are requesting $55.5 million to construct 1.800 new family housing units and $23.7 million to upgrade existing Wherry and other military family housing, some of which are 20 years old and do not meet current standards.

We are also requesting $38.1 million for the construction of 60 new bachelor officer quarters and 4,800 new dormitory spaces, as well as the improvement of 4,800 dormitory spaces.

HUMAN RELATIONS

Effective functioning of the Air Force requires that we have an environment of mutual understanding and respect among all of our members. To help maintain this environment, we have established social action programs, which include improvements in equal opportunity, drug and alcohol rehabilitation, and domestic action assistance to local communities.

DRUG ABUSE PROGRAM

Chairman McCLELLAN. The subcommittee has asked each service Secretary to speak to the drug abuse problem and how he is combating it. How does the Air Force combat this problem?

Secretary SEAMANS. The Air Force combats the problem of drug abuse in a number of ways. We have made extensive efforts to combat drug abuse through education and training. Each base has a social actions office which manages the drug abuse control program for the local commander. Social actions personnel have been trained to conduct education programs and provide counseling assistance to Air Force personnel and their dependents who may have questions or problems with drug abuse. All Air Force members receive annual drug abuse education. We have also introduced drug abuse instruction into all of our entry level training and our professional military education courses. We have aggressive programs run by our law enforcement personnel to control drug trafficking. Increased awareness and efforts on the part of law enforcement personnel and commanders have resulted in a steadily increasing number of drug abuse investigations over the past 4 years. These investigations account for the identification and entry into rehabilitation of approximately 20 percent of all identified drug abusers. The exemption program accounts for the largest share of identified Air Force drug abusers.

Under this program, a member can seek treatment for his drug problem without fear of punitive action being taken against him under the UCMJ for his personal use of illegal drugs, or his possession of drugs incident to personal use. We also have a comprehensive urine testing program which serves the dual purpose of deterring members from using hard drugs as well as identifying those who have drugs in their systems. As in the case with the exemption program, members discovered through urinalysis are not subject to prosecution under the UCMJ. In the case of all identified drug abusers, administrative sanctions and duty limitations may be applied which are consistent with the interest of national security and effective mission accomplishment. In general, our objective is to prevent and eliminate drug abuse within the Air Force, to assist those who have become involved with drugs and to return them to duty when feasible. Those who cannot measure up to Air Force standards are discharged and referred to appropriate VA or civilian agencies if they require further rehabilitation.

Chairman McCLELLAN. Proceed.

DRUG PROBLEM IN THE AIR FORCE

Senator YOUNG. Today, we read and hear about the seriousness of the drug problem in our country including the armed services.

Does the Air Force have a drug problem?

Secretary SEAMANS. Yes, the Air Force has a drug problem. I think the scope and degree of seriousness deserve some specific comment. The fact that drug abuse is an illegal activity renders it serious in all cases. However, considering the frequency and type of drug use, we are finding that the Air Force problem is far less damaging than might appear on the surface. For example, when we identify hard drug abusers (heroin, barbiturates, and amphetamines) they are normally using drugs at the experimentation level, where addiction and physical damage have not occurred. Of all the drug abusers that we have identified, 60 percent were involved with only marijuana use. Our ability to

closely control our people and the increased awareness of commanders and supervisors have made detection at the experimentation level a reality, and held the drug problem under control. There are also geographical considerations. With the increase of personnel in Southeast Asia we experienced an increase in the use of heroin, whereas in Europe, we have to date had an insignificant amount of heroin use, with marijuana and hashish being the drugs most used.

DETECTION OF DRUG USERS

Senator YOUNG. How are drug users detected?

Secretary SEAMANS. There are four basic means of identifying drug users: The urine testing program; the limited privileged communication program (exemption program); apprehension, arrest, and investigation; and discovery incident to medical care. The urine testing program gives us the capability of detecting the presence of hard drugs at a very high level of sensitivity. Air Force members aged 28 and under are vulnerable for at least one random urine test per year. In high threat drug areas, the number rises to a minimum of three tests per year. In addition, we test each member shortly before his return to the States from Southeast Asia. The limited privileged communication program accounts for the largest portion of identified drug abusers. Under this program, the airman cannot be prosecuted under the UCMJ for his personal use of drugs or the possession of such drugs incident to use, provided he seeks medical treatment for his drug problem from specified personnel. Incidentally this same privilege extends to those discovered through urine testing and incident to medical care. Naturally those who are apprehended, arrested, or discovered by investigation are liable for punitive action under the UCMJ.

REHABILITATION AND DISCIPLINE OF DRUG USERS

Senator YOUNG. How are known drug users handled in the Air Force with respect to rehabilitation and discipline?

Secretary SEAMANS. Every drug abuser, regardless of how he is identified, is afforded rehabilitation. The objective of our rehabilitation program is to either return the member to duty or prepare him for reentry into civilian life. Our policy is to keep the member whenever possible, and to date we have been successful in about 50 percent of the cases. Those members who are not retained are often involved in drug trafficking and the commission of other serious crimes, or have psychological or other health problems which prohibit their retention in the service. As far as discipline is concerned, as mentioned previously, disciplinary action for drug abuse is taken only against those who are identified by apprehension, arrest, or investigation, not those who voluntarily seek assistance. Without question we discipline drug pushers. However, I want to stress that in all cases, the member is given some type of rehabilitation. The relatively few members who are found to be drug dependent are usually discharged and sent to the Veterans Administration for long term rehabilitation.

LAYOFF OF DRUGS BY USERS TO AVOID DETECTION

Senator YOUNG. Has it been the Air Force's experience that drug users lay off drugs for 5 days so as to avoid detection in the urine test

when it is known that tests are to be conducted? How about volunteer recruits?

Secretary SEAMANS. Under the old urine testing procedures in Southeast Asia, urine tests were given to some members after they had been notified well in advance of the test date. Under these conditions it is reasonable to assume that some would lay off of drugs in order to avoid detection. However, since July of 1972, we have placed our emphasis on no-notice random urine testing, in which the service member to be tested has less than 8 hours to produce a urine specimen after being directed to do so. So, we have done away with the 5-day layoff problem. As far as recruits are concerned, they are urine tested immediately after arrival at basic training. In general, we have improved and tightened up our drug detection capabilities and procedures during the past year to the point where we feel confident that it is difficult for a drug abuser to avoid detection. We are continuing to closely monitor the entire program and to seek better ways of combating the drug problem.

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. A new social actions career field became effective in January 1973, and courses have been established for those specializing in this field.

We are placing particular emphasis on equal opportunity in such areas as personnel procurement, training, promotion, and duty assignment. We are actively working to assure that our officer force attracts a reasonable share of the talent which exists in the minority community. While we are attracting minorities into our forces, we are also taking possible career development actions to assure that genuine opportunities exist for all officers to compete and advance. The career development program strives to put each officer into the right job or the right school to help him develop to his fullest potential. This personalized career management should provide the minority officer, along with every other officer, an equal opportunity to compete for promotions and selection to advanced schools.

With respect to our airmen, we are working to get a more effective match between the skill needs of the Air Force and the talents of the airmen we enlist. Our product from this intensified management of capabilities and requirements will be increased utilization of minority airmen in more technical skills.

EDUCATION AND TRAINING

In studying the motivation of our young first-term airmen, we have found educational and training opportunities to be one of the most attractive incentives. Some 90 percent of all Air Force enlistees receive formal training, much of which has direct civilian utility. To facilitate the granting of credit for this training by civilian educational institutions, we established the Community College of the Air Force, which now operates a transcript system to provide transfer credit for five Air Force schools. These schools are now fully accredited by the Schools Commission on Occupational Education Institutions, a division of the Southern Association of Colleges, and we are working toward other regional accreditation.

I believe in the last week the North Central Association of Colleges has also accredited our program.

Collectively, the newly accredited schools conduct 800 courses in residence, with an additional 1,200 courses conducted by field training detachments and traveling instructor teams throughout the world.

In an effort to improve the effectiveness of Air Force training programs, the Air Training Command has used job analysis data as a basis for restructuring 90 technical training courses. This has enabled us to reduce time spent in training during fiscal year 1972 by 1,118 man-years, with savings since fiscal year 1970 exceeding $12 million. We expect these savings to increase steadily as more courses are similarly revised.

Perhaps even more significant is the use of new flight simulation techniques and instructional technology in training aircrews. The A–7D combat crew training course being conducted at Davis Monthan Air Force Base, Ariz., uses flight simulation to reduce aircraft training flights. Compared to the older, conventionally developed F–4 training program, the A–7D course has about 30 percent more simulator time and 25 percent fewer flying hours. Although the training requirements for these two aircraft are not identical, the figures do indicate a significant benefit from greater use of simulation. We are now working to restructure the F–4, F–111, and C–130 courses, using similar instructional technology. In the future, we plan to install advanced simulators for undergraduate pilot training and expect to reduce flight hours by as much as 40 hours per student by simulating instrument flight.

PILOT TRAINING

Chairman McClellan. What is the cost of a pilot training flight hour?

Secretary Seamans. The cost is $179 per flight hour for undergraduate pilot training.

Chairman McClellan. Proceed.

CURRENT PERSONNEL PROBLEMS

Secretary Seamans. Before leaving the subject of personnel, I want to cite three areas of concern, which General Ryan will discuss further. Since 1965, we have been reducing the size of the Air Force and have been able to reach lower strengths primarily through voluntary means. However, to meet officer end strengths this year, voluntary methods were exhausted and some involuntary separation actions had to be taken. Additional involuntary separations may be necessary in fiscal year 1974.

Chairman McClellan. How many officers will be involuntarily separated in fiscal year 1973? What is the estimate for fiscal year 1974? What grades are most affected?

Secretary Seamans. By June 30, 1973, we will have involuntarily separated 722 officers through the use of various force reduction programs.

Based on current budget strengths and the expected yield from voluntary programs, we estimate that we will be required to involuntarily separate approximately 1,500 officers during fiscal year 1974.

Reserve officers in grades through lieutenant colonel will be affected, with the bulk being those serving as lieutenants and captains.

Chairman McClellan. You mean in order to reduce your strength?

Secretary SEAMANS. In order to come down to the strength level which we have indicated, yes.

A second problem involves permanent officer grade legislation for the Air Force. Temporary officer grade relief was provided by Congress in 1972, but will expire before the 93d Congress adjourns. Unless new legislation is enacted, Air Force will revert to grade levels authorized in the Officer Grade Limitation Act of 1954. Grade levels contained in this act were more restrictive on the Air Force than on the other services. Return to 1954 levels would put it in the position of running a modern Air Force with an officer corps tailored to Korean war requirements. We would have to demote, retire early, or separate involuntarily several thousand officers. Early favorable action on the Defense-wide officer personnel management system which proposes new grade legislation for all services, will provide a better basis for a long-term effective Air Force.

TERMINATION OF FLIGHT PAY

Another critical problem involves the recent action by Congress in section 715 of the fiscal year 1973 Appropriations Act, which requires the termination of flight pay on May 31, 1973, for several thousand of our Air Force flyers. We are preparing an alternative plan which will be submitted to Congress. The proposed change would provide a fair solution, and would prevent serious damage to the morale of our flying force.

OFFICERS LOSING FLIGHT PAY

Chairman MCCLELLAN. When are you going to submit the alternative plan to Congress concerning flight pay for those officers of the grade of colonel and above who no longer fill flying assignments? How many officers will start losing their flight pay at the end of next month?

Secretary SEAMANS. The Defense Department is still working on the details of an alternative flight pay system. We have found the inventory of flyers and the distribution of that inventory within the four services so different it is extremely difficult to devise a new flight pay system which treats the attraction and retention problems of all services, responds to the wishes of the Congress, is fair to the individual, and stays within current budget limitations. Under the present provisions of section 715, approximately 3,000 officers will lose their flight pay beginning June 1, 1973.

III. WEAPONS PROCUREMENT

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. Air Force weapons procurement and research and development programs are designed to provide necessary phased modernization of our forces to insure that they will be able to perform their missions in future years. Table III indicates our principal systems today, those being procured, and those that are still in the development phase. It also shows advanced prototype programs that we are using to obtain knowledge of cost and feasibility on which to base future development decisions. As new systems are moved into the inventory, more modern weapons can be transferred to our Air Reserve Forces.

[Table III follows:]

TABLE III

SUMMARY OF MAJOR WEAPON SYSTEM PROGRAMS

	Principal Systems Today	Systems Being Procured	New Systems In Development	Advanced Prototypes
Strategic	MM I, II, III TITAN II B-52, FB-111 SRAM F-106 Satellite Warning KC-135	MINUTEMAN III SRAM Airborne Command Post	B-1 SCAD AWACS	
Tactical	F-4, RF-4 F-111 A-7 AC-130 Gunship EO/Laser Guided Bombs	F-15 MAVERICK	A-10	Lightweight Fighter
Airlift	C-5 C-141 C-130			Medium STOL Transport

Secretary SEAMANS. In fiscal year 1973, we will complete procurement of the F–111, A–7D, and A–37 programs.

Chairman MCCLELLAN. Am I correct that you have no procurement funds for the A–7 aircraft in the fiscal year 1974 budget?

Secretary SEAMANS. There are no funds in the 1974 budget for the procurement of A–7D aircraft. However, there is $400,000 for the procurement of initial spares.

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. For fiscal year 1974, our request for aircraft procurement includes an additional Boeing 747 command post aircraft, 27 F–15's and 284 replacement F–4E's for our tactical forces, 36 C–130's and 332 helicopters which will take the place of aircraft turned over to the VNAF by the U.S. Air Force and Army, and 16 support aircraft. Also, for the military assistance program, the request provides reimbursement of $69.3 million for 116 F–5A's transferred to the Vietnamese Air Force and procurement of 71 F–5E's and 3 T–41 training aircraft.

Chairman MCCLELLAN. You say that your fiscal year 1974 budget contains funds for the reimbursement of 116 F–5A's transferred to the Vietnamese Air Force. How much is involved and just how will the funds be managed and accounted for?

Secretary SEAMANS. $69.3 million has been requested. Upon availability of these dollars to the Air Force, they will be reimbursed to the military assistance appropriation through established accounting procedures.

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. Table IV outlines the funds requested for aircraft procurement programs.

[Table IV follows:]

TABLE IV

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

	FY 72		FY 73		FY 74	
F-15			(30)	421.6	(77)	801.9
A-10						30.0
AWACS						11.7
C-5A		299.1		107.6		43.1
Advanced Airborne Command Post			(2)	69.0	(1)	32.3
F-4E	(36)	129.2	(48)	168.1	(24)	98.6
F-5 A/B/E	(21)	69.5	(64)	102.3	(187)	181.3*
C-130 E/H	(12)	40.1	(20)	90.0	(36)	180.6
Other Tactical Aircraft	(121)	678.6	(96)	296.6		
Misc Support Aircraft	(11)	49.7	(27)	73.5	(19)	9.7
Helicopter			(186)	74.1	(332)	148.2
Modification		577.3		465.7		527.7
Spares		407.9		521.0		579.5
Support		791.3		250.3		268.2
TOA		3042.7		2639.8		2912.8 *
Acft for Army/ US Allies	(24)		(305)		(522)	
Acft for USAF	(177)		(168)		(154)	

*Includes reimbursement of $69.3 million to the Military Assistance program for 116 F-5As transferred to the VNAF.

AIRCRAFT FOR U.S. ARMY/U.S. ALLIES

Chairman McClellan. Explain the category at the end of table IV, "Aircraft for Army/U.S. Allies."

Secretary Seamans. The category described as "Aircraft for Army/U.S. Allies" refers to those aircraft included in the Air Force direct procurement program which will be delivered to SEA allies included in the military assistance service funded program (MASF) or to pay back the U.S. Army for helicopters transferred in-country to VNAF. Also included are A–37B's, transferred from USAF assets to VNAF, which were scheduled to be phased into the AF Reserve.

AIRCRAFT FOR ARMY/U.S. ALLIES

	Fiscal year—		
	1972	1973	1974
F-5A			[1] [2] 16
F-5B		[1] 7	
F-5E	[1] 21	[1] 57	[1] 71
T-41D	[3] 3	[4] 1	[3] 3
UH-1H		[5] 180	[4] 308
CH-47C			[4] 24
A-37B		[7] 60	
Total	24	305	522

[1] VNAF.
[2] The 116 F–5A's are not a new procurement. They represent aircraft reacquired by the MAP account from allied nations for release to the Air Force and subsequent transfer to the VNAF under the MASF program.
[3] 2 VNAF, 1 Laos.
[4] Laos.
[5] 2 Laos, 1 VNAF.
[6] U.S. Army.
[7] AFRES.

SUPPORT OF THE VIETNAMESE AIR FORCE

Senator Young. Mr. Secretary, the fiscal year 1974 budget request contains funds to procure aircraft to replace aircraft turned over to the Vietnamese. This is understandable as a condition that developed as we were removing our troops and receiving our P.O.W.'s.

Will the Air Force request funds to buy aircraft for the Vietnamese in future years?

Secretary Seamans. Chapter II amendment 7 of the cease fire agreement permits a 1-for-1 replacement of attrited aircraft with aircraft of similar characteristics. However, the decision to effect replacement of Vietnamese Air Force losses lies with the U.S. Government and would be dependent upon circumstances at that time. Currently no program is approved in the out-years to procure replacement aircraft for Vietnamese Air Force losses.

Senator Young. How will the countries that gave up F–5A's for transfer to Vietnam be repaid?

Secretary Seamans. As you know, the specific countries from which the F–5A aircraft were obtained are [deleted].

ADVANCED AIRBORNE COMMAND POST

Senator Young. How many 747's do you have in the Air Force now?

Secretary Seamans. In 1973 budget there were funds for two. This will make the third.

General GLASSER. Two procurement and one R. & D.

Senator YOUNG. This will make three altogether.

Secretary SEAMANS. This will make the fourth, then.

General GLASSER. There will be the three procurement, and one R. & D., a total of four.

Secretary SEAMANS. Existing equipment will be transferred from three E–135 aircraft now in operation to three 747 aircraft and the fourth 747 will be used for R. & D. to develop new and better equipment for the Advanced Airborne Command Post.

Senator YOUNG. Was not your original request for six or seven?

Secretary SEAMANS. The total will be seven.

Senator YOUNG. You are still planning on the seven?

Secretary SEAMANS. Yes, sir.

F–111 AIRCRAFT

Chairman MCCLELLAN. May I ask you about the F–111?

How many F–111s do you have in your inventory now?

Secretary SEAMANS. In our inventory today I believe there have been 442 approved. In our inventory, we now have 113 F–111A's, 91 F–111E's, 94–111D's and 70 F–111F's. There are 22 additional F models being manufactured.

Chairman MCCLELLAN. Does that include those that were lost?

General RYAN. The 442 includes those that were lost.

This is how many we bought.

Chairman MCCLELLAN. How many were lost?

Secretary SEAMANS. There were eight combat losses in Southeast Asia, two in 1968, and six in 1972.

General RYAN. Thirty-four attributed for all causes.

Chairman MCCLELLAN. Do you have now a better plane in progress or procurement or research and development to carry out substantially the same missions?

Secretary SEAMANS. I personally feel the F–111 is a unique airplane for what I would call interdiction.

Chairman MCCLELLAN. I am not questioning that.

Secretary SEAMANS. Whereas the planes that are under development, such as the F–15, have a different purpose, a different objective. The F–15 is for air-to-air fighting, as it is an air superiority fighter. It is not the equivalent of or would not replace the F–111.

Chairman MCCLELLAN. What about the B–1? I thought the F–111 was to be a great plane, and I am not saying it is not. I am trying to find out if it is so good, why we are not going to order more of them? Why do we stop? We originally were to produce about 1,400 Air Force planes. Now we are settling for about 35 percent of that, or 36 percent.

Secretary SEAMANS. There are two uses. One is a tactical one, and I mentioned there the important interdiction capability of the F–111. But we believe to keep our forces balanced within the anticipated budget we need to round out our force with a better, really close support aircraft and an air superiority fighter.

On the other hand, over in our strategic forces we really feel that the FB–111 does not have sufficient capability to replace the B–52 and that is the reason that we are stressing the importance of the

B–1 for development at this time. The FB–111 does not have the payload and does not have the range that we believe is needed for a strategic deterrent.

Chairman McClellan. I am not opposing the new planes as such. I have gone through the material that I have, and I get concerned about the number of different weapons which may be necessary. It reminds me of the F–111, when it was promoted to be the greatest plane ever. It was to be a fighter and a bomber. But you come along now and you are building a new bomber and also a new fighter. So, obviously the F–111 does not have all the qualities or performance that it was claimed to have at the time it was strongly promoted. That is the way it appears to me. By the time you develop a satisfactory product in the early life of the plane, you feel you must develop a better plane to do the bombing, and a better plane to do the fighting. As a result, I am wondering whether it is such a wonderful plane.

FB–111 AND B–52

General Ryan. May I comment?

Chairman McClellan. Certainly.

General Ryan. Mr. Chairman, I had the Strategic Air Command when we testified for the FB–111 which was to be used in the strategic role. At that time we stated that the FB–111 was not a replacement for the B–52. It could cover roughly—about [deleted] percent of the targets in Russia because of its shorter range.

Chairman McClellan. Because of what?

General Ryan. Because of its short range. We still needed the B–52 G's and H's to cover all of Russia. We have 72 FB–111's in the Strategic Air Command today. For the shallow targets it is a very good airplane but it just does not have the range to give us the capability of covering all of the Russian targets in the strategic role.

TAILORING EQUIPMENT TO MISSIONS

Chairman McClellan. I am not opposed to your buying more of them. I notice you include none in this budget. I am not opposed to your buying more of them if they are really good and needed. That is not the point. I think this would have been a much better plane if it had not been compromised in trying to make a Navy plane and an Air Force plane out of the same parts. I think this plane was compromised somewhat. You would have had a better plane had you started out to build a aircraft such as this plane.

Anyway, this is not related primarily to the issue of the F–111 other that I am trying to rationalize why, if it was to be a fighter-bomber, do you now need a new bomber and also a new fighter just as this one comes into its early deployment. That puzzled me.

Secretary Seamans. Mr. Chairman, you have brought out what to me is a very fundamental issue that I have attempted to address in the last 4 years. I personally do not think it is possible to come up with one piece of equipment that will serve many different roles. I think that it is a better policy to tailor equipment to specific missions and

consequently when we started with the F–15 we said we are not going to compromise it for ground delivery of weapons. It is going to be designed for air-to-air combat—a highly maneuverable aircraft. Similarly, with our close support aircraft, we said this won't be used for deeper interdiction or for air-to-air combat. It will be used for close support right in the weeds for the Army. I think it is better that way. Even though it looks more extravagant because you are working on more equipment, I think you get better equipment in the long run and it is cheaper to proceed that way.

PHILOSOPHY OF THE F–111

Chairman McClellan. I am not arguing with you. If that is correct, it completely refutes the philosophy of the F–111 when it was started.

Secretary Seamans. I am not trying to sit here and criticize what happened in the past, but I believe it is a mistake to try to make a piece of equipment to do too many jobs at once.

Chairman McClellan. I am not criticizing it. I am just making reference to the facts that you are testifying to here that sustain the view that some of us had in the beginning, which was that you weren't going to be able to produce one plane to do two things out of the same parts. I think that is true, and I think it was obvious from the beginning that it was true. Yet for some reason we proceed to try to do what was impracticable to start with.

To a layman it looks like the F–111 was supposed to do both fighting and bombing. Now you find you need a plane for each purpose. I don't doubt that the F–111 can do many things, even though it did not reach the original operational requirements. It has never measured up to that objective. I still think it is probably a pretty good weapon except there has been some mystery about it.

Some of the accidents or crashes have never been explained. I don't know whether there is something inherently wrong in the plane or whether there are other reasons.

BOMB-CARRYING CAPABILITY

Senator Young. What is the comparable bomb-carrying capability or weapons-carrying capability of the F–111 as against the B–1, for example, in an operational flight to Russia?

Secretary Seamans. Let us get the exact figures on that. I think, the B–1 is four to five times that of the FB–111.

Senator Young. The F–111 could not carry much of a bombload.

Secretary Seamans. The maximum internal pay load in SRAM's for the B–1 is 24. For the FB–111 it is 2. If you restrict it to internal payloads, there is a very dramatic difference. The maximum external, SRAM payload is 8 for the B–1 and 4 for the FB–111. We will give you a table that shows that along with the B–52 G and H.

Chairman McClellan. The FB–111 was certainly touted to be much better than that in its inception and in its promotion.

Senator YOUNG. You remember like an elephant.
[The information follows:]

COMPARATIVE CHARACTERISTICS OF STRATEGIC BOMBERS

	B-1	B-52G/H	FB-111
Maximum nuclear payload (number of SRAM):			
Internal	24	8	2
External	8	12	4

MODIFICATIONS AND SPARES AND REPAIR PARTS

Chairman MCCLELLAN. All right, Mr. Secretary, you may proceed.
Secretary SEAMANS. A considerable portion of our aircraft procurement request is for aircraft modifications, spares and repair parts, and support equipment and facilities. The modification program provides for safety of flight changes and improvements to increase the mission effectiveness of current systems. Major modifications schedules for fiscal year 1974 include continuation of the program to maintain the service life of 80 B–52D aircraft, incorporation of improved ECM and electro-optical viewing systems on the B–52 G and H and the addition of leading edge slats on the F–4E. The spares and repair parts program provides for initial spare parts for aircraft being procured in fiscal year 1974, primarily the F–15, as well as for aircraft in the Air Force operational inventory.

C–5 AIRCRAFT

In fiscal year 1973 the Air Force requested funds to complete the C–5 program. Congress reduced the request, leaving funding to be approved incrementally. We are requesting $43.1 million to cover fiscal year 1974 requirements. Fatigue life of the C–5 continues to be a subject of concern. An independent structural review team formed in late 1971 has outlined a number of alternative methods for increasing fatigue life. As a result of this review, we are implementing flight and fuel management techniques and we are going ahead with an active lift distribution control system, to reduce stress on critical wing areas during flight operations. We expect that the cost of these measures can be accommodated within the funds that we have requested. They will increase the service life from 6,500 hours to between 11,500 and 17,000 hours.

C–5A SERVICE LIFE

Chairman MCCLELLAN. What was the anticipated service life of the C–5A aircraft in the original design specifications?
Secretary SEAMANS. The design goal in the original specification for the C–5 aircraft was 30,000 hours of service life.
Chairman MCCLELLAN. Proceed.
Secretary SEAMANS. The difference depends on the particular history of each airplane.

We are adding instruments to all C–5 aircraft to record wing stress and will continue to inspect each aircraft periodically for indications of fatigue. We are also initiating engineering design work on modified wing sections as a possible means of further increasing fatigue life. Whether or not we decide to modify the wing will depend on operational experience factors.

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

Chairman MCCLELLAN. Certainly.

C-5A AIRCRAFT WING FATIGUE

Senator YOUNG. Last year the Air Force testified about the wing fatigue of the C–5A aircraft. In your statement $43.1 million is requested for the C–5A program under the aircraft procurement account. Will the $43.1 million be utilized for the wing fatigue problem?

Secretary SEAMANS. No. These funds will be used to meet expenses associated with the continuation of the acquisition phase of the C–5 program.

Senator YOUNG. Will funds from the operation and maintenance account be utilized also for the problem?

Secretary SEAMANS. Yes. Modification funds as well as operations and maintenance funds will be requested to meet wing fatigue problem requirements.

Senator YOUNG. I am not advocating buying more C–5's, but if sometime in the future you needed more C–5's, would there be much of a problem to start an assembly line again or if you wanted spares?

Secretary SEAMANS. As far as building additional C–5's, there would be considerable startup costs associated not just with the airframe but with all the subsystem, radar, and so on. This is something that always has to be considered when we phase out a production line. I can't give you an exact figure on it but it would be a fairly sizable amount.

Senator YOUNG. How about spares? Do you have enough spare parts?

Secretary SEAMANS. At the moment we have a problem with spares on the C–5. We are still building a logistic chain for the support of the C–5's. To keep the plane flying we do have to cannibalize from one plane to another, or something of this sort, which is undesirable The logistical problems are becoming less and we are building up the readiness of the aircraft that we have.

Senator YOUNG. Are you able to get the spares from the factory?

Secretary SEAMANS. Not to the extent that we would like, but it is getting better.

Senator YOUNG. Thank you.

F–15 AIR SUPERIORITY FIGHTER

Secretary SEAMANS. For the F–15, we are asking for $802 million for procurement of 77 F–15 air superiority fighters, and $230 million for additional development work. This program remains within the cost estimates that we discussed with you last year.

Our primary objective in designing the F–15 was to provide the capability to out-maneuver and out-fight any aircraft which our potential adversaries may have operational during the next 10 to 15 years. The F–15 has a low ratio of aircraft weight to wing area, and its high thrust-to-weight ratio is 50 percent greater than the F–4E.

The F–15 avionics will include a long-range attack radar with a look-down capability to detect and track a target against ground clutter at medium and low altitudes where most engagements would take place.

F–15 "LOOK-DOWN" RADAR CAPABILITY

Chairman McCLELLAN. Explain what the F–15 avionics "look-down" capability means.

Secretary SEAMANS. An aircraft equipped with a conventional pulse radar is severely limited in its capability to detect targets flying at low level. That is, an aircraft flying at an altitude higher than the target cannot distinguish the target from radar returns reflected from the surface below (ground clutter). Such pulse radars have poor "look-down" capability.

The F–15's "look-down" capability enables its radar to detect low flying targets which are normally lost in this ground clutter. The F–15 pulse doppler radar utilizes the Doppler principle to discriminate low flying targets from ground clutter. The target's radar return has a characteristic Doppler frequency shift that is proportional to its velocity. Thus, through electronic filtering the target return may then be distinguished from the ground radar echoes. This is the feature described as a "look-down" capability in the F–15.

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. This will permit the F–15 to operate effectively in an enemy ground-controlled intercept environment, countering the advantages that radar vectoring could give to an enemy fighter.

The F–15 development program, initiated about 3 years ago, was our first major development effort incorporating new management policies which give the Government more control and flexibility. We have proceeded on a step-by-step basis, making trade-offs as necessary among performance, cost, and schedule factors. The F–15 first flew in July 1972, and by March 1 of this year, four test aircraft had accumulated over 315 hours during 300 flights. The initial aircraft performance demonstration milestone was completed on August 12, ahead of schedule. Fatigue testing and static testing to full load were successfully completed in January 1973.

F–15—PROBLEMS IN DEVELOPMENT OF ENGINES

Senator YOUNG. Much has been said recently about the engine problem being experienced by the engine for the F–15. Has the Air Force experienced similar problems in the development of other jet engines?

Secretary SEAMANS. Yes; we have commonly experienced similar problems in the development of other jet engines. Modern engines have considerably improved performance characteristics when compared to engines developed years ago. In spite of the increased complexity of

modern engines, we require they be more reliable than past engines. New engines are being subjected to more severe tests than at anytime in the past and yet the rate of development failures is comparable to past experience.

F–15 ENGINE PROBLEMS COMMON TO THE NAVY VERSION—THE F–14B

Senator YOUNG. Is the problem being experienced in that part of the engine that will be common to the Navy version should the Navy elect to build the F–14B?

Secretary SEAMANS. During the development of the F–100 engine for the F–15 aircraft, the Air Force has identified several deficiencies which have been subsequently corrected. In each case we have been able to translate these gains, either as hardware improvements or technology advances, into the Navy development effort. In regard to our recent engine difficulties, we have experienced three unrelated problems, a fan blade tip failure, a turbine blade cooling deficiency caused by tightening up the engine air leakage, and foreign object damage from the loss of several rivet heads on a retainer ring. Although the knowledge that has been gained from these occurrences is directly transferrable to the Navy development, only the resulting redesign of the fan blade tips is directly related to the Navy engine.

F–15, 150-HOUR ENDURANCE TEST

Senator YOUNG. Do you anticipate successful completion of the 150-hour endurance test prior to May 31, 1973 which I understand is a milestone date?

Secretary SEAMANS. Yes, sir. We are presently running the 150-hour endurance test and have every confidence that we can complete the required testing by May 31, 1973.

Pratt & Whitney has experienced some problems with engine turbine and fan blades during the 150-hour endurance run which now must be reaccomplished. We are going ahead with production of 30 F–15's of the first wing, as originally scheduled, but will reexamine the program if the engine endurance tests are not successfully completed by May 31, 1973. In the fiscal year 1974 budget we are asking funds for production of 77 aircraft to complete the procurement of the first F–15 wing.

F–14 ADVANCED ENGINE

Chairman MCCLELLAN. What effect will the delay on an advanced engine for the F–14 aircraft have upon the F–15 aircraft, and how much will it increase the cost of the F–15?

Secretary SEAMANS. Until the Navy's future program plans pertaining to the advanced engine (F401) for the F–14 aircraft have been firmly established, an appraisal of the impact on the F–15 aircraft costs cannot be made.

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. The first operational aircraft is scheduled to be delivered in November 1974.

ADVANCED AIRBORNE COMMAND POST (AABNCP)

Our 1974 request includes $69.6 million for the advanced airborne command post. In addition, there is $13.5 million in the military construction program for ground facilities.

AABNCP CONCEPT

Chairman McClellan. Explain the advanced airborne command post concept and the need for it.

Secretary Seamans. The advanced airborne command post concept is based on the need to provide a modernized highly survivable capability for effective command and control of our strategic forces on a continuous basis before, during, and after any nuclear attack on the United States. The AABNCP is being designed to make those improvements in our national command and control system needed to help offset the threat from Soviet strategic forces, and to provide the means for more flexible and responsive command and control of our forces, even under the adverse circumstances which would prevail during any nuclear attack on the United States.

The AABNCP will incorporate those features which are most essential to further improve the survivability, reliability, and flexibility of command and control operations of both the National Command Authorities and the Strategic Air Command. Specifically, as compared with the EC–135 aircraft currently used for airborne command post operations, the AABNCP aircraft will include the following improvements: (1) greater floorspace and payload capacity, which will accommodate sufficient staff and the communications and automatic data processing equipment needed to extend and make more efficient the command and control process, and which will allow for future growth requirements; (2) related to the foregoing improvement, advanced communications subsystems which will permit more secure, more reliable, and more survivable communication with our forces at longer ranges, and which will exploit advances made in important related areas (e.g. communications satellites); (3) increased hardness (against the electromagnetic pulses generated by nuclear explosions) which will minimize the possibility of damage to onboard electronics equipment in a nuclear environment; and (4) greater airborne endurance, larger geographical operating areas, and the ability to take off and land at a greater number of airfields, all of which will contribute to improved survivability and operational flexibility.

The AABNCP will sustain deterrence later in this decade by denying to a potential aggressor confidence of being able to delay, disrupt, or otherwise negate a timely, controlled, and effective response by U.S. strategic retaliatory forces through attack on those less survivable elements of our command and control systems which are located at fixed, ground-based sites. In this regard, the AABNCP will operate in a manner similar to that of current airborne command post aircraft. One AABNCP—the Headquarters SAC AABNCP—will be continuously airborne and therefore will be essentially immune to an enemy

attack. The AABNCP for the National Command Authorities (NCA) will be maintained on ground alert so that it could take off promptly during periods of escalating tensions or crisis or upon warning of an attack. As mentioned earlier, the ability of the AABNCP to survive an attack will be even greater than that of current airborne command post aircraft. This ability of airborne command posts to deny an enemy the option to attack a command and control "Achilles' heel" is fundamental to deterrence and is important at all times, particularly during periods of heightened tensions when deterrence is subject to its most severe test.

Should deterrence fail, the improved capabilities of the AABNCP would better enable the NCA to select and order, in an informed and deliberate manner, the controlled response most appropriate to the nature and level of provocation; and concomitantly would further enable the Commander in Chief of SAC and other military commanders to execute and terminate the response in precise compliance with those orders. The improved capabilities would insure maximum practical effectiveness in the application of our forces irrespective of the circumstances surrounding conflict initiation.

Chairman McClellan. Proceed.

Secretary Seamans. This system consists of a modified 747 aircraft equipped with advanced command, control, and communications equipment. It will be used in place of the EC–135 for the National Emergency Airborne Command Post and for the SAC Airborne Command Post. Each requires three aircraft. That accounts for six. The seventh aircraft is for research and development.

With much greater floor space and more powerful engines the 747 will carry almost four times the payload and accommodate 20 additional battle staff members. It will have improved communications, and ultimately advanced data processing equipment. It will be able to remain on station for up to 6 hours longer than the EC–135.

The fiscal year 1973 program includes $69 million for procurement of two 747's of the seven aircraft planned for the total program. To provide an increased capability as soon as possible, we are modifying these aircraft with existing equipment used in the EC–135. Our fiscal year 1973 budget also includes $48.3 million in R. & D. funds for acquiring and equipping a third aircraft to be used for testing.

Funds to continue this program in fiscal year 1974 include $32.3 million for procurement of one additional aircraft to be modified with the older EC–135 equipment. We are also requesting $37.3 million in R. & D. funds for the advanced communications and electronic systems. We expect to achieve an interim capability with the first two aircraft during fiscal year 1974.

MISSILE PROCUREMENT

We have made substantial progress in our program to modernize the Minuteman force. We have completed conversion of the first two wings to Minuteman III. This brings our total Minuteman III strength to over 50 percent of the currently authorized deployment of 550 missiles. In addition to the programed Minuteman III deployment, we will maintain 450 Minuteman II's and 54 Titan II's as part of our total ICBM force of 1,054 missiles.

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ICBM AND SALT

Chairman McClellan. Is the total intercontinental ballistic missile force of 1,054 missiles at the ceiling prescribed under the SALT agreement?

Secretary Seamans. The interim agreement on strategic offensive arms prohibits new construction of additional, fixed land-based ICBM launchers. This restriction limits us to the 1,054 fixed ICBM launchers that are currently operational. Test and training launchers, such as those at Vandenberg Air Force Base, in California, are excluded from the launcher total.

Table V shows our fiscal year 1974 missile procurement request.

[Table V follows:]

TABLE V.—MISSILE PROCUREMENT

[In millions of dollars]

	Fiscal years		
	1972	1973	1974
Minuteman III procurement	476.0	396.4	414.5
MM force modernization	269.2	267.2	253.2
SRAM	221.0	195.2	136.7
Maverick	78.9	66.1	107.1
Other tactical missiles	11.8	65.2	62.5
Target drones	72.	2.4	13.0
Modifications	43.4	36.9	43.4
Spares and parts	42.6	41.9	47.1
Other support	529.6	615.1	495.7
TOA	1,679.7	1,686.4	1,573.2

MINUTEMAN

Secretary Seamans. Our fiscal year 1974 budget includes $414.5 million to complete the currently programed purchase of Minuteman III. We are evaluating possible requirements for additional Minuteman III production. We expect to complete that evaluation during the next year. To maintain the option for further production, we have included $23.1 million in our request.

This is so that the production line will not terminate, and so that we would not have to have startup costs if we should decide to procure more than the 550 now authorized.

Senator Young. I understood last year that you had another modernization program for the Minuteman in the Minot and Grand Forks wings costing about a million and a half dollars.

Secretary Seamans. I am coming to that in the next paragraph of my statement. This has to do with hardening.

Senator Young. Yes. Is that unchanged?

Secretary Seamans. It has changed somewhat since we discussed it with you last year.

MINUTEMAN FORCE MODERNIZATION

Senator Young. The Minuteman force modernization program has received support from the committee and the Congress since its incep-

tion. I understand that the request for funds this year was reduced, which in effect stretches out the program.

What is the effect of the reduced funding for this modernization?

Secretary SEAMANS. The Minuteman force modernization initiation date at Grand Forks Air Force Base, N. Dak., Malmstrom Air Force Base, Mont., and Whiteman Air Force Base, Mo., have been delayed by 14 to 18 months. This delay results in leveling the workload and avoids the economic hardships of a sharp peaking of employment with related layoffs shortly thereafter. Although the fiscal year 1974 funding requirements were reduced by $187 million, the total force modernization program increased by approximately $66 million.

PROGRAM FOR 1975 AND SUBSEQUENT YEARS

Senator YOUNG. Please describe the program for fiscal year 1975 and subsequent years. Please provide the committee with a funding table for the original program and the stretched-out program.

Secretary SEAMANS. Force modernization efforts will continue at Warren Air Force Base, Wyo., and are scheduled for completion in February 1975. Upgrade silo and command data buffer work will begin at Minot and Grand Forks Air Force Bases, N. Dak., in September 1974 and October 1975, respectively. The efforts at Malmstrom Air Force Base, Mont., will commence in November 1976. The last location to be modernized is at Whiteman Air Force Base, Mo., and that activity will begin in April 1978. The funding table which compares the original program to the stretched-out program will be provided for the record.

[The information follows:]

MINUTEMAN FORCE MODERNIZATION

[Procurement dollars in millions]

	Fiscal year—						
	1973	1974	1975	1976	1977	1978	Total
Original	276.4	440.5	393.6	230.6	78.2	.....	2,306.3
Stretched out	267.2	253.2	289.1	329.8	238.7	102.2	2,367.4
Change	−9.2	−187.3	−104.5	+99.2	+160.5	+102.2	[1] +60.9

[1] Additional $5,000,000 impact in R.D.T. & E. appropriation.

Senator YOUNG. What will be the additional cost due to inflation for the stretched-out program?

Secretary SEAMANS. Approximately $25 million.

Our fiscal year 1974 procurement request also provides $253.2 million for modernization of Minuteman, including modification of additional Minuteman silos to withstand increased shock, better protection against nuclear radiation effects, and increased retargeting capability through the installation of Command data buffer systems for our Minuteman III's. Our research and development request provides $99.8 million for design and development work needed to meet the local requirements of modernizing additional wings, and for con-

tinued development of the missile performance measurement system for use on the western test range.

General Ryan would like to add to what I have said.

General RYAN. The program for the modernization which we presented to you last year, Senator Young, has slipped a year or so. We don't have concurrency in the two wings at the same time.

Senator YOUNG. You have enough money to go ahead here with the one wing?

General RYAN. Yes, sir. The funds we are requesting here are under the new schedule.

Senator YOUNG. I thought that was the case.

Chairman MCCLELLAN. Are there research funds in your fiscal year 1974 request for mobile Minuteman? What is the status of this program?

Secretary SEAMANS. There are no funds in the Minuteman program for mobility. We do have $6 million in the advanced ICBM technology program element to advance the technology base applicable to a new generation ICBM for the 1980's and 1990's. The program will consider the following basing modes: air mobile, ground mobile, and silo based. This R & D program will provide the technology base to support development options for potential future systems that are capable of responding to future threats.

EFFECT OF SLIPPAGE OF SCHEDULES

Senator YOUNG. General Ryan, you state on page 4 of your statement that constraints of the budget have made it necessary to slip the Minuteman modernization schedule.

Does the slippage of schedules present additional risk to the survival of our Minuteman missiles considering the Soviet advantages in strategic missiles and the terms of the treaty on strategic arms limitations?

General RYAN. The slip in the Minuteman force modernization schedule means that some missiles will be deployed for a longer period in silos which are less resistant to nuclear effects than we would prefer. However, this was taken into consideration when the program was slipped and it was determined that the additional risk was acceptable.

Senator YOUNG. Not considering budget constraints, were there other reasons for slipping this program?

Secretary SEAMANS. Yes. By slipping the program, the workload was leveled avoiding the buildup and training and subsequent release of personnel caused by simultaneously modernizing two wings. Furthermore, the number of Minuteman III missiles in alert status during the modernization period was increased by approximately 50 missiles.

SHORT-RANGE ATTACK MISSILE (SRAM)

Secretary SEAMANS. The short-range attack missile, SRAM, is in its third year of production. By the end of fiscal year 1973, we will have reached operational capability with four B–52 squadrons and four FB–111 squadrons. The SRAM can be used effectively against a variety of targets and has an excellent capability of suppressing enemy air

defense systems. The fiscal year 1974 request of $136.7 million will be used to procure 454 additional SRAM's to further strengthen the deterrent capability of our bomber force.

MAVERICK

The Maverick is a nonnuclear, air-to-ground missile with electro-optical guidance, which is now becoming operational in our tactical forces. It will be highly effective against hard targets such as tanks and reinforced bunkers. Initial operational test and evaluation was completed in June 1972.

MAVERICK EFFECTIVENESS

Chairman McCLELLAN. How effective is the Maverick against a moving target?

Secretary SEAMANS. Very effective. The Maverick can hit targets moving at speeds up to [deleted] miles per hour. As of this date, we have fired at 11 moving targets, such as tanks, armored personnel carriers, and trucks, and [deleted]were direct hits.

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. The results of these tests showed that aircrews can use Maverick against heavily defended targets with relatively low exposure to ground defenses. The F–4 and A–7 will be able to carry Maverick missiles, and a similar capability is being planned for the A–10.

The development phase of the Maverick program was completed with fiscal year 1973 funding. In fiscal year 1974, we are requesting $107.1 million for procurement of 6,000 missiles.

IV. RESEARCH AND DEVELOPMENT

Our present R & D programs establish limits on the capabilities we will be able to provide 10 to 15 years from now. The Air Force fiscal year 1974 R & D budget request of $3.2 billion will buy 38 percent less than the corresponding authorization 10 years ago.

The Air Force has carried out major improvements in the management of both procurement and research and development programs. We have provided highly competent program directors with extensive authority to make trade-offs within specified guidelines. Additional control measures include monthly status reviews by the Secretary and Chief of Staff, milestones for judging contractor performance, and extensive hardware testing.

We selected about 15 or 16 of our major programs to come under this reporting procedure. We believe that it is important for ourselves, including our Assistant Secretaries and Deputy Chiefs, to meet with the senior project people on a monthly basis. We think that this not only gives us a better perspective of what is going on but also increases the stature of the project people not only within the Air Force but within the Department of Defense.

In other efforts to improve our research and development capabilities, we have strengthened our Air Force laboratories dealing with various areas of technology.

AIR FORCE LABORATORIES

Chairman McCLELLAN. How have you strengthened your Air Force laboratories?

Secretary SEAMANS. Special emphasis has been given to strengthening the formulation and updating the composition of Air Force laboratories programs. Inputs of the operating commands such as the Strategic Air Command, Air Defense Command, et cetera, and the major system developments have increased influence on the laboratories program. A concerted effort has been made in the last year to weed out the lower priority work. Indicative of this, technology areas were identified for reduced emphasis and in some instances elimination. Among these are ramjet technology and magnetohydrodynamic power generation.

In order to provide an independent outside review of our Air Force laboratories efforts, a Science and Technology Advisory Group (STAG) has been chartered. The STAG will be a panel of distinguished scientists selected from the Air Force Scientific Advisory Board. Prof. Seymour Bogdonoff, Princeton University, has been appointed the Chairman of the STAG. He will report directly to the Director of Science and Technology who has responsibility for all Air Force laboratories.

Another management step to strengthen our laboratories was the establishment of "lead laboratories" for given technology areas. The lead laboratory for a given area has the responsibility to act as focal point for all Air Force efforts in that technology. Lead laboratories have been designated for areas such as displays for aircraft, digital avionics, laser hardened materials, space object identification, and radiation hardening and effects on electronic equipment.

The coupling of our basic research efforts with our exploratory development efforts has been solidified through generation of research planning objectives by a committee composed of the chief scientists of all Air Force laboratories.

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. This has allowed us to provide more immediate support to system programs, to judge contractor performance more accurately, and to give appropriate guidance when necessary.

Our fiscal year 1974 R.D.T. & E. request is shown in table VI, along with the budgets approved for the last 2 years.

[Table VI follows:]

TABLE VI

Research and Development
(millions of $, funds in parentheses show funding for major system)

	FY 72	FY 73	FY 74
Aircraft	$1,184.6	$1,289.9	$1,228.0
B-1	(370.3)	(444.5)	(473.5)
F-15	(420.2)	(454.5)	(229.5)
A-10	(47.0)	(48.1)	(112.4)
F-5E	(42.5)	(17.7)	(2.6)
Subsonic Cruise Armed Decoy (SCAD)	(10.0)	(48.6)	(72.2)
Advanced Prototypes	(15.0)	(71.0)	(115.2)*
Missiles	405.0	344.8	293.0
MINUTEMAN	(181.6)	(139.7)	(99.8)
Astronautics	337.3	339.8	529.1
Ordnance and Combat Vehicles	95.2	111.0	124.0
Other Equipment	423.4	525.2	518.1
AWACS	(139.3)	(194.2)	(197.8)
Advanced Airborne Command Post (AABNCP)		(48.3)	(37.3)
Military Sciences	142.5	131.5	136.2
Management & Support	348.9	388.1	400.3
TOA	$2,936.9***	$3,130.3	$3,228.7**

* Includes $67.2 million for the Advanced Medium STOL Transport and $48.0 million for the Lightweight Fighter and engine.
** Excludes $11M for Jan 1, 1974 civilian pay raise.
*** Includes adjustment of $8.5 million for civilian pay raise effective January 1972.

INCREASED FUNDS AND CONTINUED DEVELOPMENT

Secretary SEAMANS. In new aircraft programs, we are requesting increased funds for the B–1 and A–10, but R. & D. money for the F–15 has been reduced by about one-half as we move into the production phase. Our request also includes funds for continued development of AWACS and the lightweight fighter and advanced medium STOL transport prototype programs.

LIGHTWEIGHT FIGHTER REQUIREMENT

Chairman MCCLELLAN. What is the requirement for a lightweight fighter aircraft? What will it replace?

Secretary SEAMANS. We have no identified operational requirement at this time. The lightweight fighter prototype program, which we are talking about here, is one of our advanced development programs indorsed by former Deputy Secretary of Defense Packard as a means of providing prototype hardware for service test and evaluation of design, technology and military usefulness in support of anticipated military requirements. The selection of a lightweight fighter for prototyping was motivated by the need to investigate promising new aerodynamic concepts and design ideas, and to determine the technical feasibility and operational utility of potentially lower cost, relatively austere, high performance fighter aircraft. We expect the program will reduce the risks and uncertainties of subsequent aircraft programs, encourage industry design team stability, and provide the DOD with proven options applicable to future fighter development efforts. Additionally, but depending of course upon the results of our flight tests, such an aircraft could have considerable application for foreign sales.

B–1 STRATEGIC BOMBER

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. Strategic deterrence depends on our intercontinental missiles, submarine-launched missiles, and strategic bombers. This triad of forces denies an enemy the possibility of neutralizing our deterrent by concentrating his attack against a single element of our strategic force. It also insures that a major technological advance by an adversary would not threaten our entire deterrent posture.

The manned bomber is the most flexible element in the triad. It can be launched on warning and remain safe until we can determine whether an attack is actually underway. Bombers also have the flexibility of various speeds and altitudes, as well as crew operated penetration systems.

Since the latest model B–52 were delivered to the Air Force between 1958 and 1962, we need to provide an option for modernizing our bomber force. We are developing the B–1 for this purpose. In comparison with the B–52, the B–1 will be able to get in the air faster, and it will be hardened against nuclear effects. Moreover, the B–1's shorter takeoff distance will allow operation from many additional bases. It is being designed primarily for low altitude, high subsonic penetration, but will also be able to fly at supersonic speeds at high altitude.

The B–1 will be able to carry twice the internal payload of the B–52 for longer low-level distances and deliver its weapons with greater accuracy. It will present a small radar cross-section to reduce the effective range of defensive radars, and its low-level infrared emission will degrade the threat of air-to-air missiles. Also, the B–1 will have advanced penetration devices to counter electronic defensive systems.

Senator YOUNG. What will be the maximum speed?

Secretary SEAMANS. About Mach [deleted] at 50,000 feet or thereabouts.

One of the more important decisions we made on the B–1 was not to give it supersonic capability at low altitude. We felt that would greatly increase the cost and would not improve the survivability appreciably. So we elected not to have it supersonic on the deck but to limit it to [deleted] or [deleted] Mach number.

B–1 LOW ALTITUDE CAPABILITY

Senator HRUSKA. What is the minimum altitude?

Secretary SEAMANS. It will be designed to fly at [deleted] feet above the terrain just the way we fly the F–111.

Senator HRUSKA. Its capability for such low altitude really does away with a good deal of the necessity for sonic speed.

Secretary SEAMANS. From a survivability standpoint it is more important to get down to very low altitude than it is to add [deleted] Mach number.

Senator HRUSKA. The difference in that speed won't make too much difference because of the altitude.

Secretary SEAMANS. It is much more difficult for enemy defenses to knock down an airplane flying at very low altitude below [deleted] feet. That is the reason we have concentrated so much on that capability including the aerodynamic design of the airplane itself, which has special features so that it won't be adversely affected by flying at these very low altitudes.

Senator HRUSKA. It accommodates for variations in the terrain?

Secretary SEAMANS. It accommodates for variations in the terrain as well as variations in the winds that it flies through, the turbulence in the air.

Chairman MCCLELLAN. You say you fly it as low as [deleted] feet?

Secretary SEAMANS. Yes, sir. It is pretty sporty flying.

Chairman MCCLELLAN. It is not leaving much of a margin for safety, is it?

Secretary SEAMANS. I have flown in the F–111 on automatic terrain following. You become a believer as soon as you try it. It seems to work very well.

Chairman MCCLELLAN. You have the same mechanism in the B–1 that you have in that for terrain following?

F–111 LOW ALTITUDE CAPABILITY

Secretary SEAMANS. Yes. To the maximum extent we have used avionics equipment from the F–111 program in the B–1.

Chairman MCCLELLAN. Mr. Secretary, has that system ever failed in the operation of the F–111?

Secretary SEAMANS. When we had our six losses in Southeast Asia in 1972, we carried out an intensive study to determine whether some of the losses were for this reason. The system is designed so that if there is a failure the plane flies up, it does not go down.

Chairman MCCLELLAN. I am for it, I am not against it.

Secretary SEAMANS. We think possibly one or two of the failures might have been caused by this, but we can't substantiate it.

Chairman MCCLELLAN. It is a wonderful function and operation if it can be done safely. If it ever achieves reliability——

Secretary SEAMANS. We have had many thousands of hours flying at these low altitudes.

Chairman MCCLELLAN. Does Russia have a comparable plane?

Secretary SEAMANS. I don't know of any capability they have that permits them to fly automatically at such low altitudes.

General RYAN. I have no direct evidence that they have, Mr. Chairman, but I think it is well within their state of the art that they could develop it.

Chairman MCCLELLAN. Just for information for the record, did the F–111 do that kind of flying over in Vietnam?

General RYAN. Yes, sir.

Chairman MCCLELLAN. In the course of the operations there recently?

General RYAN. Yes, sir.

Chairman MCCLELLAN. And performed successfully?

General RYAN. Performed very successfully.

Chairman MCCLELLAN. If I understand correctly, they were able to come down under radar for a given distance and drop their load and then come back from the target under the radar.

General RYAN. Yes, sir. We have found from examining the [deleted].

Chairman MCCLELLAN. And after they left the target?

General RYAN. As they left they stayed down also.

Chairman MCCLELLAN. As I remember, there was to be a 200-mile low-flying capability, but that was materially reduced. They never did achieve that.

General RYAN. That was at supersonic speeds, Mr. Chairman. That is correct, that was a requirement and it was not achieved.

Chairman MCCLELLAN. I don't remember which it was. I wondered if they were ever able to really operate that way without detection.

General RYAN. Yes, they were in North Vietnam. However, it was not supersonic. We were going in at [deleted].

Chairman MCCLELLAN. For what distance were you able to achieve continuous flight of, say, something less than 200 miles?

General RYAN. This is off the top of my head. I would say they went down to terrain following at low altitude probably on an average [deleted] miles from the target. Say [deleted] miles would be a good average in North Vietnam.

Chairman MCCLELLAN. That is a whole lot better than has been reported heretofore.

General RYAN. This is subsonically, Mr. Chairman. You see, the 200 miles was supersonic. They were never able, because of the increased fuel consumption supersonically on the deck, to achieve the specific operational requirement.

Chairman McCLELLAN. I am gratified to know that you feel this system is safe. It has been developed to the point of safety and I think it is a great innovation and advance in weapon capability, particularly survivability.

FAILURE OF TERRAIN-FOLLOWING EQUIPMENT

Senator HRUSKA. Mr. Secretary, you said that any failures that occurred in combat in Vietnam could not be attributed to failure of this equipment.

Secretary SEAMANS. Not necessarily. It could have been.

Senator HRUSKA. Have there been any demonstrated failures here, either in test or training, of that equipment, not in combat but here in America?

General RYAN. Yes; we have had failures of the terrain-following equipment. I cannot recall any accident we have had because of a failure of the terrain-following equipment. It is so designed, Senator, that if it does fail you go into a 2G pull-up.

Chairman McCLELLAN. I thought you did have one out in Nevada somewhere.

General RYAN. In the terrain-following mode?

Chairman McCLELLAN. I think so. I could be mistaken.

General GLASSER. The chairman may be referring to one where the man switched off of terrain-following when he lost confidence in it and we did have an accident, but he was flying manually. It was in a snowstorm.

B–1 AIRCRAFT

Chairman McCLELLAN. You may proceed.

Secretary SEAMANS. Rockwell International is the prime contractor for the B–1, with General Electric developing the engine and the Boeing Company integrating the avionics subsystems. In the airframe development program, two major milestones, preliminary design review and mockup review, were completed in fiscal year 1972. In fiscal year 1973, completion of the design validation review was delayed from September to January 1973 to allow time for a special study of the crew escape system. We will be unable to develop an escape module man-rated at 600 knots in time to support the initial B–1 flight tests. Therefore, we plan to use an interim module, man-rated at 450 knots at sea level, for the three test aircraft.

The production decision is now scheduled for July 1975, 15 months after the first flight and 3 months later than originally planned, in order to allow for flight test demonstration of the offensive avionics before going into production. This change will result in an increase of $164 million in our cost estimates, but it will help us to obtain a valid assessment of the capability of the system before making the production decision.

In July 1972 we awarded two competitive contracts for defensive avionics systems. These contracts call for a 10-month effort of studies, component development, and testing. This will help to further define the design and specifications before proceeding with full-scale development. A parallel study effort is being conducted by the Air Force

Avionics Laboratory utilizing more conventional technology. In July 1973 we will determine which technical approach is preferable.

As final engineering drawings were being completed for the first B–1, estimates of the empty aircraft weight increased an additional 10,000 pounds, making a total of 18,000 pounds over our original design goal. As a result of offsetting design modifications, this will have only a slight effect on mission performance. However, an increase in weight usually results in a parallel increase in cost.

B–1 TITANIUM AND BORON

Chairman McClellan. To what extent are you using titanium and boron in the B–1 aircraft?

Secretary Seamans. We are using 21.6 percent titanium and only a very small percentage, about 0.4 percent, of boron in the B–1.

Chairman McClellan. Proceed.

Secretary Seamans. This is being looked at very carefully, and studies based on actual program experience should give us a reasonably accurate estimate by September 1973. Theoretical parametric cost studies indicate that our unit cost estimate of $30 million may increase by as much as $1.9 million, both figures expressed in fiscal year 1970 dollars. The net result of B–1 program changes to date has been only a 3 percent increase in cost since the contract award in June 1970—if the effect of inflation is excluded.

The initial assembly effort for the first aircraft began at the end of 1972, and this aircraft is scheduled to fly in April 1974. The second aircraft will be used for structural testing and therefore will not fly until April 1975. The third aircraft will be used for avionics flight testing and will fly in January 1975. We are requesting $473.5 million to continue the B–1 development program in fiscal year 1974.

B–1 PRODUCTION COSTS

Senator Hruska. Mr. Secretary, some of us had a briefing at Rockwell in December. At that time Rockwell was pretty proud for staying within the original estimates and did not feel there were any fractures of it. Have they occurred since that time?

Secretary Seamans. I am talking here about the production cost.

Senator Hruska. But not the prototype cost?

Secretary Seamans. As far as I know, the development costs are reasonably close to target. I would like to ask General Crow to respond.

General Crow. The small increase that the Secretary addressed has to do with the production cost associated with the potential increased aircraft weight.

Senator Hruska. Insofar as the retest plans are concerned they are pretty much on target?

General Crow. That is correct.

Secretary Seamans. As you know, in our reporting to the Congress, our SAR reporting, we also show total program cost, including estimated production, spares and so on. We are often accused of trying to hide things. So, when we had this weight increase we put a note in our submission to Congress that this could increase the production cost by as much as $1.9 million.

Senator HRUSKA. If we are going to get any bad news we had better get it in advance.

Secretary SEAMANS. That is a unit cost. Now, we won't really know until later on this year when we build the estimated production costs up from the individual piece parts, if you will, and aggregate them to determine what this increased weight might do to the unit production cost. I believe we are looking at the dark side, if you will, when we say the cost increase attributable to the weight growth might be this much.

Senator HRUSKA. We hope so.

A–10 CLOSE AIR SUPPORT AIRCRAFT

Secretary SEAMANS. To improve close air support capability we are developing the A–10. It will be a simple, rugged, and comparatively inexpensive aircraft that can support ground forces better than any existing system. It will carry heavy ordnance loads, and loiter in the combat area for extended periods. It will have combat speeds ranging from 150 to 400 knots and will be highly maneuverable, permitting targets to be kept in view for longer periods and enabling operation under low ceilings and in areas of rough terrain.

Special emphasis is being placed on survivability features in the A–10. The cockpit will be protected by some 1,600 pounds of armor plating, and fuel tanks will contain foam as a safety measure against fires.

AIRCRAFT SURVIVABILITY

Chairman MCCLELLAN. What other aircraft has the Air Force designed and built wherein survivability has been a principal feature since inception?

Secretary SEAMANS. For many years survivability of aircraft has been enhanced by incorporation of a variety of techniques: that is armor, redundant controls, fire suppression, and spacing of critical components. Some of these techniques were incorporated into initial system designs. Development, operational, and considerable combat experience with these techniques have made it possible for us to emphasize survivability by including it as a principal design feature from inception in the B–1, F–15, and A–10.

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. Also, the A–10 will have manual backup control systems and armor plating to protect flight and engine controls and vulnerable engine components. These features have been tested successfully by firing large caliber ammunition into the cockpit armor and fuel tanks.

The A–10 development program has progressed well, meeting all target costs and schedules. Northrop and Fairchild Industries were awarded fixed price contracts in 1970 to build two competitive prototypes each. These aircraft first flew in May 1972, ahead of schedule. By October some 350 hours of contractor testing were completed, and the Air Force began a fly-off competition consisting of about 280 hours of flight tests by combat-experienced Air Force pilots. Based on the results of this fly off and evaluation of contractor proposals Fairchild Industries was selected as the prime contractor for developing the

A–10 preproduction aircraft, with General Electric developing the engine.

We are requesting $112.4 million in fiscal year 1974 which includes funds to build 10 preproduction aircraft. Six of these aircraft will be used for development testing and four will be used for initial operational test and evaluation. Test efforts in fiscal year 1974 will also include demonstrations of the 30MM GAU–8 cannon. We expect to make an initial production decision on the A–10 in May 1974 and a full production decision in October 1975.

AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)

Development of the Airborne Warning and Control System (AWACS) is an urgent program for improving air defense and tactical air control. It will consist of an improved surveillance radar and associated data processing and communications equipment installed in a modified Boeing 707 aircraft.

Chairman McClellan. What is the latest estimated total program cost for the Airborne Warning and Control System?

Secretary Seamans. The total program acquisition cost of the AWACS is:

	Billions
R.D.T. & E.	$1.12
Procurement	1.27
Total	2.39

AWACS will be capable of extending effective control of our forces significantly beyond the range of ground-based radars. It will be more survivable than ground-based control facilities and will be able to detect and track aircraft at low altitudes over land as well as water.

Senator Young. Mr. Chairman, before we get too far away from the A–10, what arrangements did you make to buy these? It could not be on a bid basis any more, could it?

Secretary Seamans. The prototype program was on a fixed price basis for each contractor. At the time that we were actually testing the two different airplanes with our own pilots in a very well ordered kind of test, to try these aircraft under a wide variety of conditions, we also received proposals from each contractor for 10 preproduction aircraft and for an option for production of 48.

Now, once we have selected Fairchild Industries, of course we are dealing with one contractor and you don't have the benefit of competition except insofar as other types of aircraft might be competing for this role.

PREPRODUCTION AND PILOT AIRCRAFT CONTRACT NEGOTIATION

Senator Young. When you enter into a contract do you do this on a negotiated basis now?

Secretary Seamans. We went through a very, very careful negotiation with each one of the contractors ending up with a signed contract from each one. The contractors signed them before making our selection.

Senator Young. Over what period of time?

Secretary SEAMANS. For the 10 preproduction aircraft plus the option for what I call pilot production.

Senator HRUSKA. Who has the option?

Secretary SEAMANS. We hold the option. We don't have to exercise that option but we can.

Senator YOUNG. What if the two companies wanted an exorbitant price for producing the planes later, what do you do then?

Secretary SEAMANS. We don't buy them. The contractor recognizes that if we can't keep the cost of the A–10 down to a $1.5 million unit cost in fiscal year 1970 dollars, or close to that level, we are not going to buy these aircraft.

Senator YOUNG. What cost factors do you allow them?

Secretary SEAMANS. The preproduction aircraft would be on a cost-plus incentive arrangement. Anything beyond that is on a fixed-price incentive.

General GLASSER. Senator Young, I think the part you are seeking is how do we know that we will be able to keep the price down.

Senator YOUNG. Yes.

General GLASSER. First of all, one of the pivotal issues in the selection was the price of producing the aircraft, and we gave them a quantity of 600 to be produced at a rate of 20 per month. They had to show that they were going to cost in the vicinity of $1.4 million a copy in fiscal year 1970 dollars in order for us to go ahead. We also have inserted in the contract, under which Fairchild is now performing, a requirement for them to advise the Government any time that any factor occurs in the program that will cause this price to shift. Now it is true we do not have Fairchild under what you might call a total package procurement contract but we will have the evidence in hand that the contractor says it ought to cost about so much money. So, if we then go out and ask for a quote to buy the next batch of airplanes and Fairchild says, "I want $3 million a copy," we have the evidence in hand that says "That is not right, you have been telling us that they were going to cost this other number."

So I think we will have the ability to force a fair pricing.

CRITICISM ON COST OVERRUNS

Senator YOUNG. I was trying to get the answer to this criticism on overruns. There is a news story over the weekend involving a report by the General Accounting Office on overruns. I don't know whether it is accurate or not, but what would the overruns include? What would be the major factors causing overruns? There are overruns in everything that you buy now. I haven't been quite able to do a good job of explaining these cost-plus contracts to constituents. That is why I am seeking the information as to how you do it.

Secretary SEAMANS. A cost overrun can come from a variety of reasons. Inflation is certainly one of them. It can also come from technological surprises as one gets into a program. It can obviously come from not managing a program well. It can come from changes that are made in the requirements as one proceeds, one knows more about what is needed 5 or 10 years from now. It comes about from a variety of reasons.

Senator YOUNG. For example, there was a contract entered into by the producer with labor cost increases of 5 or 10 percent. Would that be automatically cranked into the additional cost?

General CROW. As this is reported, it is automatically a cost overrun, Senator Young. That GAO report identified for the Department of Defense as a whole that about 30 percent of the cost increases are attributable to inflation. In terms of pure economics that is not a cost increase because the real, constant dollar has not changed. The same number of man-hours go into the work. In one sense that is unfairly labeled a cost overrun.

Now, the GAO indicated some 25 percent, and this is across the board, of the so-called cost overruns were errors in estimating. That, generally speaking, I think, is a fair definition from this reporting system of what cost overruns actually are.

PROGRAM CHANGES AND STRETCHOUT

Now, the other 45 percent is where there have been changes in the program that have been reviewed by the Department of Defense and been reviewed by the various committees of the Congress and approved by the Congress. Now, that is also labeled a cost overrun under this reporting system.

Senator YOUNG. If you did not make these changes as new developments occur, you would certainly be wrong.

General CROW. That is true.

General RYAN. You could have a stretchout of a program, for instance. A stretchout of any program always increases the cost because you are carrying the overhead for each longer. That would be a cost overrun.

Chairman MCCLELLAN. Would that be a situation in which you contract with one contractor to build the frame and another one to provide the engine and they have trouble with the engine, stretching out the delivery date? Does that involve additional cost?

General RYAN. Yes, sir.

Secretary SEAMANS. If because the engine is delayed you have to, in turn, delay the airframe contractor, that can cause the airframe contractor's costs to go up.

Chairman MCCLELLAN. Another thing: too often you give a contract for procurement before these things are perfected. If you find changes have to be made in the engine, you have one and you test it and you find it does not meet the requirements and they have to go back and make another one. That also causes overruns. Where you are researching and developing, I don't see how you can determine in advance what the costs will be.

Secretary SEAMANS. In the B–1 we did not even get options for the production of that aircraft, whereas, with the A–10, which is a much, much simpler airplane and where we had the prototype fly-off, we felt that it was reasonable to get a pilot production option. We thought this would be a healthy influence on the contractors in the process of their bidding to give us this indication, to give us that much indication of what they thought it would cost to produce the aircraft.

Senator YOUNG. In this respect, the Russians have a simpler system than we have. They don't have to report these overruns.

Secretary SEAMANS. That is true, but they have to keep track in some form of the manpower. I'll wager it sometimes takes more man-hours to develop and produce their aircraft than they originally estimate.

Senator YOUNG. They don't have a general accounting office.

COST OVERRUN REPORTING

General CROW. Senator Young, back to your original question, I think the method of reporting cost overruns is badly in need of overhaul. I think the Department of Defense and the Department of the Air Force should be accountable to the Congress in effect for the contract we make with you. The current methodology does not permit this. We have such things, for instance, as a program identified to cover a time span through 1977. That was an original estimate. The time span is extended to 1979. It adds 2 more years. Those 2 years are automatically a cost overrun. I don't think the system is fair.

Senator YOUNG. We have the same thing in the construction of a dam by the Corps of Engineers. If you stretch it out, it is a cost overrun.

General CROW. If they add 4 feet to the dam that was not in the original estimate, under our current reporting system that additional 4 feet is automatically a cost overrun. I don't think that is fair.

Secretary SEAMANS. Just taking that example, when there is a change of the sort, say 4 feet or something, so much more technical in the case of an aircraft, this is not something that is done casually. This is something that is done by a series of hard negotiations between the Government and the contractor where whatever the change, is spelled out in detail. We get a proposal from a contractor. We then negotiate with the contractor before definitizing that change.

Chairman MCCLELLAN. All right, you may proceed.

AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)

Secretary SEAMANS. Development of the Airborne Warning and Control System (AWACS) is an urgent program for improving air defense and tactical air control. It will consist of an improved surveillance radar and associated data processing and communications equipment installed in a modified Boeing 707 aircraft. AWACS will be capable of extending effective control of our forces significantly beyond the range of ground-based radars. It will be more survivable than ground-based control facilities and will be able to detect and track aircraft at low altitudes over land as well as water.

The prime contract was awarded to the Boeing Co. in July 1970. Hughes and Westinghouse were given subcontracts for demonstration of prototype radars, and competitive flight tests were conducted from March through August 1972. The Westinghouse radar was selected for full-scale development.

We are requesting $197.8 million for fiscal year 1974 to continue research and development and $11.7 million for advanced procurement. R. & D. to date has been devoted primarily to the radar. We now

need to integrate navigation units, identification sensors, communications, and develop a data processor to combine all information for command and control functions. The program includes using one of the original two brassboard aircraft for a system integration demonstration of the complete avionics equipment and reconfiguring the other for development and operational testing. In addition, two more 707 aircraft will be configured for development and operational testing. The production decision is planned for December 1974, and we expect to have an AWACS initial operational capability in March 1977.

Chairman McClellan. Has the date for initial operational capability of the AWACS slipped any since the beginning of the program? If so, why?

Secretary Seamans. An AWACS capability has been considered by the Air Force for many years. Various programs were proposed which led to the present program, which has not slipped. The IOC of the development estimate and the current estimate are the same.

Chairman McClellan. Proceed.

Secretary Seamans. We had the first one flying from Andrews Air Force Base several months ago. I took the then Deputy Secretary of Defense, Mr. Rush, in this aircraft for a flight over central Virginia. We could observe all aircraft flying from southern [deleted] and we could determine in which direction each plane was going, where they were located.

I think at all times there were on the order of [deleted] aircraft that you could spot on the scope, which is a very, very unique capability. Combining this with the additional systems that I have mentioned here, it permits this aircraft to do a tremendous job to guide an air battle, to control tactical forces and provide for air defense.

Chairman McClellan. Would this detect a missile traveling at a thousand miles an hour?

Secretary Seamans. No, this can only be used for detecting and tracking aircraft in the atmosphere.

Chairman McClellan. Do we have the capability of detecting and tracking a missile?

Secretary Seamans. We have a capability of detecting missiles with our satellites when they are launched. We have a [deleted]. This is for early warning purposes. We also have radar that does a more precise job of tracking missiles.

Chairman McClellan. Has our detection system with respect to missiles been substantially perfected for detecting and tracking missiles?

Secretary Seamans. We have made, I think, a very major improvement. I believe I will mention it shortly, what we call our [deleted]. We can [deleted] is through doing its job.

Chairman McClellan. You do need more research and development in that field?

Secretary Seamans. Yes, we need a continuing program.

Chairman McClellan. Do we have such a program now?

Secretary Seamans. Yes; it is in our research and development budget.

ADVANCED PROTOTYPES

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. We are undertaking selected advanced prototype projects to give us data on probable costs and operational suitability without any commitment to full-scale development. One such project is the lightweight fighter program. In April 1972 General Dynamics and Northrop were each selected to design, fabricate, and flight test two prototype fighters. These aircraft will weigh about 18,000 and 21,000 pounds respectively. They will have a high thrust-to-weight ratio for fast acceleration and will be designed for maximum maneuvering capability across a wide range of combat speeds. The $48.0 million requested for fiscal year 1974 will be used to begin major assembly of the airframe and complete development of the prototype engine. First flight is scheduled in early 1974 to be followed by a 1-year joint flight test program by the contractors and the Air Force.

We are also requesting $67.2 million in fiscal year 1974 to continue development of the advanced medium STOL transport and prototype. The Boeing Co. and McDonnell-Douglas will each design and build two prototypes for flight testing and evaluation. We expect development of these demonstration models to be completed in about 4 years. They will make use of currently available engines, which are adequate to provide the necessary propulsion.

ADVANCED MEDIUM SHORT TAKE-OFF AND LANDING AIRCRAFT RUNWAY REQUIREMENTS

Chairman McCLELLAN. You speak of developing an advanced medium short take-off and landing aircraft. What are the runway requirements for this aircraft compared to requirements for current transport aircraft in the inventory?

Secretary SEAMANS. The advanced medium STOL transport is designed to operate from 2,000-foot fields (under sea level, hot day conditions) with a payload of 13.5 tons for a radius of 400 nautical miles. Under the same mission requirement, the C–130E, the present tactical airlift transport, would need approximately 3,800 feet of runway.

AERONAUTICS

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. Air Force laboratories and research centers have helped to provide the technology for our new systems. For instance, the B–1 will be able to carry twice the payload at far greater speed than the B–52 because steady improvements in turbine engine technology have almost doubled the thrust-to-aircraft weight ratio during the past decade.

We are asking for $15.6 million in fiscal year 1974 for a development program for an advanced turbofan engine demonstrator to provide technical and cost information. Such an advanced engine could be considered as an option for use on a later production model medium STOL transport and probably on other future aircraft.

The technologies we are developing in composite materials and in more sophisticated design concepts are finding important application in our new systems. New materials contribute not only to improved tur-

bine engines but to advances in aircraft structures as well. For example, some of the high strength fibers such as boron or graphite have been used in the weight sensitive elements on our F–15. As the cost of these materials drops and as our knowledge of their application increases, we should be able to achieve a 20 to 30 percent savings in structural weight.

I have already mentioned our success in developing the Maverick electro-optical guided missile. Such progress is due, in large measure, to the research and development efforts of Air Force laboratories. Our armament laboratory began developing laser-guided weapons in 1965 and during the past year they were used to significantly improve our combat effectiveness in Southeast Asia. We are presently working as the lead service in a Department of Defense effort to achieve even greater capability in this field.

LASER-GUIDED WEAPONS

Chairman McClellan. Explain just how the laser-guided weapons operate.

Secretary Seamans. The laser-guided weapon operates by homing in on energy reflected by a laser beam. This laser beam is transmitted by a crew member or gunner to the target with a device which we refer to as a designator. When aimed correctly the beam illuminates a spot on the target. This illumination procedure is known as designating the target. Once a target is so designated it reflects energy which can be used in guiding a bomb (or projectile). This guidance to the target is provided by incorporating a seeking device on the bomb itself. This device, or seeker, as it is called, has demonstrated remarkable capability in guiding bombs or projectiles to the designated targets.

Chairman McClellan. Proceed.

Secretary Seamans. We are placing particular emphasis on the development of modular weapons having interchangeable components. Such weapons would permit a significant saving in development, production, and training costs.

AERONAUTICS

The fiscal year 1974 R. & D. request includes $529.1 million for space programs.

Warning satellites have been developed to provide early warning of land- and sea-launched missiles. This surveillance system provides near-global coverage and reports information almost instantaneously to the National Military Command Center, the North American Air Defense Command, and SAC [deleted].

We are also making significant progress in developing space systems which can give us reliable and secure global communications. Two defense communications satellites launched in late 1971 failed to work properly. But we have determined the cause of the malfunction and have incorporated modifications in the next two satellites scheduled for launch in 1973.

DEFENSE COMMUNICATIONS SATELLITES

Chairman McCLELLAN. What is the ratio of effort and resources expended between participants in the defense communications satellite program?

Secretary SEAMANS. Overall management of the program including some research, development, test, and evaluation is the responsibility of the Defense Communications Agency. The Army is responsible for ground terminals, the Navy for shipborne terminals, and the Air Force for satellites and boosters, plus satellite ground control facilities. If we look at the defense satellite communications system phase II program, approved funds for fiscal year 1969 through 1963 break out as follows:

	(*millions*)
Defense Communications Agency (6 percent)	$15.1
Army (33 percent)	84.9
Navy (8 percent)	20.5
Air Force (53 percent)	134.4

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. In this program, the Air Force is responsible for the satellites and aircraft terminals, the Army provides the ground terminals and the Navy the shipboard equipment.

In the area of navigation, the Air Force has proposed a Department of Defense program to test and evaluate the use of satellites for precise positioning. We expect participation by the Army, Navy, and civilian agencies. Launch of the demonstration satellites could occur in 1977. We expect to develop a capability which will have many applications to advanced navigation and traffic control techniques, both military and civilian. The follow-on operational system would permit accurate position fixing and speed determination worldwide and should significantly reduce the dependence on special purpose systems.

We plan to maintain a balanced space technology program, enabling us to preserve options for future space systems development. We will determine which technologies could have application to space systems, develop prototypes which are initially tested in the laboratory, and finally demonstrate the technology in space under actual operational conditions. Some examples of technologies we have under investigation include techniques for improving satellite survivability, laser communications, and low weight/high energy power supplies.

We are cooperating closely with NASA in the development of the Space Shuttle. While NASA has development responsibility, the Air Force expects to use the system after it becomes operational.

Senator YOUNG. You say you intend to utilize it. For what purpose?

Secretary SEAMANS. Our efforts during the last year have been concentrated on identifying DOD requirements for the design of the shuttle.

AIR FORCE USE OF THE SPACE SHUTTLE

Chairman McCLELLAN. What uses will the Air Force have for the Space Shuttle which NASA is developing? What time frame are you thinking of?

Secretary SEAMANS. Fundamentally, the Air Force anticipates that it will transition essentially all of its payloads from expendable launch vehicles to the Space Shuttle. In addition, the shuttle inherently offers new capabilities that appear attractive to the Air Force. Specifically, the new capabilities are: recovery and reuse of payloads; on-orbit checkout of payloads prior to deployment; on-orbit maintenance and servicing of payloads; on-orbit testing of components and/or systems for development programs; on-orbit assembly of large systems; and the availability of man on the scene to participate in these activities. These need to be studied in more depth to understand their specific application to military space missions.

The Air Force has been studying use of the Space Shuttle when it becomes operational. Initial DOD use is being considered to start from mid-1980 to early 1983 on the east coast at the Kentucky Space Center, and on the west coast at Vandenberg AFB from late 1981 to late 1984. Experimental type DOD payloads will be considered for earlier NASA flights.

Chairman MCCLELLAN. Proceed.

Secretary SEAMANS. For our unmanned satellite program. This is designed for putting any kind of satellite into earth orbit. We have more satellites going into orbit than NASA does at this time, for communications, for surveillance, for whatever the purpose may be.

Senator YOUNG. Would the space shuttle have the capability of [deleted] satellite?

Secretary SEAMANS. Not per se. It can carry anything that is needed in space for scientific purposes. It of course could carry into space a system that could be used for [deleted] is under development at this time.

Senator YOUNG. The Russians do have a capability of [deleted] satellites.

Secretary SEAMANS. They have carried out experiments where they have [deleted] yes.

Senator YOUNG. What are we doing to counter that?

Secretary SEAMANS. We have no major development program under way for that purpose. We have a lot of studies. We have done work with certain technologies like [deleted] and so on, to see if we can make [deleted] that will do the job, but we don't have a development program that leads into any kind of test program. Maybe General Glasser would care to add to that.

General GLASSER. That is correct, we do have a general [deleted] study program. We have had some experiments in which we are operating in a tri-Service experimental program to gain the necessary technology background. On the other hand, it is not clear that [deleted].

As of this time, the Air Force has continued to focus its attention on maintaining the data stream that we need as an intelligence input to ourselves [deleted] data stream.

Secretary SEAMANS. What I said in connection with our astronautics program, that these investigations include techniques for im-

proving satellite survivability, that is exactly what I am getting at. There are quite a few techniques to make it difficult for the Soviets or anyone else to detect and to impair the performance of our satellites in any way by electronic jamming or by whatever method.

Senator YOUNG. I thought the Space Shuttle had some capability of [deleted] satellite.

General GLASSER. The Space Shuttle is a transportation means. It can carry any of these various payloads. To that extent you are quite right, it could carry a [deleted] system as its payload. The only active one that the Air Force has had to date has been the [deleted] approach that you have been briefed on in the past. It is a [deleted] system. We have conducted experiments on [deleted] devices but our primary emphasis has been, as the Secretary indicated, on making [deleted].

V. IMPROVED OPERATING EFFICIENCY

Secretary SEAMANS. The Air Force is taking important steps to control costs in operations, maintenance and supply activities. We are seeking more operational capability at a lower expenditure of dollar and human resources.

This has involved a degree of risk to our combat capability as a result of reduced flying hours for our air crews, lowered crew-to-aircraft ratios, and less maintenance manpower. During fiscal year 1973 the Strategic Air Command reduced the flying hours per month for each B–52 crew stationed in the United States by over 10 percent. And in Tactical Air Command the fighter/reconnaissance crew-to-aircraft ratio has been reduced from 1.25 per aircraft to 1.1. Similar reductions have occurred in the mobility forces. However, there are limits to how far this process can be carried without seriously reducing the mission capabilities of our forces.

Of course, there are ways to achieve greater efficiency without degrading operating capability, and we continue to work toward that goal.

Last year I emphasized a major Air Force effort to streamline and reduce the manpower and dollar cost of headquarters activities. At that time we estimated that savings from these efforts by the end of fiscal year 1973 would be approximately 1,800 spaces. However, since that time, through continued efforts of the same nature, we have realized additional reductions in headquarters manpower. Total reductions in our headquarters structure from end fiscal year 1971 to our projected end fiscal year 1974 position will now amount to 6,900 military and civilian spaces. As a result of these actions, we have been able to exceed the $9.8 million reduction in headquarters management costs for fiscal year 1973 directed by the Appropriations Committees.

Also, concerted efforts have been made to reduce the cost of supporting Air Force activities overseas. As one example, the 3d Air Force was moved from London to Mildenhall Air Base with a reduction of 345 spaces formerly dedicated to support.

HEADQUARTERS

Chairman McClellan. Have you eliminated any Air Force headquarters or have you merely reduced positions within existing headquarters?

Secretary Seamans. In addition to reducing positions in existing headquarters, the Air Force has eliminated eight intermediate headquarters as follows: National Range Division in Air Force Systems Command; Central European Communications Region, Mediterranean Communications Region, United Kingdom Communications Region, Alaskan Communications Region and Far Eastern Communications Region in Air Force Communications Service; and European Security Region and Pacific Security Region in U.S. Air Force Security Service.

LOGISTICS

With respect to logistics, we are placing greater emphasis on the entire life cycle cost of weapons systems. We are striving for systems which have more built-in reliability, coupled with easier and cheaper maintainability, so that we can lower life cycle costs. Through fiscal year 1972 this concept had been applied to 83 procurements with estimated cost avoidance of about $30 million. So far in fiscal year 1973, 68 procurement actions have been identified for application of life cycle costing formulas. In the past this technique has been used only in conjunction with components and parts, but this year the list includes the A–10 close support aircraft, inertial navigation sets, and other major items.

For example, we have implemented a program to improve the reliability of inertial navigation systems on the F–4D and E aircraft. For an investment cost of less than $1 million, projected annual savings will exceed $2 million and could rise to $5 million because of lower failure rate of the equipment. Also we are pressing forward with a project to replace older radios, TACANS and instrument landing systems on most of our aircraft with solid state equipment that will significantly increase reliability. This modernization program will require an investment of about $160 million and, when fully implemented, will generate savings in excess of $29 million per year.

To achieve further cost savings in logistics support, we are standardizing base-level maintenance organizations in such diverse areas as aircraft, ICMB's, electronics, munitions and ground support equipment. We have also initiated more effective cost accounting controls for maintenance at both base and depot levels.

We have taken steps to reduce aircraft depot-level inspection and repair requirements. As a result, 19 aircraft models were eliminated from the inspect and repair as necessary (IRAN) program.

AIRCRAFT ELIMINATED FROM IRAN PROGRAM

Chairman McClellan. Are there not safety risks inherent in a reduction of depot level inspection and repair work?

Secretary Seamans. This was not a hasty decision. Each of the 19 aircraft models received an extensive review of all depot and field

level inspection requirements. Depot level inspection requirements which are essential were included in field level inspection packages, made an item for special field inspection or made a part of a depot level "inspection in lieu of IRAN" package. All three of these inspections and associated repairs are designed to provide continuing confidence in flight safety while decreasing the depot maintenance cost associated with the operation of these aircraft.

Chairman McClellan. Proceed.

Secretary Seamans. IRAN intervals were extended on nine other aircraft models, and the work specifications were reduced on all other aircraft. Savings from these actions exceed $50 million for the first year.

We are beginning to realize the benefits of our program to update depot maintenance and storage facilities. We estimate that these improvements will permit savings which could exceed $1.5 billion over the 25 year life of the new facilities and the corresponding 10-year period for associated new equipment. In order to continue planned modernization, we are requesting $30.7 million under the military construction program and $26.9 million for equipment.

We plan to implement the first phase of the advanced logistics system during fiscal year 1974. This system will integrate all of the depot level purchasing, storage, distribution and maintenance activities in the Air Force Logistics Command. We estimate net benefits of over $250 million will be realized over the 7-year life of the new computers. These savings will result from the release of approximately 90 computer systems presently installed, a manpower reduction of over 3,000 spaces and a reduction in the spares buy program.

ADVANCED LOGISTICS SYSTEM

Chairman McClellan. You say that an advanced logistics system will release approximately 90 installed computer systems. What will the 90 systems then be used for, and will their cost and manpower requirements not be absorbed elsewhere?

Secretary Seamans. Some of the approximately 90 computer systems are Government-owned and others are leased. They will be reported as available, and screened for possible reuse through Air Force, DOD, and other Federal agencies in accordance with normal Government procedures. Leased computer systems will be returned to the vendors unless approved requirements exist at the time of release and reutilization is economically advantageous. The manpower spaces to be replaced as a result of the advanced logistic system represent reductions to Air Force strength and will not be absorbed elsewhere.

CENTRALIZATION OF MILITARY PAY AND LEAVE RECORDS

The joint uniform military pay system (JUMPS) calls for the centralization of all military pay and leave records of active duty Air Force personnel at the Air Force Accounting and Finance Center. The system will perform all pay computations and provide accounting data to better manage the military personnel appropriation.

JOINT UNIFORM MILITARY PAY SYSTEM

Chairman McCLELLAN. When did the Air Force start installing the joint uniform military pay system?

Secretary SEAMANS. The leave portion of the system was installed Air Force-wide in October 1971.

Installation of the pay portion of the system was started December 1, 1972 on an incremental basis with the conversion of two bases (Bergstrom Air Force Base, Tex. and Clark Air Base, Philippine Islands).

When an Air Force member's pay account is converted to JUMPS, his account remains in JUMPS even though he may be subsequently transferred to a new duty station. Due to this conversion philosophy, JUMPS accounts are now being serviced at 122 Air Force installations.

Chairman McCLELLAN. Proceed.

Secretary SEAMANS. The system is to become fully operational by July 1974. Although actual cost savings inherent in JUMPS have not yet been validated, it is anticipated that annual savings will approximate $4 million once the system is implemented and operating.

There are many additional applications of computer technology that can help further reduce our overall operating costs in the years ahead. Of course, automation required increased communication networks, more expensive technical training, and technicians to handle complex equipment. Nevertheless, we believe that on balance computer technology can be used to improve effectiveness and reduce costs. To help insure proper control of new applications we have established a single manager with broad authority over Air Force automatic data processing programs.

Other steps we have taken to hold down operating costs include: restricting civilian overtime work; reducing temporary duty and travel authorization; limiting purchases of office supplies and replacement equipment; termination of selected contracted services where more economical in-service capability could be used; reducing leased communications and automated data processing costs to the minimum essential level; and deferral of lower priority facility projects. Such action are a part of our continuing efforts to control the day-to-day costs of the Air Force.

VI. CONCLUSION

The men and women of the Air Force are placing great emphasis on the efficient use of resources in both current operations and modernization programs. I have outlined some of these efforts in the areas of personnel policies, weapons procurement, research and development, and operating efficiency.

Through better use of our manpower, including greater reliance upon our Reserve forces, we are increasing capabilities and realizing cost savings. Improvements in personnel policies are providing more effective recruiting, better training, more efficient job structure, and improved career opportunities. And our human relations programs

will insure an environment where each man and woman is treated fairly.

With respect to weapons procurement, the first two wings of Minuteman III's are operational. Also, in fiscal year 1973 we will complete procurement of the F–111, A–7 and A–37, and the last C–5 will soon be delivered to the Air Force. We have achieved an operational capability with the SRAM for our strategic bombers, and the Maverick is deployed with our tactical units. We have continued to develop space systems which can help us better accomplish our security tasks, including an operational space warning system and satellites for global communications.

In managing our modernization programs we have emphasized early hardware testing and greater control by the Air Force. We have ruled out "nice-to-have" capabilities that are not essential to performance of required missions. The F–15 is moving into production, the B–1 is proceeding toward initial assembly, and the A–10 and AWACS are entering full-scale development. We also have advanced prototype development programs to provide a solid basis for decisions on how best to meet future system requirements.

We are confident that the improvements we have achieved in the management of Air Force programs will help us meet the challenges ahead. By continuing our firm commitment to aggressive resource management we should be able to maintain adequate in-being forces to support national objectives, while at the same time providing necessary options for meeting future requirements.

Chairman McClellan. Thank you very much.

Secretary Seamans. Thank you, Mr. Chairman.

Budget Request

STATEMENT OF GEN. JOHN D. RYAN, CHIEF OF STAFF, U.S. AIR FORCE

BIOGRAPHY

Chairman McClellan. The next witness will be Gen. John D. Ryan, Chief of Staff of the U.S. Air Force.

General Ryan, do you have a prepared statement?

General Ryan. Yes, sir.

Chairman McClellan. The biography of General Ryan may be placed in the record at this point.

[The biography follows:]

BIOGRAPHICAL SKETCH
GENERAL JOHN D. RYAN

General John Dale Ryan is Chief of Staff of the United States Air Force.

General Ryan was born in Cherokee, Iowa, Dec. 10, 1915. Following graduation from Cherokee Junior College in 1934, he entered the United States Military Academy from which he graduated in 1938. He next attended flying school at Randolph and Kelly Fields, Texas, and received his pilot wings in 1939.

General Ryan remained at Kelly Field as a flight instructor for approximately two years. From January 1942 until August 1943, he was Director of Training at Midland Army Air Field, Texas, and was instrumental in establishing an advanced bombardier training school. His next assignment was as operations officer for the Second Air Force at Colorado Springs, Colorado. In February 1944 he was transferred to Italy where he commanded the 2d Bombardment Group and later became operations officer for the 5th Bombardment Wing, Fifteenth Air Force.

He returned to the United States in April 1945 and became Deputy Air Base Commander, Midland Army Air Field, Texas. In September 1945 he was assigned to the Air Training Command (ATC) at Fort Worth and Randolph Field, Texas, where he remained until April 1946 when he assumed duties with the 58th Bombardment Wing and participated in the Bikini Atoll atomic weapons tests. From September 1946 to July 1948 he was assistant Chief of Staff for Plans of the 58th Bombardment Wing and then Eighth Air Force Director of Operations. For the next three years, he commanded the 509th Bombardment Wing at Walker Air Force Base, New Mexico. Between July 1951 and June 1956, General Ryan commanded the 97th Bombardment Wing and the 810th Air Division, both at Biggs Air Force Base, Texas, and the 19th Air Division, at Carswell Air Force Base, Texas.

General Ryan became Director of Materiel for the Strategic Air Command (SAC) in June 1956 and four years later assumed command of SAC's Sixteenth Air Force in Spain. In July 1961 he was named Commander of the Second Air Force at Barksdale Air Force Base, Louisiana.

In August 1963 General Ryan was assigned to the Pentagon as Inspector General for the U.S. Air Force. One year later he was named Vice Commander in Chief of Strategic Air Command and in December 1964 became Commander in Chief. He was assigned as Commander in Chief, Pacific Air Forces, in February 1967.

General Ryan was appointed Vice Chief of Staff of the U.S. Air Force in August 1968 and Chief of Staff of the U.S. Air Force in August 1969.

His military decorations and awards include the Distinguished Service Medal (Air Force design) with three oak leaf clusters Distinguished Service Medal (Army design); Silver Star with one oak leaf cluster; Legion of Merit; Distinguished Flying Cross with one oak leaf cluster; Air Medal with five oak leaf clusters Purple Heart; French Croix de Guerre with Palm; Chinese Order of the Cloud and Banner, 1st Class with Grand Cordon, and 2nd Class

Korean National Security Merit, First Class; the Vietnamese National Order of Vietnam/Commander and Gallantry Cross with Palm; the Grand Cross of the Royal Order of the Phoenix, 1st Class (Greece); Grand Cross of Aeronautical Merit, 1st Class, with White Distinctive Cross (Spain); the Chilean Military Star of the Armed Forces, Class of Great Star for Military Merit; the French Legion of Honor, Degree of Commander; and the Brazilian Order of Aeronautical Merit, Degree of Grand Official.

In December 1962 he joined a select group of athletes, who have been successful in their professional careers since their college football days, when he was chosen a member of the Sports Illustrated Silver Anniversary All-American team.

He received an honorary Doctor of Laws Degree from Creighton University, Omaha, Nebraska, on 30 May 1966; and an honorary Doctor of Laws Degree from the University of Akron, Ohio, on 5 June 1967.

General Ryan is married to the former Jo Carolyn Guidera of San Antonio, Texas. They have a son, Captain Michael E., USAF; and a daughter, Patricia Jo. A second son, Captain John D. Jr., USAF, was killed in January 1970 when his F-4D crashed on takeoff.

FORCES TO SUPPORT STRATEGY OF DETERRENCE

Chairman McCLELLAN. All right, General Ryan, you may proceed.

General RYAN. Mr. Chairman and members of the committee, I am pleased to appear before you to discuss the Air Force proposed budget for fiscal year 1974.

We are continuing to structure our forces to support the national security strategy of realistic deterrence. At the same time we have provided substantial military power supporting national decisions in Southeast Asia. This has been neither easy nor simple. Rather, within the constraints of resources available to us, we have had to make some hard choices. We have had to determine the best balance between maintaining current force levels and modernizing for the future.

Since the peak of the Southeast Asia buildup in 1968, the Air Force will have reduced its active duty military manpower level from 905,000 to 666,000 by the end of fiscal year 1974; a reduction of over 26 percent.

1964 MANPOWER STRENGTH

Chairman McCLELLAN. What was the strength of the Air Force in 1964?

General RYAN. The Air Force military end strength for 1964 was 856,890.

Chairman McCLELLAN. Proceed.

General RYAN. We have made smaller reductions in the civilian force during this same time period—only 18 percent from 358,000 to 292,000. We are continuing to convert military spaces to civilian positions. During 1973 and 1974 about 10,000 additional military spaces will be converted.

COST COMPARISON BETWEEN MILITARY AND CIVILIAN SPACES—INCLUDING RETIREMENT AND OTHER RELATED COSTS

Chairman McCLELLAN. What is your cost comparison between military and civilian spaces, including retirement and other related costs? Provide it for the record.

[The information follows:]

The latest average annual costs are $13,429 for Air Force military spaces and $13,363 for Air Force U.S. citizen civilian spaces. The components of the military cost factor are pay and allowances, retirement, permanent change of station travel, housing, support, and Dependents and Indemnity Compensation. The components of the civilian cost factor are base pay, retirement, life insurance, overtime and holiday pay, health benefits, terminal leave pay, and miscellaneous support costs. The above averages were developed on the basis of current strengths and existing grade structures for the total Air Force and would not be applicable for use in specific applications.

General RYAN. Between 1968 and the end of fiscal year 1974, we will have made significant reductions in our active forces including 12 squadrons of strategic bombers, 19 squadrons of interceptors, 14 tactical airlift squadrons, 15 strategic airlift squadrons, 16 special operations squadrons and we have reduced flying hours of our remaining combat crews. To be sure, we have partially offset these reductions with some modernization. We have added C–5's, F and FB–111's, A–7's, and improved versions of the F–4. But our overall active force level is down—down considerably.

During the same period, we have also made sharp cuts in support functions. We will have reduced headquarters manning by 15,000 military and civilian personnel. We have cut back and deferred maintenance of facilities.

FALSE ECONOMY OF CUTBACK IN MAINTENANCE ACTIVITIES

Chairman McCLELLAN. The reduction and deferral of maintenance activities always seem to catch up with you and at a higher price. Do you feel that this cutback in maintenance is false economy?

General RYAN. Yes sir, we agree that maintenance cutbacks are not economical. Since maintenance must eventually be accomplished, deferral can only result in higher costs due to progressive deterioration and inflationary trends. If maintenance is deferred too long, the result may be failure of the facility, or a portion thereof, necessitating major repair or even replacement at much higher costs than the initial maintenance. For these reasons, we only defer maintenance with great reluctance, however, oftentimes there is no alternative when other high priority workloads require that funds be reallocated to meet these more pressing needs.

Chairman McCLELLAN. Proceed, General.

General RYAN. We have reduced spares support. We have reduced undergraduate pilot training. In the interest of preserving combat force structure, we may have cut back too much in support.

As a result of force and support reductions, we have a smaller Air Force and it is clear that if there are further reductions, they will have to come from the combat force structure.

STRATEGIC OFFENSE FORCES

As I have stated in my previous appearances before this committee, I firmly believe in the concept of the strategic TRIAD—manned bombers, land based missiles and sea launched missiles. The TRIAD is the strongest, most flexible way to provide our Nation sufficient deterrence.

The Soviets' 3 to 2 advantage in numbers of ICBM launchers allowed under the interim Strategic Arms Limitation Agreement—and their potential for modernization—make it imperative that we proceed with modernization of our Minuteman force.

Chairman McCLELLAN. I would like to interrupt to ask your opinion whether we have been placed at a disadvantage by the 3 to 2 ratio given to Russia in the SALT Agreement.

General RYAN. I think overall, Mr. Chairman, it was a step in the right direction and did put a lid upon how many missiles they could build too. It is true, however, that the Russians are allowed more land-based missiles and more sea-based missiles than the United States.

Chairman McCLELLAN. If it is an advantage, maybe we gave a permanent advantage to Russia. I hear comments about it. I think there are honest differences of opinion as to the overall result, but in this one particular it seems we did give Russia a decided advantage.

General RYAN. That is true, for ICBM's.

UPGRADING (HARDENING) MISSILE SILOS

Chairman McCLELLAN. All right, proceed.

General RYAN. The silo upgrade program will substantially increase the resistance of the silos to electromagnetic pulse effects as well as blast and shock. The program is designed to insure a continuing high degree of survivability against projected improvements in the quality of the Soviet offensive threat.

Chairman McCLELLAN. Just how are you upgrading your silos? With concrete and other materials?

General RYAN. The modifications for blast and shock resistance generally consist of mechanically isolating the equipment inside the silo, including the missile itself, from the silo cement so that ground shock is not transmitted to the equipment. The electromagnetic pulse modifications include the addition of voltage surge protection devices, electromagnetic seals, and grounding circuits. There is almost no modification to the existing concrete.

Chairman McCLELLAN. Proceed, general.

General RYAN. In this regard, our previous efforts have made Minuteman highly survivable today, even though since 1966 the Soviet Union has added to their ICBM force the equivalent of our entire ICBM force in numbers and nearly triple our capability in throw weight.

The command data buffer program will provide secure, remote retargeting of the Minuteman III force from the launch control facility rather than requiring entry into each silo to insert target data—and do it in a small fraction of the time now required.

Chairman McCLELLAN. How long does it now take you to retarget the Minuteman force, and how will the command data buffer program reduce this time? Explain the retargeting procedures to the committee.

General RYAN. To retarget the Minuteman III force presently requires about 45 days. Using command data buffer, it will require about 10½ hours. At present, a targeting team is dispatched to each individual launch facility to retarget the missile using preprepared targeting materials. With command data buffer, it will no longer be necessary to visit each launch facility. The missiles will be retargeted electronically from the manned launch control facilities. There is one launch control facility for each 10 missiles.

Chairman McCLELLAN. Proceed, General.

General RYAN. We can then more effectively posture and maintain forces to support our single integrated operational plan.

We will complete missile procurement for the currently approved 550 Minuteman III program with this year's budget. However, we are requesting funds to preserve an option for the continued production of Minuteman III missiles. The constraints of the budget have made it necessary to slip somewhat the Minuteman modernization schedules which we discussed with you last year. We are bringing in the missiles on schedule, but we are deferring silo upgrade improvements and the command data buffer program for some of our wings by several months.

Strategic bombers are not a part of the interim SALT Agreement, but are an essential part of the TRIAD. The present Soviet advantage

in strategic missiles coupled with their intensive military R & D programs give manned bombers much greater importance in the strategic equation. Bombers give us the force flexibility we need, and complicate the problems of our potential enemies in attempting to defeat or defend against our strategic forces. In addition to their nuclear deterrent role, strategic bombers alone possess the inherent capability to deliver massive firepower in conventional conflict.

RUSSIAN VERSION OF THE B–1

Chairman McClellan. As I understand, there are no limitations on manned bombers.

General Ryan. No limitations at present, sir.

Chairman McClellan. Does Russia have any bombers that will compare with the B–1 that you know of?

General Ryan. The Russians at the present time have in development a new swing wing bomber that approximates the B–1. From the information I have on it I do not think it is as good as the B–1.

Chairman McClellan. Very well.

General Ryan. Strategic bombers also possess a considerable capability to counter naval forces. They can locate and attack naval surface fleets, perform reconnaissance, deploy mines, help to control surface movement in many strategic areas such as the Greenland, Iceland, United Kingdom Gap, and assist in antisubmarine warfare.

SOVIET NAVY VS SAC

Chairman McClellan. What defensive weapons system does the Soviet Navy have to use against our strategic bombers? Discuss their effectiveness.

General Ryan. The Soviet naval surface force consists of about 200 major combatants. All employ some type of antiaircraft gun defense and about 500 have surface-to-air missile systems which are similar to Soviet land-based SAM's. The AAA guns are essentially point defense systems, effective to 10,000 to 20,000 yards. Most of the missile systems are effective to ranges of [deleted] miles. A longer range system, effective to [deleted] miles, is found on 12 of the latest cruisers (built since 1965).

We believe that successful attacks could be conducted against these naval forces [deleted] Soviet shipboard defenses.

Chairman McClellan. Proceed, General.

General Ryan. Thus, the bomber element of the Triad provides a double payoff with its ability to function effectively in both conventional and nuclear roles.

The present strategic bomber force consists of FB–111's, and B–52D's, F's, G's, and H's.

B–52's: COST OF WING MODIFICATION

Senator Young. How many B–52's will receive the wing modification? How much will it cost?

General Ryan. We plan to modify a total of 80 aircraft. This will allow us to equip five squadrons. Our initial cost estimate for the modification of $197.4 million was based on a go-ahead decision by March 15,

1973. Since that decision was deferred, the contractual engineering for the modification, to have been completed in July, was terminated on March 31, 1973. There will be a cost increase of approximately $0.5 million to reinitiate that effort provided a decision is made by June 13, 1973. Delay beyond the June 13, 1973, date will require full contract renegotiation since price quotes from material suppliers will expire at that time.

MODIFIED B–52'S EXTENDED LIFE COORDINATED WITH B–1 AVAILABILTY

Senator YOUNG. The B–52 aircraft have experienced wing fatigue problems and I understand funds are requested to extend the life of some of the B–52 fleet in the fiscal year 1974 budget. Can the life of the B–52's and the delivery of the B–1's be coordinated so that our bomber force will retain its capability throughout the transition period?

General RYAN. Yes; the requested modification to the B–52's will allow our bomber force to maintain its capability throughout the transition period. We estimate that the modification, from a design standpoint, will allow the aircraft to fly until 1982. The programed addition of the B–1 to the force will allow us to build from the projected initial operational capability in February 1980 to completion of production in October 1983. Based on this program, sufficient B–1's will be available to maintain the bomber force capability as the B–52D's reach their phaseout point.

The B–52D's have performed extensively and with great effectiveness in Southeast Asia. Their average age is now more than 15 years. This and the heavy Vietnam usage have put the D models beyond their design life. Extensive structural modifications are now required to avoid grounding the B–52D's and to maintain their life into the 1980's. To modify all of the D's to maintain this service life would be very costly. However, their unique dual conventional/nuclear capability is such a valuable aspect of the total force that it would be unwise to phase all of them out. Consequently, we plan to keep somewhat over half of the D force along with all of the G's and H's. Thus, while our bomber force will have the same types of aircraft we discussed with you last year, it will be smaller in numbers.

Development of the B–1 is essential to provide the option to begin replacing aging B–52's around the end of this decade. The B–1 is being specifically designed to be as insensitive to future changes in the threat as is technically and economically feasible.

B–1 PENETRATION

Chairman MCCLELLAN. Do you feel that the B–1 aircraft can successfuly penetrate the Soviet air defense system of the 1980's and reach its assigned targets?

General RYAN. The B–1 has been conceived and is being designed and produced with those characteristics necessary to insure penetration of enemy defenses. It will have the ability to penetrate at low altitudes and high speeds throughout the U.S.S.R. In fact, its high subsonic penetration speed at low altitude will essentially preclude a co-altitude, tail chase intercept by even a high speed manned inter-

ceptor. B–1 penetration speed and altitude will virtually rule out engagement by all Soviet interceptors except possibly an interceptor with look-down radar and shoot-down missiles. If the Soviets elect to introduce look-down shoot-down interceptors into their inventory, the B–1 has other penetration characteristics designed to counter that type of defense. Included in those penetration characteristics are a low radar cross-section, suppressed engine infrared emissions, active electronic countermeasures and other penetration aids, and the B–1's inherent maneuverability could force the long range air-to-air missile into an impossible maneuver. The B–1's low radar cross-section will greatly reduce the Soviet air defense radar detection range and surveillance time. A low radar cross-section, coupled with a reduced engine IR emission, will greatly shrink the engagement zones of radar or IR guided missiles. Moreover, the reduced radar cross-sections of the B–1 will permit a significant reduction in the radiated power required by the ECM equipment to screen the bomber from detection by Soviet defensive radars.

With regard to penetration of surface-to-air missile sites, the B–1, like the B–52, would be planned to fly around SAM sites, or destroy them with the short-range attack missile (SRAM). However, if an unlikely encounter with a SAM occurred, the B–1's penetration altitude, speed, radar cross section, and ECM would greatly shorten the time available to surface-to-air missile defenses.

The B–1 avionics suite planned for the production aircraft adequately meets our best estimates of B–1 employment requirements and the threat anticipated for the 1980's. Moreover, the B–1 has been designed to accommodate, with comparative ease and low cost, those changes in avionics capabilities which, although not now evident, may someday be required.

In sum, the B–1 will be superior in those characteristics which contribute to penetration effectiveness, and will be capable of avionics growth if the threat so requires.

Thus, the B–1 will increase the capability of our bomber force to survive and penetrate to its targets under the most severe threat postulated for the future. This, in truth, will serve the nuclear deterrence objective by insuring high confidence of effective retaliation in any circumstance under which conflict could occur.

The B–1 will be able to penetrate enemy defenses at lower altitude and higher speed with a smaller radar cross section and bigger payload than the B–52. It will employ greater numbers of the now operational nuclear short-range attack missile (SRAM) to further increase its penetration capability and expand targeting options.

The strategic deterrent is the cornerstone of our entire defense effort. We must continue to keep it strong.

TRIAD

Chairman McClellan. In speaking of the "strategic deterrent being the cornerstone of our entire defense effort," you refer to the Triad, do you not?

General Ryan. Yes, sir, and it is important that we continue to develop the B–1 and preserve the option to expand deployment of Minuteman III to keep those vital legs of the Triad strong.

STRATEGIC DEFENSE FORCES

Chairman McClellan. Proceed, General.

General Ryan. The Air Force continues to maintain strategic defense forces to provide surveillance, warning, and intercept capabilities for the aerospace defense of the continental United States.

In accord with congressional concern, increased attention has been directed toward protecting the sovereignty of airspace across the Southern United States. In a cooperative effort with the Federal Aviation Administration and the Air National Guard, the Air Force has reestablished a capability that we expect to be fully operational by mid-1973.

We are continuing development of the AWACS as the most important element of air defense modernization. As I will discuss later, AWACS will also play a vital role in our future tactical operations. AWACS will be a flexible, survivable airborne system that will deny to potential aggressors the confidence of being able to degrade CONUS air defenses through attack on fixed surveillance and control sites. It will enhance deterrence—and reduce the impact of an enemy attack, should deterrence fail—by substantially increasing the effectiveness of current as well as future interceptors. We are pleased by the progress of this program. Technical performance of the radar system has been better than anticipated and was demonstrated ahead of schedule and under cost.

Our air defense system continues to be a matter of concern. In the midsixties, we began a sharp phasedown of our relatively obsolescent air defense system to provide resources for modernization. Unfortunately, these resources were diverted to other pressing needs, and we now find ourselves with a greatly reduced capability with little progress toward modernization.

AIR FORCE CONTRIBUTION TO THE CONTINENTAL AIR DEFENSE COMMAND

Chairman McClellan. Just what is the current Air Force contribution to the air defense of the continental United States? Do you feel our current overall air defense posture is capable of defending against current Soviet capabilities?

General Ryan. The Air Force contributes to air defense as the largest component of the Continental Air Defense Command which has the responsibility for defending against air and missile attack. Conad is also charged with obtaining and disseminating tactical warning of attack by aircraft and/or missiles as detected by a network of surveillance systems which includes conventional ground and airborne radars, optical systems, missile early warning systems, over-the-horizon radars, and space detection centers. Conad exercises command and control of its forces through a Combat Operations Center and subordinate control centers. In addition, Cinconad exercises operational control over the Army Safeguard and air defense artillery systems. Conad weapon resources include 19 interceptor squadrons from the Air National Guard and 8 squadrons from the Regular Air Force. Fighter-interceptors consists of F–101, F–102, F–106, and F–4 aircraft.

In response to the second question, although the current CONUS air defense system is capable of providing a credible defense against

Soviet bombers attacking at medium to high altitude, it has little capability to detect, track, or destroy high performance aircraft when they fly at low altitude. When air defense modernization began, it was recognized that a certain measure of risk would have to be accepted in the interim between phasedown of the old system and deployment of the modernized system. Until the modernized air defense force, consisting of OTHB, AWACS and IMI, becomes fully operational, the deficiencies of the present system will continue to exist, and any delays in deploying the new system will result in prolonging that risk.

Chairman McClellan. Proceed, General.

General Ryan. AWACS, as the principal air defense modernization program, is, thus, a matter of urgency.

TACTICAL FORCES

In fiscal year 1974, our tactical Air Forces are again structured to consist of a balanced, highly mobile force of 21 tactical fighter wings (4 F–111, 3 A–7, and 14 F–4). We also have 13 RF–4 tactical reconnaissance squadrons and 220 special-purpose aircraft.

The flexibility and mobility of these forces have been clearly demonstrated in response to aggression. We have moved tactical fighters from the United States and had them performing combat missions in SEA in less than 90 hours from the order to launch. There is no question that responsive and effective tactical air forces are a major deterrent to potential aggressors anywhere in the world.

The versatile F–4 is the backbone of our tactical force. It is complemented by the F–111 with its unique night and all-weather capability and by the A–7 which has demonstrated its capability in close air support and has proved to be an extremely effective interdiction weapon system. We plan to round out our future tactical capability with the A–10 designed specifically for close air support and the F–15—an advanced fighter optimized for air-to-air combat.

The A–10 is being developed to perform close air support better than any aircraft in existence or under development.

A–10 "DEDICATION" EXPLAINED

Chairman McClellan. Will the A–10 aircraft be dedicated to the close air support mission? Explain your meaning of the term "dedication" in this sense.

General Ryan. The imbalance between Pact and NATO ground forces, especially armored forces, will require dedication of the A–10 to close air support from the initiation of hostilities, while other tactical aircraft are simultaneously conducting a successful counterair campaign. This aircraft has been dedicated from its inception to satisfying the requirements of the close air support mission. It has been designed with one role in mind—close air support to save U.S. lives on the ground. The term "dedication" is thus applied to the mission rather than to any organizational arrangement.

Chairman McClellan. Proceed, General.

General Ryan. This mission requires a combination of lethality, responsiveness, simplicity, and survivability. The A–10 has been carefully designed to optimize these characteristics in a relatively low-cost

airframe—and it will have the capability to operate from austere forward locations.

COST DIFFERENTIAL BETWEEN THE A–10 AND A–9

Senator YOUNG. What was the cost differential between the A–10 and A–9?

General RYAN. The cost differential between the A–9 and A–10 was found to be relatively small when all life-cycle costs, such as R.D.T. & E., production and 10-year operating and support costs, were considered. On the basis of total life cycle costs, the differential was $202 million in favor of the A–10. The cost elements which comprise total costs and contribute to this difference are given below in then-year dollars.

	A–9	A–10
R.D.T. & E.[1]	290	252
Production [deleted] aircraft	1,792	1,932
Operating and support	3,248	2,944
Total	5,330	5,128

[1] Prototype phase cost of $84,500,000 not included

ADVANTAGES OF THE A-10 OVER THE A-9

Senator YOUNG. Briefly, what were the advantages of the A–10 over the A–9?

General RYAN. The A–10 engine location being high and on the aft fuselage minimizes potential foreign object damage when operating from forward, semiprepared airfields. The engine placement permits maintenance and servicing while the engines are running. The A–10 engine exhaust is tilted upward to eliminate adverse jet blast effects on personnel, equipment, tents, and so forth. The A–9 engines would be subject to foreign object damage and ingestion of gun gas and stores debris. The A–9 engine jet blast would adversely affect ground personnel. Servicing and maintenance of the A–9 could not be conducted simultaneously with the engines running.

The A–10 wing is essentially clean and optimized for carrying ordnance. Pylon spacing provides for excellent access with minimal need for special ordnance loading techniques. The A–9 wing loses considerable space because of the large engine inlet ducts. Thus, the A–9 wing pylons are more closely spaced and adversely affect ordnance loading and carriage.

The gun installation in the A–10 is superior to the A–9 installation because of better accessibility. The gun reaction forces pass within about 6 inches of the A–10 center of gravity as compared to 28 inches in the A–9. This permits an uncomplicated design in the A–10 and tends to minimize aircraft pitch changes when the gun is fired. Although both aircraft would be very survivable, the A–10 has some advantages over the A–9.

Finally, the A–10 prototype is more similar to the production configuration than is the A–9. This increases the utility of the A–10 prototypes in future testing and leads to less technical risk in the future development efforts.

ADVANTAGE OF THE A–10 ENGINE OVER THE A–9 ENGINE

Senator YOUNG. Does the A–10 engine provide advantages over the A–9 engine?

General RYAN. Yes, the A–10 is specifically designed to use the General Electric AF34 engine, which develops 9,275 pounds of thrust. The A–10 is not sized to use the (A–9) Lycoming F–102 engine which was designed for 7,650 pounds of thrust. The A–10 therefore would be able to meet the performance requirements of the close air support mission using the TF34 engine. The same aircraft performance could not be achieved with the F–102 unless the A–10 was modified and the thrust of the F–102 engine increased considerably. The increased technical risk and costs of such efforts cannot be justified considering that the TF34 engine is a more mature engine and is properly matched to the A–10 airframe.

Senator YOUNG. What is the cost difference between the two engines, the A–9 and A–10?

General RYAN. The Lycoming F–102 engine unit recurring cost for the A–9 is estimated to be $174,500. The General Electric TF34–100 engine unit recurring cost for the A–10 is estimated to be $224,500. Since two engines are required for each aircraft and a quantity of spares is necessary, the costs are based on procuring 1,500 engines for 600 aircraft and are stated in constant fiscal year 1970 dollars. On a per aircraft basis, the difference in engine costs would be $100,000. The A–10 airframe, however, is cheaper than the A–9, so the total difference in unit recurring aircraft cost would be $87,000 less for the A–9 than for the A–10 in fiscal year 1970 dollars.

REASONS FOR SELECTION OF THE A–X OVER THE A–7

Senator YOUNG. Why did the Air Force in its deliberations on the selection of the A–X aircraft discard the A–7?

General RYAN. The Air Force gave very careful consideration to other candidate aircraft before determining that continued development of the A–10 was appropriate. These candidates included the A–4M, A–7D, and an improved version of the A–7D. As you know, the A–10 weapon system requirements were selected to avoid the known deficiencies of other candidates for the close air support (CAS) mission while incorporating their better features. As a result of our rigorous flight testing and analysis, the A–10 was found to provide superior effectiveness in the CAS mission. The low cost and excellent survivability of the A–10 were also strong contributors to the decision process. Stated briefly, the Air Force and OSD analyses determined that the A–10 would be more than twice as cost effective as the nearest competitor, the A–7, in supporting ground troops in a European environment.

Senator YOUNG. Considering the R. & D. costs for the development of the A–X, could the Air Force have procured sufficient A–7's to meet their force requirements for the same money?

General RYAN. No, the funds required to develop the A–10 would not be sufficient to enable the Air Force to procure enough additional A–7's to meet the force requirements. It is important to note that during our recent studies which led to the decision on the A–10, very careful consideration was given to other candidate aircraft such as the A–7.

These studies included R.D.T. & E. and production costs as well as operating and support costs. As you know, operating and support costs account for about three-fifths of total life-cycle costs, so it is important that all costs be included in such decision processes.

The Air Force and OSD analyses also compared the relative effectiveness of A–7 and A–10 aircraft in preventing the breakthrough of enemy tanks in a European environment. It was found that 955 A–7D UE aircraft would be required to do the same job as 504 A–10 UE aircraft. The larger number of A–7D aircraft required to do the job quickly negates the short-term advantage accrued through saving A–10 development costs. Furthermore, when the 15-year life-cycle costs are considered, the 955 A–7 aircraft are found to cost about $7.2 billion more than 504 A–10 aircraft.

In a parallel competitive effort we are developing an improved 30 mm cannon which will be adaptable to the A–10 and to other aircraft. This weapon will be capable of destroying a wide variety of targets, and is specifically designed to destroy armor.

SOVIET AIRCRAFT GUNS

Chairman McClellan. What caliber of cannon are the Soviets using in their aircraft? What are the military characteristics of the 30 mm cannon?

General Ryan. The cannons in use on some Soviet combat aircraft are 23 mm, 30 mm, and 37 mm. The 37 mm cannon is old and a weapon this large has not been on any Soviet aircraft produced since 1958. With one exception, the Soviet guns are all single-barrel, linear-action weapons with firing rates around [deleted] rounds per minutes. In 1969, the Soviets introduced a 23 mm, twin-barrel, linear-action cannon on the Mig–21. This gun has a firing rate of [deleted] rounds per minute. This is the latest Soviet gun development.

The 30 mm gun we are developing will be a 6 or 7 barrel Gatling gun type that will weigh around 600 lbs. The nominal rate of fire will be 4,000 rounds per minute with a muzzle velocity of about [deleted] ft/sec. The round used in this gun will be around 11 inches long and weigh about 1.5 pounds including the projectile weight of around 0.8 pound.

Chairman McClellan. Proceed, General.

General Ryan. As the Secretary explained, our program to develop the F–15 air superiority fighter is progressing well. The attainment of air superiority is critical to other missions of tactical air warfare and the operations which they support. The F–15 is designed to provide the Air Force with an air superiority aircraft able to defeat any fighter postulated over the 1975–1985 time frame. The F–15 fulfills the essential requirement to outclimb, outaccelerate, outturn, and defeat the postulated fighter threat.

COMPARISON OF PERFORMANCE CAPABILITY OF THE F–15 VERSUS THE SOVIET FOXBAT

Senator Young. The U.S.S.R. has demonstrated a priority in the development of high performance fighter aircraft. The Air Force experienced combat with some of these aircraft in Vietnam. Will the

F–15 be capable of attaining the performance of the Soviet fighters, such as the Foxbat?

General RYAN. F–15 performance is superior to any known or projected Soviet fighter with the exception of the high speed, high altitude capability of the Foxbat.

The Foxbat, as a highly specialized interceptor, has been optimized for high altitude, high mach number flight. In order to achieve these capabilities, severe limitations in permissible indicated airspeeds and g-loads were necessary. These limitations cause the Foxbat to be unsuitable for maneuvering air combat. The F–15 can outmaneuver the Foxbat at any altitude and is actually faster than the Foxbat up to approximately [deleted] feet. The only reasonable way the Foxbat can be employed against the F–15 is in the long range standoff missile mode.

Our analyses continue to show that the F–15's superior maneuverability, warning systems, attack radar and AIM–7F missile enable it to successfully counter the Foxbat in worst one-on-one situations. When we introduce tactics and multiple aircraft, the results are even more favorable. The balanced capabilities of the F–15 deny the Foxbat the high altitude, high mach sanctuary.

Senator YOUNG. Will the F–15 be able to stand off and engage in a missile attack against a Soviet fighter with similar missile?

General RYAN. First, it should be noted that intelligence estimates [deleted]. The F–15 can launch its AIM–7F missile at [deleted] NM, whereas the maximum launch range attributed to the Foxbat's missile is [deleted] NM. Other Soviet fighters, such as Fishbed and Flogger, have maximum missile launch range capabilities of [deleted] and [deleted]NM, respectively.

In any postulated duel in which opponents are given equal missile capabilities, the outcome will be determined by the aircraft with superior detection capability, performance, and tactical flexibility. The F–15 is superior to any Soviet fighter threat in each of these categories.

Tests to date indicate that it will be the world's best air superiority fighter. The six Air Force test pilots—all Vietnam experienced—who have flown the F–15 report that it is truly a great airplane.

We plan to arm the F–15 with a significantly improved Sparrow missile, the AIM–7F; a more capable Sidewinder, the AIM–9L; and a high velocity 25-mm cannon.

CHARACTERISTICS OF IMPROVED SPARROW MISSILE

Chairman MCCLELLAN. Briefly explain to the committee the characteristics of the improved Sparrow missile and the Sidewinder missile.

General RYAN. The AIM–7F is a solid-state improvement of the AIM–7E missile. It will have improved effectiveness through the use of dual guidance modes (continuous wave (CW) and pulse Doppler (PD)), larger boost-sustain motor, adaptive autopilot, larger continuous-rod warhead, improved fuze, solid state electronics, instant ("snap") start capability and greater reliability. The AIM–9L is the improved "dogfight" missile. The changes in the guidance and control section, over previous AIM–9 missiles, will provide a forward hemisphere launch, increased seeker sensitivity and tracking stability,

improved inner boundary and high altitude performance, and improved maximum operating time. It also has an improved fuze and warhead with rate bias which improve lethality and reduce susceptibility to countermeasures.

Chairman McClellan. Proceed, General.

General Ryan. All of these weapons will have adaptability to other U.S. aircraft.

While its air-to-air combat capability has been the primary design feature of the F–15, simplicity and reliability have continually been stressed. As a result, system mean time between failure rates for the F–15 are now expected to improve by a factor of three over previous systems.

F–15 IMPROVED MEAN TIME BETWEEN FAILURES

Chairman McClellan. Explain what you mean by "system mean time between failure rates for the F–15 are now expected to improve by a factor of three over previous systems."

General Ryan. The system mean time between failure rate is the average time, in flying hours, between failures of some component whether airframe, engine or avionics. We expect reliability to improve by a factor of three over other aircraft by reducing the frequency of failure (mean time between failures) of all components of the aircraft. This improvement results from placing demanding requirements on the prime and subcontractors to design for reliability. In addition they are required to demonstrate the results of their design with a stringent reliability test program. An MTBF control program and system burn-in of electronic equipment prior to delivery also contribute to the F–15's improvements in system MTBF.

Chairman McClellan. Proceed, General.

General Ryan. This will decrease the long-term cost of ownership of the F–15 force.

F–15 VERSUS RUSSIAN FIGHTERS

Chairman McClellan. Are you confident that it is a superior fighter to anything that Russia has?

General Ryan. Yes, sir.

The F–15 shows every promise of having the mission versatility to control the skies not only in tactical contingencies but also as an interceptor in the air defense of the United States. We are extremely pleased with the progress of the F–15 program.

In my discussion of air defense, I emphasized the importance of AWACS. It also has a vital role in the control of tactical air forces. One of the most important lessons from Vietnam is the real need for improved tactical air control. We operated over North Vietnam without effective radar control of our fighters and we paid the price in aircraft and crew losses.

AWACS'S IN NORTH VIETNAM

Chairman McClellan. If we operated over North Vietnam without effective radar control of our fighters, do you imply that we have never had effective radar control? Explain.

General RYAN. Yes, in that our warning and control radars could not provide coverage over all areas of North Vietnam, nor could they reliably [deleted]. The deficiencies in our radar coverage allowed MIG–21's to conduct supersonic surprise attacks on Air Force forces. With the aid of the North Vietnamese ground intercept radars, the small-sized MIG's would be vectored to an optimum position from which they could launch their missiles [deleted]. As a result, some of our aircraft were shot down without any warning of the impending attack. Our experiences in North Vietnam dramatically validated the need for a tactical AWACS to provide a reliable and comprehensive picture of the air situation.

Chairman MCCLELLAN. Proceed, General.

General RYAN. With an AWACS capability, we would have had improved effectiveness in our total air operations.

Senator YOUNG. Will the F–15 fly as high and as fast as the Foxbat?

General RYAN. No, sir. The Foxbat is very similar to our SR–71. It operates in the 70,000- to 80,000-foot regime, around Mach 3. [Deleted].

Senator YOUNG. What is the speed of the F–15?

General RYAN. The maximum speed is Mach [deleted].

F-15 ENGINE ENDURANCE TEST

Senator HRUSKA. General, before you get too far away from the F–15, the Secretary in his statement referred to some problems with the engine and the fan blades.

General RYAN. Yes, sir.

Senator HRUSKA. Tests are going on now and they are going to be completed soon, probably some time this month?

General RYAN. Yes, sir. We hope to have the endurance test and the inspection following the endurance test, completed by the middle or latter part of May.

Senator HRUSKA. Of course, if the tests come out fine, that is well. Then the money that you ask for production of the 77 aircraft is well placed.

General RYAN. Yes, sir.

Senator HRUSKA. If not, however, I presume further review will be necessary, and then the applicability of this funding would be contingent on the result of that review, is that correct?

General RYAN. That is correct.

AWACS

With its vastly improved, all-altitude surveillance radar, data processing, and rapid digital communications, AWACS will provide for better command and control of air superiority, interdiction, close air support, and combat support operations. Having better command and control will permit the airborne commander more flexibility to respond quickly to changing tactical situations. For example, he could rapidly change the target of airborne strike forces, or shift the mission from interdiction to close support or air superiority or search and rescue. Additionally, AWACS will be capable of immediate deploy-

ment with other elements of airpower to provide early warning and on scene command and control anywhere in the world. This adds significantly to the capability and credibility of our worldwide deterrent posture. I consider AWACS to be a vast improvement over present airborne control and warning systems. The success of U.S. forces in future conflicts may well depend on the availability of AWACS to counter numerically superior opposition.

AWACS OPERATIONS

Chairman McClellan. Explain just how the airborne warning and control system will operate. What ranges and how much time will it give us?

General Ryan. AWACS will be used in CONUS air defense and as an integral element of the tactical air control system (TACS) utilizing its unique "lookdown" radar to surveil and permit battle management far beyond the capability of ground-based control systems deployed today. It will provide warning and control of close air support, air interdiction, counterair, tactical air reconnaissance, tactical airlift, and rescue missions. The AWACS range detection capabilities and the correlative warning times this will provide, are both a function of enemy aircraft speed and altitude. AWACS has demonstrated a detection capability exceeding the design specifications; that is, a heavy bomber at [deleted] nm/a fighter at [deleted] nm. The warning time these detection ranges afford will vary, therefore, from as little as 15 minutes to almost an hour.

AIRLIFT FORCES

Chairman McClellan. Proceed, General.

General Ryan. Our strategic airlift forces, with their professional aircrews and all-jet high payload aircraft, contribute significantly to our total deterrent capability. In May of this year when the last C–5 is delivered, our strategic airlift force of C–5's and C–141's will be fully equipped. These aircraft, in concert with the Civil Reserve Air Fleet, will have the capability to airlift mechanized and armored divisions with virtually all of their heavy equipment in a combat condition—worldwide.

Just as the C–141 has proved itself by years of fast, reliable, around-the-clock service, the C–5, with over 90,000 flight-hours, is proving itself. During the North Vietnamese offensive last spring, the C–5 performed in remarkable fashion. In one task, the C–5 lifted 26 U.S. Army tanks—weighing a total of 1.6 million pounds—in 10 missions directly into Da Nang.

C–5 BATTLETANK LIFT

Chairman McClellan. What types of tanks were those that were lifted by C–5 aircraft last spring?

General Ryan. There were two types of tanks airlifted. The first type was the M–41, weighing 54,000 pounds each. We delivered 20 of this type. The next type was the M–48, weighing 98,000 pounds each, of which we delivered six.

Chairman McCLELLAN. Proceed General.

General RYAN. Six of these tanks were delivered from a U.S. repair depot in the Pacific within 24 hours. Offloading took only 32 minutes on the average and the tanks were in battle in a matter of hours.

In another instance the C–5 responded to a requirement for massive delivery of outsize cargo to Southeast Asia and the Western Pacific. Thirty-six missions into Southeast Asia offloaded 5.8 million pounds of cargo. On 15 of the 36 missions the equipment was so large it could not be carried by any other aircraft. The movement included F–5's, A–37's, CH–53 helicopters, minesweeping equipment, and cranes—all delivered virtually intact.

AIRCRAFT LIFT VIA C–5

Chairman McCLELLAN. How soon can the F–5, A–37 and CH–53 aircraft be operational after delivery by C–5 aircraft to a secure base?

Secretary SEAMANS. The F–5 and A–37 both are capable of being totally operational within 72 hours—the CH–53 in less than 48 hours.

General RYAN. While the C–5 has performed admirably, we have had problems with it, as we reported to you last year. An intensive structural review has now been completed. It is clear from this study that we will have to carefully preserve the service life of the aircraft as it is currently configured. The study gives us a number of options for extending the life of the C–5. We have examined them carefully and have selected the program outlined by the Secretary in his statement.

Interfacing with strategic airlift is our tactical airlift force of C–130 aircraft.

C–47 ACTIVE AIRCRAFT

Chairman McCLELLAN. Speaking of tactical airlift, do you still have any active C–47 aircraft? How old are they?

General RYAN. We have 44 active C–47 aircraft whose average age is 28 years.

Chairman McCLELLAN. Proceed, General.

General RYAN. This workhorse has done a superb job in Southeast Asia but is now aging. To meet future needs, we have initiated a prototype development program for an advanced medium STOL transport. The fiscal year 1974 budget provides continued support to this program. After successful development, testing, and evaluation, a final design will be determined to eventually replace the C–130. This should be afforded sufficient priority in future budgets to provide needed tactical airlift in the 1980's.

AIR GUARD AND RESERVE FORCES

The Air Force is actively implementing the total force concept—to fully utilize all available resources. Our objective is to improve operational effectiveness by—bringing active and reserve forces closer together—increasing the role of Reserve forces—and broadening our force employment options.

We are continuing to modernize our Guard and Reserve units at an unprecedented rate. Guard aircraft now include F–4s, RF–4s, F–105s,

F–106's, C–130's, and in fiscal year 1974, some units will convert to A–7s. These conversions have placed a heavy workload on the National Guard but it has responded well. Today, Air Guard units are performing a majority of the air defense interceptor mission. They are providing additional alert support for air defense of the southern United States.

ANG AIR DEFENSE COMMITMENT

Chairman McClellan. Explain how Air National Guard units are performing a majority of the air defense interceptor mission.

General Ryan. The Air National Guard currently possesses 75 percent of the squadrons in the United States that have an air defense interceptor mission. There are 11 F–102 units and 6 F–101 units presently in the Air Guard program. Each of these units is providing a daily round-the-clock alert posture of two aircraft and seven crews in support of air defense. In addition, the Air Guard has four F–106 units presently in conversion status and will soon be participating in the air defense alert mission. Also, the F–102 units are currently supporting the southern air defense mission and one ANG F–104 unit in Puerto Rico is providing on a daily basis, daylight air defense coverage for that area. In contrast the active Air Force has seven active squadrons in the United States performing the air defense mission with the F–106 aircraft.

Chairman McClellan. Proceed, General.

General Ryan. In addition, Air National Guard communications, engineering, and weather units are providing assistance to civil authorities as well as to major active and guard units.

The Air Force Reserve is also modernizing rapidly. Its inventory now includes F–105's, A–37's, and C–130's. Through its associate program it also provides valuable augmentation to our airlift capability. We now have one C–9 and 13 C–141 associate units and by the end of fiscal year 1974, our C–5 associate units will be a part of this program. C–141 and C–9 units have conducted their training on regularly scheduled airlift and medical evacuation missions. Their contribution was especially valuable during the periods of peak Southeast Asia airlift requirements.

During the modernization of our Air Reserve Forces, personnel leaving active duty who are qualified to maintain or fly the newer weapon systems are encouraged and assisted in transferring to the Air National Guard and Air Force Reserve.

AIR RESERVE FORCES RECRUITMENT

Chairman McClellan. How successful have you been in getting people who are leaving active duty to transfer their critical skills to the Air National Guard or Air Force Reserves?

General Ryan. To date our efforts have been relatively successful, and with intensified recruiting and additional incentives such as tuition assistance, servicemen's group life insurance coverage and shorter terms of enlistment for some skills, we believe we can meet our manpower requirements with the primary resource coming from trained, prior service personnel. In addition to prior service personnel re-

cruiting, the Palace Chase program has provided the Air National Guard and Air Force Reserve with 4,493 airmen and 420 rated officers since the program was implemented March 1972. This program provides for early release of active duty volunteers who sign a contract to serve twice the length of their remaining active duty service commitment as a participating member of an Air Reserve Forces unit.

RESEARCH, DEVELOPMENT, TEST & EVALUATION

Chairman McCLELLAN. Proceed, General.

General RYAN. In this area our capability in real terms continues to decline. This has reemphasized the necessity for getting the most we can for each R. & D. dollar. We are concentrating on high payoff projects and attempting to make maximum use of proven technology in developing new weapon systems. Our systems now in development such as the B–1, AWACS, A–10, F–15, lightweight fighter, and advanced medium STOL transport appear to be the best in the world. The variety and uncertainties of future security needs make it imperative that we continue to develop forces which can best deal with uncertainty—forces which possess inherent versatility and flexibility.

I am concerned that we might not be devoting enough resources to our technology base to assure continued leadership. My concern is for later generation systems—10 to 20 years from now—which will depend on our research and technology investments today.

U.S. AIRPOWER VIS-A-VIS U.S.S.R.

Chairman McCLELLAN. Dr. Foster addressed the committee at great length over his concern that our technology is falling behind that of the U.S.S.R. Will you speak to this in terms of air power?

General RYAN. The U.S.S.R. has demonstrated a consistent development of aircraft of all types. Each new aircraft introduced into service has shown improved capability and has reflected the application of new technology. This has been possible for the Soviets only because they have been consistent in devoting resources to basic research and technology. We believe that the U.S.S.R. will continue to invest in basic research and technology. If we do not do the same, we cannot be assured of continued leadership.

Chairman McCLELLAN. Proceed, General.

General RYAN. In managing our development programs we have learned some hard lessons. We have had problems and will continue to have problems. That is inherent in the very nature of the development process. As the Secretary has described, we believe we have made, and are continuing to make, real improvements. For example, earlier more demanding operational tests during weapon system development prior to production will lessen these problems. I want to assure this committee that there is no area which has received greater emphasis from top to bottom. We have some of our brightest people managing our development programs, and they are getting results. Our systems are now coming in close to performance specifications, on or close to schedule, and close to cost estimates.

SOUTHEAST ASIA

I think it is appropriate at this time to summarize Air Force activities and achievements in Southeast Asia since 1965. While it is too early to provide an overall definitive assessment of air power in Vietnam, it is clear that the Air Force did the job it was given to do. In specific areas, accomplishments were truly remarkable.

USAF SEA OPS VS KOREA AND WWII

Chairman McClellan. Can you compare the intensity of Air Force operations in Southeast Asia with those experienced in the Korean conflict and World War II?

General Ryan. Direct comparisons between air operations in Southeast Asia, Korea, and World War II are difficult because of differences in force composition and size, geographical areas and environments, rules of engagement, and the nature of the conflict in each case. The following information, however, may provide an indication of the intensity of Air Force air operations during the three conflicts:

	Southeast Asia (February 1962–February 1973)	Korea (June 1950–July 1953)	World War II (December 1941–August 1945)
Duration (months)	[Deleted]	37	45
Combat sorties		710,886	2,362,800
Aircraft lost		1,466	22,948
Loss rate/1,000 sorties		2.1	9.7
Munitions expended (million tons)	5.888	.454	2.150
Sorties per month	[Deleted]	19,213	52,507
Losses per month		39.6	510

TACTICAL FIGHTER SORTIES

Chairman McClellan. Proceed, General.

General Ryan. Tactical fighter bombers flew over a million sorties under every conceivable condition performing close air support and interdiction missions. Air interdiction reduced the flow of enemy supplies and restricted his freedom to build up and concentrate his forces. There are also innumerable examples of air power—employed in close support of allied troops—turning the tide of specific battles at crucial times. Tactical fighters literally saved the day on many occasions providing the soldier on the battlefield the most effective close air support he has ever had, and earned his lasting gratitude.

The B–52 was the unique weapon of the war. Ground commanders routinely requested B–52's to bomb enemy concentrations. For the enemy soldier, the B–52 became the war's most feared weapon. When ordered into the Hanoi and Haiphong areas on December 18, 1972, the B–52 proved that it could operate within and destroy targets in one of the world's most concentrated, sophisticated, combat experienced air defense systems—and do so with losses less than predicted.

B–1 FOR GROUND SUPPORT

Chairman McClellan. Do you envision that the B–1 can do the role that the B–52 did in supporting ground commanders in Southeast Asia, or do you have another aircraft coming in for that type of mission?

General RYAN. While the primary mission of the B–1 will be to serve the nuclear deterrence objective, it will also have significant capabilities for use in a conventional role. The B–1 will be able to perform the mission which was accomplished by the B–52 in Southeast Asia. In fact, the B–1 will be able to carry a substantially greater conventional payload than the B–52.

Chairman MCCLELLAN. Proceed, General.

General RYAN. This is a tribute to the effectiveness of our equipment, our tactics, and above all our aircrews. I am sure that this reemphasized to our potential adversaries that our bomber force can penetrate any area in the world and successfully strike assigned targets.

AIRLIFT OPERATIONS

Our airlift operations brought a new dimension to conventional war. Tactical airlift gave commanders a degree of battlefield flexibility previously unknown. Strategic airlift introduced a new era in logistics and force mobility. Early last year when the enemy launched his invasion we responded immediately. We moved several hundred fighters and B–52's across the Pacific—with their support equipment.

B–52 AND NVN DEFENSES

Chairman MCCLELLAN. In that connection the B–1 is supposed to be and is, I assume, a much improved weapon over the B–52.

General RYAN. That is correct, sir, and can be utilized——

Chairman MCCLELLAN. If the B–52 can do what you say here, penetrate the most concentrated and sophisticated combat experienced air defense system, if they could do it with success, then can the B–1 do it with even greater success? Is that to be expected?

General RYAN. That is to be expected.

Chairman MCCLELLAN. We did lose a lot of B–52's in trying to penetrate that system, did we not?

General RYAN. We lost 15 aircraft out of 729 sorties. Our loss rate was just under 3 percent.

Chairman MCCLELLAN. Under 3 percent?

General RYAN. Yes, sir.

Chairman MCCLELLAN. That is not bad, is it?

General RYAN. That is less than we anticipated.

HANOI ANTIBOMBER DEFENSES

Chairman MCCLELLAN. When you bomb an area that is as fully protected as this one was.

General RYAN. That is correct.

Chairman MCCLELLAN. I imagine this one was. They had concentrated on protecting it, had they not?

General RYAN. They had. They had built SAM sites in a solid ring around Hanoi. There was no way to get to the target without going through the SAM ring.

Chairman MCCLELLAN. Did they place those sites in populated sections of the city?

General RYAN. Not in the center of the city but they were placed very closely right around the suburbs.

Chairman MCCLELLAN. I don't know that it is pertinent, necessarily, to this appropriation request, but did they place them so that they could not be isolated as a military target from the risk of hitting civilians?

General RYAN. They were close enough so that civilians, some civilians were under risk.

Chairman MCCLELLAN. They were exposed.

General RYAN. That is correct.

Chairman MCCLELLAN. In other words, if we did kill some civilians over there in the bombing, which I am sure we did——

General RYAN. Yes, sir.

Chairman MCCLELLAN [continuing]. It was simply unavoidable if you are going to deal with military targets.

General RYAN. That is correct.

Mr. Chairman, a great deal was made of the carpet bombing of the B–52's against North Vietnam. Nothing could be further from the truth. Even by Hanoi's admission the highest estimate I ever saw was 2,000 killed by the December 1972 raids. Had we carpet-bombed Hanoi the casualties would have been much, much higher.

Chairman MCCLELLAN. Is it not also true that in destroying war plants you will kill civilians who are in the plant at the time?

General RYAN. Exactly.

Chairman MCCLELLAN. They don't get a warning to get out. You can't give that warning. I am trying to rationalize this thing. I don't see how we can be charged with wantonly killing civilians.

General RYAN. That is true.

Senator HRUSKA. General, that 3-percent loss you referred to was in the sorties that were flown over Hanoi and Haiphong?

Secretary SEAMANS. That is correct. Not total. Overall for all the B–52 sorties over North Vietnam in 1972, our loss rate was four-tenths of 1 percent.

Chairman MCCLELLAN. During the war?

Secretary SEAMANS. That is right.

WEAPONS TECHNOLOGY ADVANCES

General RYAN. We made a number of important advances in weapons technology to meet the changing conditions in the war. We developed and employed new laser guided bombs and other advanced munitions. We achieved an improved night attack capability with newly developed sensors and other devices. We brought in better radar systems, new electronic warfare devices, and improved weather forecasting and reconnaissance capabilities.

CLOSE AIR SUPPORT AIRCRAFT/ALL WEATHER CAPABILITY

Chairman MCCLELLAN. Do we have a close support aircraft that can operate in an all-weather mode? If not, when will we have one?

General RYAN. We currently have tactical aircraft capable of providing close air support in an all-weather mode. Both the F–4 and F–111 have self-contained avionics systems which permit blind bombing using offset bombing techniques; that is, targets are located relative to known ground positions. Another means of blind bombing is

accomplished through the use of Loran equipped aircraft which navigate to weapons release points utilizing information provided by ground-based stations. The least expensive means, with regard to aircraft costs, is accomplished by radar beacon equipped aircraft which are vectored to precomputed weapons release points under the direction of ground-based radars.

The primary limitation of these three means of blind bombing is that they are unable to achieve the accuracies obtainable through visual delivery means. Our current blind bombing systems provide a capability to destroy a variety of area targets; however, the ability to selectively strike hard mobile targets, such as tanks, is lacking at this time. This is one area in which we are continuing to seek improvement.

For our future close air support aircraft, we have concentrated on improving visual delivery capabilities by designing in low speed maneuverability which will permit operations under low ceilings and in low visibility conditions. At the same time, we are investigating those advanced avionics systems, both aircraft and complementary ground, which show potential for enhancing our capability in adverse weather operations.

Chairman McClellan. Proceed, General.

General Ryan. We are proud of our professional performance in Vietnam. It was our job to provide air support to our own and to friendly powers. We did this—and we feel that we did it well. I am proud of the men and women of the Air Force who made their contribution.

VIETNAMIZATION

The Air Force, as you know, has played a direct role in the Vietnamization program, and we are very pleased with the response of the South Vietnamese Air Force. The Vietnamese airmen have proven themselves capable of supporting and employing the equipment we have provided.

Prior to Vietnamization the VNAF consisted of 22 squadrons with a unit equipage (UE) of 481 aircraft and approximately 22,000 personnel. Today that force numbers more than 51 squadrons with about 54,000 men.

In calendar year 1972 the VNAF activated nine squadrons—about one new squadron every 40 days—increased the UE by 312 aircraft, and expanded their assigned personnel by over 6,000 men. Recent actions have accelerated delivery of previously programed aircraft. These aircraft in addition to those previously possessed, will provide the VNAF with a well-balanced force. The U.S. Air Force remains dedicated to the success of the Vietnamization program. Our goal is to equip and train the Vietnamese Air Force so that it can be self-sufficient. With the most recent delivery of aircraft the South Vietnamese Air Force is the sixth largest in the world.

QUALITY OF VNAF AND WORLD RANKING OF AIR FORCES

Chairman McClellan. You say the South Vietnamese Air Force is the sixth largest in the world. Rank the preceding five. How does the South Vietnamese Air Force rate qualitatively?

General RYAN. The United States, U.S.S.R., People's Republic of China, France, and West Germany, respectively, rank ahead of the South Vietnamese Air Force (VNAF) in total number of aircraft. Qualitatively, the South Vietnamese have developed a competent air force. The greatest strides have been made in improving the capability of the VNAF to support ground forces in situations ranging from major battlefield engagements to rapid response in support of self-defense forces. This development of the VNAF was an integral and essential aspect of the overall Vietnamization program.

PERSONNEL

Chairman MCCLELLAN. Proceed, General.

General RYAN. Early in my statement, I indicated that the Air Force is continuing to reduce personnel. We recognize the need for these reductions and are employing all feasible voluntary and involuntary loss actions short of a reduction in force (RIF). We are, however, having difficulty in reaching the officer end strength for fiscal year 1973 and expect to have similar trouble in fiscal year 1974. Further officer reductions will require a RIF.

As a result of hearings last year, the Department of Defense is conducting a sweeping officer personnel management study. This study will become the basis for legislative proposals which will include a system for equitable grade structuring and promotions, and the authority for selective retirement of officers whose potential for advancement or desire to compete has fallen off. We are actively engaged in this study and will support the resulting recommendations.

Concern has been expressed about "grade-creep" in the military. We have actively worked to keep it under control. Since 1968 we have reduced the number of Air Force general officers by about 30, colonels by nearly 400, and lieutenant colonels by more than 2,500. We expect to continue this trend in fiscal year 1974. In the enlisted force, we are reducing the percentage of airmen in the top six grades from 72.7 percent in fiscal year 1972 to 69.9 percent in fiscal year 1974 with a goal of 65.2 percent by the end of fiscal year 1977.

GRADE CREEP

Chairman MCCLELLAN. You refer to "grade creep." Are you within congressional ceilings with respect to higher officer and noncommissioned officer grades?

General RYAN. Yes. We manage our officer and airman promotion programs in a manner to remain well within statutory ceilings.

Chairman MCCLELLAN. Proceed, General.

General RYAN. Faster reduction in these grades would significantly impair promotion opportunity, especially in an era of force reduction.

FLIGHT PAY TERMINATION IN NONCOMBAT ASSESSMENTS

Section 715 of the fiscal year 1973 Defense Appropriation Act included a provision to terminate flight pay for colonels and generals in noncombat assignments. Stopping flight pay for these officers seems a breach of faith and will have a serious impact on the morale of the

entire rated officer force. It would create pay inversions for newly promoted colonels and impair our ability to attract and retain qualified volunteers to fill rated positions. I do not believe it was the intent of Congress to do this. A proposal to correct inequities in incentive pay is now being staffed within the DOD to be submitted as legislation as recommended by the Congress.

CORRECTING INEQUITIES IN INCENTIVE PAY

Chairman McCLELLAN. You have had 7 months to work on a proposal to correct inequities in incentive pay. Do you have a workable plan?

General RYAN. OSD and the services are finding it very difficult to rewrite a pay system which has evolved over 50 years and under which many of the present recipients have served for many of those years. The Department of Defense is still working on the details of a proposal which we hope will be an acceptable alternative to section 715 of the fiscal year 1973 appropriation act. We are finding each service's inventory of flyers and the distribution within those inventories so different it is difficult to devise a new flight pay system. A new system must respond to the wishes of Congress, resolve the problems of attraction and retention of flyers for each service, be fair to the individuals and remain within present budget limitations. We expect to resolve these problems and forward to Congress an acceptable alternative flight pay system in the very near future.

Chairman McCLELLAN. Proceed, General.

General RYAN. We are encouraged by our experience in moving toward an all volunteer force. Congressional support has been excellent and has helped to close the gap between military pay and that offered in the civilian sector. We are also working hard to make the Air Force a more rewarding and satisfying career through better management of our people and provision for their needs. I consider early passage of the Uniformed Services Special Pay Act as essential to providing the means to attract and keep highly qualified and skilled personnel.

I would like to add a few words to what the Secretary has said on equal opportunity in the Air Force. We are fully committed to insuring that all of our personnel, military and civilian, have equal opportunity for full and rewarding careers in the Air Force. I consider equal opportunity to be mission essential to the Air Force.

We are happy that our men held as POW's in Southeast Asia are finally being released. Homecoming—the plan for receiving and processing our repatriated prisoners of war—is working well. From the moment of their release, our men have received thorough and sensitive care from personnel well trained for the task.

The readjustment process includes the best of medical attention and comprehensive assistance with both personal and professional matters. Our plan is proving effective in reuniting the returnees with their families and our society. Many of these men are already well on their way to resuming productive and rewarding careers.

We have not forgotten those men still listed as missing in action. We are working to determine their status and will continue to assist their families in every way possible.

SUMMARY

This 1974 budget request is the fourth I have been privileged to present to you as Chief of Staff of the Air Force.

These past 4 years have been trying ones from every point of view. We have tried to do the best possible job in performing the tasks assigned us. Our biggest job has been the Vietnam war and, as I discussed earlier, our people have done a thoroughly professional job. I am proud of them.

The war has been costly—in lives lost, in dollars, and in effort and resources diverted from modernization. Since 1969 our total budget has been below pre-Vietnam levels in real purchasing power. This means that with reduced purchasing power and having to finance the war we have had fewer and fewer resources to devote to modernization. Our problems have been compounded by the greatly increased cost of personnel.

As I pointed out in my statement, we have tried to strike the best possible balance between forces in being and modernization. We have steadily reduced forces and personnel. We have reexamined our day-to-day operations to save money and do things better. We have tightened up our procurement processes. All this has given us room in our budget for some modernization.

We have the F–15, the world's most modern fighter, in development. We have the development of the AWACS—the air defense and tactical air control system—well underway. We are now entering the full-scale development phase for the A–10, our first aircraft specifically designed for the close air support mission. The first two B–1's are being assembled. These aircraft development programs will enable us to modernize in a carefully paced manner with each filling a vital need.

We have the lightweight fighter and advanced medium STOL transport under development. The lightweight fighter program will provide us with technology applicable to future fighter aircraft requirements, while the advanced medium STOL transport will give us a development option for modernization of our tactical airlift force.

Our forces are battle tested. Our aircrews are the most experienced we have ever had. Our missiles are on the ready. The Air Force is leaner, still tough, still able to do the job—with the right kinds of things planned for its future.

I deeply appreciate the support which this committee has given the Air Force.

Chairman McClellan. Senator Hruska, you may proceed with your questions.

WASHINGTON POST ARTICLE ON FLIGHT PAY

Senator Hruska. Reference has been made here to the new legislation on flight pay. The press has paid its respects here yesterday or the day before to some reports the GAO made on flight pay. It is not my purpose to cross-examine you on that, but inasmuch as notice has been taken of it by the public, would you be desirous of replying to the story I saw, I think it was in the Washington Post, and it might be well to incorporate it in the hearings so that reference can be made to it in the event of future criticism.

General Ryan. We would like to submit it for the record, if we could, Senator Hruska.

[The information follows:]

On 1 April, the Washington Post published an article titled "Flight Pay to Non-Fliers Alleged," written by Mr. Jack Taylor. The article, purportedly based on a General Accounting Office report, contains statements which mislead and misinform the public.

For the past 50 years, the military services have paid flight pay to attract and retain volunteers needed to operate and manage complex aircraft and weapon systems vital to our national defense. It has been in the best interest of the nation to insure that this additional compensation has been sufficient to attract and retain exceptional, highly motivated individuals for a full career involving this hazardous duty. Less capable individuals cost more to train, have more frequent accidents and are unable to provide the leadership required to maintain our supremacy in the air.

It costs over $236,000 for the Air Force to train the average flier before he can be used in a first-line combat aircraft. It takes several more years of active flying to develop the skills and experience he needs to become an aviation leader and manager. In a sense, career fliers are like medical doctors or other professionals in that they become more skilled and more valuable with experience and prudent to periodically move him into management and leadership positions in order to benefit from his background. For example, aviation experience is required throughout the entire staff structure of the Air Force. Certainly a background in flying and a thorough knowledge of airpower employment is required for operating, planning, formulating doctrine and concepts, research and development programs, and for maintaining a logistic system to support our force structure. To deny

senior aviators compensation which attracted them to an aviation career, when they are not in actual cockpit positions, would be analagous to reducing the income of a surgeon when he accepts a position as hospital administrator, a professor or some other professional management position. Such action serves as a disincentive toward attracting and retaining the quality and quantity of individuals needed for a full career in that profession.

To induce an officer to specialize in a flying career, the Air Force pays him an additional $100 to $245 per month depending on his grade and time in service. The present flight pay compensation aided by draft pressure, has attracted enough volunteers to enter flying training. However, we have not retained adequate numbers of younger fliers to fill manning requirements. In the last five years, because of low retention the cost of training needed for replacements has exceeded $233 million which is more than the cost of 20 F-15 aircraft.

We must reverse this undesirable trend through positive actions rather than precipitate measures which make an aviation career less attractive.

For several years, the Congress has excused many of our senior career fliers from flying when in staff positions but, recognizing their value, elected to continue to pay them flight pay. Last year, the Congress in enacting Sec. 715 of the Defense Appropriation Act of 1973 will deny flight pay to most of our senior experienced fliers on 31 May 1973. This in effect imposes a financial penalty on those whose flying experience and leadership is most needed--at a time when their financial needs are the greatest and when their earnings would be reaching a peak had they chosen careers in

commercial aviation. This is having a real impact on morale throughout our rated force. A recent survey of Air Force pilots and navigators indicates that our young fliers see little attractiveness in a career when experience and increased responsibility may be rewarded with a reduction in salary.

The impact of denying flight pay to senior officers becomes clearer from a recent survey of the pilots and navigators which indicated that our fliers consider continued flight pay to be a significant inducement in electing a career in military aviation. A loss of flight pay, even after the bulk of an officer's flying career is behind him, will encourage an even greater loss of young fliers and resultant higher training costs. This survey indicates denying some $10 million a year in flight pay to senior officers will result in increasing training costs more than $200 million over the next five years.

We seem to have reached a point where we need highly qualified fliers for a full career but are unable or unwilling to pay the price of keeping them during peacetime. We will not maintain an all volunteer aviation force by breaching a career incentive, or arbitrarily turning it on and off depending on the member's duty assignment or grade. Flight pay must be a continuing incentive for the hazardous aviation career to insure we have sufficient numbers of trained and experienced aviators and the leadership needed to guide them when hostilities begin.

To this end, we'll support legislation to maintain a career incentive we consider vital to maintaining the supremacy of our air forces.

AIR FORCE COMMUNITY COLLEGE

Senator HRUSKA. I want to make a brief comment about the Community College of the Air Force. I think that is a notable innovation. Perhaps, General, you were in SAC when the Bootstrap program was inaugurated. I was on the board of regents of the University of Omaha at that time. It was one of the most satisfying experiences, not only to set that thing up, but also the continuance that followed. It cut to a minimum the loss of academic progress that the men were forced to undergo by being in the Service. It was a capital thing.

On this level, on not quite the same level, but on this level I think this is a humanizing factor, Mr. Secretary, that is very commendable, very fine.

Secretary SEAMANS. Thank you.

Senator HRUSKA. That is all I have, Mr. Chairman.

FUNDS FOR NORTH VIETNAM

Chairman MCCLELLAN. Mr. Secretary, is there any money in this budget whatsoever for North Vietnam?

Secretary SEAMANS. Not to my knowledge.

Chairman MCCLELLAN. To help in rehabilitating North Vietnam, whether it is reparations or whatever aid you call it?

Secretary SEAMANS. There are no funds in here that are earmarked for North Vietnam.

KINDS OF AIRCRAFT IN INVENTORY

Chairman MCCLELLAN. I would like you to submit for the record if you can, how many different kinds of planes are now in our inventory.

Secretary SEAMANS. I would like to submit that for the record.

May I just say that as we bring new airplanes in we are attempting to move out of our active force planes like the F–104's for example, the C–7's, so that we do not incur the operation and maintenance cost for a relatively few airplanes of a type that are no longer as easy to maintain.

General RYAN. You want that for both the Guard and Reserve?

Chairman MCCLELLAN. All of it. You can separate those, but identify the planes. Give us the number in inventory and identify the planes. If this is regarded as secret——

Secretary SEAMANS. No, no problem at all. I just don't have the figures at hand.

Chairman MCCLELLAN. As you do this, show how many are now being procured, identifying each class, and what the ultimate cost anticipated is for each of those now planned to be procured.

Secretary SEAMANS. All right.

Chairman MCCLELLAN. Also how many—and identify them—are now in the process of research and development and what their anticipated final cost will be.

[The information follows:]

ACTIVE AIRCRAFT INVENTORY AND PROCUREMENT

ACTIVE AIR FORCE

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
A-7	1	332	320	24/0	86.7/0.4	411/1413.3
A-37	3	DELETED	DELETED			
A-10[1]	--[2]	2	2		48.1/142.4	DELETED/2269.0
B-1[1]	--	-	1		444.5/473.5	244/11276.6
RB-47	17	1	-			
B-52B/C/E	16	3	3			
B-52D	16	DELETED	DELETED			
B-52F	14	24	22			
B-52G	13					
B-52H	11					
B/EB/RB/WB-57	17	DELETED	DELETED			
EB-66	16					
FB-111	2	73				
CX-X	-	--	6	14/16	8.4/9.6	30/18

1/ Included in R&D
2/ Less than 1 year

ACTIVE AIR FORCE (CONTINUED)

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY		PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
		FY 73	FY 74			
C-5	2	77	79		107.6/43.1	81/4508.9
VC-6	7	1	1			
C-7	10	1	1			
C-9	3	20	20			
VC-X	--	2	4	4/0	24.0/0	4/24.0
C/AC/VC-47	28	37	17			
EC-47	29	26	13			
TC-47	28	2	2			
C/VC-54	28	8	--			
C-97	18	5	4			
C/VC-118	19	92	92			
C/EC-121	18	27	27			
C/NC/VC/UC-123	16	5	5			
C-124	21	2	2			
C/AC/DC/HC/WC-130	9	477	467	20H/0	93.2/0	443/1257.1
C/VC-131	18	99	99			
C/VC/WC/EC/RC-135	10	DELETED	DELETED			
KC-135	12					
VC-137	12	5	5			
C/VC-140	10	15	15			

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
C-141	7	281	281			
E-4	-	-	2	2/1	117.3/83.1	7/467.8[1/]
F-4B	5	1	1			
F-4C	8	DELETED	DELETED			
F-4D	6					
F-4E	4	592	621	48/24	170.1/99.6	815[2/]/2353.2[2/]
F-4F	-	---	DELETED			
RF-4	5	DELETED				
F-5A	5	11	2			
F-5B	4	9	14			
F-5E	Less Than 1 Year	13	24			
RF-5	-	-	-			
F/TF-15	Less Than 1 Year	7	16	30/77	908.1/1148.0	749/7835.2
SR-71	7 Approximate	DELETED	DELETED			
F-100	15					
F-101	13	DELETED	DELETED			
F-104	9					
F-105	9					
F-106	13					

1/ Excludes 80.3 million to retrofit interim NEACP
2/ Quantity includes 3 F-4s modified to F-4E configuration. Cost shown does not include RDT&E funds associated with this modification.

ACTIVE AIR FORCE (CONTINUED)

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
F-111A	4					
F-111D	1					442[1]/6937.9[2]
F-111E	3					
F-111F	1			12/0	188.3/0	
HH/UH-1	6	DELETED	DELETED			
CH-3	7					
HH-3	4					
HH-43	11	√	√			
CH/HH-53	3	51	52	6/0	20.9/0	52/166.2
O-1	20					
O-2	4	DELETED	DELETED			
OV-10	4					
T/VT/ET-29	19	256	246			
T/AT-33	15	269	250			
T-37	11	770	764			
T-38	7	974	965			
T-39	11	139	138			
T-41	5	39	39			
T-43	--	---	17	8/0	47.4/0	19/123.5
U-1	15	3	--			
U-3	13	2	2			

1/ Does not include 24 F-111C for RAAF
2/ Includes costs associated with buy of 24 F-111C for RAAF

ACTIVE AIR FORCE (CONTINUED)

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
U-4	17	2	2			
HU-16	20	2	-			
TOTAL ACTIVE AIR FORCE	9	8484	8313			

ACTIVE AIRCRAFT INVENTORY AND PROCUREMENT

AIR NATIONAL GUARD

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
A-7	-	--	59			
A-37	2					
EB/RB/WB-57	18					
C-7	10					
C/KC-97	18					
C-119	18					
C/EC-121	17	DELETED	DELETED			
C-123	14					
C-124	19					
C/DC-130	14					
C-131	18					
F-4C	8					
RF-4	7					
F-100	16					

AIR NATIONAL GUARD (CONTINUED)

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
F-101	13					
RF-101	13					
F/TF-102	15					
F-104	14					
F-105	11					
F-106	14					
0-2	4					
T/VT-29	21	55	53			
T-33	17	73	73			
T-39	12	2	2			
U-10	6	22	22			
TOTAL AIR NATIONAL GUARD	14	1857	1816			

DELETED

DELETED

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ACTIVE AIRCRAFT INVENTORY AND PROCUREMENT

AIR FORCE RESERVE

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY		PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
		FY 73	FY 74			
A-37	6	DELETED	DELETED			
C-7	7					
C/VC-118	16	1	1			
EC-121	17	DELETED	DELETED			
C/UC-123	16					
C/DC/HC-130	13					
F-105	11					
H-34	13					
VT/T-29	20	5	5			
AT-33	19	5	5			
HU-16	20	4	-			
TOTAL AIR FORCE RESERVE	12	434	444			

ACTIVE AIRCRAFT INVENTORY AND PROCUREMENT

MILITARY ASSISTANCE SERVICE FUNDED

SUPPORT OF OTHER NATIONS

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY		PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
		FY 73	FY 74			
A-1						
A-37				60/0[1]	32.5/0	468/222.3
C-7						
C-47		DELETED	DELETED			
EC-47						
RC-47						
C/VC-54						
AC/RC-119						
C-130				0/36H[2]	0/192.2	See Active AF
F-5A		140	142	0/116[3]	0/69.3[3][4]	
F-5B		4	4	7/0	12.0/0	11/15.3
F-5E		-	17	57/71	116.4/126.8	154/416.8

1/ MASF Payback to ANG/AFR

2/ MASF Payback to ANG/AFR DELETED C-130s and DELETED C-7s)

3/ MASF Payback to MAP (Funds to support Quid Pro Quo--no aircraft procurement)

4/ Does not include $2.6 million for initial spares.

SUPPORT OF OTHER NATIONS (CONTINUED)

AIRCRAFT	AVE AGE AS OF 31 DEC 72 (YEARS)	END YEAR INVENTORY FY 73	END YEAR INVENTORY FY 74	PROCUREMENT FY 73/FY 74	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/PROG ACQ COST ($ MIL)
RF-5						
UH-1				180[1]/308[1]	53.4/97.0	1180/325.0
H-34						
CH-47				0/24[1]	0/51.5	43/89.5
O-1						
O-2		DELETED	DELETED			
T-28						
T-37						
T-41				1[2]/3[2]	0.03/0.10	35/0.93
U-6						
U-17						
TOTAL MASF						

1/ MASF Payback to U.S. Army
2/ Subsequent to budget submission, an OSD decision deleted FY 73 aircraft and 2 of the FY 74 aircraft.

RESEARCH AND DEVELOPMENT

	PROG ACQ COST ($ MIL) FY 73/FY 74	TOTAL PROGRAM QUANTITY/COST ($ MIL)
A-10 1/	48.1/142.4	DELETED/2269.0 2/
AMST	25.0/67.2	4/200.0 3/
B-1 1/	444.5/473.5	244/11276.6 2/
LWF Prototype	40.0/46.5	4/106.5 3/
E-3A	194.2/209.5	42/2385.0 2/

1/ Included in Aircraft Inventory and Procurement, Active Air Force
2/ Program Acquisition Cost
3/ Research, Development, Test and Evaluation (RDT&E) only

Aircraft Procurement Contract Stretch Out

Chairman McClellan. I would like also for you to comment on a possible stretch-out in any of these planes that are under procurement now and what effect it would have on cost. I am thinking that, if there must be reductions, is it economical or would it be advisable, rather than to abandon procurement or any research and development looking to procurement, to bring about reductions by simply reducing the amount of procurement, stretching out the procurement of a weapon that we have approved and expect to produce.

I know there will be some cost increases in doing that. If we must make reductions, I would like to weigh stretching out procurement against the proposal to cut out some items altogether. I would like to have that.

[The information follows:]

The F–15 contract has a clause which provides for a quantity reduction of up to 50% of the FY 1974 procurement. Should this option be exercised, the following quantities and costs would apply:

A 25% reduction in the FY 1974 quantity would defer 19 aircraft to FY 1979. The FY 1974 budget would be reduced by $142 million, whereas the FY 1975–79 budget would be increased by $249 million. The total program cost would increase $107 million.

A 50% reduction would defer 38 aircraft to FY 1979. The 1974 budget would be reduced $331 million, with a corresponding increase in the FY 1975–79 budget of $485 million. The total program cost would increase $154 million.

A 50% reduction in the F–4E procurement of 24 aircraft would reduce the 1974 program by $46 million. The 12 deferred aircraft would be included in the FY 1975 program and would cost $54 million, an increase of $6 million over the projected FY 1974 cost.

The C–130H request for 36 aircraft would be reduced by 14 aircraft which would be deferred to the FY 1975 program. The 22 aircraft retained in the FY 1974 request, along with other projected Lockheed sales would maintain a three per month production rate. Should 14 aircraft be deferred from FY 1974 to FY 1975 the result would be a reduction of $70 million in the FY 1974 request. However, the 14 aircraft would cost $74 million in FY 1975, an increase of $4 million over the estimated FY 1974 cost.

Total Budget for Fiscal Year 1974

Chairman McClellan. I would like also for you to submit for the record the total procurement cost in your budget, the total research and development cost in your budget, and the total personnel and support cost in your budget for salaries, housing, shelter, food, and so forth. The cost of maintaining a soldier. And I reckon the other principal total cost in your budget that I would be interested in is operation and maintenance. I would like you to submit the total amount in your budget for these different categories.

Is there any other principal category that I haven't named that should be included in this so as to get an overall picture of it?

Secretary Seamans. The Reserve and the Guard.

General BOYLAN. Military construction.

Chairman MCCLELLAN. Military construction is not in this bill. I am just dealing with this bill for the moment. There will be another committee to consider military construction.

If there is any other category that I have overlooked, or if there is some other way of submitting these so as to present to a layman an understandable picture of just what the budget does with respect to these categories, please submit it.

Secretary SEAMANS. Very well.

[The information follows:]

TOTAL FISCAL YEAR 1974 BUDGET BY APPROPRIATION

The Air Force FY 1974 budget request is as follows:

Appropriation:	*Amount (TOA in millions)*
RDT&E	$3,229
Aircraft Procurement	2,913
Missile Procurement	1,573
Other Procurement	2,005
Military Personnel	7,264
Operations and Maintenance	6,589
Air Force Reserve:	
Military Personnel	145
Operations and Maintenance	229
Air National Guard:	
Military Personnel	191
Operations and Maintenance	526
Total	[1] 24,664

[1] Does not include Military Construction Appropriation for the Air Force and Air Reserve Forces. It also does not include the anticipated January 1, 1974, pay raise and proposed legislation.

The Air Force FY 74 TOA includes 44.3% for personnel and related cost which is a decrease of .1% from FY 73. When the proposed FY 74 military, civilian and wage board pay raises are added, the personnel and related costs are 45.1% of the FY 1974 TOA.

F-15 FIGHTER

Chairman MCCLELLAN. We have talked about these several planes. I do not necessarily accept all newspaper reports as accurate, but when we undertake to deal with defense expenditures for the next fiscal year and to make appropriations therefor, and when we have a project that is in the process of procurement, it frequently gets criticized in the press in the form of articles implying that the criticism is authentic.

I would like to ask you a few questions about the F-15 fighter. In the Sunday Star of March 18 there appeared an article by Mr. Orr Kelly discussing the problems with respect to the F-15. I will read some excerpts from this article and ask you to comment on them.

For the record, I think it should be answered as to what the facts are because we will probably be confronted with this criticism at some later time. I quote:

A secret Defense Department study shows that cost on the new F-15 fighter plane could run $1.7 billion or 21 percent above estimates given to Congress less than a year ago. This study has been kept from Congress.

Mr. Secretary, I would like to have you comment on that—whether such a study has been made and if it has been kept from the Congress and, if made, does it reflect that the overrun on the cost would be some $1.7 billion or 21 percent above estimates that had heretofore been given to the Congress within the last year.

'STUDY BY DEPARTMENT OF DEFENSE COST ANALYSIS IMPROVEMENT GROUP (CAIG)

Secretary SEAMANS. Within Systems Analysis of the Department of Defense there is a so-called cost analysis improvement group called the CAIG. Their role is to be a devil's advocate for the Secretary of Defense. They came up with what I call a very abbreviated study in which they used formulas and parameters, sort of parametric kinds of cost estimating to show that there might be in their view a 21 percent increase in the total cost of the program including the production of a little over 700 aircraft.

In contrast, the Air Force project team's costs are based on actual contracts, are based on working out the cost details from the ground up. I personally think that the Air Force estimates which we submit to the Congress are as valid as it is humanly possible to make at this time.

I think that the fact that our research and development costs are tracking very closely with out original estimates is a case in point.

The research and development for the F–15 are lower by 50 percent in 1974 compared to 1973 and yet the cost estimate of the CAIG for research and development does not fully reflect such reduction.

With their generalized studies they are assuming that we are going to require substantial additional research and development moneys to finish the job whereas here we are well into the research and development and we see no indications that these costs are going to climb in that fashion.

Now, we have had a separate, independent cost analysis within the Air Force and this separate analysis shows, at most, a 2 or 3 percent increase. So, I frankly don't think that the systems analysis cost study bears audit.

Chairman MCCLELLAN. You say that there was such a study made?

Secretary SEAMANS. We did not have a study made. This is by the Office of the Secretary of Defense.

Chairman MCCLELLAN. It says here a secret Department of Defense study.

Secretary SEAMANS. This is the Assistant Secretary of Defense for Systems Analysis having a study made. We are not trying to hide it.

Chairman MCCLELLAN. Is the report secret?

Secretary SEAMANS. My understanding is that at this time the Office of the Secretary of Defense is not prepared to release that study but this has nothing to do with the Department of the Air Force. This is up to the Office of the Secretary of Defense. As far as I am concerned, the report could be presented to this committee even though I don't think it is a very reliable or impressive report.

Chairman MCCLELLAN. I do not know that we will need it. We may.

We may need to evaluate it. But I would be very glad to have it submitted. If you don't have the authority——

Secretary SEAMANS. I do not have the authority.

Chairman MCCLELLAN. You do not?

Secretary SEAMANS. I do not.

Chairman MCCLELLAN. Make a note of this and let us take it up with the Defense Secretary. I do not know whether this story has validity or not. If it does, we need to know it. If there are any problems, they should be cleared up. I expect to be confronted with this in the handling of this bill. I want to make every record I can of what the truth is, what are the facts. Let's get a record before us that is truthful and on which we can rely.

F–15 ENGINE

The very next paragraph in this article says "The Star News also has learned that the special engine being developed for the F–15 has had 52 hitherto undisclosed major breakdowns in its hardware."

Now that implies that there are certainly serious problems with this engine, if it has had a number of breakdowns and these major breakdowns have been undisclosed. This would imply that they, too, are being kept secret. That is the indication of it as I interpret it. What do you say about that, Mr. Secretary?

Secretary SEAMANS. I would say there has been no attempt on our part to hide the engine program from congressional committees or within the Department of Defense. I think the number that is listed there is highly misleading. However, as we discussed in our statement, we have had some difficulties with the engine. It is for this reason that we are not giving the final go-ahead on the production of the airframe until we put the engine through the 150-hour endurance runs which will take place, according to our plan, by the end of May. We made this decision so that we would have all the facts on the engine before going ahead.

As I said, there has been no attempt on our part to keep this a secret.

Chairman MCCLELLAN. That is certainly the implication of it, "heretofore undisclosed."

General GLASSER. Quite to the contrary, any time there has been an incident that we thought was significant there has been put together a notification to each of the committees to apprise them of how the program is progressing, and we will continue to do that as we proceed.

Chairman MCCLELLAN. It is this kind of information going out to the public that sometimes casts a situation in the wrong light and provokes unwarranted and unjust criticism. I think, the thing to do, as we are considering in this bill now, is to get these things cleared up in the record.

The next paragraph says: "These failures were known to key Pentagon officials when they approved production of the F–15 a month ago," which would be about February 18. "Since that go-ahead was given two more engines have failed in the tests and one of them was involved in a crucial test which the engine must pass."

I would like to have your comment on that, Mr. Secretary.

Secretary SEAMANS. I believe in that particular case it was the engine endurance run and at that point we decided we would not continue the endurance run and we did investigate the failure. It is true that those two failures occurred. That is the reason why we will not complete the endurance run until the end of April or early in May.

F–15 PRODUCTION APPROVAL

Chairman MCCLELLAN. Has production been approved for the F–15?

Secretary SEAMANS. Full production has not been approved. The article is correct that this was known at the time that we held our meeting with the Office of the Secretary of Defense. We in the Air Force discussed our whole engine problem with the staff in the Office of Secretary of Defense in a very thorough and open fashion. It is for this reason that we have not gone ahead with the full approval for the production aircraft. We are holding that decision until the end of May. Mr. Kelly, who wrote that article, knew that perfectly well because I told him, myself, but he did not choose to put this in the article.

Chairman MCCLELLAN. In other words, the article in that respect is misleading?

Secretary SEAMANS. I believe it is.

Chairman MCCLELLAN. You think that there is no reason for it to be misleading because you stated the facts to him, is that correct?

Secretary SEAMANS. That is correct.

AIRPLANE ENGINE PRODUCTION

General GLASSER. Mr. Secretary, I think we might add at this point that there was a careful detailed analysis of the financial exposure of the Government under a variety of ways for treating the problem. It was very obvious that the least risk to the Government was to go ahead as planned with long lead-time money at this time while conducting these additional tests that the Secretary has referred to so that in the eventuality that the engine did proceed through the test satisfactorily we would still be on course at minimum expenditure. If we took the excessively conservative position and said "stop everything now," and then proceeded with the engine and have had a success, to restart the program would have cost considerably more.

Chairman MCCLELLAN. Take these two words, "approved production." Tell me whether you have approved production.

General GLASSER. We have not.

Chairman MCCLELLAN. Finally, conditionally, tentatively or what?

General GLASSER. Production as such has not been approved. We have authorized the release of long lead time moneys preparing for production.

Chairman MCCLELLAN. Then until he gets further orders a contractor cannot begin production for the purpose of fulfilling the order.

General GLASSER. I don't want to get in a point of quibbling——

Chairman MCCLELLAN. I don't, either, but I want to be able to make this record speak the truth.

General GLASSER. In a legal sense we have not authorized production. The contractor is producing some components of the aircraft at this time, but he is limited in scope.

Chairman MCCLELLAN. All-out full production has not been ordered?

General GLASSER. That is correct, sir.

FUNDING FOR AIRCRAFT AND ENGINE

Secretary SEAMANS. A ceiling has been put on his expenditures. I believe it is $40 million.

General CROW. $40 million limited funding in this interim period until a decision on production is made.

Chairman MCCLELLAN. In other words, you are doing what appears to be the prudent thing under the circumstances to protect the government's interest and at the same time make progress?

Secretary SEAMANS. That is the way we see it.

Chairman MCCLELLAN. This article does not say that.

Secretary SEAMANS. That is right.

Chairman MCCLELLAN. I don't know what it was intended to do, but if you are giving the facts now, this article is misleading and it creates a wrong impression for the readers of this article.

Senator HRUSKA. Would the Chairman yield on this point?

Chairman MCCLELLAN. I will be glad to yield.

Senator HRUSKA. Funding for the 30 planes in fiscal year 1973 was approved, subject, however, to the successful completion of the tests on the revisions that were necessary?

General GLASSER. That is correct.

General CROW. Even so the total money for the 30 aircraft has not been released.

Senator HRUSKA. That appropriation and that funding are subject to, or conditioned upon, the successful passing of this test.

Secretary SEAMANS. That is correct.

LAST MAJOR TEST OF F-15

Chairman MCCLELLAN. Is the 150-hour endurance test the last major test that you haven't yet achieved and that you want to achieve satisfactorily before entering into production?

Secretary SEAMANS. Yes, it is. We have passed many other milestones. We have flown over 300 hours in the airplane under many different conditions. We have done the static testing. We have done all kinds of different tests. This is the last one that remains to be done.

Chairman MCCLELLAN. If this is successfully completed, then there is no further hindrance to entering into full production?

Secretary SEAMANS. That is correct.

Chairman MCCLELLAN. So far as the engine is concerned, is that correct?

Secretary SEAMANS. As far as the engine or any other part of the airplane.

Chairman McClellan. This is the last and final test with respect to the engine?

Secretary Seamans. Yes; it is.

Chairman McClellan. You will have knowledge about that, whether it has passed or has not, sometime in the latter part of May?

Secretary Seamans. Yes.

DETAILED ANALYSIS ORR KELLY ARTICLE, MARCH 18, 1973 ON F–15

Chairman McClellan. I believe that is all I care to ask about this article. I think that hits the real points at issue or points that are important.

I would like you, if you wish, to submit any further comments on this article or on anything else pertaining to this particular system that you think we should have in making this record.

Secretary Seamans. I would like very much to have the opportunity to submit a more detailed analysis of that article.

Chairman McClellan. I would like for you to. As I said and I say again we are going to be confronted with things like this, and whatever the final decision is of the Appropriations Committee, whatever we recommend, there will still be attacks made, maybe rightfully so. I have no objection to attacks being made, but I want the record to speak the truth. On the basis of truth, I think the Congress can make an intelligent judgment.

[The information follows:]

ANALYSIS OF ORR KELLY ARTICLE

"F-15 COST IS HIDDEN

CHARGE: A secret Defense Department Study shows a 21% cost increase on the F-15. This has been kept from Congress.

FACT: A parametric study by the Cost Analysis Improvement Group (CAIG) of the Office of the Secretary of Defense was accomplished in 1972, using a broad data base from past aircraft development programs. The results of this analytical effort were approximately 21% higher than the present SAR figures. The existence of this study was known to the Congressional staff.

COMMENT: The SAR program estimate bases are negotiated contracts at target, negotiated options with not-to-exceed ceilings, cost trade-off studies at program go-ahead, unique management controls and a sophisticated performance measurement system that permits validation of the program estimate. The SAR estimate is now over three years old with 85% of the development program funded and still on budget target. Additionally, the SAR values are substantiated within 2-3% by an Air Force Independent Cost Analysis (AF/ICA), validated by the Aeronautical Systems Division of the Air Force Systems Command. This Air Force ICA has been examined and endorsed by the Air Force Auditor. The existence of the CAIG study, the Air Force ICA and, of course, the SAR were known to members of the Congressional staff.

CHARGE: The F-100 engine being developed for the F-15 has had 52 hitherto undisclosed major breakdowns in its hardware.

FACT: The developmental testing of the Pratt & Whitney F-100 engines has identified several design deficiencies, each of which has been systematically and effectively corrected. These have neither been major in scope nor have they been secreted by the contractor or the Air Force.

COMMENT: The identification of design deficiencies and performance inadequacies is a fundamental element in the development of all hardware, but it is particularly key in the area of aircraft engine development. To expect the test and qualification of an engine not to identify such deficiencies would be both impractical and unrealistic. The assertion that those technical problems identified to date in the F-100 engine program are "major breakdowns" is not documented in fact. Additionally, the Air Force has been open with both the press and the Congressional staff in discussions of all significant test results of the F-100 engine program.

CHARGE: The CAIG estimate has set off a bitter dispute within the Pentagon.

FACT: The existence of both the CAIG and the Air Force ICA has been thoroughly discussed between OSD and the Air Force without conflict.

COMMENT: The only dispute that is evident as a result of the CAIG and ICA difference is one of academic merit. The proponents of each method endorse the analytical basis and fundamental assumptions of their model. The differences in the conclusions of the two approaches have led to the recent and on-going efforts to combine the merits of each, and thereby, hopefully to develop an improved model from which to work.

CHARGE: Some of the early production models of the F-15 will be equipped with engines that have not passed military qualification.

FACT: Engine qualification is currently scheduled to be completed by May 1973, and the first production aircraft is not due for delivery until November 1974.

COMMENT: The very conservative F-15 program approach of "fly-before-buy" has provided sufficient program flexibility to insure that such unwarranted risk need not be taken. Even with the delay experienced to date in complet-

ing engine qualification, the F-100 engine will be fully qualified at least a year before installation in a production aircraft.

CHARGE: Recent decision to proceed with production of the F-15 was a significant departure from the "fly-before-buy" concept.

FACT: The F-15 program has always maintained adherence to Mr. Packard's interpretation of the "fly-before-you-buy" concept. Explaining this approach to a Congressional Committee, Mr. Packard said: "In my mind, fly-before-you-buy means having an acceptable level of confidence that we know what we are doing before we move ahead ....".

COMMENT: Both the experience gained in the F-15 flight test program and the overall engine test program have generated the necessary level of confidence to proceed with the FY 1973 production of 30 F-15s. Production configured engines are currently flying in some RDT&E aircraft. The F-15 has bettered all of the current DCP thresholds except two.

CHARGE: There are F-15 associated costs hidden as other efforts to minimize the total F-15 costs.

FACT: There are on-going development efforts such as the GAU-7A 25 mm gun and the Tactical Electronic Warning Systems which, if successful, will have application to the F-15 aircraft.

COMMENT: The management decision to develop such high risk subsystems as the GAU-7A and TEWS was, in no way, an effort to hide funds expended. Costs associated with these efforts have been reported to Congress and have in every case been clearly identified as having potential application to the F-15, as well as other aircraft.

CHARGE: When the engine cost went up $552 million, $522.8 million was deleted in needed spares, in an effort to offset the cost increase.

FACT: The engine cost increase of $522 million was a net increase cost projected from the repriced engine contract after deletion of the Navy F-14B engines. Subsequently, in May 1972 DoD directed a change in reporting cost on the SAR report. This change was applicable to all SAR reports and in no way related to the F-15 engine costs. Previous SAR documents included a last page titled, "Additional System Costs" which included a wide variety of cost categories such as (1) Modifications, (2) Component Improvements, (3) Modification Spares, (4) Replenishment Spares, (5) Common AGE, (6) Common AGE Spares and (7) War Consumables. The revised reporting eliminated all cost categories except (1) Modifications and (2) Component Improvement. The effect of this direction was to reduce the total dollar value of "Additional System Costs" reported by approximately $520 million.

COMMENT: The increase in engine cost was appropriately reflected within the total system acquisition cost of the F-15, and was properly reported in the main body of the SAR. The reduction in reported Additional Systems Costs prompted by the Dod Directive does not impact the reported system acquisition cost.

CHARGE: F-15 program includes a $15.5 million spin inhibitor system designed to solve a serious problem.

FACT: The F-15 does not have a spin problem and there is no spin inhibitor system either existing or envisioned. The $15.5 million figure quoted does not exist in the F-15 program.

COMMENT: The F-15 design has displayed such a resistance to spin that difficulties have been encountered in attempting to spin the 3/8 scale F-15 spin model. The assertion of a spin problem in the F-15 aircraft is unfounded.

Chairman McClellan. Is there anything else, Senator?

Senator Young. No, Mr. Chairman.

Chairman McClellan. Mr. Secretary and General Ryan, we will expect, no doubt, before the hearings close on this budget, that we will need further testimony from you, either from you or your successor since you have indicated you will not be here very long.

I understand Secretary Seamans will be available here. I don't know what your destiny is, General.

General Ryan. I will be available if the committee wants me.

Chairman McClellan. In the meantime, Mr. Secretary, to you and to General Ryan we will submit questions for you to answer for the record. It may be ultimately we will have to call you back. In the meantime we may submit a list of questions to you.

1974 Budget Request

STATEMENT BY MAJ. GEN. JOSEPH R. DE LUCA, DIRECTOR OF BUDGET

PREPARED STATEMENT

Chairman McClellan. At this point in the record there will appear the statement of Maj. Gen. Joseph R. De Luca, Director of Budget, Air Force, on the overall budget for the Department of the Air Force for fiscal year 1974.

[The statement follows:]

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE. This briefing consists basically of three parts. First, Forces and Resources programmed for the Air Force during fiscal year 1974; Second, formulation of the Air Force Budget including Appropriation Summaries; and Third, Special Interest Subjects and Analyses.

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
		• LOGISTICS

RESOURCES

- 11600 AIRCRAFT
- 1054 STRATEGIC MISSILES
- 5.9 MILLION FLYING HOURS
- 151 MAJOR BASES
- 15 MAJOR AIR COMMANDS
- 10 SEPARATE OPERATING AGENCIES
- 1.1 MILLION PERSONNEL

TOA

$25,006 MILLION

Chart 1

AIR FORCE RESOURCES

Chart 1 shows the Air Force resources necessary for the security of the United States which are provided by the FY 1974 Budget request.

The Air Force may be categorized into: Strategic, Tactical and Mobility, and Research and Development, Training and Logistic forces.

The forces include 1,054 Strategic Missiles and 11,600

aircraft flying 5.9 million hours. The USAF consists of 151 major installations throughout the world manned by 1.1 million personnel. There are 15 major Air Commands and 10 Separate Operating Agencies. The Total Obligation Authority requested for these resources is $25,006 million.

STRATEGIC FORCES

ORGANIZATIONS: SAC ADC ANG

PRIMARY STRUCTURE:

AIRCRAFT	SQ	
B-52 G/H	17	1580 U.E.
B-52 D/F	7	
FB-111	4	
KC-135	38	
F-106	11	
F-102	10	
F-101	6	
EC-135 AABNCP	1	
SR-71	1	

MISSILES	
MINUTEMAN III	1054 U.E.
MINUTEMAN II	
MINUTEMAN I	
TITAN	

COMMAND, CONTROL AND SURVEILLANCE

BASES	
SAC	31
ADC	8

Chart 2

Strategic forces, shown on chart 2, consist of the Strategic Offensive and Defensive Forces, which are assigned to the Strategic Air Command (SAC), the Aerospace Defense Command (ADC) and the Air National Guard (ANG).

Only the major 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 and tactical fighters on a world-wide basis. There are 24 B-52 Squadrons, four FB-111 Squadrons, and 38 KC-135 Squadrons.

The Aerospace Defense Command (ADC) provides forces to the combined U.S. and Canadian North American Air Defense Command (NORAD). ADC operates interceptors, surveillance and control aircraft, ground control radars and early warning systems. The Air National Guard (ANG) now provides the majority of the Air Defense interceptor force with only seven F-106 squadrons remaining in the active inventory. Command, Control and Surveillance is an integral portion of Strategic Forces operated by NORAD. Included are 29 control centers, eleven spacetracking installations and 136 radar sites. Strategic defensive forces consist of eleven F-106 squadrons (four ANG and seven Active), ten F-102 ANG squadrons and six F-101 ANG squadrons.

TACTICAL AND MOBILITY FORCES

ORGANIZATIONS: TAC PACAF USAFE USAFSO AAC MAC AFR ANG

PRIMARY STRUCTURE:

TACTICAL	SQ	
F-4	46	
F-111	12	
F-105	8	
F-100	17	
F-104	1	
A-7	12	2845
A-37	2	U.E.
KC-97	9	
EC-135		
RECON/TEWS/DRONE	23	
SOF	13	

AIRLIFT	SQ	
C-5	8	
C-141	26	
C-124	3	910
		U.E.
C-130	46	
C-123	5	
C-7	3	

BASES			
TAC	18	AAC	3
PACAF	12	MAC	10
USAFE	20	AFR	10
USAFSO	1	ANG	1

Chart 3

Chart 3 shows the Tactical and Mobility forces assigned to the Tactical Air Command (TAC), the Pacific Air Force (PACAF), the United States Air Force - Europe (USAFE), United

States Air Force - Southern (USAFSO), the Alaskan Air Command (AAC), the Military Airlift Command (MAC), the Air Force Reserve (AFR), and the Air National Guard (ANG).

The major forces are shown on this chart.

Fighter and attack aircraft perform the missions of counter air, close air support, and interdiction.

The Budget supports 21 tactical fighter wings: 14 F-4s, four F-111s and three A-7 wings.

The Military Airlift Command (MAC) provides strategic air transportation of military personnel and equipment throughout the world. MAC also operates the Aeromedical Evacuation System, the Air Rescue Service, and the Air Weather Service. Tactical airlift forces provide intra-theater airlift for deployed forces.

PACAF, USAFE and AAC are responsible for Air Forces deployed and assigned in their theaters of operation. The mission of USAFSO is to advise and assist the Latin American Air Forces.

Chart 4 summarizes the organization and structure of the R&D, Training and Logistics forces. These forces provide for the modernization and support of the operational forces --- and personnel training and education.

The Air Force Systems Command (AFSC) manages the Air Force Research, Development, Test and Evaulation Program and Major Procurement Programs. It operates 13 Air Force laboratories, two missile space ranges, four test and development centers, and three system acquisition divisions.

R&D, TRAINING AND LOGISTICS FORCES

ORGANIZATIONS: AFSC AFLC AFCS USAFSS ATC AU
SEPARATE OPERATING AGENCIES

PRIMARY STRUCTURE:
- 13 AIR FORCE LABORATORIES
- 4 TEST CENTERS
- 2 TEST RANGES
- 3 SYSTEM ACQUISITION DIVISIONS

- 5 AIR MATERIEL AREAS

- COMMUNICATIONS
  - AUTOMATIC VOICE NETWORK (AUTOVON)
  - AUTOMATIC DIGITAL NETWORK (AUTODIN)
  - AUTOMATIC SECURE VOICE NETWORK (AUTOSEVOCOM)

- TRAINING AND EDUCATION
  - 9 PILOT TRAINING BASES
  - 5 TECHNICAL TRAINING CENTERS
  - NAVIGATOR TRAINING BASE
  - PROFESSIONAL EDUCTION CENTER
  - AIR FORCE ACADEMY

- 110 HOSPITALS

- ACCOUNTING & FINANCE CENTER
- MILITARY PERSONNEL CENTER
- RESERVE PERSONNEL CENTER
- DATA AUTOMATION AGENCY

Chart 4

The Air Force Logistics Command (AFLC) provides logistic support of all forces from five materiel areas (San Antonio, Oklahoma City, Sacramento, Ogden, and Warner-Robins).

The Air Force Communications Service (AFCS) provides equipment and services for world-wide voice, digital and flight communications.

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 mem-

bers. In FY 74, the Air Training Command will train 87,373 new recruits, 163,963 technicians, 3,438 pilots and 1,444 navigators. These numbers include production for the active force, ANG, and AFR as well as civilians, Army, Navy, Other government agencies and Foreign students.

The Air University is dedicated to the professional education of Air Force personnel. There are 110 hospitals. The Air Force also has 10 Separate Operating Agencies (SOAs). A few examples are: The Air Force Accounting and Finance Center, the Military Personnel Center, the Reserve Personnel Center and the Data Automation Agency.

AIRCRAFT AND FLYING HOURS

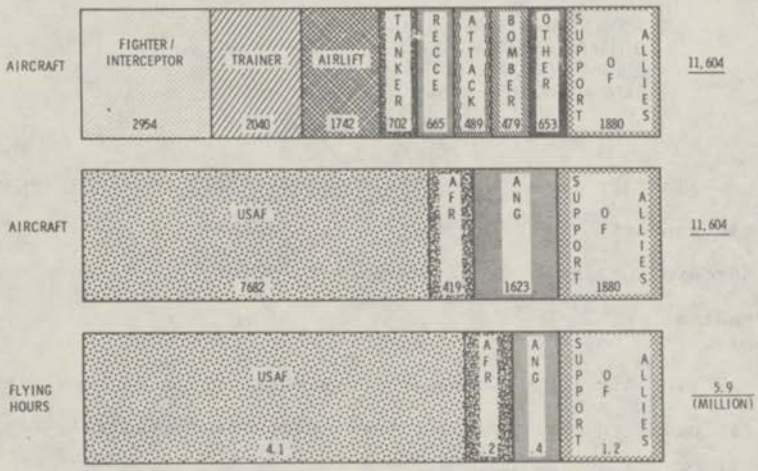


Chart 5

Chart 5 shows the operating aircraft and flying hours supported by the FY 74 Budget request.

The distribution of aircraft by type and component and the associated flying hours for FY 1974 are shown on

this chart. There are 11,604 operating aircraft. Fighters, interceptors, trainers and airlift aircraft comprise 58% of the total; support of allies 16%; and the remaining 26% consists of tankers, reconnaissance, attack, bomber and other aircraft.

The active force is programmed for 7,682 or 66% of the aircraft and 4.1 million or 69% of the flying hours. Support of Allies accounts for 16% of the aircraft and 20% of the programmed flying hours, and the AFR and ANG for 18% of the aircraft and 10% of the flying hours.

MAJOR INSTALLATIONS

UNITED STATES	116
ALLIED COUNTRIES	35

• WESTERN EUROPE

GERMANY	8
GREECE	1
ITALY	1
NETHERLANDS	1
SPAIN	2
TURKEY	1
UNITED KINGDOM	6
TOTAL	20

• PACIFIC

GUAM	1
JAPAN	2
KOREA	2
OKINAWA	1
PHILIPPINES	1
TAIWAN	1
THAILAND	3
VIETNAM	1
TOTAL	12

• OTHER

PANAMA	1
AZORES	1
ICELAND	1
	3

Chart 6

Major Installations are shown on chart 6.

Of the 151 Major Installations, 116 are located in the United States and 35 are in Allied Countries. The 20 bases in Western Europe support NATO. The 12 Pacific bases were those programmed at the time the Budget was submitted, and are being reviewed in light of the cease-fire in SEA.

In addition to the 151 Major Installations, there are over 3,000 Minor Installations. 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.

All other installations, such as Auxiliary Air Fields, Missile Sites, and Radar Sites are categorized as Minor Installations.

MANPOWER SUMMARY

TOTAL

	MILITARY - 813	CIVILIAN - 292
USAF	666	258
AFR	55	11
ANG	92	23

1.1 (MILLION)

MILITARY

	OFFICER	AIRMEN	CADET	TOTAL
USAF	113	549	4	666
AFR	14	41		55
ANG	12	80		92

813 (THOUSAND)

CIVILIAN

	GS	WB	FN	TOT
USAF	131	98	29	258
AFR	5	6		11
ANG	11	12		23

292 (THOUSAND)

Chart 7

The manpower to operate and support the forces is summarized on chart 7. The programmed end strength for FY 1974 is 1.1 million military and civilian personnel.

This chart shows the breakout of personnel in the Active Force, Reserve and National Guard.

The 1.1 million includes 813 thousand Military and 292 thousand General Schedule, Wage Board and Foreign National Civilians programmed for FY 74.

MANPOWER END STRENGTH SUMMARY

(THOUSAND)

	FY 65	FY 66	FY 67	FY 68	FY 69	FY 70	FY 71	FY 72	FY 73	FY 74
MILITARY										
USAF	825	887	897	905	862	791	755	726	692	666
AFR	50	49	50	46	47	52	52	50	52	55
ANG	76	80	84	75	84	90	86	89	89	92
TOTAL	951	1016	1031	1026	993	933	893	865	833	813
CIVILIAN										
USAF	310	329	342	333	324	301	285	271	262	258
AFR	9	9	9	8	8	9	10	9	10	11
ANG	15	16	16	17	17	18	18	20	22	23
TOTAL	334	354	367	358	349	328	313	300	294	292

Chart 8

Chart 8 shows the Manpower End Strength Summary for the Active Air Force, Air Force Reserve and Air National Guard. Reserve Force drill spaces are included in these figures.

USAF military manpower peaked at 905,000 in FY 1968 and has decreased to 666,000 in FY 1974; this is a reduction of 26%. Military strength is at the lowest level since 1950. Conversely, implementation of the Total Force Concept in the past few years has resulted in an increase in military manpower of the AFR and ANG by 20% and 23% respectively since 1968.

Civilian manpower for the USAF was 342,000 in FY 1967. By the end of FY 1974 there will be 258,000 - a decrease of 25%. Air Force Reserve and Air National Guard civilian manpower have increased 38% and 35% respectively since 1968.

PLANNING, PROGRAMMING AND BUDGETING

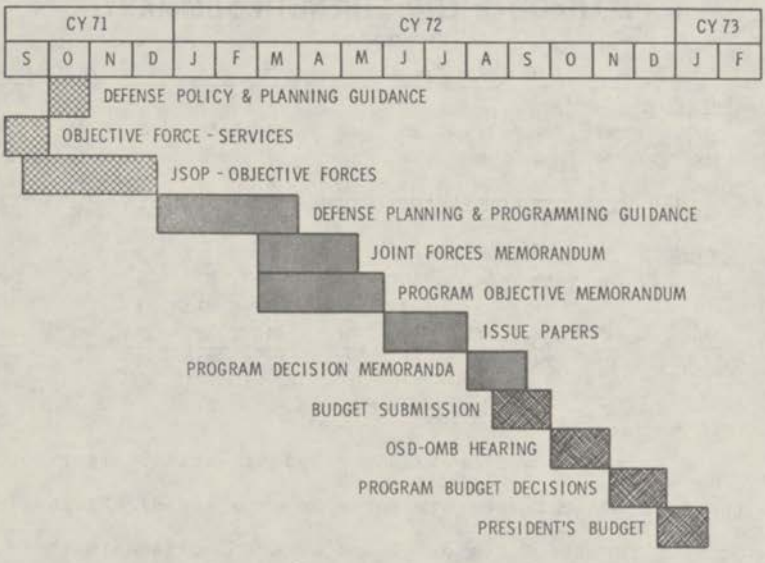


Chart 9

FORMULATION OF THE AIR FORCE BUDGET

Before presenting the Air Force Budget by Appropriation, the next two charts describe the Budget Formulation Process.

Chart 9 shows 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 one of the early stages of this disciplined and documented 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 is developed in five parts: (1) Defense Policy and Planning Guidance, (2) Fiscal Guidance, (3) Materiel Support Guidance, (4) Guidance for Program Objectives Memorandum preparation, and (5) SEA Support Guidance.

The Joint Forces Memorandum (JFM) is the JCS proposed force structure within the Fiscal Guidance described by OSD.

The Program Objective Memorandum (POM) is the Service Secretary's proposed force structure within the Fiscal Guidance.

After analyzing the Service POMs, OSD first prepares Issue Papers to which the Services respond. Specific changes to the Service Submissions are directed by Program Decision Memoranda (PDMs). The PDM process is characterized by extensive discussion between OSD and the Services. The final PDMs provide the basis for submission of the Budget to OSD.

The Service Budget Submission to OSD in early October prices the PDMs 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 reclama the Tentative Decisions in the PBDs. The final step in the PBD process is a Major Budget Issue meeting between Service and OSD leadership to resolve difference before the final Budget Decisions are made.

After final PBDs are received, the changes are made and the resulting program is incorporated in the DOD Budget which is sent by the President to the Congress.

The heart of PPBS is a system of detailed analyses, dialogue on key issues, documentation, and discipline.

BUDGET CONSIDERATIONS

- RESEARCH AND DEVELOPMENT
- FORCE STRUCTURE AND MODERNIZATION
- FORCE READINESS
  - ACTIVITY LEVELS
  - TRAINING
  - SUPPORT
- MANPOWER
- SECURITY ASSISTANCE

Chart 10

Chart 10 shows 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 weapon systems the AF will need 15-20 years from now. Closely related is the need to support the current force structure and maintain readiness while modernizing the force.

Decisions, as to the size of the force structure and readiness levels, dictate the manpower required to operate and maintain forces.

The Budget also provides resources for Security Assistance.

FY 74 BUDGET -- $ MILLIONS

USAF		
• RDT&E	3229	
• PROCUREMENT		
AIRCRAFT	2913	
MISSILE	1573	
OTHER	2005	
• CONSTRUCTION	312	
• MILITARY PERSONNEL	7264	
• O&M	6589	
		23885
AFR		
MILITARY PERSONNEL	145	
O&M	229	
CONSTRUCTION	10	
		384
ANG		
MILITARY PERSONNEL	191	
O&M	526	
CONSTRUCTION	20	
		737
TOA		25006

Chart 11

Chart 11 summarizes the FY 1974 Budget Request by Appropriation.

The Active Force request is for a total of $23,885 million. The Air Force Reserve requires $384 million and the Air National Guard needs $737 million for a total of $25,006 million.

FY 1973/FY 1974 COMPARISON

		($ MILLIONS)		PERCENT	
	USAF	FY 1973	FY 1974	FY 1973	FY 1974
• RDT & E		3130	3229	12.6	12.9
• PROCUREMENT					
AIRCRAFT		2640	2913	10.6	11.6
MISSILE		1686	1573	6.8	6.3
OTHER		2080	2005	8.4	8.0
• MILITARY CONSTRUCTION		269	312	1.1	1.2
TOTAL INVESTMENT		9805	10032	39.5	40.0
• OPERATION AND MAINTENANCE		6696	6589	26.9	26.4
• MILITARY PERSONNEL		7373	7264	29.7	29.1
TOTAL O&M AND MIL PERS		14069	13853	56.6	55.5
TOTAL		23874	23885	96.1	95.5
	AFR				
OPERATION AND MAINTENANCE		193	229	.8	.9
MILITARY PERSONNEL		129	145	.5	.6
MILITARY CONSTRUCTION		7	10	-	-
TOTAL		329	384	1.3	1.5
	ANG				
OPERATION AND MAINTENANCE		464	526	1.9	2.1
MILITARY PERSONNEL		173	191	.7	.7
MILITARY CONSTRUCTION		16	20		.1
TOTAL		653	737	2.6	3.0
TOA		24856	25006	100.0	100.0

Chart 12

Chart 12 compares FY 73 and FY 74 TOA and percentages by appropriation.

There are shifts in the details and a slight rise in the total· but the overall picture is one of a level. stable program. Of special note is that in FY 74. the corner has been turned on support and personnel costs which are 55.5 percent of the Budget in FY 74 compared to 56.6 percent in FY 73. Investment increased from 39.5 percent in FY 73 to 40 percent in FY 74.

RDT & E

BUDGET ACTIVITY	($ MILLIONS) FY 73	FY 74	CHANGE
SCIENCES	131	136	+ 5
AIRCRAFT	1290	1228	- 62
MISSILES	345	293	- 52
ASTRONAUTICS	340	529	+189
ORDNANCE	111	124	+ 13
OTHER EQUIPMENT	525	518	- 7
MANAGEMENT AND SUPPORT	388	401	+ 13
TOA	3130	3229	+ 99 (3.2%)
PROGRAM CATEGORY			
RESEARCH	81	81	-
DEVELOPMENT			
EXPLORATORY	262	267	+ 5
ADVANCED	435	540	+105
ENGINEERING	914	1023	+109
OPERATIONAL SYSTEMS	934	800	-134
MANAGEMENT AND SUPPORT	504	518	+ 14
TOA	3130	3229	+ 99

Chart 13

Chart 13 shows the RDT&E Appropriation by budget activity and by program category.

R&D funding is $99 million higher than in FY 73.

Military Sciences are funded at essentially the FY 73 level except for increases in defense research sciences, materials development and environmental efforts and studies.

Aircraft development decreases $62 million. The major decrease is for the F-15 ($455 to $230M) as this program matures. This is offset by increased requirements for such programs as the A-10 ($48M to $112M).

Missile development decreases $52 million as the MINUTEMAN Program goes from $138.7 million to $99.8 million, and the MAVERICK Program decreases from $8.3 million to $0.

million over FY 73. The increase is primarily for improvement in intelligence data collection capability ($188.4M to $299.4M).

The Ordnance Program increase includes the GAU-7A, 25mm, and the GAU-8A, 30mm, Gun Test Program.

The Management and Support area provides funds for operation of the AF System Command divisions (3), and test centers (4), plus Headquarters AFSC and the Space and Missile Systems Office (SAMSO). Pay raises contribute $16.2 million to the increase from FY 73 to FY 74.

The RDT&E request is also shown by program category which will be presented on the following chart. The definitions are:

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 pertains to programs that are being engineered for service use, but which have not yet been approved by the SecDef for procurement and deployment.

Operational System Development is the development of weapon systems which have been approved for operational deployment.

SELECTED DEVELOPMENT PROGRAMS

		($ MILLIONS) FY 73	FY 74
	OPERATIONAL SYSTEMS		
F-15	AIR SUPERIORITY FIGHTER	455	230
MM II/III	BALLISTIC MISSILE	140	100
DSP	DEFENSE SUPPORT PROGRAM	32	50
SDS	SATELLITE DATA SYSTEM	23	40
	CLASSIFIED	188	299
	ENGINEERING		
B-1	STRATEGIC BOMBER	445	474
A-10	SPECIALIZED CLOSE AIR SUPPORT ACFT	48	112
AWACS	AIRBORNE WARNING AND CONTROL SYSTEM	194	198
AABNCP	ADVANCED AIRBORNE COMMAND POST	48	37
	ADVANCED		
ABRES	ADVANCED BALLISTIC RE-ENTRY SYSTEM	95	95
SCAD	SUBSONIC CRUISE ARMED DECOY	49	72
AMST	ADVANCED MEDIUM STOL TRANSPORT	25	67
LWF	LIGHTWEIGHT FIGHTER PROTOTYPE	40	47

Chart 14

Chart 14 shows selected Operational, Engineering and Advanced Development Programs.

F-15 Air Superiority Fighter funding is shifting from R&D to Procurement. The thirty aircraft being procured in FY 73 will be used in operational testing, training, and to initiate equippage of the first wing. The 77 aircraft in the FY 74 Program will complete equippage of the first wing.

The Minuteman II and III requirements decline as the Minuteman system matures.

The Defense Support Program increase is to improve satellite survivability, reliability and computer software.

The Satellite Data System increase in FY 74 is to continue detailed system engineering and design work on this satellite communications system.

The FY 74 RDT&E request is for $474 million, which represents the peak year for the R&D Budget. During this FY the B-1 engine will complete the Preliminary Flight Readiness Test and the first flight of the prototype aircraft will occur.

The A-10, Specialized Close Air Support Aircraft, continues full scale development in FY 74. Air frame design is scheduled for completion and the manufacture of ten RDT&E aircraft begins in FY 74.

During FY 74, the Airborne Warning and Control System (AWACS) hardware and software will be installed in the System Integration Demonstration (SID) aircraft which will be used to demonstrate the function essential to the AWACS mission.

Design and fabrication of the electronics package for the Advanced Airborne Command Post (AABNCP) will begin in FY 74.

Development of re-entry technology under the Advanced Ballistic Re-entry System (ABRES) Program continues in FY 74.

Engine/airframe compatibility testing will be completed and long lead items will be ordered for RDT&E test-

ing of the Subsonic Cruise Armed Decoy (SCAD).

In FY 74, manufacturing plans and initial test of components for the Advanced Medium STOL Transport (AMST) are scheduled for completion. Tooling fabrication and the assembly of the first prototype aircraft is also scheduled to commence in FY 74.

Completion of ground and structural testing and airframe mating of the Lightweight Fighter Prototype (LWF) is scheduled in FY 74. Four (LWF) aircraft will begin one year of developmental and operational flight testing.

AIRCRAFT PROCUREMENT

	($ MILLIONS) FY 73	FY 74	CHANGE
PROCUREMENT	1403	1537	+134
MODIFICATIONS	466	528	+ 62
SPARES AND REPAIR PARTS	521	580	+ 59
SUPPORT EQUIPMENT AND FACILITIES	206	238	+ 32
CLASSIFIED	44	30	- 14
TOA	2640	2913	+273 (10.3%)

AIRCRAFT DISTRIBUTION	(QUANTITY)	
US AIR FORCE	168	154
US ARMY	180	332
ALLIES	125	74
TOTALS	473	560

Chart 15

Chart 15 shows the FY 74 Aircraft Procurement appropriation request by Budget category. The Aircraft Procurement request of $2.913 billion is $273 million greater than the FY 1973 program, an increase of 10.3 percent.

The additional $134 million for Procurement is requested for new aircraft for the U.S. Army and Southeast Asia allies.

The request of $528 million for Modification of In-service Aircraft is an increase of $62 million over FY 1973. There is a continuing effort to maintain the programmed service life of aircraft within the force, such as the B-52 (S62M): and to increase existing systems' capabilities to counter new threats created by the technological advancement of hostile forces.

The Spares and Repair Parts category includes the engines and investment items required to initially support new aircraft. It also includes replenishment spares to maintain pipeline quantities, base and depot stocks and to replace attrited spares. The FY 1974 increase of $59 million is primarily due to the initial spares area for the F-15, F-5E and the C-130H.

The Aircraft Support Equipment and Facilities category includes aerospace ground support equipment, industrial facilities, war consumables, component improvement and other production charges which contain, among other items, electronic countermeasures equipment. The FY 1974 increase of $18 million over FY 1973 in this category is partially due to the replacement of common equipment items which are from 10-18 years old and are no longer economical to repair. Additional electronic countermeasures equipment is also being programmed to counter new threats including infrared and radar guided missiles.

AIRCRAFT PROCUREMENT

	FY 73		FY 74	
	QTY	$	QTY	$
F-4E	48	168	24	99
F-5A	-	-	(116)	69
F-5B	7	12	-	-
F-5E	57	91	71	112
F-15A	30	422	77	802
F-111F	12	151	-	-
F-111F ADV PROC	-	30	-	-
A-7D	24	83	-	-
A-37B	60	32	-	-
A-10 ADV PROC	-	-	-	30
AABNCP	2	69	1	32
AWACS ADV PROC	-	-	-	12
C-130H	20	90	36	181
CX-X	14	8	16	10
VC-X	4	19	-	-
C-5A	-	108	-	43
T-43A	8	46	-	-
T-41D	1	-	3	-
UH-1H	180	53	308	97
CH-47C	-	-	24	52
HH-53C	6	21	-	-

Chart 16

Chart 16 compares the FY 1973 and FY 1974 Aircraft Procurement by type, quantity and cost.

In FY 74 only 154 aircraft are programmed for the Air Force - 24 F-4s, 77 F-15As, one Advanced Airborne Command Post, 36 C-130Hs, and 16 CX-X aircraft. The procurement of 77 F-15A aircraft, together with the FY 73 procurement of 30 aircraft will complete procurement of aircraft for the first F-15 wing.

The remaining Aircraft Procurement is for either the VNAF (71 F-5E, three T-41 and payback to MAP for aircraft diverted to VNAF) or payback to the U.S. Army for aircraft turned over to the VNAF (308 UH-1H and 24 CH-47).

MISSILE PROCUREMENT

($ MILLIONS)

	FY 73 QTY	FY 73 $	FY 74 QTY	FY 74 $	CHANGE $
•BALLISTIC MISSILES					
MINUTEMAN II/III	120	381	136	401	
MINUTEMAN III ADVANCE PROCUREMENT		16		14	
MINUTEMAN FORCE MODERNIZATION		267		253	
TOTAL	120	664	136	668	+ 4
•OTHER MISSILES					
SHRIKE	300	11		11	
MAVERICK	3000	66	6000	107	
SRAM	480	195	454	137	
SPARROW	40	10		51	
SIDEWINDER		5			
STANDARD ARM	300	39			
DRONES		3		13	
TOTAL	4120	329		319	- 10
•MODS		37		43	+ 6
•SPARES AND REPAIR PARTS		42		47	+ 5
•SUPPORT EQUIPMENT AND FACILITIES		200		141	- 59
•CLASSIFIED		415		355	- 60
TOA		1687		1573	-144 (6.8%)

Chart 17

Chart 17 shows the FY 1974 Missile Procurement appropriation request of $1,573 million.

The procurement and modernization of Minuteman continues bringing the force to 550 MM III and 450 MM II. In addition, provision is made for long lead items for a stable rate and the Maverick production rate increases from approximately 400 to 833 per month by end of the FY 74 funded delivery period. Initial production of an advanced Sparrow is programmed.

Modification of in-service missiles provides for continued update of Minuteman subsystems to improve capability, reliability and safety of the system.

The $47M in FY 74 for spares and spare parts is for initial and replenishment spares of the various missile systems.

The other support equipment and facilities category includes space boosters and satellites for operational space systems, such as the Defense Satellite Communications System, Defense Systems Application Program, Defense Support Program and Satellite Data System.

OTHER PROCUREMENT

	($ MILLIONS) FY 73	FY 74	CHANGE
• MUNITIONS	820	599	-221
(WRM)	(311)	(249)	(- 62)
• VEHICLES	32	52	+ 20
• ELECTRONICS & TELECOMMUNICATIONS	235	337	+102
• BASE SUPPORT EQUIPMENT	142	143	+ 1
• CLASSIFIED	851	874	+ 23
TOA	2080	2005	- 75 (3.6%)

Chart 18

Chart 18 shows the FY 1974 Other Procurement request of $2,005 million.

The Other Procurement request is $75M less than FY 73. The greatest decrease in Munitions is based on the planned decrease in SEA activity at the time the Budget was prepared.

Vehicle Procurement increases to provide an orderly replacement of vehicles that are beyond economical life.

Electronics and Telecommunications Equipment increases $102 million to upgrade and modernize Command, Control and Communications Systems and associated warning systems in support of the World Wide Military Command and Control System (WWMCCS).

Base Support Equipment increases by $1 million for general equipment replacement.

MUNITIONS - HIGH $ ITEMS

($ MILLIONS)

	TOTAL		WRM	
	QTY	$	QTY	$
CLUSTERED BOMB UNIT				
PARACHUTE/ANTI-PERSONNEL	78799	85	71100	62
ANTI-PERSONNEL	27100	24	20607	19
JUNGLE BOMBLET	58838	36	6259	4
ROCKEYE CLUSTER BOMB	15000	41	15000	41
BOMB				
250 LB (MK-81)	265015	31		
500 LB (MK-82)	331049	45		
750 LB (MK-117)	128903	30		
2000 LB (MK-84)	12000	7	9168	6
LASER BOMB GUIDANCE KIT	4800	15	4800	15
ELEC-OPT	780	14	780	14
FUZE				
INERTIAL	120000	10	120000	10
PROXIMITY	70000	23	70000	23
2.75 ROCKETS & HEADS	1127317	44	381169	16
7.62 MM LINK CARTRIDGES	403432K	36	200000K	18
20 MM COMBAT CARTRIDGES	19722K	27	15807K	21

Chart 19

Chart 19 shows FY 1974 High Dollar Munitions items.

The bulk of the Munitions Procurement is to replenish depleted WRM Stocks to align munitions reserves with stockage objectives for war contingency plans.

Planned procurements of cluster bomb units total $145 million which includes $85 million for WRM. For general purpose bombs (e.g., the MK-81, MK-82, etc.) only $6 million of the total planned buy of $113 million is for WRM. Planned procurement of the Rockeye, Laser and Electrical-Optical bombs plus the inertial and proximity fuzes totaling $103 million is all for WRM. Stockage of most general purpose bombs in WRM has been satisfied. The balance of the high cost items identified on the chart for rockets

and cartridges totaling $107 million includes $55 million for WRM.

CONSTRUCTION, AF

($ MILLIONS)

	CONUS	OVERSEA	TOTAL
MAJOR	247	32	279
MINOR			15
PLANNING			18
TOA			312

FACILITY CATEGORY

OPERATIONAL	52	BACHELOR HOUSING	40
RDT&E	10	COMMUNITY	28
MAINTENANCE	36	MEDICAL	41
SUPPORT	33	UTILITIES	12
TRAINING	5	POLLUTION ABATEMENT	10
SUPPLY	12	ADMINISTRATION	33

Chart 20

Chart 20 shows the Construction Program for FY 74.

The request of $312 million includes major construction projects costing $279M or 90% of the program.

Minor construction to meet urgent unforseen requirements which arise during the course of the year will total approximately $15 million.

Planning funds of $18 million are for site selection, base master plans, advance project planning, and project design.

The funding breakout by facility category is as shown.

There is a continuing need to improve living conditions for Air Force personnel. Currently there is a short-

age of adequate housing for 35,000 airmen, 20,000 families and 8,000 bachelor officers. Included in the $40 million for bachelor housing is $25.7 million to construct 4,768 new dormitory spaces, $1.2 million for 60 new bachelor officer quarters and $13.1 million for alterations. Not shown on the chart is the Air Force request for $55.5 million from the OSD Family Housing Account to construct 1800 family units.

MILITARY PERSONNEL, AF

	($ MILLIONS) FY 73	FY 74	CHANGE
PAY AND ALLOWANCES			
OFFICERS	2146	2111	- 35
AIRMEN	4411	4296	-115
CADETS	17	18	+ 1
PCS	475	516	+ 41
SUBSISTENCE	306	307	+ 1
OTHER	18	16	- 2
TOA	7373	7264	-109 (1.5%)
END STRENGTHS			
OFFICERS	115,122	112,893	- 2229
AIRMEN	572,795	549,047	-23748
CADETS	4,417	4,417	
TOTAL	692,334	666,357	-25977 (3.8%)

Chart 21

Chart 21 shows the FY 1974 Military Personnel Appropriation request of $7.264 billion. Military Personnel costs in the active force decreased $109 million from the $7,373 million estimated for FY 1973. Military pay costs are lower than FY 1973 due to strength reductions. The end strength reduction of 25,977 in FY 1974 more than offsets the cost of the increased pay rates. In addition, the decline of 25,977 military spaces by the end of FY

1974 includes conversion of 10,000 military spaces to civilian spaces.

The Cadet Program increase of $1 million is for the pay raise and full year cost of the increase in ration rate effective 1 January 1973 ($1.46 to $1.65).

The permanent change of station travel program increase of $41 million is primarily for the gradual reduction of mandatory 48 month overseas tours to 36 months.

Although not shown on the chart, there are significant actions which impact on Military Personnel.

Officer accessions are estimated to be 10,899 in FY 73 and 10,364 in FY 74. Enlisted accessions for FY 1974 are programmed to be significantly below FY 1973. The largest reduction is in the recruitment of non-prior-service men and women. Plans call for recruitment of 96,529 in fiscal year 1973 versus 73,361 for fiscal year 1974.

Reenlistment rates are currently meeting Air Force needs. First term reenlistments, as a percentage of those eligible is planned to increase from 22.5% to 26.0% in FY 74. Career reenlistment, as a percentage of those eligible, remains constant. Because of the reduction in total strength, the number of career eligibles has decreased; therefore, the rate is estimated to be 93.0% in FY 1973 and 92.2% in FY 1974. The loss rate is anticipated to remain the same in both years.

Increased opportunity for women to serve throughout the officer and enlisted forces of the Air Force is pro-

vided in FY 1974. The number of women in the Air Force is expected to triple by the end of FY 1978. Accession objectives have been established for each year. For example, accession of women is expected to increase from 6,432 in FY 73 to 8,400 in FY 74.

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 22

Chart 22 shows the purpose of the Operations and Maintenance (O&M) Appropriation. It provides the resources for the day-to-day operation of the Air Force, including facilities, equipment, supplies and material.

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 maintained by Operations and Maintenance funds.

OPERATION & MAINTENANCE, AF

($ MILLIONS)

ELEMENT OF EXPENSE		FY 74	PERCENT
• CIVILIAN PAY		2039	31.0
DIRECT HIRE	1942		
INDIRECT HIRE	97		
• DEPOT MAINTENANCE		1125	17.1
EXCHANGEABLES	595		
AIRCRAFT	277		
ENGINE	174		
MISSILE	12		
OTHER	67		
• SUPPLIES AND EQUIPMENT		1186	18.0
POL	420		
WEAPON SYSTEM & MISSION SUPPORT	378		
CIVIL ENGINEER	131		
BASE OPERATING SUPPORT	131		
MEDICAL	68		
TRAINING	58		
CONTRACTUAL SERVICES		714	10.8
TRAVEL & TRANSPORTATION		516	7.8
RENT, COMMUNICATIONS & UTILITIES		436	6.6
OTHER PURCHASED SERVICES		273	4.1
CONTRACTOR OPERATED INSTALLATIONS		162	2.5
OTHER EQUIPMENT MAINTENANCE		92	1.4
PRINTING, INSURANCE & INDEMNIFICATION		46	.7
TOA		$6589	100.0

Chart 23

Chart 23 shows the O&M Appropriation by element of expense.

The first three items represent 66% of the O&M Budget. These funds are tied to the force structure and force activity levels.

Civilian Pay includes the compensation and benefits for 169,616 direct hire and 18,761 indirect hire manyears.

Depot Maintenance provides for the payment to the Depot Maintenance Industrial Fund and equipment maintenance beyond the capability of the operational commands.

The $1,186M for Supplies and Equipment supports the flying hour program. The categories shown include POL for

aircraft, repair parts and technical supplies consumed in the operation and maintenance of facilities and for the medical treatment and training of personnel.

Major items included in Contractual Services are contract operations for ground electronics, maintenance of installations, aircraft refueling, and storage of household goods.

Travel and Transportation provides for commercial transportation charges, travel of individuals and per diem costs, freight and express charges, drayage and local transportation expenses such as household goods.

Rent, Communications, and Utilities includes utilities, Automatic Data Processing Equipment (ADPE) rentals, rental of other equipment and leasing of working space, charges for the transmission of messages, leased telephone and teletype services and postage.

Other Purchased Services of $273 million includes facility projects by contract and other engineering services, reimbursement for services provided by other DOD components, and contract engineering and technical service.

The $162 million for Contractor Operated Installations provides for the Eastern Test Range, Base Maintenance Contracts for Athens, Greece, Civil Engineering services at installations in Spain and Turkey, and operation and maintenance of Johnson Atoll in the Pacific.

Other Equipment Maintenance of $92 million provides for maintenance of equipment by contract other than the Industrial Fund.

Printing, Insurance and Indemnification includes contractual printing and reproduction services and reimbursement to the Bureau of Employee Compensation.

OPERATION & MAINTENANCE, AF

	($ MILLIONS) FY 73	FY 74	CHANGE
STRATEGIC FORCES	1146	1079	- 67
GENERAL PURPOSE FORCES	952	929	- 23
INTELLIGENCE & COMMUNICATIONS	530	525	- 5
AIRLIFT & SEALIFT	185	178	- 7
CENTRAL SUPPLY & MAINTENANCE	2425	2356	- 69
TRAINING & MEDICAL	842	953	+111
ADMINISTRATION & ASSOCIATED ACTIVITY	204	217	+ 13
SUPPORT OF OTHER NATIONS	412	352	- 60
TOA	6696	6589	-107 (1.6%)

Chart 24

Chart 24 compares the O&M appropriation for FY by Major Force Program (MFP).

In FY 73 the Air Force is operating within the flexibility allowed by DOD reprogramming procedures to adjust funds between major force programs. In compliance with FY 73 Defense Appropriation Act (PL 92-570), the FY 74 Budget has been submitted requesting specific amounts for the various major force programs. There is a continuing need for flexibility to manage Air Force operating accounts.

The decrease of $67 million for Strategic Forces results from phasedown of combat operations in Southeast Asia, Phasedown of B-52D aircraft (from 120 to 95 UE), inactivation of three BOMARC Missile Squadrons, and transfer of Otis AFB to the Air National Guard. These decreases

were partially offset by increased costs of military/civilian conversions, pay raises, Minuteman Force Modernization, and improvements in the defense of the Southern United States.

In General Purpose Forces, the phasedown of Southeast Asia activity was partially offset by the pay raises.

Intelligence and Communications decreases $5 million with the transfer of the Advanced Range Instrumentation Program (ARIS) to Central Supply and Maintenance. This represents a $10 million reduction offset by $5 million for pay raises and additional supplies, maintenance contracts, rentals and services for defense communication system.

The decrease of $7 million for Airlift and Sealift results from the reduction in Southeast Asia activity.

The reduction of $69 million in Central Supply and Maintenance results from reductions in second destination transportation and depot level maintenance associated with the phasedown in SEA and civilian personnel reductions. These reductions are offset by the transfer of the Advanced Range Instrument Ships (ARIS), Automatic Data Processing Equipment (ADPE) rentals for the Advanced Logistics System, and transfer of labor costs from the procurement appropriation for weapon system update modifications.

The $111 million increase for Training, Medical and Other General Personnel Activities is due to the growing use of medical care obtained from the civilian community for dependents and retired personnel, an expanded Medical Training Program, Project Volunteer expenditures and restoration of programs deferred in FY 73.

Administration and Associated Activities increases $13 million as a result of pay raises, JUMPS, New Survivor's Benefit Program, software conversion for WWMCCS, and installation of computers at the Military Personnel Center for the Advanced Personnel Data System and MICROFORM.

The Support of Other Nations net reduction is $60 million. This represents the reduction in support to Southeast Asia countries partially offset by an increase to Military Assistance Advisory Groups (MAAG) and Missions.

In summary, operating funds relate directly to the flying hour, manpower programs and the force and support structure that results from these force and readiness needs.

AIR FORCE RESERVE

APPROPRIATION	($ MILLIONS) FY 73	FY 74	CHANGE
O&M			
MISSION FORCES	125	153	
DEPOT MAINTENANCE	30	35	
OTHER SUPPORT	38	41	
TOA	193	229	+36
PERSONNEL			
RESERVE COMPONENT	111	121	
ROTC	18	24	
TOA	129	145	+16
CONSTRUCTION	7	10	+ 3
TOTAL AFR	329	384	+55 (16.7%)
PROGRAM			
FLYING UNITS	53	55	+ 2
AIRCRAFT	373	419	+ 46
FLYING HOURS	128,098	147,573	+19,475
MILITARY PERSONNEL - END STRENGTH	51,818	55,053	+ 3,235
AVG STRENGTH	51,477	53,323	+ 1,846
CIVILIAN PERSONNEL - END STRENGTH	10,340	10,875	+ 535
AVG STRENGTH	9,880	10,583	+ 703

Chart 25

Chart 25 shows the appropriation requests for the Air Force Reserve.

The Air Force Reserve is continuing its transition to more modern weapon systems. Force changes shown on the following chart are the principal cause of the increase over FY 73.

This is the first year that the Air Force Reserve O&M requirements are presented as a separate appropriation. The request of $229 million is $36 million greater than in FY 73 and results from force changes, increased flying hours of 19,475 and civilian average strength increases of 703.

The Reserve Personnel appropriation increases $16 million as a result of an average strength increase of 1,846 and implementation of the Health Professions Scholarship Program.

Military Construction increases $3 million in FY 74 to update facilities in support of more modern aircraft.

RESERVE MODERNIZATION

(UNITS)

FROM	TO	FY 72	FY 73	FY 74
• AIRCRAFT & MISSION CONVERSION				
C-124	C-130A	2		
	C-130B	2		
	C-123K	1	1	
	C-7A	1		
	A-37B	1		
	EC-121	1		
	F-105B		1	
	F-105D	1	1	
C/AC-119	C-123K	1	1	
O-2A	C-7A	1		
TOTAL		11	4	

FROM	TO	FY 72	FY 73	FY 74
• AIRCRAFT CONVERSIONS				
HC-97	HC-130		2	
HU-16	HH-34	1	-	1
TOTAL		1	2	1
• SERIES CHANGES				
C-130A	C-130B			3
• ACTIVATIONS				
	C-130A	1		
	C-130B		1	
TOTAL		1	1	
• ASSOCIATE UNITS				
	C-141		2	2
C-124	C-141	1		
C-141	C-5A		2	2
TOTAL		1	4	4

Chart 26

Chart 26 shows the modernization of the Air Force Reserve. The Air Force Reserve is continuing its transition to more modern weapon systems. During FY 1973, four units are being tasked with a different mission and aircraft, while two are transitioning to newer aircraft with the same mission.

During FY 1974, one unit will convert to different aircraft and three units will receive newer models of the same aircraft. In addition, two units were activated during FY 72 and FY 73.

The military airlift units have progressed from C-124s to C-141s and C-5s in an associate capacity. Tactical aircraft units will fly C-130s, C-123s and C-7s instead of HC-97s, and, the Air Force Reserve has been assigned a tactical fighter mission with the conversion of two F-105 units in FY 1973.

AIR FORCE RESERVE

• FLYING UNITS	FY 73	FY 74
A-37	4	4
F-105	3	3
C-7	2	2
C-123	4	4
C-130	18	18
EC-121	1	1
HH-34	2	3
HU-16/HH-34	1	-
HC-130	2	2
ASSOCIATE UNITS		
C-5A	2	4
C-9	1	1
C-141	13	13
FLYING UNITS	53	55
• NON-FLYING UNITS	137	138
TOTAL AFR	190	193

Chart 27

Chart 27 shows the number of flying and non-flying units in the Air Force Reserve.

With the activation of two C-5 units in FY 1974, the Air Force Reserve will increase from 53 flying units in FY 1973 to 55 units by the end of FY 1974. This is consistent with the Total Force Concept and increases Air Force Reserve capabilities and mission responsibilities.

AIR NATIONAL GUARD

APPROPRIATION

	($ MILLIONS) FY 73	FY 74	CHANGE
O&M			
OPERATIONS	47	45	
TRAINING	336	388	
LOGISTICS AND SUPPORT	81	93	
TOA	464	526	+62
PERSONNEL	173	191	+18
CONSTRUCTION	16	20	+ 4
TOTAL ANG	653	737	+84 (12.9%)
PROGRAM			
UNITS	92	92	
AIRCRAFT	1857	1816	- 41
FLYING HOURS	446,823	432,206	-14,617
MILITARY PERSONNEL - END STRENGTH	88,876	92,473	+ 3,597
- AVG STRENGTH	88,268	92,291	+ 4,023
CIVILIAN PERSONNEL - END STRENGTH	22,214	23,158	+ 944
- AVG STRENGTH	21,000	22,891	+ 1,891

Chart 28

Chart 28 shows the Air National Guard (ANG) appropriation and related program data. The extensive conversion and modernization of ANG units, which will be shown on the following chart, causes an increase of $84 million in FY 74 to $737 million total ANG funding.

A major portion of the $62 million increase in the O&M appropriation is required for unit conversions, a newly assigned Southern Air Defense Mission, annualization of the

January 1973 pay increases and the transfer of host responsibility for two installations from the active Air Force.

The Military Personnel appropriation increase of $18 million is for the increased drill strength training associated with unit conversions and annualization of the January 1973 pay increases.

The Military Construction increase of $4 million is for facilities to support conversion and modernization.

GUARD MODERNIZATION

(UNITS)

FROM	TO	FY 72	FY 73	FY 74
• AIRCRAFT & MISSION CONVERSION				
F-100	F-106	1		
F-105	F-106		1	
C-97	KC-97		1	
C-121	C-130	2		
	C-7A		1	
	KC-97		1	
C-124	C-130E	1		
	C-130A	1		
	KC-97		1	
	F-100D		2	
KC-97	F-102		1	
RB-57	B-57G	1		
RF-101	F-100D	2		
	F-106	—	1	
TOTAL		8	9	

FROM	TO	FY 72	FY 73	FY 74
• AIRCRAFT CONVERSION				
F-84	F-4	1		
	F-100D	1		
F-100C	A-7			1
F-100D	A-7			2
F-102	F-106	1		
RF-84	RF-101	2		
RF-84	RF-4	1		
	TOTAL	6		3
• SERIES CHANGES				
F-100C	F-100D	3		2
C-130A	C-130B	—		1
	TOTAL	3		3

Chart 29

Chart 29 shows the modernization of the Air National Guard.

Modernization of the Air National Guard greatly improves its combat capability. Aircraft and mission conversions were extensive in FY 1972 and there will be nine additional in FY 1973. Three units of the aging F-100s will be converted to A-7Ds in FY 1974. There will be three

series conversions in FY 1974; two units with F-100Cs were changed to F-100Ds and one C-130A unit will change to C-130B.

AIR NATIONAL GUARD

• FLYING UNITS	FY 73	FY 74
A-37	2	2
F-100	21	18
F-101	6	6
F-102	10	10
F-101/F-102	1	1
F-104	1	1
F-105	4	4
F-106	4	4
A-7D	-	3
F-4C	1	1
RF-4C	3	3
RF-101	4	4
C-7	1	1
C-123	1	1
C-124	3	3
C-130	11	11
KC-97	9	9
EC/C-121	1	1
O-2	5	5
C-119/U-10	3	3
B-57	1	1
FLYING UNITS	92	92
• NON-FLYING UNITS	200	200
TOTAL ANG	292	292

Chart 30

Chart 30 shows the number of flying and non-flying units of the Air National Guard.

In summary, under the Total Force Concept, the AFR and ANG increases to $1.1 billion. Reserve Force capabilities are upgraded through equipment conversions, expansion of mission responsibilities and improved combat readiness. The Reserve Forces are now the initial and primary source of mobilization.

BUDGET SUMMARY

THE AIR FORCE BUDGET CONSISTS OF:	FY 73	FY 74
DIRECT PROGRAM (TOA)	24856	25006
REIMBURSABLE PROGRAM	1725	1293
TOTAL PROGRAM	26581	26299
THE TOTAL PROGRAM IS FINANCED BY:		
APPROPRIATION ENACTED/ESTIMATED	23709	24986
RECOUPMENTS/UNPROGRAMMED BALANCE	4	20
ANTICIPATED REIMBURSEMENTS	1749	1293
TRANSFERS: CONGRESSIONALLY SPECIFIED	551*	
TRANSFERS: PROPOSED	232*	
PROPOSED SUPPLEMENTALS	336*	
TOTAL FINANCING	26581	26299
OBLIGATIONS	26964	26159
OUTLAYS	23721	23944

Chart 31

The Air Force direct program is shown on Chart 31. For FY 73, the TOA is $24,856 million and $25,006 million is requested for FY 74.

In addition, the Air Force Reimbursable Program is estimated to be $1,725 million and $1,293 million in FY 73 and FY 74, 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.

The financing of the program falls into five categories:

First, the Congressional Appropriation which has been enacted for FY 73 or which is being requested for FY 74;

The second source of financing is from the recoupment/ unprogrammed balance which consists of $10 million of unprogrammed FY 1973 Military Construction Funds carried into FY 1974 and an additional $10 million in anticipated recoupments of Military Construction Funds during FY 1974. The FY 1973 unprogrammed balance is due to the cancellation of the SAC Satellite Basing Program at Ellsworth AFB. The FY 74 new obligating authority request is reduced by $20 million as a result of these balances;

Third are the anticipated reimbursements received from customers. In FY 1973, the difference between the anticipated reimbursements of $1,749 million and the Reimbursable Program of $1,725 million, or $24 million, is the estimate of those orders to be received which the Air Force can fill from inventory without requiring concurrent replacement;

Fourth are transfers from other DOD programs, and;

Fifth, the Supplemental Appropriation.

The obligations and outlays in FY 73 and FY 74 continue to show high rates of fund utilization. This is the result of the emphasis which the Air Force has placed on realistic programming and effective program implementation.

FY 73 TRANSFERS

TRANSFERS SPECIFIED IN APPROPRIATION BILL

(TRANSFERRED TO)

AIRCRAFT PROCUREMENT	443
MISSILE PROCUREMENT	35
OTHER PROCUREMENT	23
O&M, AF	50
TOTAL	551

PROPOSED

DMA/DIS	- 68
SECTION 735 - SEA	+216
SECTION 735 - NON - SEA	+ 84
TOTAL	232

Chart 32

The FY 1973 transfers and their purpose are listed on Chart 32.

Transfers required by the FY 1973 Appropriations Act total $551 million. These transfers reflect the Congressional direction to finance a part of the FY 73 TOA programs from prior year balances in lieu of providing new obligation authority. Functional transfers reduce the appropriations by $68 million ($65.3M transfer to Defense Mapping Agency, $3.2M transfer to Defense Investigative Services).

Transfers, as authorized by Section 735, total $300.0 million. $216.0 million is in direct support of the surge in Southeast Asia activity through 31 December 1972. Of the $84 million non-SEA transfer, the $57.5 million transfer to O&M is required to partially offset the FY 73 program/funding imbalance in the operating accounts. The remaining $26.5 million non-SEA transfer to the Military Personnel-AF appropriation is for increased FICA contributions, and increased commutted ration allowances effective 1 January 1973.

FY 73 PROPOSED SUPPLEMENTALS

PURPOSE
($ MILLIONS)

PAY RAISES	
JANUARY 1973 MILITARY	184
JANUARY 1973 GENERAL SCHEDULE	51
WAGE BOARD	65
SUB-TOTAL	300
POSTAL INCREASE	32
HEALTH SCHOLARSHIP	4
TOTAL	336

Chart 33

Chart 33 summarizes the FY 1973 proposed supplementals of $336 million:

The January 1973 pay raise is $184 million for military personnel and $51 million for civilian classified employees (1 Jan-30 Jun 73). The CY 1972 Wage Board increase required $65 million.

The postal increase of $32 million includes $25 million for increased charges for indicia mail and $7 mil-

lion for mail privileges for military personnel overseas. The DOD Health Scholarship Program costs an additional $4 million in FY 73.

FY 1973 BUDGET TRACK

($ MILLIONS)

	ENACTED	TRANSFERS	SUPPLEMENTALS	OTHER FINANCING	FY 73 PROGRAM IN FY 74 BUDGET
RDT&E	3123	- 3	+ 10		3130
AIRCRAFT PROC	2682	- 52		+10	2640
MISSILE PROC	1705	- 18			1686
OTHER PROC	2122	- 58		+15	2080
MIL PERS, AF	7151	+ 46	+ 176		7373
MIL PERS, AFR	124		+ 5		129
MIL PERS, ANG	168		+ 5		173
O&M, AF	6250	+317	+ 129		6696
O&M, AFR	189		+ 4		193
O&M, ANG	457		+ 7		464
CONSTRUCTION, AF	279			-10	269
CONSTRUCTION, AFR	7				7
CONSTRUCTION, ANG	16	—	—	—	16
TOA	24,273	+232	+336	+15	24,856 ✓

Chart 34

Chart 34 represents a track by appropriation of the FY 1973 Budget from the program as enacted by the Congress to the FY 73 column of the FY 74 Budget.

Transfers include those under Section 735 of the FY 73 DOD Appropriations Act and transfer of functions within the Department of Defense.

Supplementals are for pay raises, postal increases and for the Health Professions Scholarship Program.

In other financing, the $10 million in Aircraft Procurement and the $15 million in Other Procurement are the result of sales of material to customers that do not require replacement. The $10 million decrease in Military Construction funds is an unprogrammed balance at the end of FY 1973. This $10 million is carried forward to FY

1974 as a reduction in the request for new obligational authority.

FY 73 INTERNAL REPROGRAMMING

($ MILLIONS)

APPROPRIATION	INCREASE		DECREASE	
RDT&E (2)	DEFENSE SUPPORT PROGRAM	11	AWACS	20
	ADVANCE RADIATION TECH	5	OTHER PROGRAMS	2
	IMPROVED AIRCRAFT GUN SYS	4		
	EF-111A	2		
ACFT PROC (1)	B-52 MODS	13	MISC PROGRAM DECREASES	13
OTHER PROC (3)	1000 LB BOMB	8	CLUSTER BOMBS	8
	SLBM RADARS	7	DEFENSE SUPPORT	7
	PROXIMITY FUSE	21	OTHER PROGRAMS	21
O&M, AF (2)	MAJOR FORCE PROGRAMS VII & IX	52	MAJOR FORCE PROGRAMS I & II	52
	HEADQUARTERS OPERATION & ADMIN	17	OPERATIONS & LOGISTICS	17
O&M, AFR (1)	HEADQUARTERS OPERATION & ADMIN	1	OPERATIONS & LOGISTICS	1
O&M, ANG (1)	TRAINING SUPPORT	4	OPERATIONS & LOGISTICS	4
	TOTAL	145	TOTAL	145

Chart 35

Chart 35 summarizes the reprogramming actions within available funds that have been proposed to adjust the FY 73 program for changes that have occurred since the Budget was submitted and enacted. For example, within the RDT&E appropriation, as a result of the continuous review of the Defense Support Program, adjustments to the program and funding are required as experience with the system is gained. The most recent reviews show that $10.6 million is required to improve the system's survivability, reliability and capability. The sources of the additional funding requirements under RDT&E are shown. The majority of the additional funding results from the recent review of AWACS by the Defense Systems Acquisition Review Council (DSARC). The $19.5 million decrease results from completion of the Brassboard radar demonstration at less than

budgeted cost, transfer of funding for Aerospace Ground Equipment (AGE) from RDT&E to Aircraft Procurement, and a reappraisal of contractor expenditure rates.

Under Aircraft Procurement, the B-52 reprogramming is necessary to provide for modification of B-52D aircraft to maintain programmed service life. The offsetting decrease results from changes in the C/RC/WC-135 scheduling of modification installation to coincide with IRAN, deferral of certain MODS to provide for further prototype testing, and realignment of modification priorities and decreases in the operational necessity line item because of the unforseen requirement for the B-52 wing modification.

Under Other Procurement, a further example of reprogramming is the increase of $20.9 million for increased procurement of the FMU-56 proximity fuse. The increase is necessary to rebuild WRM stocks to meet the objective levels. Funds for this increase are available from reduced requirements for Laser Bomb Guidance Kits and the Dispenser and Bomb CBU-55.

Under O&M, AF, the $52 million additional requirement is comprised of two major force programs. Central Supply and Maintenance (MFP VII) was increased $43.4 million to provide for transportation expense of moving reparables between depots and operating locations and retention of three tactical reconnaissance squadrons to meet NATO commitments rather than being phased out as originally planned. $8.7 million for Administration and Associated Activities (MFP IX) is to meet the requirements of the Joint Uniform Military Pay System (JUMPS) conversion and parallel

operation; operation of the Data Automation Agency including implementation of the San Antonio Data Services Center and acquisition of an IBM 360/75 for the Air Force Accounting and Finance Center (AFAFC), Military Personnel Center (MPC) and the Air Force Audit Agency; implementation of Survivors Benefit Plan and Wage Board pay increases; and increased supply and travel in support of the Audit Agency Mobile Audit Teams. The offsetting amount of $52.1 million comes from reductions in flying hours, deferral of supplies, real property maintenance replacement of civilian personnel, deferral of Automatic Data Processing Equipment (ADPE) Programs in Strategic and General Purpose Forces which were necessary to correct the overall program/funding imbalance within the Operations and Maintenance appropriation.

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 36

Chart 36 addresses "why" good 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 priority needs arise after funds are appropriated. The reprogramming process that has evolved provides a firm basis 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 that urgent requirements are recognized that could not be forseen 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.

SPECIAL INTEREST ITEMS

The next portion of the briefing will present items of special interest.

The next three charts list the Congressional action items contained in the reports of the Congressional Committees on the FY 1973 Defense Authorization and Appropriation Bills applicable to the Air Force. The Air

Force wishes to be completely responsive to these recommendations.

CONGRESSIONAL ACTION ITEMS

- RDT & E
  - ADVANCED PRODUCTION ENGINEERING/PRODUCT IMPROVEMENT
  - FEDERAL CONTRACT RESEARCH CENTERS
  - MILITARY SCIENCES
  - RAMJET TECHNOLOGY
  - ADVANCED MEDIUM STOL
- INVESTMENT
  - PREMATURE PROCUREMENT FUNDING
  - SELECTED ACQUISITION REPORTS
  - F-111
  - A-X, CHEYENNE, & HARRIER
  - ADVANCED AIRBORNE COMMAND POST
  - ATTACHE SERVICE AIRCRAFT (CX-X)
  - MODIFICATION AND ALTERATION OF WEAPON SYSTEMS
  - AIRCRAFT MODIFICATIONS
  - COMMAND DATA BUFFER

Chart 37

CONGRESSIONAL ACTION ITEMS (CONT'D)

- OPERATING
  - INCREASED CONGRESSIONAL CONTROL OF THE OPERATIONS AND MAINTENANCE APPROPRIATION
  - SHIPMENT OF FOREIGN MADE/FOREIGN PURCHASED PRIVATE OWNER VEHICLES AT GOVERNMENT EXPENSE
  - INCREASED ALLOWANCE FOR SHIPMENT OF HOUSEHOLD GOODS TO THE U.S.
  - HEADQUARTERS OPERATIONS
  - ORGANIZED UNIT MOVES
  - AUTOMATIC DATA PROCESSING OPERATIONS
  - CONVERTING MILITARY POSITIONS TO CIVILIAN POSITIONS
  - CIVILIANIZATION OF KP DUTIES
  - MANPOWER FOR STRATEGIC SYSTEMS
  - GRADE CREEP
  - TRANSIENTS
  - RECRUITING PROGRAMS
  - AIR FORCE RESERVE NON-FLYING UNITS

Chart 38

CONGRESSIONAL ACTION ITEMS (CONT'D)

- DEPOT AIRCRAFT OVERHAUL FACILITY, MCCLELLAN AFB
- SATELLITE BASING PROGRAM
- UTILIZATION OF COASTAL BASES BY SAC AIRCRAFT
- RESTUDY OF PLAN FOR CONSTRUCTION OF TWO-BEDROOM FAMILY HOUSING UNITS
- STUDY OF NONCOMPARABILITY BETWEEN DESIGN AND CONSTRUCTION MANAGEMENT ACCOUNTING SYSTEMS
- IMPROVEMENTS TO QUARTERS OF JUNIOR OFFICERS AND ENLISTED PERSONNEL
- EXTENSION OF OFFSET PROGRAM TO BARRACKS REHABILITATION AND FAMILY HOUSING REPAIR
- EXCESS PROPERTIES WITHIN AIR INSTALLATION COMPATIBLE USE ZONE (AICUZ)
- BASE CLOSURE DECISIONS
- PLAN FOR RELOCATION OF ACTIVITIES FROM WASHINGTON, D.C.
- NATO INFRASTRUCTURE
- REDUCTION TO BE APPLIED SOLELY TO GENERAL SUPPORT

Chart 39

The Committee has been provided a statement of the action taken on each of these recommendations to insure that the intent of Congress is carried out in the implementation of the Air Force Program.

SUMMARY OF PERSONNEL AND RELATED COSTS

	$ MILLIONS		% OF TOA	
	FY 73	FY 74	FY 73	FY 74
TOTAL MILITARY PERSONNEL	7674	7600	30.9	30.4
TOTAL CIVILIAN PERSONNEL	3374	3466	13.5	13.9
AF BUDGET: PERSONNEL & RELATED COSTS	11048	11066	44.4	44.3
ADDITIVES (CUMULATIVE)				
PROPOSED FY 74 PAY RAISES AND LEGISLATION	11048	11460	44.4	45.1
MILITARY FAMILY HOUSING	11372	11792	45.2	45.8
RETIRED PAY	12859	13424	48.2	49.1

Chart 40

Chart 40 shows a summary of Personnel and Related Costs including AFR and ANG for FY 73 and FY 74. The Air

Force FY 74 TOA includes 44.3% for personnel and related cost which is a decrease of .1% from FY 73.

When the proposed FY 74 military, civilian and wage board pay raises are added, the personnel and related costs are 45.1% of the FY 1974 TOA. When the Air Force portion of the OSD accounts for family housing and retired pay are added, the costs are 49.1%.

SOUTHEAST ASIA FULL COSTS

($ MILLIONS)

	FY 1973				FY 1974			
APPROPRIATION	USAF	MASF RVN	MASF LAOS	TOTAL	USAF	MASF RVN	MASF LAOS	TOTAL
MILITARY PERSONNEL	519	-	-	519	331	-	-	331
O&M, AF	1289	330	77	1696	500	273	72	845
PROCUREMENT								
AIRCRAFT	384	226	11	661	62	322	9	393
MISSILE	40	-	-	40	-	-	-	-
OTHER	356	191	45	592	71	176	51	298
RDT&E	15	-	-	15	2	-	-	2
		787	133			771	132	
TOTAL	2603	920		3523	966	903		1869
PROGRAM DATA	USAF	MASF		TOTAL	USAF	MASF		TOTAL
AIRCRAFT BUY	74	305		379	-	300		300
FLYING HOURS (000)	778	1122		1900	211	1243		1454

Chart 41

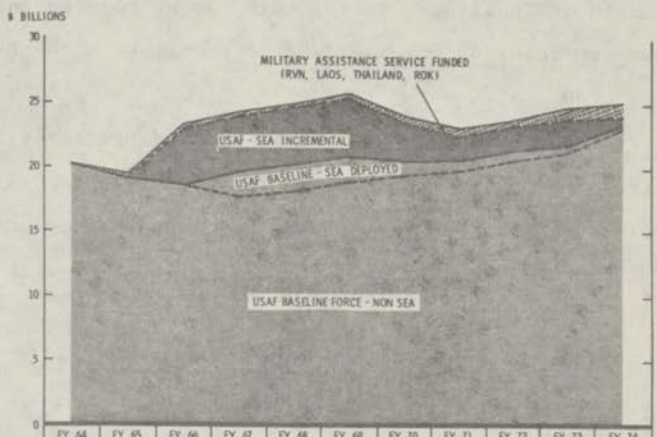
Chart 41 shows the cost of Southeast Asia activities in FY 73 and as programmed for FY 74. There is a 47 percent reduction in FY 74 as compared to FY 73. ($3.523 million in FY 73 versus $1.869 million in FY 74.)

This funding decrease results directly from the reduction in USAF forces, flying hours, personnel and sortie levels in Southeast Asia as programmed in the FY 74 Budget.

There is however, an increase in the Military Assistance Service Funded (MASF) flying hours and tactical sorties programmed in FY 1974. The MASF dollar decrease from $920M in FY 73 to $903M in FY 74 results because the one time

costs incurred during FY 73 for the accelerated delivery of aircraft and equipment and the increased inventory buy to obtain programmed material inventory levels. In FY 74 contract support is also reduced as VNAF capability increases.

USAF BASELINE AND SEA COSTS



	FY 64	FY 65	FY 66	FY 67	FY 68	FY 69	FY 70	FY 71	FY 72	FY 73	FY 74
USAF BASELINE - NON SEA	20018	19205	18658	17851	18150	18987	19467	19818	20757	21331	23136
USAF BASELINE - SEA	-	-	-	1888	2059	2007	1181	841	672	551	284
USAF SEA INCREMENTAL	-	211	4541	4349	4601	4602	3095	2028	2010	2052	683
MASF SEA INCREMENTAL	-	20	144	228	159	269	300	425	420	920	903
TOTAL	20018	19436	23343	24316	24969	25865	24043	23112	23859	24854	25006

Chart 42

Chart 42 shows the relationship of Southeast Asia costs to baseline force costs. The section above the non-SEA baseline represents the full cost of Air Force combat operations in SEA. The light blue part of the chart represents the Budget baseline including SEA. The dark blue and amber segments represent the total incremental costs associated with SEA. That portion of the incremental costs that is MASF is the top segment of the chart (amber).

The peak year for SEA Air Force costs was FY 1969. Since then, SEA costs have been declining.

The USAF baseline force - non-SEA for 1974 totals $23.136 million.

The FY 74 baseline forces deployed in SEA total $284 million.

The FY 74 incremental SEA cost of $1.6 billion includes $903 million in support of South Vietnam and Laos. The remaining $683 million is the cost of USAF forces programmed to remain in Thailand. These costs can be reduced only if forces are removed from Thailand or commitments to SEA Allies are reduced.

FY 74 adjustments, because of reduced SEA activity, must consider the cost of deployments that continue in SEA and associated activities in the U.S. to maintain those deployments.

VIETNAMESE AIR FORCE

TACTICAL	HELICOPTERS	LIAISON
F-5	UH-1	O-1
A-1	CH-47	U-17
A-37	AIRLIFT	O-2
RECONNAISSANCE	C-7	TRAINING
RF-5A	C-130	T-41
EC-47	GUNSHIP	T-37
U-6	AC-47	UH-1
RC-47	AC-119	SPECIAL AIR MSN
RC-119L		VC-47
C-47		UH-1H
		U-17
• 51 SQDNS	• 1317 U.E.	• 53,000 MANPOWER

Chart 43

Chart 43 shows the South Vietnamese Air Force aircraft. Over the past three years, the U.S. Air Force has provided additional aircraft to the Vietnamese so the VNAF could better assume responsibility for its own defense.

This force structure has been developed by a series of improvement and modernization efforts. In June 1970,

the Secretary of Defense approved a Consolidated RVNAF Improvement and Modernization Program (CRIMP) to provide aircraft to build the VNAF from a 22 squadron force of 481 UE aircraft to a 51 squadron force of 1317 UE aircraft and 53,000 personnel. This objective was to be achieved by FY 4/74. In May of 1972, the original CRIMP was modified to provide accelerated delivery of aircraft previously programmed to the VNAF.

The aircraft on this chart are those which the Air Force Budget supports under the Military Assistance Service Funded concept.

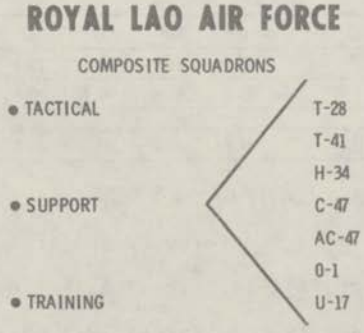
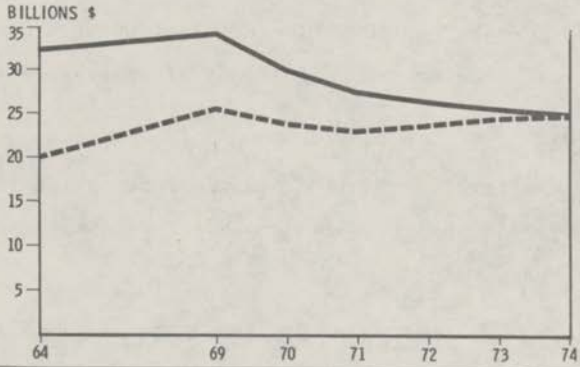


Chart 44

The Royal Lao Air Force aircraft are shown on chart 44. As with the South Vietnam Air Force, the Royal Lao Air Force is also supported by the MASF Program. There are programmed changes in the force structure. For example T-28s will increase while C-47s will reduce. The Air Force Budget contains funds for POL, maintenance, and supply support for these aircraft.

The final portion of this briefing will cover budget trends, a reconciliation of the FY 74 Budget and concluding remarks on the FY 74 Budget in perspective.

AIR FORCE BUDGET TREND
CURRENT AND CONSTANT DOLLARS



FY	64	69	70	71	72	73	74
TOA $ --	20.0	25.9	23.9	23.1	23.9	24.8	25.0
PERCENT OF DOD	39.4	33.0	31.4	30.9	30.7	30.7	28.9
CONSTANT 74 $ —	32.4	34.7	30.3	27.7	26.5	26.0	25.0

Chart 45

Chart 45 shows the Air Force Budget trend from FY 1964, the pre-war year, to FY 1974. The TOA is shown as a percent of the DOD Budget and in constant FY 1974 dollars.

As a percent of the DOD Budget, the Air Force Budget has been consistently declining since 1964, from 39.4% to 28.9%.

In terms of constant 1974 dollars and real purchasing power, the Air Force Budget has also been declining since FY 1964. Due to pay and price increases, the FY 1964 Budget of $20 billion would now require $32.4 billion in constant 1974 dollars and that is without adding a single item or person. The current purchasing power is about 62% of FY 1964.

BUDGET RECONCILIATION

($ MILLIONS)

	FY 73 BUDGET	FY 74 BUDGET	NET CHANGE	CHANGE EXPLAINED BY: INFLATION & PAY RAISES	CHANGE EXPLAINED BY: PROGRAM ADJUSTMENTS
TOA	24856	25006	+ 150	+ 611	- 461
		SOURCES OF CHANGE			
• USAF MANPOWER					
MILITARY (-25977)	6897	6749	- 148	+ 100	- 248
CIVILIAN (-2522)	2136	2164	+ 28	+ 16	+ 12
• OPERATING COST, USAF (NON-PERSONNEL)	5035	4940	- 95	+ 162	- 257
• RDT&E	3130	3229	+ 99	+ 97	+ 2
• PROCUREMENT	6676	6803	+ 127	+ 188	- 61
• AIR FORCE RESERVE	329	384	+ 55	+ 18	+ 37
• AIR NATIONAL GUARD	653	737	+ 84	+ 30	+ 54

Chart 46

The purpose of Chart 46 is to explain the difference between the FY 73 and FY 74 budgets in terms of inflation and pay raises and program adjustments.

The methodology used to identify the sources of change was made by dividing the difference between the FY 73 Budget and the FY 74 Budget into two parts. The first part compared the FY 73 and FY 74 programs using constant FY 73 prices. By holding prices constant program impacts were identified.

The second part compared the FY 74 program priced at both FY 73 and FY 74 prices. By holding the program constant, the price impact was identified.

The manpower data was developed using the average salaries and manyears in the Budget. A similar analysis was made on other segments of the budget (after eliminating manpower) using the OSD deflators as the index to convert the FY 74 program to FY 73 prices.

Looking first at TOA, there are two underlying factors which account for the increase of $150M. The first factor is inflation and pay raises for Military and Civilian Personnel. This factor, by itself, would have caused the FY 74 Budget to be $611 million higher than the FY 73 Budget.

To partially compensate for inflation, it was necessary to cut forces, support programs and personnel by $461 million. In effect, the Air Force absorbed 75% of the price increase through program decreases.

The lower section of the chart shows the effect which the adjustments have had on major segments of the budget. The 25,977 man decrease in military personnel cut $248 million; offset by a $100 million pay increase.

Overall, civilian personnel end strength will decrease by 2,522. However, for FY 74, the average strength temporarily increases as programs for civilianizing military billets, enhancing the Reserve Forces, and reducing USAF and Industrial Fund personnel are implemented. The net result is a slight increase in price but a reduced program.

The $257 million decrease in operating costs clearly reflects major Air Force efforts to stabilize operating costs through productivity increases, reductions in overhead and reduction of support costs in line with a decreasing force.

Inflationary pressures are clearly reflected in the cost of RDT&E.

The principal reason for the $61 million decrease in procurement was a reduction in the procurement of munitions from FY 73 levels.

Finally, the programmed $37 million increase in the Air Force Reserve and $54 million in the Air National Guard reflects the movement toward greater reliance on the Reserve Forces under the Total Force Concept.

To summarize, an essentially stable budget in FY 74 is buying a smaller Air Force than in FY 73. However, the reductions have been made selectively to correspond with changing requirements and priorities to obtain optimum utilization of the requested TOA.

AF 74 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

Chart 47

Chart 47 shows the Air Force FY 1974 Budget in perspective.

The 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 in order 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 tightly balanced Total Force Concept within the established fiscal constraints and complies with Presidential guidance. The Budget provides for a reasonable investment in technology, a paced modernization of weapon systems, essential combat readiness, manpower programs trimmed to a zero draft environment, operating costs arrested, investment resources increasing, and transition from a war to a baseline force. It is a budget which is responsive to changing Air Force needs.

SUBCOMMITTEE RECESS

Chairman MCCLELLAN. Thank you very much. We stand in recess subject to the call of the Chair.

[Whereupon, at 12:30 p.m., Monday, April 2, the subcommittee was recessed, to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1974

FRIDAY, JUNE 15, 1973

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. John L. McClellan [chairman] presiding.

Present: Senators McClellan, Young, and Thurmond.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

OPERATION AND MAINTENANCE, AIR FORCE

STATEMENT OF MAJ. GEN. JOSEPH R. DeLUCA, DIRECTOR OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

ACCOMPANIED BY:

MAJ. GEN. OLIVER W. LEWIS, DIRECTOR OF PERSONNEL PROGRAMS, DEPUTY CHIEF OF STAFF, PERSONNEL, HEADQUARTERS, U.S. AIR FORCE

COL. JAMES B. CURRIE, DEPUTY DIRECTOR OF PROGRAMS, DIRECTORATE OF AEROSPACE PROGRAMS, HEADQUARTERS, U.S. AIR FORCE

COL. PAUL E. MULLEN, CHIEF, FINANCIAL PROGRAMS DIVISION, OFFICE OF THE SURGEON GENERAL, HEADQUARTERS, U.S. AIR FORCE

COL. DONALD L. FALKENSTEIN, CHIEF, RESOURCE MANAGEMENT DIVISION, ASSISTANT CHIEF OF STAFF, INTELLIGENCE, HEADQUARTERS, U.S. AIR FORCE

COL. R. E. EIDSON, DEPUTY DIRECTOR OF MILITARY ASSISTANCE AND SALES, DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS

MR. DANIEL P. COLLINS, DIRECTORATE OF COMMAND CONTROL AND COMMUNICATIONS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

PROGRAM AND FINANCING

Chairman MCCLELLAN. This afternoon, the subcommittee will hear testimony in support of the fiscal year 1974 budget request for Air Force Operations and Maintenance appropriations.

At this point in the record there will appear certain program and financing information from the justifications.

[The justification follows:]

Justification

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-10-3400-0-1-051	1972 ACT	1973 EST	1974 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. STRATEGIC FORCES	1,116,184	1,146,291	1,078,313
	2. GENERAL PURPOSE FORCES	1,010,782	952,512	928,783
	3. INTELLIGENCE AND COMMUNICATIONS	544,921	529,894	525,350
	4. AIRLIFT AND SEALIFT	190,857	185,005	178,434
	5. GUARD AND RESERVE	172,220	.....	.....
	7. CENTRAL SUPPLY AND MAINTENANCE	2,426,973	2,393,361	2,356,002
	8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	798,320	840,139	953,225
	9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	194,613	204,195	217,104
	10. SUPPORT OF OTHER NATIONS	155,542	411,718	351,989
	TOTAL DIRECT PROGRAM	6,610,412	6,663,115	6,589,200
	REIMBURSABLE (TOTAL)	513,698	512,069	529,600
10	TOTAL OBLIGATIONS	7,124,110	7,175,184	7,118,800
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	-386,148	-409,813	-430,552
13	TRUST FUNDS	-100,222	-72,380	-73,727
14	NON-FEDERAL SOURCES	-53,726	-24,151	-24,146
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR	-7,017	-33,415	-27,690
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-215,593	-427,200	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR	33,415	27,690	26,515
	BUDGET AUTHORITY	6,394,819	6,235,915	6,589,200
	BUDGET AUTHORITY:			
40	APPROPRIATION	6,306,584	6,200,372	6,515,000
41	TRANSFERRED TO OTHER ACCOUNTS	-46	-65,554	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	20,000	5,697	.....
43	APPROPRIATION (ADJUSTED)	6,326,538	6,140,515	6,515,000
44,10	PROPOSED SUPPLEMENTAL FOR WAGE-BOARD PAY RAISES	.....	59,600	.....
44,95	JAN 1973 PAY INCREASE SUPPLEMENTAL/AMENDMENT	.....	35,800	74,200
69	CONTRACT AUTHORITY (STAT CIT)	68,281	.....	.....

BUDGET REQUEST

Chairman McClellan. The first witness is Maj. Gen. Joseph R. DeLuca, Director of Budget, Headquarters, U.S. Air Force.

General, do you have a prepared statement?

General DeLuca. Yes, sir; I do.

Chairman McClellan. I wish you would highlight your presentation and let the remainder of it be printed in the record in its proper place.

You may proceed.

General DeLuca. Mr. Chairman and members of the committee I appreciate the opportunity to present to this committee the Department of the Air Force's fiscal year 1974 fund requirements for the Operations and Maintenance (O. & M.) appropriation.

Mr. Chairman, as you know, O. & M. to us in the forces is support of day-to-day operations. That is really what we are talking about, support of our weapons, support of our equipment, support of our bases, our facilities and people.

Having worked in O. & M. now for a couple of years, I really think it boils down to the fact that it is the working environment of the force and the living environment of the force, the thing that generates the resources in O. & M., sir, aircraft inventory, flying hours, the bases we have, and the manpower associated therewith, day-to-day work.

Our request in 1974 is for $6.589 billion.

Now, compared to last year, this is $107 million less than the adjusted 1973 program of $6.696 billion but that, too, is being adjusted by your mark on the supplemental and possibly the revising of the MASF account in the Air Force budget.

The 1973 program, as you know, has been continually adjusted on a net basis to take care of two prime elements, the one being the dynamics of Southeast Asia, and two being, as from the record, you know, we in the Air Force started out with a $359 million program funding imbalance in 1973. That is, we had too much program or not enough money and all year we have been trying to work that problem and the Southeast Asia problem.

There is a table on page 3 that actually shows where the Air Force major force program funding is. In the middle column, $6,589.2 million is what we are requesting. There is a breakout by strategic forces, general purpose forces.

INTELLIGENCE AND COMMUNICATIONS

Senator Young. I would like to ask a question about intelligence and communications.

General DeLuca. Can I get to the major force program?

I will cover each of these major force programs.

Senator Young. All right.

General DeLuca. But, to answer you right now, there are communications intelligence, electronics intelligence, the running of the long lease-line communications, the AUTOVON, AUDODIN, and so forth, additional data communications systems.

In intelligence, there is the cryptologic and so forth.

Senator Young. Will you get into satellite communications?

General DeLuca. Yes, sir.

Mr. COLLINS. Senator, we do have a program for defense satellite communications in the force program.

Senator YOUNG. This is only part of it, though?

Mr. COLLINS. This is part.

General DELUCA. This is the running part, the operation and maintenance. It is not the procurement.

ACTIVE AIRCRAFT

Sir, if I may then go to page 5, table 3 there shows at end 1974 that we would be supporting in the Air Force through the O. & M. account 9,785 active aircraft. I repeat, for the O. & M. account. because there are other aircraft in the Reserve and in the Guard.

The Military Airlift Command has other aircraft.

SUPPORT OF OTHER NATIONS

Chairman MCCLELLAN. Why are we supporting aircraft of other nations?

General DELUCA. These are the support of the South Vietnamese Air Force and the Royal Laotian Air Force. These are military assistance service funding.

Chairman MCCLELLAN. These are planes we have given to them?

General DELUCA. Yes, sir.

Chairman MCCLELLAN. We are still maintaining them?

General DELUCA. And support.

Again, that is petroleum, transportation of supplies.

Chairman MCCLELLAN. Does that mean, General, that we are still financing the whole war in Vietnam, although we have pulled out of it? We are financing the South Vietnamese?

General DELUCA. We are financing the South Vietnamese, the running of the South Vietnamese Air Force, after we gave them the equipment.

Chairman MCCLELLAN. You are talking now about only the Air Force?

General DELUCA. Yes, sir.

Chairman MCCLELLAN. We gave them the airplanes first. Now we are supporting them by providing them the fuel, ammunition, maintenance, and everything that is necessary?

General DELUCA. They supply the manpower.

Chairman MCCLELLAN. Does your budget include the estimated cost of that for the next year?

General DELUCA. The estimated cost of the physical support, the materiel support.

Chairman MCCLELLAN. For that many planes?

General DELUCA. Yes, sir.

Chairman MCCLELLAN. Would you make a calculation or do you show in your statement the amount that it will cost to service those planes for them during the next year?

General DELUCA. Yes, sir; I do show that and it will be [deleted] million for South Vietnamese Air Force and about [deleted] million for the Royal Laotian Air Force.

Chairman MCCLELLAN. Nothing for Cambodia?

General DeLuca. Nothing for Cambodia. Cambodia is military assistance, MAP-program funded.

Chairman McClellan. That comes out of some other account?

General DeLuca. That comes out of the military assistance program. This comes out of the Air Force budget.

You know, when we went to this war, in order to kind of have a total force concept doing both the force structure as well as the financing in one place, it went military assistance service funding. We, the Air Force, funded Laos.

Chairman McClellan. Who is funding the planes over Cambodia now?

General DeLuca. That comes up in a separate appropriation called the Military Assistance program.

Chairman McClellan. It is not in this request?

General DeLuca. No, sir.

Senator Thurmond. You said [deleted] for South Vietnam. What is it for Laos?

General DeLuca. [Deleted] million.

CLASSIFIED STATEMENT

Senator Young. This page is marked "Secret." Is the whole testimony secret? Do you mean we can't use any of these figures to defend the appropriation?

General DeLuca. I can give you an unclassified version. Where the page is marked "Secret," it means that there is information on that page that is for your information but not for release.

Chairman McClellan. How will we handle that?

General DeLuca. I will give you an unclassified version. But this is a closed session. The numbers [deleted] and [deleted] are classified. If you want to get into the numbers of airplanes they have and the types of airplanes, that is secret.

Chairman McClellan. It is going to be a little difficult for us to know what you would like us not to use or not to disclose.

General DeLuca. I can give you the marked version.

Chairman McClellan. Had you planned to do that?

General DeLuca. I am planning to give it to you.

Chairman McClellan. This is going in our record, you know. Will this be printed in the record?

Mr. McConnell. We will send them the record after the transcription is returned and the Department will edit it and put in brackets that which is classified. Of course, when we print it we will delete it. But it will be in the subcommittee files for the members' reference.

Chairman McClellan. I wanted to be sure how you wanted us to handle this.

Proceed.

AIRCRAFT FLYING HOURS

General DeLuca. Sir, that is the aircraft. Those aircraft are going to have certain activity levels. The activity levels are on the bottom of the page and show the flying hours that the strategic forces will fly, general purpose will fly, intelligence and communications aircraft and airlift aircraft, and so forth.

Our flying hour program in O. & M. in 1974 is predicated on the support of, in the 1974 column, 4,705,568 flying hours.

Flying hours are down almost 6 percent from 1973, which was 5 million hours.

Chairman McClellan. Does this contemplate the war will still be going on between North and South Vietnam?

General DeLuca. This has an activity level for the U.S. Air Force that is stationed over in Southeast Asia, primarily Thailand, which supports the proficiency level and training of those aircraft crews that we have over there at certain levels. Now, those levels, sir, are in effect the tactical air; we will fly like [deleted] sorties per month this year, [deleted].

Chairman McClellan. Even though we pull all of our troops out, we are still going to finance the war in certain areas like this, at least?

General DeLuca. Yes, sir.

Chairman McClellan. You have made your budget on that basis?

General DeLuca. Yes, sir.

Chairman McClellan. Suppose we pull out the financial support, what will be the impact on South Vietnam?

General DeLuca. If we pulled out the financial support of the South Vietnamese Air Force, that [deleted] million we were talking about, they could not operate their Air Force. They have [deleted] airplanes over there that are active. It is a force. You just can't park it on the apron.

Chairman McClellan. Would they be able to defend themselves?

General DeLuca. With the air force?

Chairman McClellan. Without this air support.

General DeLuca. I do not believe so. It is part of their self-defense now, sir. It is the whole Vietnamization program.

Chairman McClellan. They could not finance it? There is no way they could finance it?

General DeLuca. From what I understand about the economics of the South Vietnamese sector, public and private, our understanding is: no, they could not finance it.

Chairman McClellan. We are still going to be expending for the benefit of South Vietnam in further support of her war effort about how many millions of dollars in this 1974 budget?

General DeLuca. Air Force?

Chairman McClellan. Air Force. [Deleted.] The bulk of it right now is, I guess, [deleted] million.

General DeLuca. Including Laos, [deleted] million.

Chairman McClellan. There is bound to be some more. This is the bulk of what we are spending on them other than economic assistance, I assume?

MILITARY ASSISTANCE SERVICE FUNDING

General DeLuca. Yes, sir. If I may give you a Department of Defense paper—not give you—but recite from it, because it is being, in effect, signed out today, I understand, a letter which is coming to each of the chairmen of the committees from the Department of Defense. It was signed this morning.

It is resizing MASF, Military Assistance Service Funding, the utilization of the air force and the army and so forth.

When the 1974 budget was submitted, it included $2.1 billion for authority to support MASF, to get to your question.

The Department of Defense says:

"In view of the changed conditions based on the cease-fire situation which currently exists in Vietnam and Laos, your committee has requested"—in this case, it was the Senate Armed Services Committee—"that we update the basis for the request. In response to your request, the President has approved a restructured program for military assistance service funding.

"Based on the assumptions listed in attachment A"—and there will be some assumptions here—"these assumptions generate adjustments to the 1974 MASF program."

To make a long story short, it, in effect, reduces the $2.1 billion to $1.7 billion.

To answer your question, in totality beyond the Air Force I would say military assistance service funding support, South Vietnam and Laos, $1.7 billion.

Chairman McClellan. $1.7 billion is the total overall?

General DeLuca. Military assistance service funding.

SOUTH VIETNAMESE AIRCRAFT MAINTENANCE

Senator Young. I would like to ask one question, Mr. Chairman. Are the South Vietnamese able to maintain these [deleted] planes, by doing their own repair work, or are these engines shipped to Japan and do we pay for that? Do they have the capability of maintaining the planes themselves?

Colonel Eidson. Senator, we started about a year ago, recognizing that the cease-fire and withdrawal was coming about and looking at our overall program and recognizing it was going to have to be compressed, we arranged with contractor personnel so that U.S. military forces could be withdrawn, to train their people, South Vietnamese military people, to maintain these pieces of equipment we have put in.

This training will last through fiscal 1974, at which point the Vietnamization, if you will, will have reached a milestone and they should be at that point capable of maintaining all of their own equipment with very few exceptions that do go offshore for overhaul.

Some of the engines they do not have the capability to maintain and they will be contracted out in other places.

But, generally speaking, all of the maintenance of their equipment will be in-house capable during fiscal 1974.

Senator Young. Is the cost of these contracts part of the budget you mentioned?

Colonel Eidson. Yes, sir.

Senator Young. Is it part of the budget for South Vietnam?

Colonel Eidson. Yes, sir. The contracts are so written that the incentive is for the contractor to train the people as rapidly as he can, to work himself out of the job.

General DeLuca. The idea is to make the South Vietnamese Air Force self-sustaining, operational training and self-support.

Chairman McClellan. Except financially.

General DeLuca. From what I know; yes, sir.

Senator Thurmond. When did you estimate that would be possible to make them self-sustaining?

Colonel EIDSON. Our figures indicate that by the end of fiscal year 1974 our contracts will be down to just those necessary to maintain the equipment that we have not been able to develop the capability in and that is very few items.

Senator THURMOND. After fighting for 10 years and losing 50,000 men and having 300,000 wounded, it seems to me it is a wise course not to let it go down the drain now. I, as one Senator, stand behind that position.

Colonel EIDSON. Thank you, sir.

Chairman MCCLELLAN. General, you may proceed.

CIVILIAN PERSONNEL

General DELUCA. Sir, if I may, I would like to go to the Direct Hire Civilian Personnel—O. & M. only.

Just as a feel for aircraft flying hours, table 5 shows our civilian personnel strength. We are talking about a strength of 168,954 civilians working in O. & M. It is the civilian pay of these people involved here. The man-year cost for an average person that is on a general schedule is $12,000, and the man-year cost for a person who is blue-collar or wage-board is $9,000.

Chairman MCCLELLAN. General, there is practically no reduction, only about 1,000 civilians.

General DELUCA. From last year, there is a reduction. That is due to the grade creep.

Chairman MCCLELLAN. 168,954 from 170,000?

General DELUCA. That is 1,060 people. You must recall here that we are on the civilianization program and in the civilianization program we have in 1973 and 1974 converted 10,000 military spaces to civilian spaces, of which 2,323 were done in 1973 and 7,282 in O. & M. will be done in 1974.

So, really, there is an add of 7,282 before you get to the net of minus 1,000. You can say there has been at least a reduction of 8,000 to 9,000 people in O. & M. When you say the minus 1,060 net, it is after the civilianization and adding of 7,000 people to the account.

BASE CLOSURES

Sir, on the next page, page 8, I would like to highlight base closures. That is at the top of the page there.

The base closures of the U.S. Air Force are:

We will transfer Forbes Air Force Base to the Air National Guard; Hamilton Base will go to the Reserves; Laredo, Tex. will close; McCoy in Florida will close; Ramey in Puerto Rico will close; and Westover will go to the Reserves.

We do have some $10,600,000 in our budget that can come out and should be used to offset the increases to the Guard and to the Reserve when they take over these bases to run. At the right time, we will resize that and give you the figures as to what the Guard and Reserve should have.

Senator THURMOND. What happens to Westover?

General DELUCA. Westover Air Force Base will come under the auspices of the Air Force Reserve.

Senator THURMOND. How about Ramey? I have been to Ramey. It is a very nice post in Puerto Rico. What will you do with that?

General DELUCA. Close it. It will go back to the Government of Puerto Rico.

Senator THURMOND. Do we own it?

Colonel CURRIE. Yes. It is Air Force property.

Senator THURMOND. Is it leased or do we own the land?

Colonel CURRIE. We own the land. We hold title.

Senator THURMOND. Are we going to sell it?

Colonel CURRIE. It will go to GSA, sir, in accordance with the procedures that are now in existence. GSA will dispose of it to the highest bidder.

Senator THURMOND. It is worth millions of dollars. I presume we should get something out of it.

Colonel CURRIE. Yes, sir.

BALANCED PROGRAM

Chairman MCCLELLAN. Proceed.

General DELUCA. Now, sir, I do not want to take all the time, but I will try to hit the highlights.

On page 9, I know you will all know this, but I will make this plea. In each service's budget there is always the discussion as to what goes into technology, R. & D., what goes into procurement, the weapons, and what goes into so-called support, which is military personnel and O. & M.

The only point I make is that in the Air Force, and I am sure the Army, Navy, and Marines, our support is integrated to the things that drive the cost of support, Air Force bases, people, flying hours. If you cut support, you ought to look at the programs. If you cut programs, obviously we reduce support.

Chairman MCCLELLAN. Are you saying that if you are going to make a reduction, one should reduce personnel?

General DELUCA. If you just say we are going to take $200 million off O. & M. and then don't look at what it might do to aircraft or flying hours or bases or the number of people, it is an unsystematic, unprogrammatic cut. We would say the time has arrived now in the executive and in the legislative to look at the total structure of the programs that are supported and the costs to support them, and there ought not to be unscientific cuts of support that aren't related to programs. Or, if there are cuts to programs, a due share of support goes with them.

Chairman MCCLELLAN. In other words, don't take it all out of one place.

General DELUCA. That is right.

Chairman MCCLELLAN. In other words, if you cut the number of planes, you don't need as many personnel to maintain them.

General DELUCA. That is right. If you cut the number of people, there is something that is going to happen to the support of those airplanes.

Chairman MCCLELLAN. The maintenance of the equipment deteriorates.

General DELUCA. That is correct.

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Chairman McClellan. So, it will be a kind of across-the-board cut?

General DeLuca. That becomes a level of readiness to which we all subscribe.

Senator Thurmond. This is a matter for the Navy but what is being done about Roosevelt Roads down there? I have been reading that we are withdrawing down there our training facilities and we won't be able to carry on the training there. For some years, there has been a question as to whether we would or not. The decision has been made that we would withdraw from that area. Are you familiar with that?

Colonel Currie. No, sir.

MAJOR FORCE PROGRAMS

Chairman McClellan. Proceed.

General DeLuca. Sir, on page 12, I will now go into O. & M. fund requirements for each major force program.

The first major force program is strategic forces.

Strategic forces, of course, is strategic offensive and that is primarily the work of the Strategic Air Command, both with aircraft and missiles and command and control, and also the defensive forces which is primarily the work of the Air Defense Command, and the Alaskan Air Command.

The point I would like to highlight in the middle of the page on table 9, our requirement being requested for the support of strategic forces is $696.5 million for the strategic offensive forces and $381.8 million for strategic defensive forces. We are reducing this year two B–52D squadrons.

STRATEGIC OFFENSIVE FORCES

If I could ask you, in the interest of understanding that force structure, to turn to table 11. This is the force structure that the money we are requesting will support on offensive.

Seven squadrons of 117 B–52 D/F aircraft; 17 squadrons of B–52 G/H aircraft; or 255 airplanes.

The FB–111, four squadrons; 66 aircraft.

The SR–71, strategic reconnaissance, one squadron; [deleted] aircraft.

The tankers, KC–135, 38 squadrons, 615 aircraft. They will be flying at a rate, as you see there in the flying hours, of 209,000 for the B–52's. That is a decrease of 107,000 hours because we don't program to fly the way they had been flying in 1973 in the war and that is a sizable reduction.

On the tankers, a 69,000 flying hour reduction.

The FB–111 will fly 27,187 hours.

It is that force structure that drives the strategic offensive cost.

FB-/F–111's

Chairman McClellan. General, the FB–111, you are going to have only four squadrons of 66 planes?

General DeLuca. These are the bombers, sir. The fighters I will come to when I get to the tactical air force and the general purpose air force. The answer is yes; four squadrons of FB–111.

Chairman McClellan. What others are bombers?

General DeLuca. The B–52 is our heaviest bomber. That is the top two.

Chairman McClellan. Wasn't the FB–111 designed to take the place of the B–52 bomber?

General DeLuca. No, sir. The range, the altitude, the speed, the carrying capability of these two aircraft is significantly different.

Chairman McClellan. Does the FB–111 have a heavier carrying capacity than the others?

General DeLuca. It does not have a heavier carrying capability than the 52D or F as a bomber.

Chairman McClellan. Let me ask this question.

At that time, I know we were supposed to have 1,400-and-some-odd F–111A planes. The F–111B's were to be Navy planes. That is the way this program started out. We were to have over 1,400 Air Force planes and over 400 Navy planes. If we needed planes so badly, what was that plane really designed to do? We needed 1,300 or 1,400 of them then. Now we have only 300 or 400 of them that are capable of combat, as I understand it.

General DeLuca. If I may, with a more expert witness, when we get to the procurement hearings next Tuesday we can answer that.

Chairman McClellan. This F–111 program has cost us about $5 billion or $6 billion up to now; has it not?

General DeLuca. Yes, sir; the investment in the F–111–A, D, E and F program at this point in time, including the buy of fiscal 1973, including research and development and acquisition—you said the word "total"—would be a total of $6.9 billion.

Chairman McClellan. Nearly $7 billion.

General DeLuca. Yes, sir.

Chairman McClellan. We have received a few more than 500 planes.

General DeLuca. On the fighters, we have procured 466; 442 for the U.S. Air Force and 24 for Australia. If I may go to the bombers, the FB–111, we have procured 77.

Chairman McClellan. Just a little more than 500 planes. As I recall, there are about three categories of those planes in the Air Force. Am I right?

General DeLuca. Yes, sir. We have different series. They each have different characteristics.

Chairman McClellan. There are only about 140 of these planes that come near meeting the requirements? None of them meets all the specifications, I know. There are about 140 of them that have the latest most sophisticated equipment on them.

Colonel Currie. We are procuring the F's now. We will have 94 F's when we finish.

Chairman McClellan. I don't want to downgrade it.

Colonel Currie. The fact is that the oldest F–111's are the ones flying combat in Southeast Asia.

I believe the wing commander appeared before one of the committees not so long ago. The sense of that committee was that the aircraft was doing an outstanding job.

Chairman McClellan. I got the impression there were three categories of these planes; the first 100 or 200 lacked something. We never did get it fully equipped with the most modern system—terrain-following radar. They finally decided on about 140 of them, as I

recall, the very latest of which would include pretty high-class weapons.

General DeLuca. The best I can say, to be fair to your question, and also to the aircraft and operations, is that we feel it is a sound aircraft and has proven itself in South Vietnam.

Chairman McClellan. If that aircraft is doing what it is supposed to do, why don't we buy more of them instead of going out and trying to get different ones? Originally, you wanted a much larger number than the 520 you procured.

Why, if we are going to need them, why not buy those instead of something else?

General DeLuca. Can I just make this amplification of your point? For adverse weather, night, you know, we don't have a better airplane. Why not buy more? Sir, we get about three countervailing pressures that work against us. One is the force structure that we have and we are trying to get.

EFFORTS TO ACHIEVE AIR SUPERIORITY FIGHTER

To elaborate on that, we are trying to get the air superiority fighter. We are trying to get a close air support aircraft. We are trying to get the airborne command post. We are trying to get battle management control, surveillance and warning through the AWACS aircraft. That is to improve the force structure down the road.

Two. That requires resources. We have fiscally constrained resources. We can't support that moderate pace of modernization in our weaponry even though we would like to buy more FB–111's and do it within the competing requirements for the resources that are available to the Air Force.

So, it is a balance between force structure, modernization and resource.

Chairman McClellan. It seems to me that there was an exaggerated concept of the number that was going to be needed in the beginning of this program.

General DeLucas. I can't speak to the requirement, sir.

Chairman McClellan. You ought to, you are the military people.

It started off that there would be 1,400-some-odd Air Force planes. Now that is down to 400-something.

General DeLucas. 466 plus the 77 FB–111's.

Chairman McClellan. About 1,000 planes less than was contemplated as the need.

General DeLucas. I would say the requirements have changed.

Chairman McClellan. I am of the opinion that the best of the F–111's is a pretty good weapon, but there must be something wrong with the system. I don't know whether it works perfectly or not.

General DeLucas. The men who fly it swear by it.

Chairman McClellan. There have been some accidents which indicated it had not been perfected.

I want you to have the best weapon possible. I know $6 billion or $7 billion is about a billion dollars more than the whole quantity of 1,700 planes was supposed to cost to begin with.

General DeLuca. There is always that problem of estimating and pricing.

Chairman McClellan. But we can't do too much of this. This has to stop. I think we are making a marked improvement now. I know in one system of procuring today they are requiring two top designers to make prototypes. Then they will go out and test those and determine which they will purchase.

We certainly have profited some by the experience with the F–111. I say profited by it. What I really mean is that we are doing it in a more acceptable and more prudent way.

General DeLuca. If I might endorse your comment, I would say the Air Force has learned a great deal through both the procurement of the F–111 and the C–5. We think we have learned our lessons.

Sensitive and uppermost in our mind is performance, cost, and timing, and the control of cost and design-to-cost and fly-before-buy is engrained in every meeting we have on the proficiency and the requirements of the specifics in the allocation of resources.

The Chief of Staff and the Secretary pound the table on that on every point.

Chairman McClellan. I can appreciate that in a real war emergency you don't have time to perfect systems. You have to use what you have and hope to perfect later. But certainly in peacetime or what is comparable to peacetime, there is no use committing a lot of money until you know that you have what you want and you are getting what you request.

FB–111 RANGE VERSUS B–52 RANGE

Senator Young. Sir, how does the range of the FB–111, without refueling, compare with the B–52?

Colonel Currie. The B–52 H, which is the latest model and the best, has 9,000 nautical miles unrefueled range, whereas the FB–111 is 3,460; in other words, about half or a little less—the FB–111 has less than half.

Chairman McClellan. That is one of the specifications they did not meet. It was supposed to fly about 6,000 or 7,000 miles, as I recall, so that it could fly to Europe and back.

Colonel Currie. Of course, sir, these ranges I am giving you are combat ranges with a combat load. If you are not going to do that, if you want to fly to Europe without refueling, you will not have any problem. But we are talking about a combat profile.

Chairman McClellan. This plane, when it was sold to us, was supposed to fly over there and back, deliver its load and then get back without refueling.

Senator Young. I believe the F–111, maybe the FB, in your bombing of Southeast Asia has been flying without refueling?

General DeLuca. We don't have the FB–111 there. We have the F–111. It has been flying without refueling.

Senator Young. Up and back?

General DeLuca. Up and back.

Chairman McClellan. That is only about 1,000 miles.

General DeLuca. That is what I say; it is right in Thailand.

Chairman McClellan. The Navy has to refuel its planes, and we refuel most of the Air Force planes, don't we?

General LEWIS. We fuel the F–4 and F–105 in and out, sir, with tankers.

Chairman MCCLELLAN. I thought it had a little longer range than others with the exception of the B–52.

General DELUCA. The B–52 G flying out of Anderson flies unrefueled.

The B–52 D flying out of Anderson flies refueled.

MISSILES

Chairman MCCLELLAN. Proceed.

General DELUCA. Now, sir, if I may go to page 17, the table there shows that is being supported in the missile force of the Air Force.

The Minuteman on the bottom of the page there, again reading it, 20 squadrons, 50 missiles per squadron, 1,000 missiles.

As you see, at the end of fiscal 1974 we will have upgraded the structure to Minuteman III, [deleted] missiles; Minuteman II, 500; Minuteman I, [deleted]. We will carry the 6 squadrons of 54 Titan and we will be increasing the SRAM, short-range attack missiles, to 11 squadrons of B–52 and 4 squadrons of FB–111. That is the force structure that is being supported offensively, strategically, missilewise.

STRATEGIC DEFENSIVE FORCES

Now, sir, to get to the defensive forces, strategic defensive forces, on page 20 funds are required for the defensive forces.

The only thing I want to highlight is the Air Defense Command and the Alaskan Air Command.

This is surveillance and warning and this is the SAGE system, the DEW system and the BMEWS system, ballistic early warning system, distant early warning line, and the SAGE.

These are defensive forces, and on page 21 I would like to emphasize that on the F–106 the active Air Force now has 7 squadrons of 131 aircraft, F–106. The bulk of the air defense mission in that aircraft is now with the Air National Guard. General Greenlief will touch on that later.

JUSTIFICATION

Chairman MCCLELLAN. At this point in the record there will appear certain information submitted by the Department in justification of the amounts requested for this activity.

[The justification follows:]

Justification

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-10-3400-0-1-051		1972 ACT	1973 EST	1974 EST
	PERSONNEL COMPENSATION:			
11.1	PERMANENT POSITIONS	1,969,160	1,786,658	1,801,156
11.3	POSITIONS OTHER THAN PERMANENT	26,256	25,823	27,715
11.5	OTHER PERSONNEL COMPENSATION	39,624	37,395	40,235
	TOTAL PERSONNEL COMPENSATION	2,035,040	1,849,876	1,869,106
	DIRECT OBLIGATIONS:			
	PERSONNEL COMPENSATION	1,916,807	1,744,100	1,763,146
12.1	PERSONNEL BENEFITS, CIVILIAN	169,257	176,017	177,219
13.0	BENEFITS FOR FORMER PERSONNEL	1,848	1,900	1,900
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	175,729	187,420	169,191
22.0	TRANSPORTATION OF THINGS	464,715	487,186	347,072
23.0	RENT, COMMUNICATIONS, AND UTILITIES	382,791	415,850	435,715
24.0	PRINTING AND REPRODUCTION	33,601	29,592	30,830
25.0	OTHER SERVICES	2,183,348	2,344,312	2,462,232
26.0	SUPPLIES AND MATERIALS	1,225,697	1,216,977	1,133,215
31.0	EQUIPMENT	56,101	46,666	53,335
41.0	GRANTS, SUBSIDIES, AND CONTRIBUTIONS	293	337	369
42.0	INSURANCE CLAIMS AND INDEMNITIES	225	12,758	14,976
	TOTAL DIRECT OBLIGATIONS	6,610,412	6,663,115	6,589,200
	REIMBURSABLE OBLIGATIONS:			
	PERSONNEL COMPENSATION	118,233	105,776	105,960
12.1	PERSONNEL BENEFITS, CIVILIAN	10,982	9,824	9,840
21.0	TRAVEL AND TRANSPORTATION OF PERSONS	6,797	7,784	7,784
22.0	TRANSPORTATION OF THINGS	21,041	22,041	22,041
23.0	RENT, COMMUNICATIONS, AND UTILITIES	23,565	17,646	17,644
24.0	PRINTING AND REPRODUCTION	2,369	2,085	2,085
25.0	OTHER SERVICES	289,351	304,458	320,993
26.0	SUPPLIES AND MATERIALS	38,817	39,795	40,593
31.0	EQUIPMENT	1,038	1,060	1,060
43.0	INTEREST AND DIVIDENDS	1,505	1,600	1,600
	TOTAL REIMBURSABLE OBLIGATIONS	513,698	512,069	529,600
99.0	TOTAL OBLIGATIONS	7,124,110	7,175,184	7,118,800

Personnel Summary

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Total number of permanent positions	187,879	169,347	167,712
Full-time equivalent of other positions	5,735	3,260	3,531
Average paid employment	195,884	172,291	175,656
Average GS grade	7.7	7.6	7.5
Average GS salary	$12,171	$12,378	$12,040
Average salary of ungraded positions	$ 7,906	$ 8,564	$ 9,189

Justification of Estimates for FY 1974

Appropriation: Operation and Maintenance, Air Force

General Statement
(Dollars in Thousands)

The justification material for this appropriation is presented in a format similar to that provided in previous years. Requirements, including classified data where appropriate, are displayed by major force programs which are summarized on page 11. Training and Medical requirements are separately identified under Major Force Program VIII and detailed data begins on page 62. Special exhibits address subjects in which the Congress has expressed particular interest. These exhibits identify funds plus 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 forces programmed in the budget. The FY 1972 column included funds for the Air Force Reserve. Beginning with FY 1973 a separate appropriation entitled Operations and Maintenance, Air Force Reserve was established pursuant to the Department of Defense Appropriation Act, 1973.

The FY 1973 estimate in the FY 1974 budget is adjusted to include authorized civilian pay supplementals, transfers from other appropriations to meet additional O&M costs and transfers to other appropriations to accompany transfers of functions. Summary of adjustments is:

Appropriated (Including authorized transfer of $ 50,000 from Defense Stock Fund)		$ 6,250,515
Proposed Supplementals		+ 128,600
Wage Board	$ 59,600	
Classification Act	35,800	
Postal/Indicia	31,400	
Medical Scholarships	1,800	
Proposed Section 735 Transfers		+ 382,800
Southeast Asia	$ 319,700	
Program/Funding Imbalance	57,500	
Military/Civilian Conversion	5,697	
Functional Transfers		- 65,554
Defense Mapping Agency	$ 62,422	
Defense Investigative Service and General Services Administration	3,132	
Adjusted O&M FY 1973 Program		$ 6,696,315

The FY 1974 column of the justification book totals $ 6,589,200 and includes the President's Budget amount of $ 6,515,000 plus $ 74,200 for the costs of the January 1973 civilian employee pay raise.

New Programs
Operation and Maintenance Appropriation
(In Thousands of Dollars)

Identification and Description	FY 1974 Estimate
Armed Forces Health Professions Scholarship Program	$ + 5,400

The Armed Forces Health Professions Scholarship Program (Public Law 92-426) provides full scholarships for students accepted by accredited health professional schools. Persons participating will be commissioned as Second Lieutenants in the Air Force Reserve. They will be detailed as students at accredited civilian institutions for the purpose of training in a designated health profession. The Air Force has been authorized 1,575 students for this program.

Student Nurse Financial Assistance Program	+ 500

Qualified persons accepted by or attending an accredited college or university and who are pursuing a program leading to a baccalaureate degree in nursing will be eligible for Air Force sponsorship. Applicants will be enlisted in airman status and receive the pay and allowances of an E-3. Tuition and other education

costs will be paid by the Air Force. Upon completion of training and certification as registered nurses, they will be commissioned as First Lieutenants in the Air Force Nurse Corps. An enrollment of 200 is estimated for FY 1974.

	FY 1974 Estimate
Transfer of Modernization Installation Funding. As recommended in the FY 1973 House Appropriations Committee Report, labor costs for installing modifications are being transferred from Air Force Procurement appropriations to Operation and Maintenance, Air Force appropriation.	+32,900
Transfer of [Deleted] research facilities from the RDT&E, Air Force appropriation	+ 4,000
Transfer of Intelligence Collection Program from Aircraft Procurement, Air Force appropriation	+ 5,000

Summary of Civilian Manpower Increases

Fiscal Year 1973 to Fiscal Year 1974

(Full-time, O&M direct hire permanent employees)

Operation or Activity	Year End Increases
Military Civilian Conversions	+ 6,384*
Project Transition	+ 55
Armed Forces Vocational Aptitude Battery Test	+ 10
Air Force Audit Agency	+ 47
Medical Recruiting	+ 20
Total Increases	+ 6,516
Less Total Decreases	- 6,922
Net Change	- 406

* A total of 10,000 conversions from military to civilian spaces will be made during FY 1973 and FY 1974. Of the total 2,323 will be made in FY 1973 and 7,677 in FY 1974. The 6,384 is that portion of the 7,677 which will be funded from the O&M, AF Appropriation. All of the 2,323 will be funded from the O&M, AF Appropriation.

Direct Hire Civilian Employment
Operation and Maintenance Appropriation, Air Force
(Dollars in Thousands - Strength in Whole Numbers)

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Average Strength	End Strength	Actual Obligations	Average Strength	End Strength	Estimated Obligations	Average Strength	End Strength	Estimated Obligations
Direct Hire Civilians									
Full-time permanent.....	192,906	185,310	$ 2,190,871	169,756	167,847	$ 2,011,794	168,756	167,441	$ 2,030,350
Other (Part-time, temporary and WAE)	1,215	2,240	26,256	860	2,167	25,823	860	1,513	27,715
Total.....	194,121	187,550	$ 2,217,127	170,616	170,014	$ 2,037,617	169,616	168,954	$ 2,058,065
Detail by Budget Activity									
Strategic Forces.....	28,571	28,067	$ 321,605	27,251	27,150	$ 314,682	28,103	29,460	$ 329,244
General Purpose Forces.....	28,712	25,269	212,298	23,297	22,544	199,499	22,125	22,164	204,837
Intelligence & Communications.	13,704	13,503	185,014	10,195	10,311	139,788	10,259	10,480	139,287
Airlift & Sealift.....	10,177	10,329	108,999	10,126	10,305	112,018	9,699	9,752	110,318
Guard and Reserve Forces.....	9,357	9,337	110,939	-	-	-	-	-	-
Central Supply & Maintenance..	61,498	61,307	804,826	58,129	58,812	767,524	56,790	55,579	756,004
Training, Medical, & Other General Personnel Activities	30,653	28,588	324,280	30,222	28,911	346,438	30,961	29,775	352,496
(Training & Other).....	(24,710)	(22,796)	(269,326)	(24,236)	(22,738)	(287,160)	(24,854)	(23,627)	(289,108)
(Medical).....	(5,943)	(5,792)	(54,954)	(5,986)	(6,173)	(59,278)	(6,107)	(6,148)	(63,388)
Admin & Associated Activities.	11,209	10,899	148,181	10,953	11,335	153,310	11,041	11,103	158,969
Support of Other Nations.....	240	251	985	443	646	4,358	638	641	6,910
Total.....	194,121	187,550	$ 2,217,127	170,616	170,014	$ 2,037,617	169,616	168,954	$ 2,058,065
(Reimbursable Obligations Included Above)			($ 129,215)			($ 115,600)			($ 115,800)

OTHER PERSONNEL COMPENSATION
(Dollars in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Overtime and Holiday Pay.....	$ 17,067	$ 16,107	$ 17,329
Sunday and night differentials.....	6,037	5,699	6,132
Post differential and cost of living	2,038	1,922	2,068
Premium Pay (Including firefighters)	5,410	5,104	5,492
Other Compensation	9,072	8,563	9,214
TOTAL.....	$ 39,624	$ 37,395	$ 40,235

Summary of Requirements by Budget Program
(In Thousands of Dollars)

Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
Strategic Forces	$ 1,116,184	$ 1,146,291	$ 1,078,313
General Purpose Forces	1,010,782	952,512	928,783
Intelligence and Communications	544,921	529,894	525,350
Airlift Sealift	190,857	185,005	178,434
Guard and Reserve Forces	172,220		-
Central Supply and Maintenance	2,426,973	2,424,761	2,356,002
Training, Medical and Other General Personnel Activities	798,320	841,939	953,225
Training and Other General Personnel Activities	(506,803)	(513,056)	(565,455)
Medical	(291,517)	(328,883)	(387,770)
Administration and Associated Activities	194,613	204,195	217,104
Support of Other Nations	155,542	411,718	351,989
Total Direct Program	$ 6,610,412	$ 6,696,315	$ 6,589,200
Reimbursements (Total)	$ + 513,698	+ 512,069	+ 529,600
Total Obligations	$ 7,124,110	$ 7,208,384	$ 7,118,800

FORCE PROGRAM I: STRATEGIC FORCES
PURPOSE AND SCOPE

This program encompasses two major groupings of forces -- offensive and defensive.

Offensive forces are those of the Strategic Air Command (SAC) consisting of combat aircraft, intercontinental ballistic missiles and 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. Within the warning time provided by surveillance and warning systems, and the dispersal advantages of the Basing Program, SAC's ground alert bombers and tankers can be airborne and secure in the event of a surprise attack. SAC's global command, control and communication systems insure warning of attack and positive control of the strategic offensive forces.

The Strategic Air Command is also responsible for maintaining a capability to conduct conventional (non-nuclear) bomber operations. SAC administers, trains and equips Air Force Strategic offensive forces for battle readiness, responsive to the National Command Authority through the Joint Chiefs of Staff. From the major command headquarters, SAC controls the operations of 3 intermediate commands, 9 air divisions, 29 aircraft wings, 9 missile wings, 2 training wings, and other miscellaneous units.

Defensive forces are those 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 Semi-Automatic Ground Environment (SAGE), the Distant Early Warning (DEW) Line, and the Ballistic Missile Early Warning System (BMEWS).

ADC 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 of the 586,000 square miles of Alaska. The AAC electronic alerting system includes the operation of thirteen aircraft control and warning squadrons under the operational control of a manual Region Control Center (RCC).

Obligations by Program Element Groupings
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Strategic Offensive			
1. Aircraft	$ 349,516	$ 401,552	$ 280,186
2. Missiles	28,582	26,477	40,734
3. Offensive Operations	347,846	330,556	375,600
Sub-Total...	$ 725,944	$ 758,585	$ 696,520
B. Strategic Defensive			
1. Aircraft and Missiles	$ 20,660	$ 15,480	$ 14,786
2. Surveillance and Warning	189,477	189,843	186,056
3. Defensive Operations	180,103	182,383	180,951
Sub-Total...	$ 390,240	$ 387,706	$ 381,793
TOTALS...	$1,116,184	$1,146,291	$1,078,313

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Strategic Offensive	$ 725,944	$ 758,585	$ 696,520
1. Aircraft	$ 349,516	$ 401,552	$ 280,186

This category includes funds for pay of civilian personnel, supplies and equipment, and associated operating cost of: B-52 and FB-111 bombardment, SR-71 strategic reconnaissance, and KE-135 air refueling squadrons, wing headquarters, field level maintenance, and advanced flying training.

PROGRAM DATA

	FY 1972	FY 1973	FY 1974
Squardrons			
B-52	26	26	24
(C - F Series)	(9)	(9)	(7)
(G - H Series)	(17)	(17)	(17)
FB-111	4	4	4
SR-71	1	1	1
KC-135	38	38	38
Flying Hours	579,209	660,487	500,242
Manpower (End-Strengths)			
Military Personnel	54,965	54,581	52,596
Civilian Personnel	944	804	801

(In Thousands of Dollars)

The decrease of $121.4 million in fund requirements from the FY 1973 level for Strategic aircraft results from the following actions:

a. Reduction in active B-52 aircraft inventory with phaseout of certain B-52D units and lessening of activity in Southeast Asia	$ -93,943
b. Reduction in KC-135 tanker support for Southeast Asia operations	-16,819
c. SR-71 force reduction and decreasing operations in Southeast Asia	-11,813
d. Increase of 2,872 flying hours for FB-111 aircraft as they achieve full programmed operational capability	+ 1,209
Total	$-121,366

(In thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
2. Missiles	$28,582	$26,477	$40,734

This category includes funds for pay of civilian personnel, supplies and equipment, and associated operating costs for Titan, Minuteman, Short Range Attack (SRAM), and Hound Dog missile squadrons, missile maintenance, munitions maintenance, wing headquarters, and missile site support aircraft.

PROGRAM DATA

SQUADRONS-MISSILES

	FY 1972	FY 1973	FY 1974
Missile			
Hound Dog	17-340	17-328	17-328
SRAM	1-53	[Deleted]	
Titan	6-54	6-54	6-54
Minuteman	20-1000	20-1000	20-1000
(MM - I)	(6-290)	[	
(MM - II)	(10-500)	[Deleted]	
(MM - III)	(4-210)	[	]
Flying Hours	30,840	20,142	21,000
Manpower (End Strengths)			
Military Personnel	17,388	18,463	19,025
Civilian Personnel	134	143	143

The program data indicates the continuing phased replacement of Minuteman I with Minuteman III missiles and the increasing inventory of the Short Range Attack Missiles (SRAMs).

The increase of $14.3 million from FY 1973 and FY 1974 results from the following:

	(In Thousands of Dollars)
a. Increased operating costs to support the increasing inventory of Short Range Attack Missiles.....	$ + 669
b. Change in funding responsiblity from AFLC to SAC for selected services and supply support. These requirements were formerly financed in Major Force Program VII and are not an increase to the overall Air Force O&M Budget.....	$ +6,127
c. Increased software for Minuteman to update programs for force modernization and to incorporate advanced technology. Includes requirements for Command Data Buffer that are not a part of the R & D program.....	$ +7,461
Total	$+14,257

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
3. Offensive Operations	$ 347,846	$ 330,556	$ 375,600

This category includes funds for pay of civilian personnel, supplies and equipment, and other operating costs incurred in the following areas:

SAC Automated Command and Control System:
(Excluding communications)
Post Attack Command and Control System (PACCS):
(EC-135 Airborne Command Posts and associated operation and maintenance activities)
SAC Communications:
(Defense Communications System -DCS- including long-haul, point-to-point leased/government owned circuitry, and access lines for: Automatic Voice Network, Automatic Digital Network, Automatic Secure Voice Communications, and Defense Special Security Communications System)
PACCS Communications:
(DCS and Non-DCS support for the PACCS airborne command posts)
Special Purpose Communications:
(Air Force low frequency system transmitters, receivers for: Northern area UHF sites, Minuteman and Titan missile sites, wing command posts, and communications squadrons.)
Command Headquarters - SAC
Satellite Basing:
(Dispersed operation of B-52, FB-111, and KC-135 aircraft at satellite locations to achieve maximum survivability of alert forces)
Real Property Maintenance Activities:
(Includes costs identifiable with the operation of civil engineer activities at bases and sites and covers maintenance and repair of real property, utilities, leased space, and other civil engineer functions)
Command and Base Communications - SAC:
(All fund requirements associated with the lease, operation, and/or maintenance of communications systems such as: base telephone systems; non-tactical radio systems; base wire communications; tolls; TWX and refile charges; and other communications systems. Excludes costs incurred in the administration or operation of communications squadrons assigned to AFCS)
Base Operations:
(All base support functions such as transportation, services, security, and administration that are not provided for in any other category.)

Training:
(Missile training squadrons and other training activities such as command sponsored schools or costs incurred for certain courses of instruction for which SAC has funding responsibility.)

Command:
(Intermediate command headquarters, combat evaluation groups, combat support groups, missile evaluation squadrons, and missile standardization squadrons.)

PROGRAM DATA

	FY 1972	FY 1973	FY 1974
Flying Hours	81,709	75,773	80,587
Manpower (End Strengths)			
Military Personnel	56,080	55,858	52,646
Civilian Personnel	17,579	17,670	20,477

Costs for Offensive Operations will increase by $45.0 million from FY 1973 to FY 1974. Major line items involved in the increase are as follows:

a. Net increase in civilian pay results from: conversion of manpower authorizations from military to civilian; the full year effect in FY 1974 of the FY 1973 Classification Act and Wage Board pay raises; the savings accrued by the change in USAF status from host to tenant at Goose AB, Labrador..... $ +21,276

b. Decrease in travel requirements for support of Southeast Asia operations and reduction in command structure..... $ - 738

c. Decrease in port handling and other transportation costs because of reduction in SEA support..... $ - 507

d. Decrease in requirement for contract maintenance of certain SAC communications equipment. Function will be undertaken by direct hire civilian personnel..... $ - 484

e. Increased utility costs resulting from rate changes..... $ + 411

f. Decrease in communications costs resulting from revision to requirements..... $ - 527

(In Thousands of Dollars)

g.	Increased contract maintenance for support equipment necessitated by deferral of this type of work from FY 1973	$ + 245
h.	Increase in Real Property Maintenance costs to improve the condition of, and prevent further deterioration to, existing facilities	$ + 4,858
i.	Increase in civil engineering services, other than maintenance and repair of facilities, results from the FY 1973 O&M program/funding imbalance	$ + 3,928
j.	Change in USAF status from host to tenant at Goose AB, Labrador, requires reimbursement to Canadian Government for base support. Offsetting savings are in the Military Personnel account, and in various other elements of O&M such as civilian pay	$ + 7,800
k.	Increase in services, supplies and equipment for other Offensive Operations activities because of the FY 1973 O&M program/funding imbalance and the deferral of work or procurement of materiel into FY 1974	$ + 7,721
l.	Increase for full year effect in FY 1974 of satellite basing operations at three civil locations and addition of a fourth civil base to complete Phase I of the program	$ + 1,061
	Total Net Change	$ +45,044

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Strategic Defensive	$390,240	$387,706	$381,793
1. Aircraft and Missiles	$ 20,660	$ 15,480	$ 14,786

This category includes funds for pay of civilian personnel, supplies and equipment, and associated operating costs for 7 fighter interceptor squadrons (FIS). A comparison with prior years' programs is shown in the following table:

Program Data

	FY 1972	FY 1973	FY 1974
Squadrons			
F-106	9	7	7
BOMARC	3		
Flying Hours	73,434	52,376	51,416
Manpower (End Strengths)			
Military Personnel	7,019	5,045	5,072
Civilian Personnel	217	132	132

The reduction of $694 thousand from FY 1973 to FY 1974 results from full year savings accruing from the inactivation of the BOMARC missile squadrons.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
2. Surveillance and Warning	$189,477	$189,843	$186,056

This category includes funds for pay of civilian personnel, supplies and equipment, and associated operating costs for the Air Defense Semi-Automatic Ground Environment System (SAGE), the Ballistic Missile Early Warning System (BMEWS), the Space Detection and Tracking System (SPACETRACK), the Distant Early Warning System (DEW LINE), the Air Force portion of the Continental Air Defense Integration North (CADIN), the Over the Horizon Radar System (OTH), the Airborne Early Warning and Control System (AEW&C), and the NORAD Combat Operations Center (NORAD COC). The components of these programs are shown in the following table:

Program Data

Operating Location (Unless Otherwise Indicated)	FY 1972	FY 1973	FY 1974
NORAD Manual Control Centers			
(CONUS)	1	2	2
(ALASKA)	3	3	3
(CANADA)	1	1	1
Regional Control Centers			
(CONUS)	6	6	6
(ALASKA)	1	1	1
(CANADA)	1	1	1
Surveillance Radars	100	102	102
Back-up Interceptor Control (BUIC)			
(CONUS-ACTIVE)	8	[Deleted]	
(CONUS-SEMI-ACTIVE)	4		
(CANADA)	2	2	2
NORAD COC	1	1	1
Distant Early Warning (DEW LINE)	31	31	31
Airborne Early Warning & Control (AEW&C)	2 Sq	2 Sq	2 Sq
Ballistic Missile Early Warning System			
(BMEWS)	3	3	3
(SLBM)	8	8	8
Space Detection & Tracking System			
(SPACETRACK)	3	3	3
(OPTICAL SENSORS)	4	4	4
Over the Horizon Radars (OTH)	9	9	9
Defense Support Program			
Satellites	2	[Deleted]	
Ground Facilities		3	

Flying Hours	26,495	24,438	29,304
Manpower (End Strengths)			
Military Personnel	16,495	16,089	16,131
Civilian Personnel	1,187	1,226	1,226

Surveillance and Warning requirements decrease $3,787 thousand from FY 1973 to FY 1974. Major changes in program costs are shown below:

	(In Thousands of Dollars)
a. Surveillance Radars - full year requirements of CONUS Southern Air Defense	$ +1,725
b. Airborne Early Warning and Control - increase in flying hours	+1,025
c. SPACETRACK - Operational services for FPS-85, Eglin AFB, due to completion of Adaptive Mission Oriented Software System (AMOSS) and transfer of the Worldwide Military Command and Control System (WWMCCS) Space Computation Center software and systems engineering requirement to Other Procurement Appropriation in FY 1974	-7,644
d. Defense Support Program - lease of UNIVAC computer for SAC display system	+ 349
e. Long leased line communications - increase for CONUS Southern Air Defense; partially offsetting decrease for external NORAD COC communications routes	+ 371
f. Dewline - full year effect of increased transportation rates	+ 178
g. [[Deleted]] - increase to support one additional deployment in FY 1974	+ 174
h. All other, net	+ 35
Total	$ -3,787

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
3. Defensive Operations	$180,103	$182,383	$180,951

This category includes funds for pay of civilian personnel, supplies and equipment, command and base communication, and associated operating costs for all bases and installations in the defensive forces in CONUS and Alaska; the training missions at Tyndall Air Force Base; and the headquarters for defensive forces in CONUS and Alaska, including NORAD Headquarters.

Program Data

	FY 1972	FY 1973	FY 1974
Flying Hours	100,465	87,277	92,867
Manpower (End Strengths)			
Military Personnel	18,599	17,273	17,101
Civilian Personnel	8,006	7,175	6,681

Defensive Operations fund requirements decrease $1,432 thousand from FY 1973 to FY 1974. A cost reduction because of transfer of OTIS AFB to the Air National Guard and disestablishment of Joint Continental Defense Systems Integration Planning Staff (JSIPS) was offset by increased requirements for real property maintenance, training involving supersonic drones, increase in flying hours for training and support aircraft and the full year effect of the FY 1973 Classification Act pay raise. A portion of the increase results from the program/funding imbalance that exists in the O&M, AF account during FY 1973. That imbalance depresses FY 1973 program by deferral of requirements where feasible into FY 1974.

GENERAL PURPOSE FORCES

General DeLuca. On major force program II, on page 24, these, sir, are the general purpose forces. They are the fighters. The attack aircraft, as you see on that page, the reconnaissance aircraft, the airlift aircraft, the JCS's and the tactical operations are done primarily by our tactical air command, our Pacific Air Command and the U.S. Air Force in Europe.

The budget there is $928 million for the support of that base structure and that force structure.

The flying hours are on page 26, and the aircraft.

As you will see there, primary aircraft are F–4; the F–111, you have been discussing. The aircraft numbers you see here are UE, unit equipment, equipment in the squadrons. Beyond those are aircraft for training, maintenance float, command support, test, so forth.

The F–105 is down to two squadrons; the A–7, nine squadrons. Flying hour program of 473,000.

Chairman McClellan. I don't quite understand this chart. You don't show the number of planes.

General DeLuca. Sir, the 12/276, 12 squadrons, 4 wings, 276 aircraft.

The F–111 is programed to fly 79,000 hours, 4,750 more hours in 1974 than in 1973.

Again, what goes behind this, sir? The cost of running the base, the maintenance, supplies, transportation, utilities, contracts, and so forth.

As we go through each one, there is a different break——

Chairman McClellan. Just highlight anything that you think needs special emphasis.

JUSTIFICATION

At this point in the record there will appear certain information submitted by the Department in justification of the amounts requested for this activity.

[The justification follows:]

Justification

FORCE PROGRAM II: GENERAL PURPOSE FORCES

PURPOSE AND SCOPE

Air Force General Purpose Forces consist of the Tactical Air Command, Pacific Air Forces, United States Air Forces Europe, and elements of the United States Readiness Command. They provide world-wide tactical strike forces for air superiority, interdiction, close air support, tactical airlift, tactical aero-medical evacuation, and reconnaissance missions in theatres of operations. Funding provides for pay of civilian personnel, supplies, equipment, field level maintenance, advanced flying training, and world-wide base support for these forces.

OBLIGATION BY PROGRAM ELEMENT GROUPINGS
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Tactical Fighters	$170,471	$174,918	$150,552
B. Tactical Attack Aircraft and Tactical Interceptors	3,299	796	47
C. Tactical Reconnaissance/Tactical Electronic Warfare	34,650	29,458	30,581
D. Special Operations Forces	17,443	14,459	8,061
E. Tactical Airlift	44,784	36,633	38,543
F. JCS Directed and Coordinated Exercises	21,109	36,176	38,807
G. Tactical Operations	719,026	660,072	661,792
TOTAL	$1,010,782	$952,512	$928,783

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Tactical Fighters	$170,471	$174,918	$150,552

This category provides for pay of civilian personnel and for supplies, equipment, and operations of tactical fighter squadrons, field maintenance and wing headquarters for the following aircraft: A-7, F-100, F-105, F-4, F-111 and for F-15 cadre personnel.

Program Data

Squadrons	FY 1972	FY 1973	FY 1974
A-7	6	9	9
F-100	3	-	-
F-105	5	2	2
F-4	49	48	45
F-111	10	12	12
TOTAL Squadrons	73	71	68
Flying Hours	517,731	535,139	492,776
Manpower (End Strength)			
Military Personnel	47,816	~~47,563~~ 46,563	46,481
Civilian Personnel:			
Direct Hire	575	545	301
Indirect Hire	91	102	102

The decrease of $24,366 between FY 1973 and FY 1974 results from the changes detailed below:

	(In thousands of dollars)
a. Decrease in A-7 flying hours of 454 offset by POL price increase and higher civilian pay	$ + 447
b. Reductions caused by phase-out of F-100	$ - 290
c. Decreases in operations because of 4,506 fewer F-105 flying hours	$ - 1,532
d. Decreases because of 44,486 fewer F-4 flying hours	$ -10,760
e. Increases for 7,220 additional F-111 flying hours	$ + 3,371
f. Initial supply support for F-15 personnel cadre	$ + 23
g. Travel and transportation requirement for return of SEA surge tactical fighter units required in FY 1973 but not in FY 1974	$ -20,502
h. Supply requirements deferred from FY 1973 to FY 1974 because of FY 1973 O&M program/funding imbalance	$ + 4,877
Net TOTAL	$ -24,366

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Tactical Attack Aircraft and Tactical Interceptors	$ 3,299	$ 796	$ 47

This category includes funds for supplies, equipment, and operating cost of the initial cadre of A/10 personnel, and phase-out of F-102 aircraft.

Program Data

	FY 1972	FY 1973	FY 1974
Squadrons			
F-102	1	-0-	-0-
Flying Hours	10,621	4,474	-0-
Manpower (End Strenghts)			
Military Personnel	377	-0-	4
Civilian Personnel	1	-0-	-0-

The decrease of $749 between FY 1973 and FY 1974 is the net effect of:

a. Decrease as a result of phase-out of all F-102 aircraft in FY 1973 ..... $ - 796

b. Increase to establish operating support for cadre of A/10 personnel ..... $ + 47

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
C. Tactical Reconnaissance/Tactical Electronic Warfare.....	$34,650	$29,458	$30,581

This program provides for pay of civilian personnel, flying hours and other operational support of Tactical Reconnaissance Squadrons, Tactical Electronic Warfare Squadrons, Tactical Drones, Aircraft Field Maintenance, Wing Headquarters, and Photo Processing for RF-4 and EB-66 Aircraft Squadrons.

Program Data

	FY 1972	FY 1973	FY 1974
Squadrons			
RF-4.....	13	13	13
EB-66.....	2	1	1
Tactical Drone.....	1	1	1
TOTAL Squadrons.....	16	15	15
Flying Hours	104,761	94,891	89,260
Manpower (End Strengths)			
Military Personnel.....	9,056	7,952	7,930
Civilian Personnel:			
Direct Hire.....	82	89	58
Indirect Hire.....	26	14	14

The increase of $1,123 from FY 1973 to FY 1974 results from the following:

a. Increases result from 1,420 added RF-4 flying hours.....	$ + 819
b. Increase in supplies for RF-4 because of deferral of requirements to FY 1974 as a result of FY 1973 O&M program funding imbalance.....	$ + 2,411
c. Decrease in EB-66 operations because of 6,915 fewer flying hours.....	$ - 2,147
d. Increase in POL and supplies for Tactical Drones.....	$ + 40
TOTAL Net Change.....	$ + 1,123

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
D. Special Operations Forces	$17,443	$14,459	$ 8,061

This program provides for pay of civilian personnel, support equipment, necessary facilities for Specialized forces for use in foreign nations for: (1) Augmentation or training of indigenous forces in the conduct of counter-insurgency, unconventional warfare, and psychological operations against covert and overt action by guerillas or enemy subversion; (2) Civic action in which the foreign military forces are instructed and assisted in developing a higher standard of living for their nation. Includes instructors, unit and individual training and Air Force Gunship operations.

Program Data

	FY 1972	FY 1973	FY 1974
Squadrons	11	7	6
Flying Hours	124,388	70,607	31,843
Manpower (End Strengths)			
Military Personnel	6,250	3,475	2,847
Civilian Personnel (Direct Hire)	90	88	44

The decrease of $6,398 from FY 1973 to FY 1974 is a result of a decrease of 14 aircraft, 38,764 flying hours, 628 military personnel, and 44 civilian personnel. The C-47, A-37, AC-119, HH-HC-53, C/UC-123, A-1, T-28, and U-10 aircraft have been eliminated from the Special Operations Force in FY 1974.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
E. Tactical Airlift	$44,784	$36,633	$38,943

This program provides for pay of civilian personnel, supplies, equipment and necessary facilities for Airlift squadrons, field level maintenance and wing headquarters.

Program Data

	FY 1972	FY 1973	FY 1974
Squadrons			
C-130	18	17	17
C-7A	1	-	-
TOTAL Squadrons	19	17	17
Flying Hours	317,345	227,193	232,283
Manpower (End Strengths)			
Military Personnel	13,716	10,119	10,062
Civilian Personnel:			
Direct Hire	112	117	114
Indirect Hire	4	4	4

The increase of $2,310 in FY 1974 above FY 1973 results from the following:

	(In Thousands of Dollars)
a. Phase-out in FY 1973 of all C-7A's, partially offset by additional C-130 flying hours	$ - 40
b. Increased supplies for C-130's because of deferral of requirements to FY 1974 as a result of the FY 1973 O&M program/funding imbalance	$ + 2,350
TOTAL Net Change	$ + 2,310

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
F. JCS Directed and Coordinated Exercises	$21,109	$36,176	$38,807

This program provides for JCS Directed and Coordinated Exercises, specifically for the deployment of Air and Ground Forces, per diem allowances, and expendable supplies.

Program Data

Fiscal year 1972 actual costs were $17,414 less than the programmed $38,523. Several exercises were cancelled or reduced in scope because of the extensive diversion of Military Airlift Command (MAC) resources to SEA during the spring surge.

Fiscal year 1973 funding is $2,576 above the FY 1973 program resulting from a MAC Airlift Service Industrial Fund rate increase.

Fiscal year 1974 funding increases $2,631 above FY 1973 to provide MAC support for Army participation in expanded CONUS exercises Gallant Crew and Brave Shield.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
G. Tactical Operations	$719,026	$660,072	$661,792

This program provides for: the command and control system, base operating support and headquarters for the Tactical Air Command, U. S. Air Force Europe, Pactific Air Forces, and U. S. Readiness Command; airborne command posts; aerial-port squadrons; air weapons control weapons control systems; tactical air control systems; tactical aero-medical evacuation squadrons and training.

Program Data

	Type of Aircraft	FY 1972	FY 1973	FY 1974
Squadrons				
Airborne Command Posts	EC-135	3	3	3
Tactical Air Control	Various	11	10	12
Aeromed Evauation (Intra-theater)	C-118, C-131, C-9A	2	2	2
Flying Hours		670,451	562,943	483,180
Manpower (End Strengths)				
Military Personnel		135,339	117,222	109,904
Civilian Personnel				
Direct Hire		24,409	21,705	21,647
Indirect Hire		16,477	16,504	15,344

($ in thousands)

Costs for Tactical Operations will increase $1,720 from FY 1973 to FY 1974:

a.	Decreases Because of reduced flying hours, personnel support and SEA activity	$ - 25,880
b.	Decreases in transportation costs because of reduction in SEA support	$ - 7,662
c.	Decrease in travel requirements because of 12,063 fewer military man-years and reduced operations	$ - 2,668
d.	Decreases in fuel requirements because of 79,763 fewer flying hours	$ - 1,061
e.	Decreases in rental of vehicles for SEA required in FY 1973 but not in FY 1974	$ - 700
f.	Increases in utility and rent rates	$ + 889
g.	Increased maintenance requirements for aircraft tip tanks and racks stored as a part of the War Readiness Materiel program	$ + 977
h.	Transfer of Wake Island management from Military Airlift Command (Major Force Program IV) to Pacific Air Forces (Major Force Program II)	$ + 2,732
i.	Increases in Real Property Maintenance requirements deferred from FY 1973 to FY 1974 because of FY 1973 O&M program/funding imbalance	$ + 3,594
j.	Increases in civilian pay for direct-hire civilians result from the full year effect in FY 1974 of the FY 1973 Classification Act and Wage Board pay raises, partially offset by a decrease of 58 end-strength and 361 man-years	$ + 4,354
k.	Increases in civilian indirect hire pay rates	$ + 5,162
l.	Impact of the FY 1973 O&M program/funding imbalance by deferral of requirements where feasible into FY 1974	$ + 18,286
	Total	$ 1,720

INTELLIGENCE AND COMMUNICATIONS

General DeLuca. Force program III, page 34. Here we have the intelligence and communications program of the U.S. Air Force.

Chairman McClellan. I note this page is not marked "Secret."

General DeLuca. Everything on that page is open to the public.

There is $525 million, as you see there is Table 22; $145 million for intelligence; $278 million for communications; and $101 million for special activities.

Senator Young. The chairman has been badgered to disclose intelligence spending. We could use figures like this.

General DeLuca. Yes, sir. Remember, these are the O. & M. costs now. It is not the military personnel cost or procurement programs which are additive.

Chairman McClellan. What do you mean by intelligence in O. & M.?

General DeLuca. Remember, this is support now.

Colonel Falkenstein. It is the pay of civilians, contract purchases for different systems.

General DeLuca. The $525 million, Mr. Chairman, is made up: $138 million civilian personnel pay; $24 million in travel; $137 million in communications, POL to fly the airplanes, $16 million; supplies, $48 million.

Remember, this is just support all the time.

Chairman McClellan. This is just intelligence.

Are we spending that much money just to maintain and operate intelligence in the Air Force?

General DeLuca. Yes, sir.

Chairman McClellan. I want a little explanation of what you mean by intelligence.

Senator Young. If you added up all the intelligence operations in your unclassified testimony today, how much would the cost be?

General DeLuca. For O. & M., I would only be talking about $145 million.

Chairman McClellan. There are other intelligence figures which you have classified.

General DeLuca. I would have to go through the budget but I would have to pull it out.

General Lewis. We don't have that broken out, either.

[The information follows:]

INTELLIGENCE FUNDING

The total fund requirement by appropriation for intelligence activities is as follows:

[Dollars in thousands]

Appropriation	Fiscal year—		
	1972	1973	1974
Operations and maintenance	$131,906	$151,636	$145,430
Military personnel	276,861	272,112	256,394
Research, development, test, and evaluation	174,584	210,032	314,100
Aircraft procurement	612,323	74,838	61,865
Other procurement	359,145	881,017	925,922
Missile procurement	419,600	450,000	379,440
Military construction	2,200	7,785	12,594
Total	1,976,619	2,047,420	2,095,745

JUSTIFICATION

Chairman McClellan. At this point in the record there will appear certain information submitted by the Department in justification of the amounts requested for intelligence and communication.

[The justification follows:]

Justification

FORCE PROGRAM III: INTELLIGENCE & COMMUNICATIONS

PURPOSE & SCOPE

This Force Program includes resources primarily for national or centrally directed DOD Intelligence and Security programs; communications; specialized missions such as weather service, and aerospace rescue/recovery. Additionally, it includes Commercial Communications Systems and Networks for Major Force Program III, only. Excluded are communications resources allocated for on-base requirements; also excluded are Command & Control resources associated with Strategic Forces, General Purpose Forces, Airlift Forces & Administrative & Associated activities. Commercial Communications encompassing all force programs are presented in the Selected Analyses Section.

Obligations by Program Element Groupings
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. General Defense Intelligence Program	$ 78,215	$ 92,389	$ 86,714
B. Other Intelligence Programs	53,691	59,247	58,716
C. Communications	268,609	273,671	278,046
D. Special Activities	144,406	104,587	101,874
TOTAL	$544,921	$529,894	$525,350

(Dollars in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. General Defense Intelligence Program (GDIP)	$78,215	$92,389	$86,714

This program provides for collection of intelligence through surveillance and detection; and the processing, production and dissemination of intelligence.

Major changes are: the decrease due to the transfer of the Advanced Range Instrumentation Ships (ARIS) Program into Force Program VII; decreases in Technical Sensor Collection and Intelligence Production Acitivites are offset by the assumption of FOREST GREEN operation and maintenance costs resulting from a transfer from Advanced Research Project Agency (ARPA) RDT&E to USAF to operate and maintain [ ] research facilities; increased support in the Intelligence Data Handling System (IDHS) for production of multi-language machine translations for Scientific and Technical (S&T) use, to provide support for the EGRESS RECAP system, to achieve timely analysis of [ ] and other event-oriented data in a scientific and technical environment and to improve Air Force data handling techniques and data retrieval within the prevailing DOD [(Deleted)] System.

Personnel Strengths		Program Data	
Military	8,973	7,121	7,071
Civilian (Direct Hire)	1,384	1,448	1,415
Civilian (Indirect Hire)	16	16	16

The major changes in program costs from FY 1973 to FY 1974 for the General Defense Intelligence Program are:

a. Transfer of the Advanced Range Instrumentation Ships (ARIS) Program	$-11,176
b. Reduction in Technical Sensor Collection	- 1,253
c. Reduction in Intelligence Production Activities	878
d. Assumption of [ ] research facilities	+ 4,000
e. Support of Intelligence Data Handling System	+ 4,249
f. Other	- 617
Total	$- 5,675

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Other Intelligence Programs	$53,691	$59,247	$58,716

These programs provide for Cryptologic Activities, which includes the collection, processing and reporting of communications intelligence (COMINT) and electronic intelligence (ELINT) information, and other intelligence programs.

Major changes include the programmed reduction of [Deleted] aircraft used in Southeast Asia for Airborne Radio Direction Finding (ARDF); a reduction of [Deleted] aircraft used for Airborne Communications Reconnaissance Program (ACRP) in Europe, and reduction in associated support costs resulting from the decreases in the force levels. Additionally, there were changes in the Special Reconnaissance Vehicle Program. COMPASS ARROW, a sophisticated high altitude, deep penetration, [Deleted] drone system was placed in dead storage; BUFFALO HUNTER, a low altitude drone [d] reconnaissance mission in Southeast Asia was limited in a contingency role; and funding for a signal intelligence (SIGNINT) collection program which was transferred to this program from Aircraft Procurement.

Personnel Strengths		Program Data	
Military	21,624	20,641	19,009
Civilian (Direct Hire)	1,262	1,183	1,218
Civilian (Indirect Hire)	222	472	513

Major Changes in Program Costs from FY 1973 to FY 1974 for the Other Intelligence Programs are:

Reduction of [d] aircraft in Southeast Asia and [d] aircraft in Europe	$-1,875
Reduction in other support costs due to decrease in force level	- 499
Deletion of COMPASS ARROW from active inventory	-1,000
Assumption of SIGNINT funding responsibility	+5,043
Limiting BUFFALO HUNTER in a contingency role	-2,200
Total	$- 531

(Dollars in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
C. Communications	$268,609	$273,671	$278,046

This program includes the non-reimbursed Air Force operating expenses for major Defense Communications System (DCS) fixed transmission Sub-Systems and switching facilities, both government-owned and leased. Also included are the operating expenses for DCS terminal communication facilities, including ground satellite terminals, costs of securing the communications of all Air Force organizations and those functions of the Air Force Cryptologic Depot associated with communications security. The leased costs for Defense Communications System Automatic Voice, Digital and Secure Voice Networks (AUTOVON, AUTODIN and AUTOSEVOCOM) which serve all Air Force organizations, world-wide are included. The operating expenses of the Air Force world-wide ground-air-ground communications networks are included, as are those of Headquarters Air Force Communications Service (AFCS) and its subordinate area Headquarters. Also included are the Air Force Communications Service Engineering and Installation Program, Communications support requirements of the National Emergency Airborne Command Post, the National Military Command System, the Air Weather Service, the Satellite Control Facility and Richards-Gebaur AFB, Missouri.

The increase of $4,375 thousand from FY 1973 and FY 1974 results from the following:

a. FY 1974 impact of the January 1973 civilian pay increases	$ + 2,645
b. Rental of Data Processing Equipment and transportation costs	+ 442
c. Service-wide leased communications	- 3,195
d. Mainly for maintenance contracts for Defense Communications Satellites and for other contracts such as Deep Sea Cables, White Alice, AUTODIN repair	+ 2,328
e. Contractual engineering technical service, miscellaneous contracts and Foreign Indirect Hire	+ 541
f. Engineering-Installation and Communications Operating Supplies and Equipment	+ 1,518
g. Other	+ 96
Total	$ + 4,375

(Dollars in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
D. Special Activities	$144,406	$104,587	$101,874

In this program grouping are included the operating costs of the USAF Weather Service; Aerospace Rescue/Recovery; and the Air Force Traffic Control, Approach and Landing System. Other programs included are support for the National Emergency Airborne Command Post; National Military Command System; Base Operations; O&M support of the Space Boosters Program, the Satellite Control Facility Program, AF Office of Special Investigations Program and the Real Property Maintenance Program.

The decrease of $2,713 thousand from FY 1973 and FY 1974 results from the following:

a. Civilian manyear reductions	$ - 2,807
b. Reduced travel mainly in the area of Air Rescue and Recovery in Southeast Asia	- 1,972
c. Increased Rental of Data Processing Equipment for Weather Service	+ 963
d. Increased requirements for Real Property Maintenance other than Civilian U.S. Hire	+ 875
e. Aviation POL price increase as offset by flying hour adjustment	+ 481
f. Other	- 253
TOTAL	$ - 2,713

MAJOR FORCE PROGRAM IV: AIRLIFT

General DeLuca. The airlift operation and maintenance program finances the Military Airlift Command (MAC) activities not funded by the Airlift Service, Air Force Industrial Fund (ASIF). The MAC Airlift Force remains stable at 13 C–141 squadrons, 4 C–5 squadrons, and 11 C–9 aircraft. The operational requirements of the force are funded by the Airlift Service, Air Force Industrial Fund. Air Force base operations requirements are funded in O. & M., Air Force, and total $178.4 million for fiscal year 1974.

JUSTIFICATION

Chairman McClellan. At this point in the record there will appear certain information submitted by the Department in justification of the amounts requested for airlift activities.

[The justification follows:]

Justification

FORCE PROGRAM IV: AIRLIFT FORCES

PURPOSE AND SCOPE

Provides funds for the locally incurred Base Operations and Maintenance expenses in support of airlift organizations not financed from the Military Airlift Industrial Fund. Includes crew training, command, logistic and support units organic to such organizations. Further, the estimate provides base support funds for activities such as Air Rescue, Air Weather Service and Aerospace Audio-Visual Service at Norton AFB, California for which the direct mission costs are included in other force programs.

Obligations by Program Element Groupings
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Air Force Mission Activities.....	$ 47,385	$ 38,693	$ 33,990
B. Airlift Operations.....	143,472	146,312	144,444
TOTALS.....	$ 190,857	$ 185,005	$ 178,434

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Air Force Mission Activities	$ 47,385	$ 38,693	$ 33,990

The Air Force is responsible for providing the airlift to meet Department of Defense-wide requirements for specific airlift missions, such as Rest and Recuperation leave, Joint Airborne Training and Special Airlift Missions. Requirements are summarized as follows:

Special Airlift Missions	$ 18,873	$ 18,752	$ 18,394
Rest and Recuperation leave	19,016	6,200	2,000
Joint Airborne/Air Transportability Training	4,091	7,200	7,055
Other Support	5,405	6,541	6,541
TOTAL Air Force Mission Activities	$ 47,385	$ 38,693	$ 33,990

There will be a $4,200 decrease in Rest and Recuperation airlift costs from FY 1973 to FY 1974 because of reduced numbers of R&R leaves. A decrease of $145 in Joint Airborne/Air Transportability Training of Army and Marine personnel in C-141 and C-5 aircraft and a decrease of $358 in Special Airlift Missions will result from changes in SEA activity.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Airlift Operations	$ 143,472	$ 146,312	$ 144,444

These funds provide command and control, crew training for C-141 and C-5 aircraft, advanced helicopter crew training, administrative support, and base services required by the Strategic Airlift Forces, the Air Weather Service, the Aerospace Rescue and Recovery Service, and the Aerospace Audio-Visual Service. All of these functions are operated by the Military Airlift Command.

Forces:

Number of operating active aircraft:			
C-141 Crew Training	16	16	16
C-5 Crew Training	6	4	4
Helicopter Training	67	58	36
Other	43	42	40
Total Aircraft	132	120	96
Total Flying Hours	77,906	78,886	79,160
Civilian End Strengths:			
Direct Hire	10,329	10,305	9,752
Indirect Hire	21	71	71
Total Civilian End Strengths	10,350	10,376	9,823
Total Military End Strength	19,092	18,708	16,637

(In Thousands of Dollars)

MAJOR CHANGES IN PROGRAM COSTS: FY 1973 to FY 1974

Airlift operations requirements decreased $1,868 from FY 1973 to FY 1974.

a.	Transfer Wake Island host responsibility to Force Program II (General Purpose Forces) - Pacific Air Forces	$ - 2,732
b.	Aviation POL resulting from increase in flying hours and in price of POL	+ 617
c.	Increase in contract facility maintenance, custodial and engineer services resulting from FY 1973 imbalance	+ 2,497
d.	Increased Base Support requirements resulting from FY 1973 imbalance	+ 4,450
e.	Savings resulting from force realignment	- 6,700
	Total	$ - 1,868

CENTRAL SUPPLY AND MAINTENANCE

General DeLuca. Now, on page 49, this is central supply and maintenance.

This is our logistic forces.

On page 49, in the middle of the page, in the fiscal year 1974 column, we are requesting $2,356 million to support the logistics posture on the central bases of the U.S. Air Force.

Chairman McClellan. Let me ask you something. After all of the closings and so forth that you are going to make, you are only going to be able to reduce the cost as compared to last year about $68 million?

LOGISTIC SUPPORT

General DeLuca. In the logistic support posture. Remember now, sir, this runs the five depots of the U.S. Air Force, five major depots. It repairs and overhauls our engines. It rehabilitates our aircraft. It repairs all of our reparable items that are on those aircraft, whether it is a strut or fuel control assembly and so forth.

There are some 30,000 items that are repaired consistently throughout the Air Force.

It does all of our procuring, follow-on support, not the buying of the new weapon. It pays for all of our transportation to move supplies to our 151 major bases. It is those things, keeping a viable force of some 10,000 to 11,000 aircraft to fly 1 million hours at the ready.

Chairman McClellan. What I was thinking was, in view of the end of hostilities in Vietnam, it would seem to me as though there would be a larger reduction than what this indicates.

General DeLuca. This is directly related again to the force structure and activity at which you fly that force structure. Remember, a number of our aircraft will be coming back for recycling for the wear and tear they have taken in South Vietnam.

Chairman McClellan. I guess a lot of that has been delayed while you were in combat operations. Now you are going to bring them back and put them in operating condition?

General DeLuca. Yes, sir.

Chairman McClellan. So there would not be as great a reduction as it would appear, taking into account the first 2 years, at least?

General DeLuca. Also, we have deferred other maintenance to take care of operations.

JUSTIFICATION

Chairman McClellan. At this point in the record, there will appear certain information submitted by the Department in justification of the amounts requested for this activity.

[The justification follows:]

Justification

FORCE PROGRAM VII: Central Supply & Maintenance

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Central Supply and Maintenance	$2,426,973	$2,424,761	$2,356,006

PURPOSE & SCOPE

The funds requested for this program are required for the logistical support of the Air Force. Provision is made for depot operations at six major logistical installations, procurement operations, depot level maintenance of airborne and ground equipment, transportation other than first destination, other logistic support service, and the Eastern Test Range.

JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 estimate of $2,356,006 thousand for Central Supply & Maintenance provides for the pay of 55,579 direct hire civilian personnel employed at logistical installations and for the non-personnel expenses required to operate the logistics system. The resources provided in this estimate reflect a personnel reduction related to reduced force level support and implementation of the Advance Logistics System.

FORCES:			
Major Logistical Installations	6	6	6
Total Flying Hours	40,507	36,070	40,144
Total Civilian End Strengths	61,308	58,818	55,585

Major Changes in Program Costs from FY 1973 to FY 1974:

a. Decrease associated with reductions in civilian personnel	$ - 11,650
b. Reduced transportation due to sortie rate reduction and flying hour reduction, offset in part by rate increases	- 79,001
c. Increase in rents & utilities for Advanced Logistics System (ALS) offset by reduction in supplies	+ 8,136
d. Increased contractual costs primarily associated with transfer of Advanced Range Instrumentation Ships (ARIS) from Major Force Program III to Major Force Program VII	+ 13,253
e. Greater costs payable to Bureau of Employment Compensation for injuries or deaths sustained by civilian employees	+ 2,219
f. Transfer of FY 1974 labor costs for weapon systems update modifications previously funded in the procurement appropriations	+ 32,900
g. Decrease in other depot level maintenance	- 34,612
Total	$ 68,755

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MFP VII

Total - Obligations by Program Element Grouping

(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Depot Operations	$ 830,172	$ 782,915	$ 780,955
B. Procurement Operations	77,242	79,036	82,647
C. Depot Maintenance	1,059,722	1,096,684	1,094,972
D. Transportation	332,831	319,461	240,460
E. Other Logistic Support Activities	30,429	64,657	65,268
F. Eastern Test Range	96,577	82,008	91,704
TOTAL - Central Supply & Maintenance	$2,426,973	$2,424,761	$2,356,006

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Depot Operations	$830,172	$782,915	$780,955

These activities provide for the management, receipt, storage and disposal by Air Force Depots of material used by the Air Force, Air Force Reserve, Air National Guard and other agencies of the Department of Defense. It includes base operation and maintenance of the following Air Force Logistics Command (AFLC) installations:

Ogden AMA, Utah
Oklahoma City AMA, Oklahoma
San Antonio AMA, Texas
Sacramento AMA, California
Warner Robins AMA, Georgia
Wright-Patterson AFB, Ohio

The major item of expense is for the pay of a civilian work force of 47,327 compared to 50,413 in FY 1973. Overall, the estimate reflects a decrease in funding requirements for FY 1974 in the amount of $1,964 thousand. The principal changes are:

a. Increased rental of ADPE equipment due to installation of computers for the Advance Logistics System	$ +14,484
b. Decrease in supplies and equipment requirements resulting from reduced activity	- 6,589
c. Increase in Civil Engineering services by contract to provide for additional investigative engineering and custodial services	+ 2,165
d. Increase in service engineering by contract for the A-7D, CH/HH-3, CH/HH-53 and the Nondestructive Inspection Program	+ 2,395
e. Civilian personnel decrease due to reduction of 3,086 spaces as offset by full year impact of the FY 1973 pay raise	-16,106
f. Other miscellaneous changes, i.e., travel, transportation, printing, etc	+ 1,691
Total	$ - 1,960

Summary of Non-Personnel Requirements

	(In Thousands of Dollars)		
	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Travel	$ 8,902	$ 7,329	$ 7,855
Transportation	3,092	2,413	2,491
Rental of ADPE Equipment	8,529	12,420	26,904
Other Rents and Utilities	7,086	7,216	7,639
Communications	5,628	5,586	5,760
Purchased Maintenance, Other	13,273	13,191	12,985
Printing	10,984	11,748	11,598
Contractual Costs	(101,610)	(81,120)	(86,209)
Munitions Storage and Handling	9,106	8,280	8,280
C-9A Supply Support	1,789	4,600	5,194
Drone Support	5,907	5,456	5,200
Field Service Representatives	2,984	3,063	1,380
Service Engineering	48,041	37,000	39,395
Facility Contracts and Minor Construction	15,442	7,406	8,645
Civil Engineer Services	3,500	4,191	6,356
Data Processing Services	2,945	2,294	987
Publication Distribution	1,511	1,509	1,509
Other	10,385	7,321	9,263

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
POL	$ 1,951	$ 1,361	$ 1,678
Supplies	41,511	42,047	35,300
Equipment	3,425	3,323	3,481

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Procurement Operations	$ 77,242	$ 79,036	$ 82,647

This estimate finances the pay of civilian personnel and other operating costs for procurement operations including Prime Procurement and Contract Administration. The Prime Procurement function includes negotiation and award of contract, amendments, changes and terminations, for the procurement of major electronic systems and follow-on spares for weapon systems. Contract Administration provides for the administration of prime and sub-contracts. It encompasses contract readjustment, property administration, pricing and financial analysis, contractor procurement evaluation, termination of contracts and quality assurance. Functions performed by personnel funded by this program insure that the Air Force receives what it pays for in quality, quantity, reliability, and timeliness.

The major expense is for the pay of a civilian work force of 5,266 amounting to $79,878 thousand in FY 1974. The increase over FY 1973 is due primarily to the annualization of the classified pay raise of Jan 73. Non-personnel requirements are identified by category in the following summary:

Summary of Non-Personnel Requirements

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Travel	$ 1,895	$ 1,789	$ 1,879
Contract Services	272	117	140
Other (Transportation, Rents, Communications, Supplies, Equipment)	1,106	807	750

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
C. Depot Maintenance	$1,059,722	$1,096,684	$1,094,972

Depot level maintenance is that maintenance which is beyond the capability of using commands and requires skill, facilities, and equipment not normally available to wing/base organizations. The maintenance is accomplished at industrial facilities (depot and contractor), except when feasible specialized field teams (depot and contractor) are sent to bases to minimize downtime of equipment.

The following is a distribution of the depot maintenance program, ordered from the Depot Maintenance Industrial Fund:

Aircraft Maintenance	$ 276,823	$ 230,311	$ 266,926
Missile Maintenance	8,018	7,855	12,317
Engine Maintenance	165,777	156,023	148,572
Other Major Items	28,313	32,896	29,221
Exchangeables	521,278	615,312	588,069
Area/Base Support, Local Manufacture	44,340	41,053	36,078
Total Direct Obligations	$1,044,549	$1,083,450	$1,081,183

In addition to the maintenance which will be procured from the Depot Maintenance Industrial Fund, the estimate provides for the pay of civilian personnel employed in storage of aircraft, missiles and vehicles; the calibration program; and for procurement of changes to technical data. The following is a distribution of these expenses:

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Civilian Personnel Requirements	$ 8,212	$ 6,964	$ 7,190
Direct Hire End Strength (Non-Add)	(1,088)	(1,090)	(1,082)
Travel	259	199	243
Supplies	460	413	400
Technical Data	5,409	4,940	5,250
Other	833	718	706
Total Direct Obligations	$ 15,173	$ 13,234	$ 13,789

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
D. Transportation	$332,831	$319,461	$240,460

This estimate provides for commercial transportation from Air Force depots; commercial contractual airlift within the Continental United States; transportation via Military Sealift Command (MSC) for personnel and materiel (except military personnel and their dependents moving in connection with a permanent change of station); transportation of APO mail to, from, and within overseas areas; transportation of materiel by the Single Manager for Airlift Service, and for associated costs, such as port handling and demurrage.

The overall estimate shows a decrease in funding requirements for FY 1974 compared to FY 1973 in the amount of $79,001 thousand. Principal changes are as follows:

	($ in thousands)
a. Reduction associated with reduced activity	$-90,801
b. Increase resulting from tariff rate charges in Military Traffic Management and Terminal Services, Military Sealift Command and Airlift Industrial Funds	+11,800

MILITARY SEALIFT COMMAND

	(In Thousands of Dollars)		
	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Cargo	$109,320	$108,234	$ 52,170
(BX Included)	(13,654)	(12,771)	(11,826)
Stevedoring	28,424	30,980	15,950
(BX Included)	(2,877)	(2,390)	(2,268)
Total Direct Obligations	$137,744	$139,214	$ 68,120
WORKLOAD (MEASUREMENT TONS)			
Cargo	2,447,132	2,390,115	1,499,056
(BX Included)	(434,840)	(411,569)	(382,832)
Stevedoring	2,267,611	2,000,507	1,152,689
(BX Included)	(408,085)	(282,506)	(256,501)

SECOND DESTINATION TRANSPORTATION BY MAJOR ACTIVITY

	(In Thousands of Dollars)		
	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Commercial Transportation	$ 54,658	$ 51,895	$ 45,466
Military Sealift Command	137,744	139,214	68,120
Airlift Service Industrial Fund	140,429	128,352	126,874
Total Direct Obligations	$332,831	$319,461	$240,460
COMMERCIAL TRANSPORTATION			
Surface	$ 22,309	$ 21,940	$ 15,572
LOGAIR	30,580	28,252	28,252
Commercial Air	1,769	1,703	1,642
Total Direct Obligations	$ 54,658	$ 51,895	$ 45,466
WORKLOAD			
Surface (Short Tons)	420,332	372,238	252,915
LOGAIR (Plane Miles)	14,960,861	13,229,858	13,229,858
Commercial Air (Short Tons)	5,038	3,524	3,426

AIRLIFT SERVICE INDUSTRIAL FUND

	(In Thousands of Dollars)		
	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Channel	$ 92,906	$ 85,067	$ 87,632
(BX Included)	(788)	(522)	(522)
Special Assignment	13,272	7,987	5,646
APO Mail	34,251	35,298	33,596
Total Direct Obligations	$140,429	$128,352	$126,874

WORKLOAD

Channel (Short Tons)	159,660	131,790	118,868
(BX Included)	(2,894)	(1,695)	(1,695)
Special Assignment (Flying Hours)	14,732	7,852	5,551
APO Mail (Ton Miles)	173,484	178,788	170,168

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
E. Other Logistic Support Activities	$ 30,429	$ 64,657	$ 65,268
This estimate provides for expenses of the following items:			
a. Contractor operation of the Air Force Production Flight Test Facility at Palmdale, California. The mission of the installation is to augment the production potential of aircraft industry by providing government facilities to assigned contractors for final assembly, flight test, equipment modification and other approved government contract work	1,409	1,658	1,658
b. Caretaker type maintenance of three reserve industrial plants pending disposal continues at the FY 1973 level	246	1,096	1,096
c. Printing requirements at departmental level for support of manuals and publications, tab cards and paper, and various cut sheet forms	13,605	10,293	10,961
d. Reimbursement to the Department of Army for real estate management	2,515	2,301	2,455
e. Reimbursement to the U. S. Postal Service for postage and fees paid indicia	12,181	36,000	33,570
f. Transportation for shipment of departmental printing	177	275	275
g. Costs payable to the Bureau of Employment Compensation for injuries or deaths sustained by civilian employees under jurisdiction of the Air Force	-0-	12,700	14,919
h. Other	296	334	334

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
F. Eastern Test Range	$ 96,577	$ 82,008	$ 91,704

The Eastern Test Range (ETR) provides trajectory measurement, telemetry, optical, range safety, data processing, and communications common support for ballistic missile and space launches from the ETR and the NASA MILA (Merritt Island Launch Area). To accomplish this mission, the ETR operates an integrated system of radars, telemetry receiving systems, optical tracking instruments, wire and radio communications, data handling, computers, recording and display systems. Major operating stations are located at Patrick Air Force Base, Florida; Cape Kennedy Air Force Station, Florida; Grand Bahama, Grand Turk, Antigua, and Ascension Islands; and on 10 aircraft and three ships. In addition the ETR provides support to the intelligence community, Defense Advanced Research Projects Agency (DARPA), launches from the NASA Wallops Island site and the Space and Missile Test Center (Western Test Range), and other agencies which require coverage from ETR land stations, ships and aircraft. Beginning with FY 1974 funding for Advanced Range Instrumentation Ships (ARIS) will transfer from Major Force Program III to Major Force Program VII.

Air Force management is under the Air Force Systems Command, which has central planning authority. Contractors include Pan American World Airways, Inc., New York, New York; Radio Corporation of America, New York, York; and Technicolor, Inc., Hollywood, California.

Program Support Costs are:

Direct Civilian Personnel Requirements	$ 23,012	$ 24,071	$ 24,746
End Strength (Non-Add)	(1,783)	(1,666)	(1,687)
Travel	700	607	651
Transportation	505	413	418
Rental of ADP Equipment	1,156	1,019	1,007
Other Rents & Utilities	1,888	2,444	2,744
Communications	659	710	710
Printing	139	65	65
Contractual Costs	(56,679)	(42,556)	(50,632)
Contract Operated Installation	50,527	35,960	37,904
Reimbursement to Navy for Ships Operation	2,192	2,347	8,277
Purchased Equipment Maintenance	1,399	1,552	1,832
Other Contracts	2,561	2,697	2,619
Supplies	11,450	9,775	10,339
Equipment	389	348	392
Total Direct Obligations	$ 96,577	$ 82,008	$ 91,704

General DeLuca. Program VIII is another large account very important to the operations of the Air Force and, as I said before, the working and living aspects.

On page 65, training and medical. Of course, in training is where we seek to upgrade continuously the skills of the people in the Air Force; and medical, of course, is where we intend to keep healthy those people in the Air Force and their dependents.

That is a $953 million operational cost. About 60 percent goes to training; and about $387 million, or 40 percent, goes to medical.

Chairman McClellan. What kind of personnel are we training?

General DeLuca. Would you turn to page 66, Senator, and General Lewis will touch on each of those.

General Lewis. We will start off fiscal year 1974, Mr. Chairman; we will bring aboard 73,000 non-prior-service airmen; recruits, if you will.

Chairman McClellan. You expect that many recruits in 1974?

General Lewis. Yes, sir.

Chairman McClellan. In the Air Force?

General Lewis. Yes, sir. We will take those people through recruit training, 6 weeks at Lackland Air Force Base.

The next step is in order to make him skilled in his job—and we have some 333 jobs in the Air Force—he will go to what we call a tech school. That is an average of 14.5 weeks per school; some longer, some shorter than that. That brings him up to his first level of skill, and he is now assignable to an operational unit, missiles, aircraft, or work on the weapons system. He goes into a work and training status at the unit, then. In that unit, he is working part of the time and training part of the time, on-the-job training, to his next skill level. That is the training that we do for the enlisted force.

For the officer force that comes aboard, they can be separated into two separate categories: Those that are going to pursue rated and nonrated duties, navigators and pilots. They will go to flying school for the first year. After flying school, then they will go to an operational assignment to one of the weapons systems that we have.

The nonrated duties, and that is a large range, for almost all skills, we will have the short courses, initial specialized training, ranging from comptroller personnel et cetera. These are short courses; they qualify for their particular skill, and then they go to work in an operational job.

That is the bulk of the training except that which we do which is called professional military education. These are the officers that attend squadron officers' school, the command and staff school and the Air War College.

Senator Young. What is the reason these costs are higher in fiscal year 1974 than in 1973? What is a simple, quick answer?

General DeLuca. Primarily, it is the higher cost of the wages of our military people and our civilian people who are running the base structure, the services that go with it and the schools. It is the higher cost, pure and simple.

The student flow, if I may amplify on General Lewis' point, to give you the numbers, on the numbers, sir, if you will notice on the recruiting and examining, $33 million; on the specialized training, $79 million. That is just a $2 million increase.

In the flight training, the pilot output—if you will turn to page 69, you will see the training loads that are going through each of the various types of training.

Now, training load, under the requirement of the Congress to authorize training loads, you know, this is a new part of the authorization, 10,000.

If you took a snapshot of a school system at any one particular point, you would find 10,836 recruits going through training. You would find in basic technical training, 22,909 people.

The point I am trying to make is that even though there are fewer people going through than the previous year, the costs of administration in terms of wages and goods and services are the only things that are driving the costs up.

Senator YOUNG. Are your recruits higher in number now than they were a couple of years ago?

General DELUCA. No, sir. In 1973, our accession program, trying to bring the number of people into the Air Force, was 96,000. In 1974, we would be seeking to bring in 73,000.

Chairman MCCLELLAN. The pay of the recruit is higher while he is in training?

General DELUCA. That is my point.

Chairman MCCLELLAN. I would think the support of the training costs more.

General DELUCA. Yes, sir. It is the costs of the goods and services and the payroll of our people.

Chairman MCCLELLAN. Training, medical, and other general medical activity funding, I thought, was training largely with respect to medicine. I see now it covers the training of the entire Air Force.

General DELUCA. This is taking a raw man, making a specialist out of him, making him a pilot, officer training, ROTC training, and so forth.

General LEWIS. The Academy.

Chairman MCCLELLAN. It includes the Academy?

General LEWIS. Yes, sir.

General DELUCA. It has been put in one major force program. In fact, you will be appropriating training separately this time in order to maintain control, the very point you are bringing up. Like intelligence, how much is invested, what do you get out of it, what is the cost, how can you suppress the cost and get better quality?

MEDICAL COSTS

Now, I would like to touch on medical, on page 80. At the bottom third of the page, Mr. Chairman, as you will notice, we are asking for $387 million for the medical cost of the Air Force, of which $186 million is for the Air Force proper and $201 million will be for CHAMPUS. Those are the costs of administering——

CIVILIAN HEALTH AND MEDICAL PROGRAM OF THE UNIFORMED SERVICES (CHAMPUS)

Chairman McClellan. What is CHAMPUS?

General DeLucca. Civilian health and medical program of the uniformed services.

This, sir, is where the retired people, the dependents of the retired people, the dependents of the deceased people, the dependents of the Active Force people who cannot get medical services within the organic facilities of the U.S. Air Force, are authorized by law to get their medical services, both inpatient and outpatient, from civilian or other Federal institutions. That is the cost of administering it.

Chairman McClellan. CHAMPUS goes up pretty rapidly, does it not?

General DeLuca. Yes, sir, pretty high.

Chairman McClellan. Why is that increasing so much?

General DeLuca. Because the beneficiary population has increased, and the costs of medical services——

Chairman McClellan. Due to the war?

General DeLuca. Due to more people retiring; due to more dependents. If you look on page 83, sir, at the bottom are the personnel that are eligible for CHAMPUS. In the last line, 1,200,000 dependents of active duty people such as myself. I have eight kids, none on CHAMPUS. If I couldn't get them into the military service, they would go on CHAMPUS. Retired servicemen, 350,000 people; they are entitled to treatment in medical facilities.

Chairman McClellan. That has gone up about 125,000 in 4 years' time.

General DeLuca. If you look at the dependents of retired personnel, 776,000. You know, even though our forces go down, Active Forces go down, the people who retire and the dependents of those people as long as they are still dependents keeps increasing. So the beneficiary population keeps increasing.

I think the important thing is on the cost; maybe the doctor can help me; I think the cost today of treatment if you are an inpatient under CHAMPUS, is running, in a civilian institution, $92 per day.

Chairman McClellan. For each individual?

General DeLuca. For each individual who is an inpatient. For an outpatient, he goes there, gets taken care of, about $16 a visit.

Chairman McClellan. Do you include in that the depreciation of the building?

Colonel Mullen. Yes, sir. The civilian hospital charges the CHAMPUS allows, includes a charge for depreciation.

JUSTIFICATION

Chairman McClellan. At this point in the record there will be included additional information from the justifications.

[The information follows:]

Force Program VIII: Training, Medical & Other General Personnel Activities
Purpose and Scope

This program provides for training, medical and other personnel activities. It includes training operations for recruits; technical and professional training; Academy Cadets; flying training; Reserve Officer and Junior Reserve Officer Training Corps. It also includes requirements for medical operations, Aeromedical Evacuation, recruiting and examining, off-duty education, overseas dependents education and mortuary services. Excluded from this program is unique command training such as Combat Crew Training.

Obligations By Program Element Groupings
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Training and Other General Personnel Activities			
1. Recruiting and Examining	$ 16,294	$ 24,817	$ 32,995
2. Recruit (Basic Military) and Specialized Training	72,857	77,851	79,438
3. Flight Training	93,777	84,656	89,108
4. Professional Training	23,518	26,027	32,595
5. Training Operations	224,139	219,414	245,389
6. Service Academy	26,208	26,551	27,809
7. ROTC	10,923	13,315	14,397
8. Overseas Dependent Schools	39,087	40,425	43,724
Sub-Totals	$506,803	$513,056	$565,455
B. Medical			
1. Medical Operations	$165,315	$165,527	$177,935
2. Medical Care in Non-Service Facilities	$126,202	$163,356	$209,835
Sub-Totals	$291,517	$328,883	$387,770
Totals	$798,320	$841,939	$953,225

(In thousands of dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Training & Other General Personnel Activities.....	$506,803	$513,056	$565,455

The estimate is for those program elements which provide for the individual training of members of the Regular Air Force, Air Force Reserve, Air Force Academy Cadets, Air Force Reserve Officers Training Corps, Air National Guard, plus foreign students and students from other Services and Government organizations.

The training is accomplished at regular Air Force installations, schools managed by other DOD Services and at civilian institutions. The following table details the number of regular Air Force installations and installation months, identified by type training or activity.

	End FY 1972 Installations (Actual)		End FY 1973 Installations (Estimate)		End FY 1974 Installations (Estimate)	
	Number	Months	Number	Months	Number	Months
Regular Air Force:						
Recruit & Specialized Training Bases ...	5	60	5	60	5	60
Pilot Training Bases	10	120	10	120	10	120
Navigator Training Bases	1	12	1	12	1	12
Professional Training Bases	2	24	2	24	2	24
USAF Academy	1	12	1	12	1	12

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(In Thousands of Dollars)	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
1. Recruiting and Examining.....	$ 16,294	$ 24,817	$ 32,995

This activity is for the USAF Recruiting Service, consisting of 7 groups, 45 detachments, and 900 offices. The Service is responsible for recruiting enlisted personnel entering the active Air Force. The airmen non-prior service recruiting requirement for FY 1974 is 73,361; the FY 1973 objective was 96,529.

Major funding changes from FY 1973 to FY 1974, +$8.2: The increase in costs is to provide the recruiter in the field the assistance needed to attain an all-volunteer force. The additional funds will be used primarily to obtain greater coverage and depth of advertising in the non-prior service program and to support an expanded recruiting effort in all areas. Special emphasis is needed in recruiting certain hard to get categories such as medical, minorities and women. Without draft motivation, aggressive recruiting and advertising will be required.

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
2. Recruit (Basic Military) and Specialized Training.....	$ 72,857	$ 77,851	$ 79,438

New enlistees and officer trainees enter the Air Force at Lackland Air Force Base, Texas. The enlistees are screened and tested during six weeks of basic military training (recruit training). Officer trainees receive their basic military training during a 12 week course in the School of Military Sciences, Officers (SMS-O) (previously known as Officer Training School). In FY 1974, the SMS-O training for pilot candidates will be expanded by three weeks to include a T-41 Flight Screening Program which will replace the flight screening phase of the Undergraduate Pilot Training (UPT) Course. The program will consist of 14 flying hours and will occur during the fourth through the sixth week of training. It is designed to determine the candidate's pilot potential before he is commissioned and permitted to progress to more expensive T-37 and T-38 jet training in the UPT program.

Upon completion of basic military training, most graduates enter formal specialized training in a particular career field. Basic technical courses range in length from 7 to 46 weeks, the average being 15 weeks. Training is in skills ranging from firefighting to precision measurement equipment repair. The training program is revised as new weapon systems enter the inventory or as the force structure changes. In addition to basic technical training, advanced and special courses are taught to individuals who have field experience but require a new or higher degree of skill or familiarization with new equipment and operating techniques.

As new aircraft and systems such as the F-15 and Short Range Attack Missile (SRAM) are scheduled to become a part of the inventory, the Air Force must develop instructional material and training courses for them. Instructors are sent to the contractor's factory to become familiar with the equipment. This initial cadre becomes the instructor element for resident training at Air Training Command Technical Training Centers. Graduates of the factory training program also participate in the test program for new systems, and form the nucleus for operational units to build a capability to maintain and operate new equipment.

Members of the Regular Air Force, the Air Reserve Forces, the other military services, and some non-DOD government agencies are trained in the USAF schools. Certain foreign personnel also receive technical training.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
3. Flight Training.....	$93,777	$84,656	$89,108

This program element provides for undergraduate pilot training, undergraduate and advanced navigator training, instructor pilot training, helicopter pilot, and survival training. In compliance with the desires of Congress, officers are attending undergraduate helicopter training (UHT) at Army Training centers and receive no prior fixed wing training. It is estimated that 225 students will complete this course in FY 1973, 150 in FY 1974 and 75 in FY 1975. The USAF undergraduate navigator production will remain at 1300 in FY 1974 and is scheduled to drop to 1250 in FY 1975. The USAF fixed wing undergraduate pilot production program for FY 1974 is projected to be 2565, a decrease of 310 from FY 1973. A further reduction of 140 is projected in FY 1975 which will bring the annual production rate down to 2425.

In FY 1971, Air Force, on an experimental basis, reduced the Undergraduate Pilot Training (UPT) Course Syllabus from 210 jet flying hours per student to 192.5 hours. Based upon evaluations of the resulting pilot graduates, the syllabus was increased back to 210 jet flying hours per student in FY 1973.

In early FY 1974, the flight screening phase of the UPT course (single engine, light plane training in the T-41), previously accomplished at nine UPT bases, will be consolidated at Hondo AB, Texas and incorporated into the curriculum of the School of Military Science, Officers. This will enable the Air Force to determine the candidate's pilot potential before he is commissioned and permitted to progress to more expensive jet training programs.

The Air Force will start phasing in the first of nineteen T-43A aircraft for the Undergraduate Navigator Training System (UNTS) by the end of the first quarter FY 1974. The aircraft will be used mainly for initial pilot qualification and checkout flying before it is incorporated into a revised UNTS flying program in FY 1975. The revised curriculum will enable the Air Force to reduce the navigator training flying hour program from 186 hours to 145 hours per student when fully implemented in FY 1975.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
4. Professional Training.....	$23,518	$26,027	$32,595

The Air University at Maxwell Air Force Base, Alabama is the professional education center of the United States Air Force. Its resident program at Maxwell AFB, Alabama has the objective of preparing personnel for key assignments in Air Force organizations. Future leaders are trained in modern concepts of employment and management of Aerospace weapons, understanding of the elements of national power, and staff procedures and practices. The major resident schools are supplemented by short courses designed to update personnel in the latest weapon system developments or other professional areas.

The Air Force Institute of Technology (AFIT) located at Wright-Patterson AFB, Ohio, is responsible for scientific engineering, and special Air Force education courses conducted at Air Force facilities and also at civilian colleges or universities throughout the country at the baccalaureate or higher level. The Air Force needs to increase its number of educationally qualified scientists and engineers.

AFIT is also responsible for the Airman Education and Commissioning Program (AECP) which offers selected enlisted airmen the opportunity to earn a college degree and subsequently obtain commissions by completing the School of Military Sciences, Officers. The AECP has been a very successful program for the procurement of career officers. It provides upward mobility for airmen and produces officers who stay with the Air Force for a career. The attrition from this program has remained the lowest of all commissioning programs. averaging 5% from selection to commissioning.

During FY 73 difficulty is being experienced in procuring the required number of rated officer accessions. AECP has not been a rated officer procurement program although candidates are encouraged to apply for rated duty. Plans are to make it a rated program to provide rated accessions for those who intend to make the Air Force a career. The AECP inputs will increase from 315 to 630. The additional inputs will be rated quotas.

Short courses are also conducted, under AFIT jurisdiction, for Air Force students and members of other services. These are designed to meet specific needs in the fields of logistics, engineering, or weapon systems management.

Medical training is conducted primarily at the School of Aerospace Medicine, Brooks AFB, Texas, various Air Force Hospitals and at Civilian Institutions. The program provides for the training and education of Air Force personnel in a wide range of medical and dental specialties. Included are two new programs for the purpose of obtaining qualified medical personnel for the Air Force.

First, the Armed Forces Health Professions Scholarship Program (Public Law 92-426) which provides full scholarships for students accepted by accredited health professional schools. Persons participating in the program will be commissioned as second lieutenants in the Air Force Reserve. They will be detailed as students at accredited civilian institutions for the purpose of acquiring knowledge or training in a designated health profession. The Air Force has been authorized 1575 students for this program which was implemented in January 1973.

The other new program is the Student Nurse Financial Assistance Program. Qualified persons accepted by or attending an accredited college or university and who are pursuing a program leading to a baccalaureate degree in nursing will be eligible for Air Force sponsorship. Applicant will be enlisted in airman status and receive the pay and allowances of an E-3. Tuition and other education costs will be paid by the Air Force. Upon completion of training and certification as registered nurses, they will be commissioned first lieutenants in the Air Force Nurse Corps. The FY 1974 budget provides for the enrollment of 200 students.

The Extension Course Institute at Gunter AFB, Alabama, offers personal correspondence training directed toward Air Force military educational requirements. Its courses are available to active duty and reserve personnel who desire to further their education in professional or technical career oriented areas. It also offers Career Development Courses which are mandatory for upgrading in certain airmen skills.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
5. Training Operations	$224,139	$219,414	$245,389

This element provides for operating and maintaining the bases and facilities and Headquarters of the Air Training Command and Air University. There of 18 training bases (Air Training Command - 16, Air University - 2). The Defense Race Relations Institute and the Military Personnel off-duty education program are also included in this program element.

Major Funding Changes from FY 1973 to FY 1974: +$ 26,000

Expansion of the off-duty education services program under Project Volunteer	$+ 4,700
Increased utility rates	+ 1,000
Purchase of equipment for new facilities	+ 1,100
FY 73 O&M funding imbalance forced deferral of requirements into FY 1974	+19,200
Total	$+26,000

(Dollars in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
6. Air Force Academy	$ 26,208	$ 26,551	$ 27,809

This requirement provides for the operation of the Air Force Academy. Excluded are the expenses identifiable to the operation of the USAF Academy Hospital. The costs for the hospital are included in the "Medical Operations" grouping discussed in the second part of this budget activity.

The program provides for a cadet strength of 4,417 as authorized by Public Law 88-276. Details of the cadet program are as follows:

Beginning Fiscal Year Cadet Population	4,401	4,390	4,417
Attrition Losses	762	671	675
Cadet Graduations	754	850	825
Cadet Entries	1,505	1,548	1,500
End Fiscal Year Cadet Population	4,390	4,417	4,417
Cadet Man Years	3,915	4,184	4,184

Major Funding Changes from FY 1973 to FY 1974: +$ 1,200

Full year costs of civilian pay raise of January 1973	$ + 500
Replacement equipment for classrooms and dorms	+ 300
Increased utility rates	+ 100
Maintenance and repair of facilities	+ 300
Total	$ +1,200

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
7. Air Force Reserve Officer Training Corps (AFROTC).....	$10,923	$13,315	$14,397

The funds requested for this element provide for the Senior and Junior ROTC programs.

The ROTC Vitalization Act of 1964 (Public Law 88-647 as amended by Public Law 92-166) provides for the establishment of two types of senior ROTC programs; a four-year program and a two-year program. The two-year program begins with six weeks of basic military training conducted during summer months. The four-year program includes a four-week summer training camp immediately preceding the junior year. The act also provides for a financial assistance program. The maximum number of financial assistance grants is set at 6500 and this number will be awarded in both FY 1973 and FY 1974.

The act also authorizes the establishment of a Junior Reserve Officers Training Corps at public and private secondary institutions. The number of AF Junior ROTC units will increase from 235 in FY 1973 to 275, the maximum institutions authorized for this program.

The following table reflects the three-year program of the ROTC:

	Air Force ROTC Program		
	FY 1972	FY 1973	FY 1974
Senior ROTC Program:			
AFROTC Detachments	174	184	182
Average Student Enrollment	23,319	21,498	21,955
Graduates Commissioned	4,165	3,844	3,486
No. of Cadets to Enter Flight Instruction Program	1,703	1,850	1,850
No. of Cadets to Four-Week Summer Training Camp	3,343	3,643	3,479
No. of Cadets to Six-Week Summer Training Camp	1,504	1,521	1,472
No. of Financial Grants Awarded	6,500	6,500	6,500
Cost of Senior Program (in millions)	$ 8.8	$ 10.5	$ 10.9
Junior ROTC Program:			
No. of Schools Participating	193	235	275
Average Student Enrollment	21,038	25,234	30,234
Cost of Junior Program (in millions)	$ 2.1	$ 2.8	$ 3.5

Major Funding Changes from FY 1973 to FY 1974 +$1.1: The Junior ROTC program increase of $.7 is for the additional 40 schools scheduled to enter the program in FY 1974. The Senior ROTC program increase of $.4 is a result of a rise in tuition and textbook costs at the participating universities.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
8. Overseas Dependent Schools.....	$39,087	$40,425	$43,724

This program element includes resources needed for the operation and maintenance of the overseas dependent schools program. In accordance with Department of Defense directives, the Air Force is the geographic manager for all dependent schools in the Pacific area. There are currently 62 service schools with no change in enrollment. However, student enrollments at tuition-fee schools are expected to decrease from 5,060 in FY 1973 to 4,900 in FY 1974.

Major Funding Changes from FY 1973 to FY 1974 +$3.3: The additional requirement results primarily from salary increases (+$1.2); implementation of a vocational education program (+$1.3); employment of additional teachers and para-professionals (+$.6); and increased transportation costs (+$.2).

The vocational education program is designed to offer the student an opportunity to acquire occupational skills through both instruction and practical on-the-job experiences in a variety of occupations.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Medical.....	$ 291,517	$ 328,883	$ 387,770

This program provides medical service for Air Force active duty military personnel and their dependents, retired military personnel and their dependents, and other beneficiaries as authorized by law. The medical service provided includes hospitalization, outpatient care, dental care, military public health and occupational medicine, bioenvironmental engineering, veterinary medicine, medical supplies and aeromedical evacuation (including aeromedical staging flights for all services), physiological training (including altitude chamber operations and pressure suit fittings) and the operation of specialized laboratories.

This program element also includes the operation and maintenance of Air Force medical facilities in the United States and overseas; medical care and hospitalization of Air Force active duty and retired personnel and their authorized dependents in civilian facilities and by civilian physicians; medical care of Air Force active duty and retired personnel and their authorized dependents in Veterans Administration, Public Health Service (HEW) and Canal Zone medical facilities. Also includes resources for the Drug Abuse and Rehabilitation Program, and charges for Industrial Fund Aeromedical Evacuation activities.

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
1. Medical Operations	$ 165,315	$ 165,527	$ 177,935

The estimate of $177,935 thousand for the operation and maintenance of medical facilities provides for pay of civilian staff, temporary duty travel, communications, contractual services, purchase of medical and non-medical supplies, materials and equipment required for the operation and maintenance of medical treatment facilities and for projects involving major repair, rehabilitation, and alteration of existing medical facilities. It also provides for the Drug Abuse and Rehabilitation Program, and for charges for Aeromedical Evacuation activities.

(In Thousands of Dollars)

Fund Requirements are summarized as follows:

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Hospital Operations	$ 135,528	$ 142,578	$ 154,463
Other Medical Activities	6,372	6,764	8,377
Aeromedical Evacuation	23,415	16,185	15,095
Domestic	(8,229)	(8,140)	(8,106)
International	(15,186)	(8,045)	(6,989)
Medical Operations TOTAL	$ 165,315	$ 165,527	$ 177,935

Major Funding Changes from FY 1973 to FY 1974 + $ 12,300

a. Aeromedical Activities based on reduced operations	- $ 1,090
b. Direct Hire Civilian Employees (increase of 183 man-years and annualization of the 8 January 1973 Pay Increase)	+ 4,110
c. For Supplies resulting from increased unit costs	+ 6,174
d. Travel for certification and license of airmen specialists and technicians and and training of professional personnel	+ 1,540
e. Equipment for modernization and replacement, and initial outfitting of new facilities	+ 1,566
Total	+ $ 12,300

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
2. Medical Care in Non-Service Facilities.....	$ 126,202	$ 163,356	$ 209,835

The estimate of $209,835 thousand for medical care in non-service facilities provides for furnishing medical care to active duty and retired Air Force military personnel and their authorized dependents in facilities of the Veterans Administration, Public Health Service, Canal Zone and in civilian medical facilities.

Fund requirements are summarized as follows:

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Medical Care in Non-Service Facilities (CHAMPUS).....	$ 118,784	$ 155,548	$ 201,735
Medical Care in Non-Service Facilities (Other).....	7,418	7,808	8,100
Medical Care in Non-Service Facilities TOTAL.....	$ 126,202	$ 163,356	$ 209,835

Major Funding Change from FY 1973 to FY 1974 - $ + 46,479:

The increase results from growth in population of retired military personnel and their dependents who become eligible for Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) benefits, and increased use of the CHAMPUS by all eligible beneficiaries, and the rising costs in medical care obtained from the civilian community.

SUPPORT OF OTHER NATIONS

General DeLuca. I would like to cover force program 10 which we had discussed earlier. That is, support of VNAF and Laos.

I would like to emphasize there in the 1974 column, about the middle of the page, that in the Vietnamese Air Force there are approximately [deleted] aircraft that we are supporting. As you know, there are [deleted] aircraft that they have in their possession, 161 that we use to back them up for training and so forth. The Laos Air Force has [deleted] aircraft.

So, we are, for one reason or another, in terms of the defense capabilities of those two countries, supporting [deleted] aircraft.

Right below that, sir, are the flying hours of the VNAF, the Vietnamese Air Force, of [deleted]. Then the support we give them in training of [deleted], or [deleted] hours, which are to keep the South Vietnamese Air Force viable, self-sustaining in terms of capability. The Laos Air Force on the top of page 92, 160,000 hours of flying. Now, sir, these are in the budget.

If we flew that many hours in support of that many aircraft, we would, in effect, be asking you, the Senate Appropriations Committee, in O. & M. to support the Vietnamese Air Force [deleted] million for Vietnam and [deleted] million for Laos, O. & M.

Now, when I gave you those other figures earlier of [deleted] million to support the entire MASF, that included munitions, aircraft spares, and so forth. This is only O. & M. gasoline, supplies, and maintenance.

We are in that letter I read to you this morning resizing that, and that will come down about $54 million if the new program holds. I just wanted to point that out for the record.

Chairman McClellan. Of course, if they do have a cease-fire, won't all this come down materially?

General DeLuca. But, sir, you still have [deleted] aircraft up there that you cannot park.

Chairman McClellan. You can't park them?

General DeLuca. You have to fly them. You have to train proficiency to keep up the capabilities of the skilled personnel.

Chairman McClellan. You mean whether they are in combat or not, you are going to support them, fly them, and keep training people?

General DeLuca. That would be their baseline force as long as our relations with them as an ally exist.

Chairman McClellan. That depends on whether we appropriate the money for that or not.

General DeLuca. Yes, sir. If we have [deleted] or [deleted] aircraft there and they are going to fly [deleted] hours, it takes gas, it takes supplies.

Chairman McClellan. All they are furnishing is personnel? They are not paying the salary of their personnel?

General DeLuca. It is their country funds. The Vietnamese Air Force, I think, is the fifth or sixth largest air force in the world. Now, it is up to us, if we wish to keep them as a viable force.

Chairman McClellan. Off the record.

[Discussion off the record.]

Chairman McClellan. On the record.

MAJOR FORCE PROGRAM IX: ADMINISTRATION AND ASSOCIATED ACTIVITIES

General DeLuca. The fiscal year 1974 requirement of $217.1 million for administration and associated activities is an increase of $12.9 million over the fiscal year 1973 level of $204.2 million.

JUSTIFICATIONS

Chairman McClellan. At this point in the record, there will be included additional information from the justifications.

[The justifications follow:]

Justification

FORCE PROGRAM IX: ADMINISTRATION & ASSOCIATED ACTIVITIES

PURPOSE & SCOPE

Administration and Associated Activities consist of the direct administrative support of the departmental headquarters, major administrative headquarters, and field commands (not otherwise accounted). It also provides for service-wide support and miscellaneous activities.

Obligations by Program Element Groupings
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Departmental Headquarters	$44,371	$51,484	$52,240
B. Field Headquarters & Activities	57,835	77,566	86,591
C. Service-Wide Support	80,731	63,284	66,169
D. Other Support Activities	11,676	11,861	12,104
TOTALS	$194,613	$204,195	$217,104

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Departmental Headquarters	$44,371	$51,484	$52,240

This category includes funds for pay of civilian personnel and requirements for the operation of the executive offices in the Washington, D. C., area engaged in the formulation of plans and policies and the supervision and direction of subordinate offices, agencies and commands for the Office of the Secretary of the Air Force.

Manpower Totals (End Strengths)

Military Personnel	2,540	2,323	2,322
Civilian Personnel	2,515	2,560	2,471

The increase of $756 thousand in fund requirements from the FY 1973 Departmental Headquarters results from the following actions:

a. Increase in personnel costs is due to one-half year increase in pay for FY 73 and a full year in FY 74	$+ 396
b. GSA labor, guard service, building alterations and external assistance contracts and supplies	$+ 360
Total	$+ 756

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. Field Headquarters & Activities	$57,835	$77,566	$86,591

This element provides for the operation of selected major commands. Included are: the USAF Southern Command activities at Albrook AFB and Howard AFB; the Headquarters Command activities at Bolling AFB and Andrews AFB; the Air Force Accounting and Finance Center; and the Air Force Data Automation Agency at Gunther AFB.

Manpower Totals (End Strengths)

Military Personnel	8,315	7,975	6,104
Civilian Personnel	4,730	5,030	4,937

The increase of $9.0 million in fund requirements from the FY 1973 level for Field Headquarters and Activities results from:

a. Increased man-years for JUMPS and the new Survivors Benefit program and the full year cost of the pay raise effective 1 January 1973.....	$+4,797
b. Contractual service for World-Wide Military Command and Control System software conversion and expanding LITE data base. Augmentation of the computer system at the Air Force Accounting and Finance Center and additional computer for the Data Automation Agency supporting the San Antonio Data Service Center and the Air Staff/OSD	$+3,098
c. Contractual services required for site preparation for computers, increased usage of general supply support, and aircraft POL	$+1,130
Total	$ 9,025

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
C. Service-Wide Support	$80,731	$63,284	$66,169

These funds provide for pay of civilian personnel, necessary facilities for activities such as the Air Force Inspection and Safety Center, the Air Force Audit Agency, the Air Force Military Personnel Center, the Postal Courier Service and the AirForce Intelligence Service. It also provides for the requirements identified with the Civil Air Patrol, which provides seven major services to the Air Force in its capacity as an official auxiliary, such as emergency services in search and rescue and disaster relief. Additionally, it provides for Real Property Maintenance Activities and Base Communications Administration.

Manpower Totals (End Strengths)

Military Personnel	9,015	7,585	7,368
Civilian Personnel	3,204	3,284	3,230

The increase of $2.9 million in fund requirements from the FY 1973 level for Service-Wide Support results from the following actions:

a. Increased man-years for real property maintenance and the full year cost of pay raise effective 1 January 1973	$+1,230
b. Installation of computers at the Air Force Military Personnel Center in support of the Advanced Personnel Data System and MICROFORM. Implementation of the Auditor General Control System	$+2,306
c. Reduced travel and commercial communications services	$- 651
Total	$+2,885

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
D. Other Support Activities	$11,676	$11,861	$12,104

This estimate provides for the pay of civilian personnel, necessary facilities the the Headquarters Audio-Visual Activities and subordinate organizations and the USAF Band. Also includes funds to provide the Secretary of the Air Force with flexibility to meet emergency or extraordinary situations. The expenditure of these funds is accounted for solely on the certificate of the Secretary of the Air Force.

Manpower Totals (End Strengths)

Military Personnel	1,509	1,375	1,192
Civilian Personnel	555	565	567

The increase of $243 thousand in fund requirements from the FY 1973 level for Other Support Activities is due to increased personnel cost offset by reductions in travel and supplies.

MAJOR FORCE PROGRAM X: SUPPORT OF OTHER NATIONS

General DeLuca. A total of $352 million is requested in fiscal year 1974 for operational, logistical, and training support of Vietnamese and Lao forces in Southeast Asia; 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 and missions (MAAG's) in Europe, the Pacific, and South America.

JUSTIFICATION

Chairman McClellan. At this point in the record, there will be included additional information from the justifications.

[The justification follows:]

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Justification

FORCE PROGRAM X: Support of Other Nations

Purpose and Scope

The funds requested for this program are for operational, logistic and training support of other nations. Principal items include overocean transportation of materiel; aviation POL and spare parts; supplies; contract for maintenance of aircraft and equipment, operational and support systems, and facility operations; training; and contracts for passenger and commodity movement; and, maintenance of facilities and air traffic control.

In addition to support of Free World Forces, funds are included for support of units and activities providing the United States share of support to NATO, CENTO and SEATO military headquarters and agencies and for operating costs of Military Assistance Advisory Groups and Missions in Europe, the Pacific, the middle East, South and Central America.

Obligations by Program Element Groupings
(In Thousands of Dollars)

Program Element Groupings	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Support of Allies:			
1. Vietnam	[Deleted]	[Deleted]	[Deleted]
2. Laos			
3. Thailand			
Sub-total Support of Allies	$153,060	$407,587	$344,494
B. International Military Headquarters and Agencies	496	357	766
C. Military Assistance Advisory Groups and Missions	1,986	3,774	6,729
TOTALS	$155,542	$411,718	$351,989

(Dollars in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
A. Support of Allies	$153,060	$407,587	$344,494

This estimate provides for operational, logistical and training support of Free World Forces.

PROGRAM DATA

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Flying Hours:	992,963	1,121,881	1,243,371
Vietnam	[Deleted]	[Deleted]	[Deleted]
Laos			
Thailand			

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Country Totals:	$153,060	$407,587	$344,494
Vietnam	[Deleted]	[Deleted]	[Deleted]
Laos			
Thailand			

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
1. Vietnam	[Deleted]	[Deleted]	[Deleted]

This estimate provides for the operation of the South Vietnam Air Force. Principal items of cost include training of Vietnamese personnel; second destination transportation of material; contract maintenance of aircraft and equipment owned by South Vietnam; rental of non-tactical radios; technical assistance contracts; contracts for training, maintenance and operation in support of systems and facilities operations in South Vietnam; contract with Air America for passenger and commodity movement within South Vietnam; facility projects; aviation POL; and supplies and equipment.

Civilian Pay	[Deleted]
Travel	
Transportation	
Contract Maintenance of Equipment	
Other Contractual Services	
Aviation POL	
Supplies and Equipment	
Other	
Total	

Major Changes in Program Costs From FY 1973 to FY 1974: Total $-57,633

a.	Projected 16.2% Military Airlift Command channel traffic rate increase effective 1 July 1973	$ + 900
b.	Vietnamese student travel, subsistence and training increase -- for the reactivation of helicopter training by the Army	+10,887
c.	Aviation fuel for increased flying hour program	+ 2,384
d.	Requirements for in-country VNAF operation and training are decreased due to the planned increase in VNAF self-sufficiency	-71,804

Base operation and maintenance, equipment maintenance, specific aircraft maintenance and training in-country	$-31,127
Transportation	-20,204
Supplies and equipment	-14,243
Depot maintenance	- 5,102
Travel	- 1,029
Civilian pay	- 99

Total $ -57,633

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
2. Laos	[Deleted]	[Deleted]	[Deleted]

This estimate provides for support of the Lao Air Force. Principal items of costs include second destination transportation of material between CONUS and SEA; contract maintenance of Lao airlift and equipment; contracts for operation of maintenance facility at Udorn, Thailand, and airlift of foodstuffs to friendly forces in Laos; training of Lao students; aviation POL; supplies; and airlift support beginning in FY 1973.

Travel	[Deleted]
Transportation	
Contract Maintenance of Equipment	
Other Contractual Services	
Aviation POL	
Supplies and Equipment	
Other	
Total	

Major Changes in Program Costs from FY 1973 to FY 1974: Total $-5,460

a.	Depot level overhaul and maintenance of aircraft & equipment because of decreased flying hour program & a reduction in T-28 and O-1 aircraft modifications in FY 1974	$- 5,564
b.	Contractual and related supply for CH-47 helicopter heavy lift	+ 1,066
c.	Increased fixed wing aircraft training in the CONUS	+ 324
d.	Projected 16.2% Military Airlift Command channel traffic rate increase effective 1 Jul 73	+ 300
e.	Less aviation fuel because of decreased flying hours	- 485
f.	Less supplies and transportation because of decreased flying hours	- 1,004
g.	Decreased travel requirements...	- 97
	Total	$- 5,460

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
3. Thailand	[Deleted]	[Deleted]	[Deleted]

Support of Thailand requirements was converted from Military Assistance Service Funded (MASF) financing to Military Assistance Program (MAP) financing beginning FY 1973.

Travel			
Transportation			
Contract Maintenance of Equipment			
Other Contractual Services		[Deleted]	
Supplies and Equipment			
Other			
Total			

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
B. International Military Headquarters and Agencies	$ 496	$ 357	$ 766

This activity finances the Air Force portion 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. The Department of the Army is the Executive Agent for NATO and SHAPE, the Department of the Air Force is the Executive Agent for CENTO, and the Department of the Navy is the Executive Agent for SEATO. This estimate excludes the cost of general purpose forces committed to NATO, that are stationed in Europe but not directly associated with support of NATO Headquarters and Agencies.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Civilian Personnel	$ 130	$ 59	$ 158
Travel	251	190	397
Contractual Services	64	77	97
Supplies and Equipment	40	16	99
Other	11	15	15
Total	$ 496	$ 357	$ 766

Major Changes in Program Costs From FY 1973 to FY 1974:

The increase in FY 1974 is primarily the result of the transfer of manpower and support costs for Supreme Headquarters Allied Powers Europe (SHAPE) from Major Force Program IX to this program.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
C. Military Assistance Advisory Groups and Missions	$ 1,986	$ 3,774	$ 6,729

This estimate provides for civilian personnel and other operating costs of Military Assistance Advisory Groups and Missions in Europe, the Pacific, and South/Central America.

(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Civilian Personnel	$ 601	$ 3,222	$ 5,674
Travel	86	19	189
Other Purchased Services	173	98	227
Aircraft POL	729	300	248
Supplies and Equipment	238	118	374
Other	159	17	17
Total	$ 1,986	$ 3,774	$ 6,729

Major Changes in Program Costs From FY 1973 to FY 1974:

In FY 1974 the $2.9 million additional is for civilian personnel and related support costs.

SUMMARY

General DeLuca. Sir, I would conclude whatever the force structure, flying hours, base structure, manpower structure of the Air Force the Congress may settle on, O. & M. supports that. O. & M. is the working thing.

That is all I would conclude with in the summary, that we have a tight account; it is well balanced.

Chairman McClellan. We are going to maintain as many planes as there are there now, and keep as many bases as we now have—keep them in operating condition and catch up in some areas by providing maintenance where we have not done much maintenance for a while.

General DeLuca. Yes, sir. I have a correction, sir. I said that we were flying B–52H's out of Guam. I would like to correct that. We are flying B–52G's.

JUSTIFICATION

Chairman McClellan. At this point in the record there will be included additional information from the justification dealing with special interest subjects.

[The justification follows:]

Justification

Summary of Special Interest Subjects
(Strength in Whole Numbers; Dollars in Thousands)

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Military End Strength	Civilian End Strength	Oblig Prog. By Appn.	Military End Strength	Civilian End Strength	Oblig Prog. By Appn.	Military End Strength	Civilian End Strength	Oblig Prog. By Appn.
1. Public Affairs Activities									
Operations & Maintenance, AF..	-	138	$ 1,366	-	141	$ 1,855	-	141	$ 1,975
Military Personnel, AF.....	386	-	4,233	389	-	4,413	387	-	4,540
Res, Dev, Test & Eval, AF.....	-	21	303	-	21	323	-	21	332
Total.....	386	159	$ 5,902	389	162	$ 6,591	387	162	$ 6,847
2. Legislative Affairs Activities									
Operations & Maintenance, AF..	-	13	$ 127	-	8	$ 98	-	8	$ 100
Military Personnel, AF.....	14	-	290	9	-	231	9	-	242
Total.....	14	13	$ 417	9	8	$ 329	9	8	$ 342
3. Hq, Operation & Administration									
Operation & Maintenance, AF...	-	9,131	$ 179,599	-	9,227	$ 176,931	-	9,229	$ 188,661
Military Personnel, AF.....	17,308		222,018	17,213	-	241,756	17,177	-	244,500
Res, Dev, Test & Eval, AF.....	-	734	15,293	-	753	17,810	-	753	19,093
Air Force Stock & Indus Fund..	-	3	36	-	3	44	-	3	46
Operation & Maintenance, ANG..	-	143	2,917	-	153	2,518	-	153	2,706
Operation & Maintenance, AF Res	-	(162)	(2,359)	-	157	2,777	-	157	2,839
Total.....	17,308	10,011	$ 419,863	17,213	10,293	$ 441,836	17,177	10,295	$ 457,845
4. Service Support Contracts									
Operation & Maintenance, AF...	-	-	$ 523,530	-	-	$ 527,966	-	-	$ 566,440
Res, Dev, Test & Eval, AF.....	-	-	67,905	-	-	100,170	-	-	112,883
Operation & Maintenance, ANG..	-	-	2,245	-	-	2,790	-	-	3,000
Operation & Maintenance, AF Res	-	-	(1,733)	-	-	2,740	-	-	2,769
Total.....			$ 593,680			$ 633,666			$ 685,092

Summary of Special Interest Subjects
(Strength in Whole Numbers; Dollars in Thousands)

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Military End Strength	Civilian End Strength	Oblig Prog. By Appn	Military End Strength	Civilian End Strength	Oblig Prog. By Appn	Military End Strength	Civilian End Strength	Oblig Prog. By Appn
5. Automatic Data Processing									
Operation & Maintenance, AF.....	-	11,132	$ 247,962	-	9,738	$ 262,183	-	9,376	$ 270,486
Military Personnel, Air Force...	13,410	-	122,887	13,310	-	130,385	12,373	-	127,184
Res, Dev, Test & Eval, AF.....	-	697	44,572	-	644	50,818	-	645	45,796
Other Procurement, Air Force....	-	-	76,046	-	-	80,999	-	-	94,924
Military Construction, AF.....	-	-	2,524	-	-	5,459	-	-	7,502
Missile Procurement, AF.....	-	-	-	-	-	17,300	-	-	7,200
Operation & Maintenance, AF Res.	-	(139)	(2,084)	-	157	2,428	-	70	1,983
Military Personnel, AF Res.....	(52)	-	(460)	52	-	504	47	-	492
Operation & Maintenance, ANG....	-	281	5,379	-	280	5,749	-	292	6,393
Total.....	13,410	12,110	$ 499,370	13,362	10,819	$ 555,825	12,420	10,383	$ 562,960
6. Communications									
Operations & Maintenance, AF....	-	6,788	$ 369,576	-	7,060	$ 400,675	-	7,085	$ 403,964
Military Personnel, Air Force...	41,509	-	344,200	42,676	-	366,600	41,761	-	374,300
Res, Dev, Test & Eval, AF.....	-	36	65,460	-	36	90,799	-	29	114,848
Missile Procurement, AF.....	-	-	4,100	-	-	2,600	-	-	85,500
Other Procurement, Air Force....	-	-	29,400	-	-	50,300	-	-	73,000
Military Construction, AF.....	-	-	5,396	-	-	2,382	-	-	5,070
Aircraft Procurement, AF.....	-	-	-	-	-	-	-	-	3,900
Total.....	41,509	6,824	$ 818,132	42,676	7,096	$ 913,356	41,761	7,114	$1,060,582
7. Intelligence									
Operation & Maintenance, AF.....	-	2,869	$ 131,906	-	3,119	$ 151,636	-	3,162	$ 145,430
Military Personnel, Air Force...	30,597	-	276,861	27,762	-	272,112	26,080	-	256,394
Res, Dev, Test & Eval, AF.....	-	-	19,984	-	-	21,612	-	-	14,700
Missile Procurement, AF.....	-	-	16,000	-	-	22,200	-	-	8,440
Other Procurement, Air Force....	-	-	20,245	-	-	30,017	-	-	51,722
Military Construction, Air Force	-	-	2,200	-	-	7,785	-	-	12,594
Aircraft Procurement, Air Force.	-	-	33,323	-	-	30,538	-	-	32,365
Total.....	30,597	2,869	$ 500,519	27,762	3,119	$ 535,900	26,080	3,162	$ 521,645

	Military End Strength	Civilian End Strength	Oblig/ Prog. by Appn.	Military End Strength	Civilian End Strength	Oblig/ Prog. by Appn.	Military End Strength	Civilian End Strength	Oblig/ Prog. by Appn.
8. Travel & Transp. of Persons									
Operations & Maintenance, AF...	-	-	$ 170,729	-	-	$ 187,420	-	-	$ 169,191
Military Personnel, Air Force..	-	-	179,361	-	-	183,472	-	-	180,818
Res, Dev, Test & Eval, Air Force	-	-	16,372	-	-	16,201	-	-	16,200
Reserve Personnel, Air Force...	-	-	7,486	-	-	9,248	-	-	10,345
National Guard Personnel.....	-	-	5,502	-	-	10,690	-	-	12,554
Operations & Maintenance, ANG..	-	-	3,608	-	-	3,866	-	-	4,288
Operations & Maintenance, AFRes	-	-	(2,276)	-	-	2,148	-	-	2,357
Total.....			$ 388,058			$ 413,045			$ 395,753
9. Real Property Maintenance									
Operations & Maintenance, AF...	-	13,424	$ 334,091	-	13,848	$ 363,577	-	14,003	$ 288,095
Military Personnel, Air Force..	13,236	-	118,677	13,073	-	125,946	11,583	-	118,632
Res, Dev, Test & Eval, Air Force	-	681	24,800	-	681	21,400	-	681	21,200
Fam Hsg Mgt Acct, Def (AF).....	-	2,100	80,300	-	2,231	81,600	-	2,628	90,700
Operations & Maintenance, ANG..	-	-	6,540	-	-	2,800	-	-	4,550
Operations & Maintenance, AFRes	(24)	(301)	(4,971)	24	305	3,351	24	304	4,151
Total.....	13,236	16,205	$ 564,408	13,097	17,065	$ 498,674	11,607	17,616	$ 527,328
10. Depot-Level Maintenance									
Operations & Maintenance, AF...	-	-	$1,104,575	-	-	$1,137,714	-	-	$1,124,781
Operations & Maintenance, AFRes	-	-	(26,343)	-	-	30,347	-	-	34,576
Operations & Maintenance, ANG..	-	-	67,787	-	-	78,014	-	-	88,906
Res, Dev, Test & Eval, Air Force	-	-	9,952	-	-	10,842	-	-	9,591
Total.....			$1,182,314			$1,256,917			$1,257,854

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Military End Strength	Civilian End Strength	Oblig/ Prog. by Appn.	Military End Strength	Civilian End Strength	Oblig/ Prog. by Appn.	Military End Strength	Civilian End Strength	Oblig/ Prog. by Appn.
11. Personnel Assistance Programs									
Drug Abuse Prevention & Rehab Program									
Operations & Maintenance, AF.	-	29	$ 5,835	-	43	$ 4,636	-	43	$ 5,053
Military Personnel, Air Force	1,424	-	8,614	1,382	-	14,855	1,347	-	14,478
Res, Dev, Test & Eval, AF....	-	-	553	-	-	265	-	-	240
Other Procurement, AF.....	-	-	622	-	-	78	-	-	-
Military Construction, AF....	-	-	76	-	-	464	-	-	-
Total.....	1,424	29	$ 15,700	1,382	43	$ 20,298	1,347	43	$ 19,771
Project Transition									1,343
Operations & Maintenance, AF.	-	131	$ 889	-	103	$ 912	-	158	$ ~~1,277~~
Military Personnel, Air Force	502	-	3,417	427	-	3,587	372	-	3,418
Total.....	502	131	$ 4,306	427	103	$ 4,499	372	158	$ ~~4,695~~ 4,761
Project Hire									
Operations & Maintenance, AF	-	75	$ 691	-	100	$ 954	-	100	$ 1,127

Headquarters Operation and Administration
(Dollars in thousands; Strength in whole numbers)

Departmental Administration:	FY 1972 Actual				FY 1973 Estimate				FY 1974 Estimate			
	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig
Office of the Secretary of Defense	275				260				245			
Organization of the Joint Chiefs of Staff	463				463				467			
Department of the Air Force, O&M	2,672	2,577	2,725	$55,476	2,445	2,645	2,540	$52,840	2,445	2,645	2,645	$58,699
National Guard Bureau, AF..	50	143	149	2,359	50	153	150	2,518	50	153	151	2,706
TOTAL - Departmental Administration, AF	2,722	2,720	2,874	$57,835	2,495	2,798	2,690	$55,358	2,495	2,798	2,796	$61,405
TOTAL - Departmental Administration - Assigned to Others 1/	996				1,031				1,021			

NOTE: 1/ - These personnel are included in the Defense Agency Justification Books.

Major Commands:	FY 1972 Actual				FY 1973 Estimate				FY 1974 Estimate			
	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig.	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig.	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig.
Alaskan Air Command	350	127	127	$ 2,915	371	132	125	$ 2,913	371	132	132	$ 3,083
Aerospace Defense Cmd...	942	378	421	7,767	1,039	395	386	6,960	1,039	395	395	7,290
AF Communications Svc ..	770	521	558	10,728	865	598	560	10,788	865	598	598	11,821
AF Logistics Command ...	450	2,033	2,033	38,345	442	1,998	2,000	38,095	442	1,997	1,997	41,140
AF Systems Command	-	2	2	32	-	2	2	42	-	2	2	43
Air Training Command ...	835	565	531	9,675	866	580	563	10,799	866	580	580	11,117
Air University	83	51	76	1,202	91	56	55	948	91	56	55	963
Headquarters Cmd USAF ..	137	61	56	887	138	63	66	1,090	138	63	63	1,115
Military Airlift Cmd ...	988	523	517	6,171	989	557	567	7,301	977	549	553	7,388
Pacific Air Forces	1,058	292	355	7,789	971	289	341	8,070	972	288	288	7,198
Strategic Air Forces ...	2,144	469	424	9,778	2,293	517	495	11,117	2,291	517	517	12,115
Tactical Air Command ...	1,504	386	490	8,698	1,461	415	406	8,120	1,449	427	421	8,285
USAF Europe	1,126	366	366	6,524	1,173	392	380	7,151	1,173	392	391	7,503
USAF Southern Command ..	120	41	44	642	122	43	43	666	122	43	43	733
USAF Security Service ..	514	255	220	4,502	577	236	227	5,030	577	236	236	5,375
Sub-Total O&M, Air Force ...	11,021	6,070	6,220	$115,655	11,398	6,273	6,216	$119,090	11,373	6,275	6,271	$125,169

Major Commands: (Cont'd)	FY 1972 Actual End Strength Mil	FY 1972 Actual End Strength Civ	FY 1972 Actual Civ Man-Year	FY 1972 Actual O&M Oblig.	FY 1973 Estimate End Strength Mil	FY 1973 Estimate End Strength Civ	FY 1973 Estimate Civ Man-Year	FY 1973 Estimate O&M Oblig.	FY 1974 Estimate End Strength Mil	FY 1974 Estimate End Strength Civ	FY 1974 Estimate Civ Man-Year	FY 1974 Estimate O&M Oblig.
Military Airlift Cmd (IF).	-	3	3	$ 36	-	3	3	$ 44	-	3	3	$ 46
AF Systems Cmd (RDT&E)....	825	734	745	15,293	762	753	743	17,810	762	753	753	19,093
AF Reserve (AFR, O&M)	133	162	184	2,917	135	157	157	2,777	134	157	157	2,839
Sub-Total - Major Commands	11,979	6,969	7,152	$133,901	12,295	7,186	7,119	$139,721	12,269	7,188	7,184	$147,147
Unified Commands:												
North American Air Defense Command	584	223	228	$ 3,624	452	208	159	$ 2,646	452	208	142	$ 2,472
U. S. European Command ...	306				285				285			
Pacific Command	320				285				285			
U. S. Southern Command ...	67				54				54			
Alaskan Command	119	23	24	583	106	24	24	512	106	24	24	520
U.S.Readiness Cmd(STRIKE Cmd)	169	76	98	1,902	154	77	76	1,843	154	77	77	1,801
Atlantic Command	46				56				56			
Sub-Total, AF	1,611	322	350	$ 6,109	1,392	309	259	$ 5,001	1,392	309	243	$ 4,793
Total - Hqs,AF, O&M..	15,304	8,969	9,295	$177,240	15,235	9,227	9,015	$176,931	15,210	9,229	9,159	$188,661

	FY 1972 Actual				FY 1973 Estimate				FY 1974 Estimate			
	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig	End Strength Mil	End Strength Civ	Civ Man-Year	O&M Oblig
Total, O&M, AF	15,304	8,969	9,295	$177,240	15,235	9,227	9,015	$176,931	15,210	9,229	9,159	$188,661
Other AF Appropriations												
Military Airlift Cmd (IF).		3	3	36		3	3	44		3	3	46
AF Systems Cmd (RDT&E)....	825	734	745	15,293	762	753	743	17,810	762	753	753	19,093
AF Reserve (AFR, O&M).....	133	162	184	2,917	135	157	157	2,777	134	157	157	2,839
National Guard Bureau, AF.	50	143	149	2,359	50	153	150	2,518	50	153	151	2,706
Other Departments.....	996	____	____	____	1,031	____	____	1,021	____	____	____	____
Sub-Total Other Air Force Hqs Appropriations.....	2,004	1,042	1,081	$ 20,605	1,978	1,066	1,053	$ 23,149	1,967	1,066	1,064	$ 24,684
Total - Headquarters Operations & Administration*	17,308	10,011	10,376 ~~10,370~~	$197,845	17,213	10,293	10,068	$200,080	17,177	10,295	10,223	$213,345

NOTE: * - 1. As reported to the Congress last year, the Air Force initiated studies during FY 1971 directed toward standardization of the definition of "headquarters" costs and the reduction of these costs. A complete array of all headquarters and direct headquarters support manpower, based on this standardized definition, was included in Military Personnel, Air Force Justification of Estimates for Fiscal Year 1973. The following summary provides total Air Force headquarters strengths consistent with last year's array. Totals differ from the preceding Headquarters Operations and Administration totals in this exhibit by the addition of direct headquarters support (e.g., publications management, command posts and management engineering teams) and Intermediate Headquarters (numbered Air Forces, Air Division and comparable organizations).

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Military	Civilian	Total	Military	Civilian	Total	Military	Civilian	Total
Departmental Administration, Department of the Air Force	2,722	2,720	5,442	2,495	2,798	5,293	2,495	2,798	5,293
Major Commands	11,979	6,969	18,948	12,295	7,186	19,481	12,269	7,188	19,457
Direct Support and Intermediate Headquarters	13,440	5,260	18,700	12,456	4,915	17,371	11,962	4,755	16,717
Sub-Total: Principal Air Force Headquarters	28,141	14,949	43,090	27,246	14,899	42,145	26,726	14,741	41,467
Departmental Administration, Assigned to Others.....	996		996	1,031		1,031	1,021		1,021
Unified Commands	1,611	322	1,933	1,392	309	1,701	1,392	309	1,701
Sub-Total: Headquarters Outside the Air Force	2,607	322	2,929	2,423	309	2,732	2,413	309	2,722
Total - Hqs FY 74 Budget	30,748	15,271	46,019	29,669	15,208	44,877	29,139	15,050	44,189

2. For ease of comparison the following table relates the total headquarters manpower shown above to data presented in last years's Military Personnel, Air Force Justification.

	FY 1972 Estimated/Actual			FY 1973 Estimated		
	Military	Civilian	Total	Military	Civilian	Total
Total - AF Hqs as shown on page 109e, FY 1973 Military Personnel Justification Book	30,170	16,149	46,319	29,339	16,078	45,417
Add: National Guard (AF)FY 73 Budget	44	155	199	44	155	199
Departmental Administration, Assigned to Others, FY 73 Budget	1,027		1,027	968		968
Unified Commands, FY 73 Budget	1,466	334	1,800	1,475	334	1,809
Total - Hqs, FY 1973 Budget	32,707	16,638	49,345	31,826	16,567	48,393
Reduction resulting from continuation of Hqs restructuring projects*.	-1,959	-1,367	-3,326	-2,157	-1,359	-3,516
Total - Hqs, FY 1974 Budget	30,748	15,271	46,019	29,669	15,208	44,877

NOTE: * - Includes FY 1973 Headquarters reduction in conformance with intent of the FY 1973 Defense Appropriations Act.

STATEMENT OF GENERAL DE LUCA ON "OPERATION AND MAINTENANCE, AIR FORCE"

Chairman McCLELLAN. Also at this point there will appear the complete prepared statement of General DeLuca on "Operation and Maintenance, Air Force." Included with the statement will be questions that I would like to have answered.

[The statement follows:]

Mr. Chairman and members of the committee. I appreciate the opportunity to present to this Committee, the Department of the Air Force's Fiscal Year 74 fund requirements for the Operations and Maintenance (O&M) Appropriation.

Chairman McCLELLAN. Could you please provide for the record what the O&M budget has been each year beginning with fiscal 1964 through the current appropriation request for fiscal 1974?

General DeLUCA. Yes, sir.

[The information follows:]

OPERATION AND MAINTENANCE BUDGETS FOR FISCAL YEARS 1964–74

Fiscal Year:	*Thousands*
1964	$4,339,159
1965	4,622,331
1966	5,016,016
1967	5,598,122
1968	5,903,799
1969	6,841,093
1970	6,519,928
1971	6,328,454
1972	6,610,412
1973	6,649,615
1974	6,598,200

FISCAL YEAR 1974 O. & M. REQUIREMENT

Chairman McCLELLAN. Proceed.

General DeLUCA. The FY 74 O&M requirement is $6.589 billion. This is $107 million less than the adjusted FY 73 program of $6.696 billion. The program in FY 74 is therefore essentially stable in terms of current dollars as compared to FY 73.

The FY 73 program in the FY 74 budget has been continually adjusted on a net basis as the activities in Southeast Asia have changed with their concomitant effects throughout the Air Force. The turbulence of the FY 73 program and a basic program/funding imbalance has caused program curtailments and deferrals, reprogramming within the O&M Appropriation between major force programs and the transfer of funds under Section 735 authority.

There are four FY 73 Air Force reprogramming actions pending before this Committee; FY 73–43, Non-SEA Mil Pers; FY 73–46, Non-SEA O&M; FY 73–47, Advanced Turbofan Engine, RDT&E; and FY 73–48, EF–111A RDT&E. Statements on these reprogrammings have been provided for the record. Favorable action on them is urgently requested to fund essential activities during the remainder of FY 73 and to properly reflect the activity by major force program. A summary of the adjustments to the FY 73 program is provided in Table 1.

TABLE 1

FY 73 O. & M. SUMMARY

	Millions
Appropriation	$6,250.4
Functional transfers	−65.5
Defense Mapping Agency	62.4
Defense Investigation Service	3.1
Supplementals	99.4
Pay increases	75.6
Classified employees	28.3
Wage board employees	47.3
Increased Postal Service charges	17.6
Air mail privileges of overseas personnel	5.0
Health scholarships	1.2
Approved transfers—Section 735	325.4
Southeast Asia (direct)	319.7
Other requirements—civilianization	5.7
Pending transfers—Section 735	57.5
Southeast Asia (direct)	-------
Other requirements	57.5
Adjusted fiscal year 1973 O. & M. program	6,667.2

In formulating the O&M requirements for FY 74, support costs were assessed and reduced wherever possible to apply maximum resources to the accomplishment of key military programs and missions, specifically:

1. An effective strategic offensive force sufficient to deter nuclear attacks.
2. The continued modernization of the tactical air forces as part of an effective general purpose force which will deter aggressors.
3. The support of and cooperation with allies.

The O&M funding requirements by major program are furnished in Table 2.

TABLE 2.—MAJOR FORCE PROGRAM FUNDING

[Dollars in millions]

	Fiscal year—		
	1973	1974	Change
Strategic forces	$1,146.3	$1,078.3	−$68.0
General purpose forces	952.5	928.8	−23.7
Intelligence and communications	529.5	525.4	−4.5
Airlift	185.0	178.4	−6.6
Central supply and maintenance	2,424.8	2,356.0	−68.8
Training, medical and other general personnel activities	841.9	953.2	+111.3
Administration and associated activities	204.2	217.1	+12.9
Support of other nations	411.7	352.0	−59.7
Total	6,696.3	6,589.2	−107.1

Change in Budgeting for Support of Other Nations

Chairman McClellan. Does this change in budgeting for support of other nations take into consideration a cease fire arrangement for Cambodia?

General DeLuca. The O&M request does not request funds for Cambodia. Cambodia is funded from the Military Assistance Program.

Chairman McClellan. Why is there only a $59.7 million decrease in this item in light of the Paris Peace Accords?

General DeLuca. The funds requested are for the support of the Vietnam and Laos air forces within the agreements of the Paris Peace Accords. The Department of Defense has developed a revised Military Assistance Service Funded (MASF) appropriation request which will further decrease the FY 1974 O&M request by an additional $54 million for a total decrease of approximately $114 million.

Chairman McClellan. Proceed.

General DeLuca. Together with the Military Personnel, Air Force Appropriation, the Operation and Maintenance, Air Force (O&M) Appropriation finances the day-to-day operating costs of manpower, materiel and services to run the active Air Force. These O&M resources are required for the Air Force structure, weaponry, activity levels, and readiness posture.

The management of the FY 73 program has required severe economies because of the original program/funding imbalance and unprogrammed SEA activity. Pressing requirements have been deferred; specifically, maintenance of real property, contractual services, training, repair of equipment, and filling of civilian employee vacancies. The funding of these requirements must be returned to prudent levels in FY 74 to prevent further deterioration in physical assets and degradation in readiness posture.

Funds Reprogramed From O & M Account in Fiscal Year 1973

Chairman McClellan. Could you please provide an item accounting for fiscal year 1973 of funding reprogramed from the O & M account to other areas of the Air Force budget, indicating, also, for each of these items how much is proposed in the fiscal 1974 budget, if any, to make up for these reprogramed funds.

General DeLuca. No fiscal year funds have been reprogramed from the Operations and Maintenance, Air Force, appropriation to other areas of the Air Force budget.

Chairman McClellan. Proceed.

General DeLuca. Specific amounts have been identified in the justification material by major force program to correct the FY 73 program/funding imbalance. It should be noted that the increases identified are a combination of the depressed FY 73 level of funding for the activity specified and a prudent amount to balance the program in FY 74.

Activity Indicators

Key indicators of activity requiring O&M funds are shown in Tables 3 through 7.

Table 3

Active Aircraft Inventory

	Millions
End fiscal year 1973	9,989
End fiscal year 1974	9,785
Change	—204

Other Country Inventories Increased by U.S. Planes

Chairman McClellan. Which countries are having their aircraft inventories increased with U.S. planes?

General DeLuca. The additional 29 aircraft for the Support of Other Nations in FY 74 will not increase the aircraft inventories of the two countries involved (South Vietnam and Laos). The 29 aircraft are the net of a decrease of 57 South Vietnam and Laos aircraft and an increase of 86 U.S. Air Force aircraft which will be used to train South Vietnam pilots within the Continental United States.

Chairman McClellan. Proceed.

General DeLuca. The transfer of aircraft to the reserve forces, the phase out of older aircraft and the attrition of aircraft causes a net decrease of 204 aircraft after taking into account the delivery of new aircraft.

TABLE 4.—FLYING HOURS

Major force program	Fiscal year— 1973	1974	Change
Strategic forces	$920,493	$752,155	−$168,338
General purpose forces	1,495,247	1,289,460	−205,787
Intelligence and communications	227,455	170,077	−57,378
Airlift	78,886	76,786	−2,100
Central supply and maintenance	36,070	38,940	+2,870
Training and medical	1,038,944	1,059,135	+20,191
Administration and associated activities	74,751	67,662	−7,089
Support of other nations	1,129,888	1,251,353	+121,465
Total	5,001,734	4,705,568	−296,166

Increased Flying Hours Explanation

Chairman McClellan. Why is there such a big increase in flying hours for Central Supply and Maintenance, Training & Medical and Support of Other Nations?

General DeLuca. I would like to discuss each of the programs in turn.

The increase of 2,870 hours for the Central Supply and Maintenance program will restore hours temporarily curtailed during FY 73 as a temporary expedient because of an overall shortage of Operations and Maintenance funds. The shortage was caused by the indirect effects of Southeast Asia activity and the basic program and funding imbalance which existed at the beginning of FY 73. During an appearance before this Committee in September 1972, I testified that the Air Force would be required to request transfer of funds into O&M under Section 735 Transfer Authority provided by the Congress because of a $325 million shortage in O&M dollars.

In addition to requesting transfer authority in the amount of $57.5 million for the non-SEA costs, the Air Force has taken action to resolve the imbalance between program and funds. Programs have been cancelled, reduced or deferred. Flying has been curtailed; vacated civilian positions have not been filed; the number of aircraft not operational because of a lack of supplies has been allowed to increase.

The increase of 20,192 flying hours in the Training and Medical program is required for the full year operation of a substantially improved undergraduate pilot training program. In August 1972 the Air Force expanded the pilot training syllabus from 192.5 hours of jet flying training to 210 hours and increased the course length from 48 to 52 weeks.

In FY 71 the Air Force, on an experimental basis, reduced the pilot training course from 210 hours to 192.5 hours. Based upon evaluation of the resulting pilot graduates, the longer 210 flying hour course was reinstated.

Although the course change will be effective for ten months in FY 73, only students who entered pilot training on or after 8 August 1972 will receive the 210 hour course. Student entries are phased over the entire fiscal year. The students who entered on 8 August 1972 will fly the 7.5 additional T–37 hours during FY 73, but will not fly the 10 additional T–38 hours until FY 74. Each of the subsequent FY 73 student entries will receive a proportionally higher amount of the 210 hour course during FY 74.

The extension of the course length from 48 to 52 weeks will reschedule 12,883 T–38 training hours from FY 73 to FY 74. Under the 48 week course, the T–38 hours would have been used in FY 73. With the extension in course length they will be used in FY 74.

As a result of the foregoing, the bulk of the flying hour increase for the extension of the undergraduate pilot training course from 192.5 hours to 210 hours will occur in FY 74.

An increase of 121,465 flying hours is requested for the Support of Other Nations. The increase is required for the full year operation of aircraft which were available for less than a full year during FY 73. The aircraft are those delivered to the South Vietnam and Lao Air Forces during FY 73 and those U.S.

Air Force aircraft used to train an increasing number of South Vietnam pilots at bases in the Continental United States.

Chairman McClellan. Proceed.

Budgeted Flying Hour Adjustments From Fiscal Year 1973 to Fiscal Year 1974

General DeLuca. Table 4 shows the budgeted flying hour adjustments from FY 73 to FY 74. U. S. Air Force activity levels in Southeast Asia have decreased substantially (570,426 hours) as emphasis has shifted more to indirect support of other nations. Some what offsetting the SEA reduction is the increase in training hours to maintain the proficiency of aircrews after the SEA phase down. Overall, the budgeted flying hour program decreases by 296,166 hours.

It should be noted that the budgeted flying hours for FY 74, shown throughout this statement, differ from the flying hours tabulated in the justification book. This difference occurs because during OSD review of the Air Force budget submission the budgeted flying hour program was reduced. Corrected data has been furnished to the committee staff.

Direct Hire Civilian Personnel—O&M Only

Civilian personnel direct hire payroll requirements are the largest single element funded in the O&M appropriation. The payroll in FY 74 will be $1.942 billion or about 30 per cent of the total O&M appropriation. Civilian personnel employment decreases from FY 73 continuing a downward trend from FY 72 but slowed by the Air Force civilianization program. The FY 74 end strength in Table 5 includes 9,605 spaces which have been converted from military to civilian during FY 73 and FY 74 at a cost of $47.5 million.

Economy in Converting Spaces From Military to Civilian Personnel

Chairman McClellan. Wouldn't it have been cheaper not to have converted these 9605 spaces from military to civilian?

General DeLuca. No, sir. The conversion has reduced FY 1974 fund requirements by $11.9 million. The conversion will increase FY 1974 fund requirements for civilians by $47.5 million and decrease military personnel by $59.4 million.

Increase/Decrease in Military and Civilian Personnel

Chairman McClellan. Could you please provide a table showing the increase or decrease in both military and civilian personnel—actual figures and percentage rate—beginning with Fiscal Year 1964 through current appropriation request for Fiscal Year 1974?

General DeLuca. I shall be glad to do so.

[The information follows:]

OPERATION AND MAINTENANCE, AIR FORCE PERSONNEL CHANGES FISCAL YEARS 1964-74

[Strengths in thousands]

Fiscal year	Military			Civilian direct hire		
	End strengths	Changes from prior year	Percent change	End strength	Changes from prior year	Percent change
1964	856.9			258.2		
1965	824.7	−32.2	−3.76	255.7	−2.5	−.96
1966	887.4	+62.7	+7.60	269.4	+13.7	+5.34
1967	897.4	+10.0	+1.13	287.3	+17.9	+6.64
1968	904.8	+7.3	+.81	278.6	−8.7	−3.14
1969	862.1	−42.7	−4.72	223.3	[1] −55.3	−19.88
1970	791.1	−71.0	−8.23	206.4	−16.9	−7.54
1971	755.1	−36.0	−4.54	197.3	−9.1	−4.42
1972	725.6	−29.5	−3.90	187.6	−9.7	−4.94
1973	692.3	−33.3	−4.59	170.0	[2] −17.6	−9.35
1974	666.4	−26.0	−3.75	168.5	−1.5	−.90

[1] Depot maintenance personnel included from fiscal years 1964 through 1968. Function industrialized in fiscal year 1969.
[2] Air Force Reserve included from fiscal years 1964 through 1972.

Chairman McClellan. Proceed.

General DeLuca. Civilianization has been a continuing Air Force program for several years. The positions converted during FY 73 and FY 74 are primarily in support areas such as supply, civil engineering and administration. Civilian strengths, man-years and funding are summarized in Table 5.

TABLE 5.—COMPARATIVE CIVILIAN PERSONNEL STRENGTHS, MAN-YEARS AND FUNDS

	Fiscal year 1972	Change	Fiscal year 1973	Change	Fiscal year 1974
End strength	187,550	−17,536	170,014	−1,060	168,954
Man-years	194,121	−23,505	170,616	−1,000	169,616
Personnel costs (millions)	$2,088	−$166	$1,922	+$20	$1,942
Man-year costs (whole dollars) graded	$12,171	+$207	$12,378	−$338	$12,040
Ungraded	$7,906	+$658	$8,564	+$625	$9,189

Active Base Structure

Decreasing activity and force levels along with continuing assessment of the base structure for effective and economic operation has resulted in a reduced number of Air Force installations, as summarized in Table 6.

In April, the Department of Defense announced a number of base closure and realignment actions. The Air Force bases announced for closure or transfer to the Reserve Forces were Forbes AFB, Kansas; Hamilton AFB, California; Laredo AFB, Texas; McCoy AFB, Florida; Ramey AFB, Puerto Rico; and Westover AFB, Massachusetts. A gross savings for all appropriations of $91 million will be realized in FY 77 after closing costs and other necessary actions are complete. The Air Force planning had anticipated a reduction in bases as forces were reduced. Therefore, the net impact on the budget will be less than the gross savings. In FY 74, the net reduction in O&M, Air Force appropriation is $10.6 million. This saving will be offset by increases in the O&M appropriations of the Air National Guard and Air Force Reserve as these units assume responsibility for the operation of Forbes, Hamilton, and Westover.

TABLE 6.—ACTIVE AIR FORCE BASES

	End fiscal year—		
	1973	1974	Change
Major installations, total	157	151	−6
United States	111	111	
Allied countries	46	40	−6
Minor installations, total	3,330	3,319	−11
United States	2,292	2,291	−1
Allied countries	1,038	1,028	−10

Base Closures/Why Not Reduce More

Chairman McClellan. Why isn't it possible to reduce more installations—both major and minor—in the U.S. and abroad?

General DeLuca. The force structure and its deployment are the major determinants of the kind of bases and where they are required. Force structure and deployments result from the national defense strategy after an evaluation of the capabilities of potential enemies and economic considerations. Decisions on the forces and where they will be deployed—overseas versus CONUS—therefore, determine what we can do in the way of reducing the CONUS or overseas base structure. Overseas, between 1968 and the end of fiscal year 1973, we will have reduced 23 major bases. In percentage terms, this is a 38 percent reduction. In the US from 1968 to end fiscal year 1973, there has been a 17 percent reduction in major bases. These reductions and the recently announced closures will result in a near optimum basing posture. Further reductions would have to be predicated on major changes in the force structure.

Chairman McClellan. Proceed.

Minor Installations

General DeLuca. 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: aircraft, flying hours, people and bases determine O&M fund requirements. The FY 74 O&M estimate is in balance with the overall Air Force program. If the program changes, the funding must be adjusted and conversely if the funding is changed the program must be modified.

FY 73 Congressional Actions

In enacting the FY 73 Defense Appropriations Bill, the Congress reduced three programs based on repricing because of changes that occurred subsequent to the submission of the budget and eleven programs were reduced because of modifications of the programs by the Congress. The reductions are listed at Table 7.

Table 7

Congressional Reductions

	Millions
Repricings because of changes:	
Savings from reduced military strengths	$16.8
T–41 training	2.3
Eastern Test Range	15.1
Programs modified by the Congress:	
Headquarters operation and administration	5.0
Project transition	4.7
Intelligence operations	4.9
Automatic data processing equipment (ADPE) operations	6.0
Contract administration	3.0
Satellite basing	3.8
C–130 conversion	4.7
NCO academy	1.5
Civilianization of KP duties	5.0
B–52 crew training	1.4
VNAF support	4.6

The Air Force has taken specific action to implement each program reduction to comply with the intent of Congress. In each instance there are implementing memoranda to direct the required action and establish reporting procedures to assure compliance.

During hearings on the FY 73 budget, Congress was informed of a serious imbalance between the Air Force program and proposed O&M funding. In recognition of the imbalance Congress added funds to specific programs. The programs that received additonal funding by the Congress in enacting the FY 73 Appropriation Bill are listed in Table 8.

Table 8

Increases by the Congress

Items:	*Millions*
Champus	$17.6
Currency revaluation	13.4
Utility costs	15.0
Retention of Goose Air Base	4.5
Air Force owned portion of Alaska communication system	2.3
Munitions storage	2.2
C–9 supply and maintenance support by contract	1.5
MAP flight training	9.4

Major Force Programs

Mr. Chairman, 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, rents, communications, transportation

and services. Stated another way, these funds are used to maintain weapon systems; operate bases, depots, intelligence activities, hospitals, and schools; and to support certain allied air forces.

The O&M FY 74 Justification of Estimates document is organized to display pertinent detailed data on forces; flying hours and manpower; key indicators of resource consumption; together with detailed O&M dollar requirements.

Major Force Program I Strategic Forces

The Strategic Forces encompass two major force groupings, Offensive and Defensive. These forces furnish the Air Force capabilities needed to maintain strategic nuclear sufficiency for deterrence, for defense against attack and to protect U.S. air sovereignty. The overall funding requirement for these forces is summarized in Table 9.

TABLE 9.—STRATEGIC FORCE FUNDING

[Dollars in millions]

	Fiscal year—		
	1973	1974	Change
Strategic offensive forces	$758.6	$696.5	−$62.1
Strategic defensive forces	387.7	381.8	−5.9
Total	1,146.3	1,078.3	−68.0

During FY 74 the major changes planned in strategic offensive forces are the inactivation of two B–52D squadrons and an increase in the Short Range Attack Missile (SRAM) inventory. Efforts will be focused primarily on maintaining and modernizing the remaining forces. In the strategic defensive forces, the existing force of manned interceptors will be maintained.

TABLE 10.—STRATEGIC FORCES MANPOWER

	Fiscal year—		
	1973	1974	Change
Military	167,309	162,571	−4,738
Civilian	27,150	29,460	+2,310
Total	194,459	192,031	−2,428

In Table 10 manpower requirements between FY 73 and FY 74 are compared. The overall manpower reduction results from the phase down of operations in SEA and the planned inactivation of the two B–52 squadrons.

Phase Down Versus Phase Out of SEA Operations

Chairman McClellan. Why is there a mere phase down of SEA operations rather than a phaseout of our activities there?

General DeLuca. We have been able to phasedown SEA operations due to the ceasefire; however, as directed by the President, the Air Force is maintaining sufficient strength in the area to counter contingencies that could develop.

Chairman McClellan. Proceed.

General DeLuca. Reductions are partially offset by an increase in the SRAM inventory and the deployment of bombers and tankers to additional satellite bases. Civilian employees increase between Fiscal Year 73 and Fiscal Year 74 as a result of conversions of military to civilian positions.

Strategic offensive:	
Fiscal year 1973	$758.6
Fiscal year 1974	696.5
Change	−62.1

Funds are required for the Offensive Forces of the Strategic Air Command (SAC) consisting of combat aircraft, intercontinental ballistic missiles, and 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. Within the warning time provided

by surveillance and warning systems, and with the dispersal advantages of the basing program, SAC's ground alert bombers and tankers can be airborne and secure in the event of a surprise attack. SAC's global command, control and communication systems insure warning of attack and positive control of the strategic offensive forces.

The emphasis in FY 74 is on quality improvement to preserve the present balance with Soviet forces and to support future negotiation under the terms of the Strategic Arms Limitation (SAL) agreements which prohibit quantitative increases in strategic missile forces over the 1972–1977 period.

AIRCRAFT AND FLYING HOURS

A total of 28 combat aircraft squadrons (B–52 and FB–111) and their supporting tankers will provide the strategic alert force and meet requirements for contingencies. During FY 71 the B–52s flew an average of 1,112 sorties per month in Southeast Asia. During FY 72 and FY 73 the rate was increased to a peak of 3,150 sorties per month with operations being conducted out at Andersen AFB, Guam and U-Tapao Airfield, Thailand. The FY 74 budget is based on reduced operations in SEA. The reduction in flying hours for this program results from deactivation of the two B–52D squadrons and reductions in SEA operations involving both the B–52 bomber and KC–135 tanker aircraft. An offsetting increase in flying hours for the FB–111 is required as the FB–111 units achieve their programmed operational capability.

NEED FOR B–52D AIRCRAFT AND KC–135 TANKERS IN SEA

Chairman McCLELLAN. Why is it necessary for so many B–52D squadrons and KC–135 tanker aircraft to remain in SEA in fiscal year 1974?

General DELUCA. For fiscal 1974 a total of [deleted] B–52D and [deleted] KC–135 aircraft are programmed to remain in theatre. This total includes [deleted] respectively to support the Single Integrated Operations Plan. The remaining aircraft will be assigned on a temporary duty (TDY) basic to carry out conventional operations if directed to do so. Based on past experience, these TDY totals are the minimum number of aircraft required to provide the conventional capability directed by higher authority for FY 74.

PROGRAM OPERATIONAL CAPABILITY/NECESSITY FOR INCREASE IN FLYING HOURS

Chairman McCLELLAN. What program operational capability is the Air Force striving for? Why is such an increase in flying hours necessary in light of the Paris Peace Accord?

General DELUCA. The increase in flying hours is for the FB–111. The FB–111 has not been involved in SEA operations and the Paris Peace Accord does not affect the flying hours necessary to attain the programmed FB–111 operational capability. The desired operational capability for the FB–111 is to maintain a 40% alert rate and to have all crews combat ready. The increase in the FY 74 flying hours (+2,011) is required to maintain combat crew proficiency at the prescribed level. The FY 73 FB–111 flying hour allocation was lower than desired because a number of the aircraft were undergoing modification. The modifications will continue during FY 74. However, improved aircraft utilization techniques and management procedures over FY 73 will make more flying hours available and attain the required combat capability.

Chairman McCLELLAN. Proceed.

General DELUCA. Table 11 provides aircraft and flying hour details (excludes the SR–71).

TABLE 11.—STRATEGIC OFFENSIVE AIRCRAFT AND FLYING HOURS

Aircraft	Fiscal year— 1973	1974	Change
Squadron/unit equipment (UE):			
B–52 D/F	9/142	7/117	−2/25
B–52 G/H	17/255	17/255	----
FB–111	4/66	4/66	----
KC–135	38/615	38/615	----
Flying hours:			
B–52	317,297	209,650	−107,647
KC–135	315,910	246,089	−69,821
FB–111	25,176	27,187	+2,011

Missiles

Under the terms of the SAL agreements, quantitative increases in the strategic missile force are prohibited during the 1972–1977 period. Therefore, emphasis continues on qualitative improvements to preserve the current U.S. negotiating position with the Soviets.

Intercontinental Ballistic Missile Forces are programmed to continue at the current level of 1,000 Minuteman and 54 Titan missiles. The Minuteman force modernization is continuing.

Minuteman Modernization

Chairman McClellan. What is the cost of this modernization for fiscal 1974? What is the total end cost of this modernization program?

General DeLuca. The fiscal 1974 program for Minuteman Force Modernization includes $253.2 million for procurement. The total procurement cost of the Force Modernization program is estimated to be $2367.4 million, which includes $1154.4 million through FY 1973.

Chairman McClellan. Proceed.

General DeLuca. During FY 74, additional Minuteman I missiles will be replaced by Minuteman IIIs.

The Short Range Attack Missile (SRAM) inventory will increase in FY 74 and by the end of that year there will be 15 squadrons equipped with the new missile.

To provide better visibility of costs identifiable to the Minuteman and Titan missile programs, the Automatic Resupply Logistics System providing supply support to these systems will be included in this Force Program beginning in FY 74 in lieu of central funding by Major Force Program VII.

Better Cost Visibility and Automatic Resupply Logistics System

Chairman McClellan. What is meant by "better visibility" of costs? What is the Automatic Resupply Logistics System?

General DeLuca. The Automatic Resupply Logistics System automatically ships supplies from depots to each using Air Force base on the basis of issue rates. Previously this program was centrally funded at the depot. Better cost visibility will be obtained in FY 74 by having the using Air Force base fund the supplies.

Chairman McClellan. Proceed.

General DeLuca. The Titan Reliability and Aging Surveillance Program will also be funded within Major Force Program I rather than as previously in VII.

Table 12 provides details of the FY 73 and FY 74 missile program.

TABLE 12.—STRATEGIC OFFENSIVE MISSILE SQUADRONS

	Fiscal year—		
	1973	1974	Change
Squadrons:			
Minuteman (total)	20	20	
Minuteman I	4	2	−2
Minuteman II	10	10	
Minuteman III	6	8	+2
Titan	6	6	
Hound Dog	17	17	
SRAM	8	15	+7

Basing

Since submission of this budget estimate, it has been determined that McCoy AFB and Westover AFB will begin closing in FY 74 as the units move to other locations. The net O&M savings during FY 74 are expected to be $3.6 million. The annualized savings after all one time closure costs are met will be $13.6 million.

Effective July 1, 1973, the Canadian Ministry of Transport will assume responsibility for operating Goose AB, Labrador, in FY 74. SAC will share costs

with the Canadian Government for base support. Military and civilian personnel costs will be less than in FY 1973.

The SAC Satellite Basing Program, which provides expanded aircraft basing dispersal and increases the pre-launch survivability of the SAC alert force, will consist of 19 bases at end FY 73 and 20 bases by end FY 74. Because of the deployment of aircraft to SEA in FY 73, the satellite locations are being maintained in a limited operational capability status.

INCREASES AND DECREASES—STRATEGIC OFFENSIVE FORCES

Significant increases

Net increase in civilian pay for full year effect of FY 73 pay raises, conversion of 3,458 manpower spaces from military to civilian of which 452 occurred in FY 73 and 3,006 in FY 74, $21.3 million.

ELIMINATION OF MANPOWER SPACES

Chairman MCCLELLAN. Why couldn't these manpower spaces be eliminated altogether?

General DELUCA. The conversion of 3458 manpower spaces in SAC from military positions to civilian authorizations was accomplished as a result of the Air Force's continuing effort to ensure that wherever work does not have to be accomplished by military we will use civilians. However, since the work is essential it is not possible to reduce the total manpower requirement.

Base operating and support requirements resulting from FY 73 price increases and deferrals (replenishment of supply and equipment maintenance and contractual service), $8.4 million.

For change in USAF status at Goose AB, Labrador. The cost sharing with the Canadian Government will be offset by reduced military and civilian personnel requirements, $7.8 million.

CHANGE IN STATUS OF GOOSE AB

Chairman MCCLELLAN. What is the change in status referred to?

General DELUCA. The U.S. Air Force now operates Goose Air Base which is leased from Canada. The lease expires 30 June 1973. Under the terms of an agreement now being completed, the base will be operated by Canada in FY 1974. The status of the U.S. Air Force at Goose Air Base will change from operator to tenant and costs will be shared with Canada.

Update Minuteman missile software programs for force modernization, $7.5 million.

Assumption of funding responsibilities for missile support cost funded from Major Force Program VII funds in FY 73, $6.1 million.

Increased flying hours for FB–111 as full operational capability of units is attained, $1.2 million.

Increase for full year effect of Satellite Basing operations at three civil locations and addition of final location to complete Phase I of the program, $1 million.

Increased SRAM inventory, $600,000.

INCREASE IN SRAM INVENTORY

Chairman MCCLELLAN. Why is it necessary to increase the SRAM inventory at this time?

General DELUCA. The SRAM is now in full scale production and being delivered to the field at the rate of 40 per month. The FY 74 procurement completes the production contract. The last article will be produced in August 1975 and delivery of that missile will complete the presently planned force.

SIGNIFICANT INVENTORY DECREASES

Significant decreases

Reduction in B–52D active inventory (two squadrons and twenty-five aircraft) and phasedown of activity in Southeast Asia, $93.9 million.

Reduction in KC–135 tanker support for SEA, $16.8 million.

SR–71 fund requirements, $11.8 million.

Decrease in base support requirements for SEA, $1.2 million.

Strategic defensive:

	Millions
Fiscal year 1973	$387.7
Fiscal year 1974	381.8
Change	−5.9

Funds are required for the Defensive forces 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, and the Ballistic Missile Early Warning System (BMEWS).

ADC 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 of the 586,000 square miles of Alaska. The AAC electronic alerting system includes the operation of 13 aircraft control and warning squadrons under the operational control of a manual Regional Control Center (RCC).

The major Strategic Defense forces are listed in Table 13.

TABLE 13.—STRATEGIC DEFENSE FORCES

	Fiscal year—		
	1973	1974	Change
Aircraft (squadrons/UE): F–106	7/131	7/131	
Flying hours: F–106	43,110	42,265	−845
Surveillance and warning:			
Manual Norad control centers	6	6	
Conus and Alaska	5	5	
Canada	1	1	
Regional control centers	8	8	
Surveillance radars	102	102	
Backup interceptor control (BUIC)	14	14	
Norad COC	1	1	
Distant early warning (DEW line)	31	31	
Airborne early warning and control	2 SQ	2 SQ	
Flying hours (EC–121)	24,438	28,425	+3,987
Ballistic missile early warning systems	11	11	
Space detection and tracking system	7	7	
Over the horizon radars (OTH)	9	9	
Ground facilities	3	3	

Seven squadrons of F–106 aircraft constitute the manned interceptor capability within the Air Force for the defense of the continental United States. Three BOMARC missile squadrons were inactivated during the first and second quarters of FY 73.

Congressional concern about the protection of air space over the southern portion of the United States caused an evaluation of measures to provide the needed capability. As a result the Southern Air Defense program was implemented in mid-FY 73. The program combines resources of the Air Force, Air National Guard and Federal Aviation Agency to meet the requirement.

BASING

The strategic defensive force base structure as contained in this budget estimate remained relatively stable except for transfer of Otis AFB, Massachusetts to the Air National Guard. Subsequent to submission of this budget estimate, it was announced that Hamilton AFB, California would become an Air Force Reserve Base.

INCREASES AND DECREASES—STRATEGIC DEFENSIVE FORCES

Significant increases

Full year requirement of CONUS Southern Air Defense, $1.7 million.

Increased flying hours for Airborne Early Warning and Control (EC–121), $1.1 million.

SPECIFIC DETAILS FOR COST INCREASES OF STRATEGIC DEFENSIVE FORCES

Chairman MCCLELLAN. Could you please provide specific details relating to each of these cost increases?

General DELUCA. Mr. Chairman, there are three increases.

The first is $1.7 million for the full year operation of the CONUS Air Defense Program. The program increases the air defense posture across the southern perimeter of the United States and was operative for only a portion of FY 73. The need for the program was established after several undetected violations of the U.S. air space had occurred. The Air National Guard and the Federal Aviation Agency participate in the program.

The first phase of the Air Force effort began in October 1972 when F–106 aircraft at Tyndall AFB were placed on alert and a NORAD manual control center was located at the FAA Traffic Control Center, Houston, Texas.

The next Air Force phase, completed in December 1972, provided new radar capability at Dauphin Island, Alabama and Lake Charles, Louisiana. The Air Force also is installing height finder radars at eight FAA locations with completion scheduled for not later than 30 June 1973.

A $1.1 million increase is requested for the Airborne Early Warning and Control System. The FY 73 program was underfunded because of the program and funding imbalance. The funds are for 4,866 additional flying hours and three additional aircraft.

The third increase is $1.0 million for components of the surveillance and warning systems.

The Defense Support Program requires $.4 million for the lease of a backup UNIVAC 1106 computer for the Strategic Air Command. The computer will improve the availability of a [deleted].

A net increase of $.4 million is required for leased communications to link components of the Southern Air Defense and other Air Defense programs. The increase is partially offset by a reduction in NORAD-COC communications.

An increase of $.2 million is required for Program 437, an [deleted].

Significant increases

Other miscellaneous increases for surveillance and warning systems, $1 million.

Significant decreases

Transfer of software and systems engineering programs for WWMCCS to Other Procurement Appropriations and reduced fund requirement for SPACETRACK software, $7.6 million.

MAJOR FORCE PROGRAM II

GENERAL PURPOSE FORCES

Air Force General Purpose Forces are primarily assigned to the Tactical Air Command, Pacific Air Forces and United States Air Forces Europe. They provide worldwide tactical forces for counter air, close air support, interdiction, reconnaissance, and tactical airlift missions in the theaters of operation. Additional missions include electronic warfare and special operations forces. The overall funding requirement for these forces is summarized in Table 14.

TABLE 14.—GENERAL PURPOSE FORCE FUNDING

[Dollars in millions]

	Fiscal year—		
	1973	1974	Change
Tactical fighters	$174.9	$150.6	−$24.3
Tactical attack aircraft	.8		−.8
Tactical reconnaissance and electronic warfare	29.5	30.7	+1.1
Special operations	14.4	8.1	−6.3
Tactical airlift	36.6	38.9	+2.3
JCS directed and coordinated exercises	36.2	38.8	+2.6
Tactical operations:			
Pacific	240.0	219.8	−20.2
Conus	222.0	230.8	+8.8
Europe	157.1	170.2	+13.1
Other	41.0	41.0	0
Total	952.5	928.8	−23.7

During FY 74 the major changes planned for the General Purpose Forces are the addition of six F–111 aircraft, the reduction of 55,117 F–4 flying hours as Southeast Asia operations decrease, and the withdrawal from major bases in Southeast Asia.

In Table 15 the FY 74 manpower requirements for the General Purpose Forces are compared to those of FY 73.

TABLE 15.—GENERAL PURPOSE FORCES MANPOWER

[End strengths]

	Fiscal year—		
	1973	1974	Change
Military	185,331	177,228	−8,103
Civilian	39,168	37,628	−1,540
Total	224,499	214,856	−9,643

Manpower Decrease Rate

Chairman McClellan. Why can't the rate of decrease in manpower be the same for both military and civilian personnel?

General DeLuca. The rate of decrease between military and civilian personnel is determined by requirements rather than arbitrary factors. The category of authorizations to be withdrawn is determined by the military/civilian mix in each of the functions and activities being reduced.

The planned reduction in General Purpose Forces military personnel between end FY 1973 and FY 1974 is 4.4% while civilian authorizations in this program will be reduced 3.9% over the same period. If 2,413 military positions were not scheduled to be converted to civilian during FY 1974, the rate of decrease would have been 3.1% for military and 10.1% for civilian.

In this particular case the larger civilian decrease will result because of substantial reductions in support areas. The support areas to be reduced have a high percentage of civilian personnel.

Chairman McClellan. Proceed.

General DeLuca. The reduction in military strength results from the phase down in SEA and civilianization of military positions. The civilianization program caused 634 military spaces to be converted and 2,413 additional conversions will occur in FY 74 offset by manpower savings as a result of reductions in operating bases.

Tactical Fighters

Fiscal year:	*Millions*
1973	$174.9
1974	150.6
Change	−24.3

Funds required for the operation and maintenance of tactical fighter squadrons will be slightly less than in FY 73.

Table 16 provides data on the fighter force by squadrons and flying hours for FY 73 and FY 74.

TABLE 16.—TACTICAL FIGHTERS

	Fiscal year—		
	1973	1974	Change
Squadrons:			
F-4	48	45	−3
F-111	12	12	0
F-105	2	2	0
A-7	9	9	0
Total	71	68	−3
Flying hours:			
F-4	368, 857	313, 740	−55, 117
F-111	75, 110	79, 860	+4, 750
F-105	21, 690	16, 668	−5, 022
F-100	137		−137
A-7	65, 976	63, 207	−2, 769
Total	531, 770	473, 475	−58, 295

Both F–4 and F–105 flying hours decrease as SEA phases down. The programmed F–111 force equipage will be achieved with the delivery of six aircraft in FY 74. Flying hours will increase as aircraft are delivered during FY 73 and are used for the entire year of FY 74.

F–111/Increase in Flying Hours

Chairman McClellan. Despite the addition of six new F–111's, why can't the flying schedules be arranged so that there will not be a net increase in flying hours during fiscal year 1974 for this craft? What necessitates the increased number of flying hours—particularly overseas—at this juncture?

General DeLuca. The flying schedules are required to achieve and maintain a combat ready F–111 force. The force is growing from 228 aircraft at end FY 72 to 270 at end FY 73 and 276 at end FY 74. The additional 4,750 flying hours are required in the CONUS and overseas to meet programmed operational capability as the aircraft available increases in FY 74 as compared to FY 73.

Chairman McClellan. Proceed.

General DeLuca. A cadre is being formed for the F–15 which enters the inventory in FY 76. Command assignments in FY 74 by type of aircraft are shown in Table 17.

TABLE 17.—FIGHTER SQUADRONS BY COMMAND, FISCAL YEAR 1974

	F-4	F-111	A-7	F-105	Totals
Alaskan Air Command	1				1
Air Defense Command	1				1
Tactical Air Command	16	9	9	1	35
Pacific Air Forces	9			1	10
U.S. Air Forces Europe	18	3			21

Tactical attack aircraft

Fiscal year:	*Millions*
1973	$0.8
1974	.0
Change	−.8

The phaseout of the F–102 aircraft in FY 73 will eliminate this category from future budget submissions. The cadre of A–10 personnel currently shown in the budget under this category will be included in the Tactical Fighter activities in the FY 75 budget.

Tactical reconnaissance and electronic warfare

Fiscal year:	Millions
1973	$29.5
1974	30.6
Change	+1.1

Funds required for the operation of tactical reconnaissance squadrons, a tactical electronic warfare squadron, a tactical drone support squadron and photo processing units for reconnaissance squadrons increase slightly during FY 74.

Table 18 lists squadrons and flying hours.

TABLE 18.—TACTICAL RECONNAISSANCE AND ELECTRONIC WARFARE FORCE

	Fiscal year—		
	1973	1974	Change
Squadrons:			
RF-4	13	13	
EB-66	1	1	
Tactical drone	1	1	
Total	15	15	
Flying hours:			
RF-4	77,640	76,688	−952
EB-66	15,475	8,303	−7,172
Tactical drone support (C-130 and CH-3)	1,776	1,591	−185
Total	94,891	86,582	−8,309

The 46 per cent reduction in EB–66 flying hours is a consequence of phase-out of EB–66 operations in USAFE and phased down in operations in SEA. The RF–4 is a photo reconnaissance aircraft and the EB–66 is designed for electronic jamming and electronic reconnaissance missions. The increase of $1.1 million is the net result of depressed funding in FY 73 and the deferral of requirements into FY 74 and aviation POL price decrease.

Reconnaissance and EW Increase

Chairman McClellan. Why is there an increase in the budget for tactical reconnaissance and electronic warfare?

General DeLuca. There are three reasons. First, the program was depressed in FY 73 because of the shortage of funds resulting from increased SEA activity and an overall imbalance between programs and funding. The FY 74 program restores the required level of equipment and facility maintenance and supplies which were temporarily deferred in FY 73.

Second, additional funds are required to support a more sophisticated camera system (KA 90 and KA 91's) installed in the RF–4's in late FY 73, and requiring a full year support in FY 74.

Third, the Infrared AN/AAD–5 Line Scan Sensor became operational on the RF–4 in June 1973. This system has a primary mission which includes [deleted] in low and high threat environments. Full year 1974 contractor support will be required for this new sensor.

Use of EB–66 and RF–4 Aircraft

Chairman McClellan. Because of the cessation of hostilities in SEA, what will the EB–66 and RF–4 airplanes be used for in fiscal year 1974?

General DeLuca. [Deleted] of the thirteen RF–4 squadrons are committed to NATO in FY 74. [Deleted] of the squadrons are programmed for contingency and training missions in the CONUS. [Deleted] will be in Okinawa and committed to the Western Pacific General War Plan. The remaining [deleted] to provide theater and national command authority with timely tactical information, to act as the reconnaissance force during contingency situations, and to accomplish reconnaissance requirements.

Current planning envisions the [deleted].

Chairman McClellan. Proceed.

SPECIAL OPERATIONS FORCES

General DELUCA.

Special operations

Fiscal year:	Millions
1973	$14.4
1974	8.1
Change	−6.3

Funds required for Special Operations Forces are significantly reduced during FY 74. These forces conduct and support counterinsurgency, unconventional warfare and psychological operations. Table 19 compares the force changes between FY 73 and FY 74.

TABLE 19.—SPECIAL OPERATIONS FORCES (SOF)

	Fiscal year—		
	1973	1974	Change
Squadrons	7	6	−1
Flying hours	70,607	30,888	−39,719

During FY 73 the A–1s, A–37s and AC–119s in the Special Operations Force were transferred to the Republic of South Vietnam; the T–28s to Laos; the C/UC–123s to the Air Force Reserve; and the C–47s and U–10s were retired from the active force. Aircraft remaining in the active special operations force in FY 74 are AC/C–130s, T/UH–1s and CH3Es. The flying hours are reduced by 56 per cent.

AIRCRAFT FOR SEA COUNTRIES

Chairman MCCLELLAN. At what point in time will the Southeast Asian countries receive their full complement of aircraft and parts which the US has agreed to supply? Please provide a listing of specific planes—and how many of each—we are supplying to each country, and the statutory authority for doing so.

General DELUCA. Mr. Chairman, as of November 1972, the VNAF had received their full complement of aircraft and spare parts. However, their F5A aircraft will be replaced by F–5E aircraft on a one-for-one exchange during the following calendar years: [Deleted].

During November 1972, the Air Force delivered the following aircraft completing South Vietnam's Air Force authorized unit equipment: 116–F–5A's; [Deleted].

The Laotians have received all of their authorized unit equipment (aircraft) and spare parts and no additional increase to their Air Force inventory is known at this time. [Deleted] aircraft were delivered to Laos during January 1973 which completed their aircraft authorizations.

The aircraft were directed to be delivered to South Vietnam and Laos by the Secretary of Defense to fill previously authorized unit equipment and to support National Defense Security Memorandum 168 dated 19 May 1972.

Chairman MCCLELLAN. Proceed.

TACTICAL AIRLIFT

General DELUCA.

Tactical airlift

Fiscal year:	Millions
1973	$36.6
1974	38.9
Change	+2.3

Funds required for the operation and maintenance of tactical airlift squadrons are stable in FY 74. The slight increase is the net result of deferrals of requirements from FY 73. Program data is displayed in Table 20.

TABLE 20.—TACTICAL AIRLIFT FORCES

	Fiscal year—		
	1973	1974	Change
Squadrons/UE:			
C–130	17/272	17/272	0/0
C–7A	0/0	0/0	0/0
Total	17/272	17/272	0/0
Flying hours:			
C–130	224, 663	225, 315	+652
C–7A	2, 530	0	−2, 530
Total	227, 193	225, 315	−1, 878

C–130 Training

Chairman McClellan. Why is it necessary to return C–130 aircrew training to a level from which it was reduced in fiscal year 1973?

General DeLuca. The return to normal training levels is required to maintain the combat capability of C–130 aircrews. Because of the imbalance between our program and funds in FY 1973, it was necessary to temporarily reduce flying hours for C–130 aircrew proficiency. Training requirements are based on flight time required to maintain aircrew proficiency. Reduced requirements beyond FY 1973 would significantly reduce combat capability of C–130 aircrews.

Chairman McClellan. Proceed.

Tactical airlift forces

General DeLuca. Tactical airlift forces for FY 1974 consist entirely of 17 squadrons of C–130s. The last C–7A squadron was transferred to the Republic of South Vietnam during FY 73. Flying hours for the C–130 increase 3/10 percent in FY 74 to return aircrew training to the level from which it was reduced in FY 73. The lack of airframes caused by attrition and diversions of airframes to SEA in FY 73 depressed the training hours in FY 73.

JCS directed and coordinated exercises

Fiscal year:	*Millions*
1973	$36. 2
1974	38. 8
Change	+2. 6

Possible Decrease in JCS Directed Exercises

Chairman McClellan. Why can't these JCS directed and coordinated exercises be decreased during fiscal 1974, rather than stepped up? How much would U.S. combat readiness suffer if such exercises were decreased by $2.6 million rather than increased by said amount?

General DeLuca. There is a requirement for an FY 74 increase in JCS directed and coordinated exercises as the Services and the Joint and Unified Commanders continue to reorient from SEAsia combat operations to peacetime training roles. Essentially, it is a matter of replacing actual combat experience with training experience in order to maintain combat readiness. It is necessary, therefore, that the level of exercise activity be stepped up as the forces disengage from combat operations and as attrition depletes combat experienced personnel with the units.

With regard to your second question, a $2.6 million reduction would reduce Army and Navy combat readiness for joint operations below the level required by the Joint Chiefs of Staff. A number of the scheduled exercises would have to be decreased in scope or eliminated entirely.

Chairman McClellan. Proceed.

MISSION RESPONSIBILITY FOR DEPLOYMENT OF UNITS—FUNDING REQUIREMENTS

General DELUCA. The Air Force has mission responsibility for deploying ground and air units during JCS Directed and Coordinated Exercises. Funding requirements include travel, transportation (Military Airlift Command airlift of units, other Services as well as Air Force), supplies and other miscellaneous requirements. Exercises enhance combat readiness and provide joint service training, contingency mobility, and airlift training. These exercises are conducted in Europe (as part of a 1967 Trilateral Agreement), in the Pacific, in South America, and in the CONUS. There is an increased need for such exercises to enhance and maintain an acceptable level of combat readiness in the absence of combat operations.

The FY 74 budget includes a total of $38.8 million for JCS Exercises for an increases of $2.6 million over FY 73 increase provides for Military Airlift Command support for Army participation in expanded CONUS exercises GALLANT CREW and BRAVE SHIELD.

Tactical operations

Fiscal year:	*Millions*
1973	$660.1
1974	661.8
Change	+1.7

Funds required are for the base structure to support the General Purpose Forces deployed worldwide in their role as quick reaction forces. The estimate includes funding for 19 bases in the United States, 21 in Europe and 15 in the Pacific. In addition the budget includes support for command and control systems, airborne command posts, aerial port squadrons, air weapons control systems, tactical air control systems, tactical aeromedical evacuation squadrons and combat crew and unit training.

The withdrawal of Air Force tactical fighter units from the Republic of Vietnam was completed during FY 73. Responsibility for Wake Island is transferred from Force Program IV—Airlift to this Force Program in FY 74.

RETENTION OF BASES IN THAILAND

Chairman MCCLELLAN. Why is it still necessary to retain [deleted] bases in Thailand?

General DELUCA. [Deleted] bases are required in Thailand for USAF forces programmed to be stationed in Thailand and for those that would be deployed should a larger force capability be required in that area.

Chairman MCCLELLAN. Proceed.

General DELUCA. The reduction in aircraft and flying is a result of reduced SEA Forces, activity levels, bases, and headquarters. There is also a decrease in support facilities in Japan.

The resulting reduction of $38.0 million is offset by increases of $9.6 million for full year impact of civilian pay raises; $21.9 million for maintenance, supply support and other base support deferred in FY 73 because of the O&M funding imbalance; and $2.7 million for transfer for funding responsibility for Wake Island.

ITEMS OF SUPPLY FOR INCREASED FY 74 FUNDING

Chairman MCCLELLAN. Why is it necessary to make up for supply and support and other base support deferred in fiscal 1973 because of O&M funding imbalance? Exactly what items of supply will be made up with such increased funding in 1974?

General DELUCA. Supply support and base support deferred during FY 73 reduced the level of maintenance of equipment and real property. The funding of these requirements must be returned to prudent levels in FY 74 to prevent further deterioration in physical assets and degradation in readiness posture.

Thousands of different supply items are required. With your permission I will insert a representative listing by type and item in the record.

[The information follows:]

Civil Engineering (Roofing materials, pipes, plastic tubes, nails, screws, cement, plumbing materials, lumber, plywood)

Administrative (Office and duplicating supplies, tabulating paper, pencils, magnetic computer tapes, reels, console typewriter paper)
Aircraft (Supplies for the repair of navigation, propulsion and aerospace systems)
Housekeeping (Janitorial supplies, linens, blankets, dining hall supplies, photographic supplies, recreation, religious)
Automotive (Spark plugs, tires, batteries, antifreeze, condensors)
Communications (Computer paper, paper tape, teletypewriters, ribbons, reproduction paper and toner, telephones, cable)
Chairman McClellan. Proceed.

Comparison of Fiscal Years 1973 and 1974 Program for Tactical Operations

General DeLuca. Table 21 compares the FY 73 and FY 74 program for tactical operations.

TABLE 21.—TACTICAL OPERATIONS

	Fiscal year—		
	1973	1974	Change
Squadron	15	17	+2
Flying hours	562,943	468,685	−94,258

Basing

The CONUS basing structure of the General Purpose Forces is stable in FY 74 except for the transfer of Forbes Air Force Base, Kansas to the ANG. The units there will be moved to other bases.

Increases and Decreases—General Purpose Forces

Significant increases

Impact of FY 73 O&M program/funding imbalance by deferral of FY 73 supply support, real property maintenance, equipment replacement, and other base support, where possible, into FY 74, $31.6 million.

Real Property Maintenance Work

Chairman McClellan. Please provide a listing of real property maintenance work to be performed with these increased funds. Give the name of base and general description of work to occur.

[The information follows:]

Homestead AFB, Florida: Retube boilers, repair aircraft parking apron, repair electrical distribution system
Nellis AFB, Nevada: Repair runway, maintenance of base roads
Mt. Home AFB, Idaho: Repair cooling towers, repair lights in hangars, maintain sewer lines, repair heating plant
Holloman AFB, New Mexico: Repair water system, repair aircraft parking aprons, repair AGE starter circuits, repair electrical distribution system
Shaw AFB, South Carolina: Repair aircraft parking apron and runway, repair roofs on fifteen buildings
Seymour Johnson AFB, North Carolina: Maintain three wells, repair electrical distribution system, repair cooling towers, repair roofs, reseal apron pavement joints
George AFB, California: Overlay runway, maintain base roads, maintain recreational facilities
Cannon AFB, New Mexico: Repair heating plant, repair taxiways, repair boilers, repair cooling towers
Little Rock AFB, Arkansas: Replace water main, repair roofs, seal joints in airfield pavements, repair heating plants, maintain airfield pavement shoulders
Luke AFB, Arizona: Repair cooling systems, maintain runway, repair base roads
MacDill AFB, Florida: Repair sewage line, repair electrical systems, maintain storm drain
Langley AFB, Virginia: Repair headquarters facility, repair roofs, exterior painting, repair underground electrical duct and cable

England AFB, Louisiana: Repair sewer line, reseal joints in airfield pavements, maintain deluge system, repair air conditioning system
Pope AFB, North Carolina: Repair taxiway, reseal apron joints
Bergstrom AFB, Texas: Repair electrical distribution system, repair sewage mains
Eglin Auxiliary No. 9, Florida: Repair water tower, repair swimming pool, repair storm sewer
Myrtle Beach AFB, South Carolina: Repair roofs, clean and paint POL tanks, repair air conditioning system, maintain hangar roofs, repair sewage mains
Davis Monthan AFB, Arizona: Repair roofs, repair cooling towers, maintain base roads
Wethersfield AB, United Kingdom: Repair runway approach lighting
Athenai AB, Greece: Repair base roads
Zaragoza AB, Spain: Repair boiler, resurface roads, repair cold storage plant, exterior painting
Aviano AB, Italy: Repair central heating plant
Greenham Common AB, United Kingdom: Repair roofs, repair heating mains
West Ruislip AB, United Kingdom: Exterior painting, repair heating plant.
Hahn AB, Germany: Repair airfield pavements, exterior painting, repair fence and roads, maintain railrod track.
Alconbury AB, United Kingdom: Resurface overrun, exterior painting.
Bitburg AB, Germany: Repair roofs.
Bentwaters AB, United Kingdom: Repair water tower, rewire approach lighting.
Lakenheath AB, United Kingdom: Maintain electrical distribution system.
Mildenhall AB, United Kingdom: Repair POL pumping system, rewire building electrical systems.
Ramstein AB, Germany: Replace roof, exterior painting.
Rhein Main AB, Germany: Repair airmen dormitories, repair transformer station.
Wiesbaden AB, Germany: Repair roofs, repair airmen dormitories.
Stuttgart AB, Germany: Maintain taxiway and parking aprons.
Hickam AFB, Hawaii: Repair maintenance shops, repair airfield lighting systems, roof repairs, repair electrical distribution systems, repair hangar doors.
Clark AB, Philippines: Repair roofs, exterior painting, repair power plant, maintain airmen dorms, maintain river banks, dam and storm drains.
Osan AB, Korea: Repair sewage treatment plant, maintain airfield pavements, repair security fences, exterior painting.
Yokota AB, Japan: Maintain heating plant, repair taxiways and aprons, maintain airmen dormitories, maintain base roads.
Kwangju AB, Korea: Maintain aircraft docks, repair dormitories, maintain runway shoulders.
Kunsan AB, Korea: Repair heating plant, exterior painting.
Kadena AB, Japan: Maintain dormitories, maintain sewage system, erosion control.
Various SEA bases: Maintain airfield lighting and pavements, maintain power plants, maintain utility systems, repair roofs, maintain revetments.

Chairman McClellan. Proceed.

General DeLuca.

Significant increases

Impact of FY 73 O&M program/funding imbalance by deferral of FY 73 supply support, real property maintenance, equipment replacement, and other base support, where possible, into FY 74, $31.6 million.

Increase in civilian indirect (foreign) pay rates, $5.2 million.

Increase in direct hire civilian pay resulting from the full year effect in FY 74 of FY 73 pay raises offset by a net decrease of civilian man years, $4.4 million

Additional F–111 flying hours, $3.4 million.

Transfer of Wake Island from Force Program IV Airlift, $2.7 million.

MAC support for Army participation in expanded CONUS exercises GALLANT CREW and BRAVE SHIELD, $2.7 million.

Increased maintenance requirements for aircraft tip tanks and racks stored as a part of War Readiness Material Program, $1 million.

Increases in rates for utilities and rents, $0.9 million.

Significant decreases ($ in Millions)

Decreased flying hours, tactical operations, travel and transportation as a result of reduction in SEA support, $79.3 million.

Decreased requirements resulting from phase out of F–100, F–102 and C–7A aircraft, $2.1 million.

Major Force Program III Intelligence and Communications

Intelligence and communications activities are essential to the accomplishment of the Air Force mission. The funding and manpower requirements for these activities are summarized in Tables 22 and 23. Overall the activity declines from FY 73 to FY 74.

TABLE 22.—INTELLIGENCE AND COMMUNICATIONS FUNDING

[Dollars in millions]

	Fiscal year—		
	1973	1974	Change
Intelligence	$151.6	$145.4	−$6.2
Communications	273.7	278.0	+4.3
Special activities	104.6	101.9	−2.7
Total	529.9	525.4	−4.5

TABLE 23.—INTELLIGENCE AND COMMUNICATIONS MANPOWER

	Fiscal year—		
	1973	1974	Change
Military	86,669	83,541	−3,128
Civilian	12,141	12,261	+120
Total	98,810	95,802	−3,008
Intelligence activities	$151.6	$145.4	−$6.2

The Intelligence program funds 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 two major programs contained in the grouping of intelligence activities—General Defense Intelligence Program (GDIP) and Other Intelligence Programs.

The funding for these two major groupings is summarized in Table 24.

TABLE 24.—INTELLIGENCE ACTIVITIES

[In millions of dollars]

	Fiscal year—		
	1973	1974	Change
General defense intelligence	92.4	86.7	−5.7
Other intelligence	59.2	58.7	−.5
Total	151.6	145.4	−6.2
General defense intelligence program (GDIP)	92.4	86.7	−5.7

This activity provides for the collection of intelligence through surveillance, reconnaissance and detection, and the processing, production, and dissemination of intelligence.

During recent years there have been substantial decreases in Air Force intelligence collection and production activities. The decrease in funding and manpower is the net result of transfer of the research facilities program ($4.0 million) from the Advanced Research Project Agency (ARPA) to the Air Force effective 1 July 1973, offset by transfer of $11.2 million for the Advanced Range

Instrumentation Ships (ARIS) to Major Force Program VII, Central Supply and Maintenance. Both transfers were directed by the Deputy Secretary of Defense.

The ARPA transfer was in accordance with Congressional guidance to upgrade and improve a classified program. Based on this Congressional guidance, the Deputy Secretary of Defense designated that operation of the program be funded in the O&M, Air Force appropriation, since the Air Force is engaged in day-to-day gathering of data. The Director, Advanced Research Projects Agency retains the technical monitoring and cognizance of the operation, and the funds for upgrading, construction and installation.

The ARIS transfer is to reflect more accurately the mission of the ships. The primary mission of the ships is to collect data on US space launches and recoveries. The ships are assigned to the Eastern Test Range, rather than to an intelligence organization.

INCREASES AND DECREASES—GENERAL DEFENSE INTELLIGENCE PROGRAM

Significant increases

Increased support of ADP required by the automated Intelligence Data Handling System (IDHS), $4.2 million.

INTELLIGENCE/ADP COST SAVINGS

Chairman MCCLELLAN. What cost savings are ultimately projected through the use of ADP for intelligence handling?

General DELUCA. The Air Force Intelligence Data Handling System uses ADP to convert raw data from many sources into useable intelligence. The System evaluates, analyzes, integrates and interprets masses of information concerning one or more aspects of a foreign country or area. The problems involved with meeting the worldwide intelligence needs of the Air Force are being solved with the continuing evolution of the ADP system.

The most significant cost saving realized is from the analytical capability and workload capacity of the System which substantially reduces the number of military and civilian personnel who would otherwise be required to manually process the required intelligence.

Chairman MCCLELLAN. Proceed.

Significant increase

General DELUCA. Transfer of research facilities program from the Advanced Research Project Agency (ARPA) to the Air Force effective 1 July 1973, $4 million.

Significant decreases

Transfer of funding responsibility for the Advanced Range Instrumentation Ships (ARIS) to Major Force Program VII, Central Supply and Maintenance, $11.2 million.

Reductions in Technical Sensor collection systems, $1.3 million.

Reductions in intelligence production in Southeast Asia as activities are phased down, $0.9 million.

Military and civilian manpower reductions, $0.6 million.

Other intelligence programs

Fiscal Year:	*Millions*
1973	$59.2
1974	58.7
Change	−0.5

This grouping includes cryptologic activities which provide for the collection processing, and reporting of communications intelligence (COMINT); electronic intelligence information (ELINT); establishment of emergency reaction facilities; and other specified intelligence collection systems.

Substantial reductions have been made in the other intelligence programs category in recent years. Continuing adjustments are programmed in FY 74, offset by transfer of funding responsibility for a collection activity from the Aircraft Procurement, Air Force appropriation effective 1 July 1973 as directed by the Deputy Secretary of Defense.

INCREASES AND DECREASES—OTHER INTELLIGENCE PROGRAMS

Signficant increase

Transfer of responsibilities funded under the Aircraft Procurement, Air Force Appropriation in FY 73, $5 million.

Significant decrease

BUFFALO HUNTER is reduced to a contingency role, $2.2 million.

Aircraft support cost as a result of a phasedown of aircraft in Southeast Asia and reductions in aircraft in Europe, $1.9 million.

Elimination of the COMPASS ARROW program, $1 million.

Military and civilian manpower reductions, $0.5 million.

Communications activities

Fiscal Year:	*Millions*
1973	$273.7
1974	278.0
Change	+4.3

The communications program funds the Air Force world-wide communications network including the Air Force portion of the Defense Communications System (DCS). Included are:

DCS terminal communication facilities and ground satellite terminals.

DCS Wideband Radio and Cable Transmission Systems.

Communications security of all Air Force organizations and the Air Force Cryptologic Depot.

DCS Automatic Voice, Digital, and Secure Voice Networks (AUTOVON, AUTODIN, and AUTOSEVOCOM) serving all Air Force organizations world-wide.

World-wide Air Force ground-air-ground communication networks.

Engineering, installation and maintenance of Communications AF-wide.

Communications support requirements of the National Emergency Airborne Command Post, the National Military Command System, The Air Weather Service, and the Satellite Control Facility.

Operating funds for Headquarters Air Force Communications Service (AFCS) and its subordinate activities.

During FY 73, the Air Force has continued the program of intensified management of communications operating resources.

The reorganization of the Air Force Communications Service including the elimination of intermediate headquarters, which was reported to the Committee a year ago, has been completed eliminating 670 manpower spaces. Additionally, in Europe, particularly in Spain and between Spain and the United Kingdom, substitution of leased facilities has allowed the deactivation of nine military radio relay facilities.

In the Pacific, reorganizations of U.S. Army and U.S. Air Force communications responsibilities have lowered annual costs by $200,000. Other consolidations of unit resources have further reduced requirements by 50 manpower spaces. Reconfiguration of communications trunking within Japan and between Japan and Korea has been a matter of intensive study. These configurations, when completed, will provide a manpower savings of 38 spaces and annual dollar savings of $1 million.

Increased emphasis has been placed on the long established requirement of commanders at all levels to constantly review the need for and cost effectiveness of installed leased communications facilities and services. The Major Commands have been directed to submit annual reports to HQ USAF concerning the results of these reviews. Particular emphasis is placed on the requirement to revalidate the need for high cost, dedicated circuits and networks. Based on these review actions, the Air Force was able to report a $3.5 million cost reduction to the Secretary of Defense in August 1972 for leased dedicated Air Force circuits and networks.

The Air Force is also participating in joint studies of 45 locations world-wide to consolidate telecommunications centers. The majority of the studies are yet to be completed. However, early results are encouraging. For example, a study of the San Bernardino, California, area has resulted in the closure of three AUTO-

DIN terminals and an annual cost reduction of $388,000. Another study resulted in reduced costs of $80,000 annually by providing service to an Army headquarters at Homestead AFB, Florida, from an Air Force base telecommunications center. The early indications are that approximately half of the studies will result in consolidations which will decrease costs about $100,000 per year. Decreases are offset partially by increases in the prices of goods and services.

INCREASES AND DECREASES—COMMUNICATIONS ACTIVITIES

Significant increases

Annualization of the FY 73 civilian pay increases and the military to civilian conversion, $2.6 million.

Communications system contractual operations and maintenance. This increase is caused by increased costs for contract labor, supplies and increased scope of work, $2.3 million.

INCREASED SCOPE OF WORK

Chairman MCCLELLAN. Exactly what does the increased scope of work entail?

General DELUCA. The increased scope of work in this case covers two projects. The first is for contract repair of the electrical power generating equipment at the White Alice Communications System sites at Neklason Lake and Smugglers Cove, Alaska. The second project is for the contract maintenance of communications equipment at Sondrestorm Air Base, Greenland. The equipment is now being maintained by military personnel.

Chairman MCCLELLAN. Proceed.

Significant increases

General DELUCA. Supplies and equipment to replenish stock levels depleted due to non-availability of funds for replacement during FY 73, $1.5 million.

Miscellaneous requirements such as full year rental of a Burroughs 3500 system and rental of other Automatic Data Processing Equipment, transportation costs for Defense Communications Satellite Terminals and for Engineering Technical Services, $1.1 million.

Significant decrease

Reduced leased communications services including $1.0 for subscriber rates in the Automatic Voice Network (AUTOVON), a $.9 million reduction in the Automatic Digital Network (AUTODIN) resulting from the replacement of leased with government-owned terminal equipment, a reduction of $.7 million in Classified Program 698J also resulting from the replacement of leased with government-owned equipment and a number of miscellaneous line item reductions totalling $.6 million, $3.2 million.

Special activities

Fiscal year:	*Millions*
1973	$104.6
1974	101.9
Change	−2.7

The special activities funding category remains stable in FY 74 with a net reduction of $2.7 million from FY 73. The civilian man-years for the various activities are reduced from 2,219 in FY 73 to 2,182 in FY 74. A net decrease of $2.8 million results from a reduction in average salary due to the transfer of civilian personnel to the Defense Mapping Agency and the Defense Investigative Service during FY 73 offset by a full year cost increase from FY 73 pay raises for civilians remaining in this funding category. Military spaces were also reduced from 30,552 in FY 73 to 29,733 in FY 74. The specil activities included in this grouping are:

USAF Weather Service which operates weather services at Air Force bases. The data processing equipment rentals of the service will increase $963,000 during FY 74.

TOTAL COST OF AIR FORCE ADP

Chairman MCCLELLAN. What is the total cost of ADP in the Air Force for 1974 (including everything from rentals to increased man hours, etc., on use of ADP throughout this service)?

General DeLuca. The total cost is $561,960,000 including Air Force Reserve and Air National Guard.

Chairman McClellan. Proceed.

General DeLuca. Aerospace Rescue and Recovery Service which searches for, locates and recovers personnel and materiel. Units of the rescue service recovered many of the airmen shot down in Southeast Asia. The reduced activity in SEA results in a reduction of $2.0 million in TDY funding requirements.

Air Traffic Control and Landing Systems which provide enroute and terminal navigation, approach and landing aids overseas and in the United States when Federal Aviation Agency facilities are not available.

National Emergency Airborne Command Post which consists of three EC–135 aircraft. These aircraft will be replaced beginning next spring by the E–4A Aircraft.

National Military Command Center which is located in the Pentagon and supported by the Air Force.

Space Booster Program which consists of launch services for the Titan III–C.

Satellite Control Facilities which consists of a Satellite Control Facility, a Satellite Tracking Center and a worldwide network of Satellite Tracking Stations.

Major Force Program IV

Airlift

The airlift operation and maintenance program finances the Military Airlift Command (MAC) activities not funded by the Airlift Service, Air Force Industrial Fund (ASIF). The MAC Airlift Force remains stable at thirteen C–141 squadrons, four C–5 squadrons and eleven C–9 aircraft. The operational requirements of the Force are funded by the Airlift Service, Air Force Industrial Fund. Air Force base operations requirements are funded in O&M, Air Force.

The O&M funding and manpower requirements for the two major categories of activity are summarized in Tables 25 and 26.

TABLE 25.—AIRLIFT FUNDING

[In millions of dollars]

	Fiscal year—		
	1973	1974	Change
Air Force mission activities	38.7	34.0	−4.7
Airlift operations	146.3	144.4	−1.9
Total	185.0	178.4	−6.6

TABLE 26.—AIRLIFT MANPOWER

	Fiscal year—		
	1973	1974	Change
Military	18,708	16,637	−2,071
Civilian	10,376	9,823	−553
Total	29,084	26,460	−2,624

As mentioned previously, management responsibility for Wake Island will transfer to Pacific Air Forces from the Military Airlift Command on July 1, 1973. In addition, Ramey AFB, Puerto Rico was programmed for transfer to the Air National Guard in FY 74. With this transfer, the number of Military Airlift Command bases will decrease from 10 in FY 73 to 9 in FY 74. Since this budget was submitted, Ramey AFB has been scheduled to close in FY 74.

Airlift flying hours funded in this Major Force Program are shown in Table 27.

TABLE 27.—AIRLIFT FLYING HOURS

	Fiscal year—		
	1973	1974	Change
C–141	14,912	17,336	+2,424
C–5	4,870	4,889	+19
HC–130	5,044	4,026	−1,018
Helicopter	30,281	24,865	−5,416
C–131	4,489	4,753	+264
C–118	4,606	4,796	+190
T–39	7,303	8,753	+1,450
T–29	7,088	7,368	+280
U–3	43		−43
C–9	250		−250
Total	78,886	76,786	−2,100

The C–141 flying hours were reduced in FY 73 because of the program/funding imbalance in FY 73. The increase in C–141 hours in FY 74 restores the training program to the required level. The helicopter flying hours decrease because of reductions in Helicopter combat crew training requirements. The T–39 hours increase to meet requirements deferred while the T–39 remanufacture program was in progress.

INCREASE IN AIRCRAFT FLYING HOURS

Chairman MCCLELLAN. Why are airlift flying hours increasing for these various aircraft?

General DELUCA. The C–141 flying training program was depressed by the FY 73 program and funding imbalance. The increase of 2,424 flying hours will restore training to the required level. The training level must be restored to insure combat ready crews.

An increases of 1,450 hours is required for the T–39. The FY 73 flying hours were reduced while the aircraft were cycling through a remanufacture program.

Air Force mission activities

Fiscal year:	*Millions*
1973	$38.7
1974	34.0
Change	−4.7

The Air Force has responsibility to provide Department of Defense requirements for Joint Airborne/Air Transportability Training, special airlift missions of the 89th Military Airlift Wing at Andrews AFB, Maryland, and, other special airlift missions.

Joint Airborne/Air Transportability Training is training of U.S. ground forces (Army and Marine) in loading and unloading C–5A and C–141 aircraft and para-drop of men and equipment. The Military Airlift Command provides this training at 40 locations world-wide.

As Southeast Asia activity phases down, the requirement decreases for airlift of DOD personnel for rest and recuperation leave. This reduction of $4.2 million and a decrease of $.4 million in funding requirement for special airlift missions account for most of the reductions in this activity.

Airlift operations

Fiscal year:	*Millions*
1973	$146.3
1974	144.4
Change	−1.9

This activity includes funds for advanced helicopter, C–111, and C–5 crew training, operation of 10 bases in FY 73 and 9 in FY 74, and command and control and base services required by the Strategic Airlift Force, the Air Weather Service, the Aerospace Rescue and Recovery Service, and the Aerospace Audio-Visual Service.

The changes in airlift aircraft are shown in Table 28.

TABLE 28.—AIRLIFT TRAINING AIRCRAFT

	Fiscal year—		
	1973	1974	Change
C–141	16	16	
C–5	4	4	
HC–130—Air rescue	8	6	–2
Helicopter—Air rescue	58	36	–22
Total	86	62	–24

The transfer of Ramey AFB and the Wake Island host responsibility reduces fund requirements in this activity by $9.4 million. This decrease is offset partially by the full year cost of FY 73 civilian pay raises and costs of facility maintenance, supply support, and base support deferred from FY 73 to FY 74 due to the program/fund imbalance which occurred in FY 73.

INCREASES AND DECREASES—AIRLIFT

Significant increases

For full year cost of FY 73 pay raises in FY 74, $2.2 million.
Deferred FY 73 Facility maintenance and support, $4.7 million.

Significant decreases

Transfer of Ramey AFB to the Air National Guard, $6.7 million.
Reduced requirements for rest and recuperation airlift, $4.2 million.
Transfer of funding responsibility for Wake Island to Major Force Program II, $2.7 million.

MAJOR FORCE PROGRAM VII

CENTRAL SUPPLY AND MAINTENANCE

The FY 74 requirements for Central Supply and Maintenance is $2,356.0 million, down slightly ($68.8 million) from the FY 73 program of $2,424.8 million. The program is comprised of six major activities. The funding and manpower requirements by activity, compared to FY 73 are listed in Tables 29 and 30.

TABLE 29.—CENTRAL SUPPLY AND MAINTENANCE FUNDING

[In millions of dollars]

	Fiscal year 1973	Fiscal year 1974	Change
Depot operations	782.9	780.9	–2.0
Procurement operations	79.0	82.6	+3.6
Depot maintenance	1,096.7	1,095.0	–1.7
Transportation	319.5	240.5	–79.0
Other logistics support activities	64.7	65.3	+.6
Eastern test range	82.0	91.7	+9.7
Total	2,424.8	2,356.0	–68.8

TABLE 30.—CENTRAL SUPPLY AND MAINTENANCE MANPOWER

	Fiscal year 1973	Fiscal year 1974	Change
Military	10,680	10,368	–312
Civilian	104,710	100,733	–3,977
Total	115,390	111,101	–4,289

The reduction is the net result of various program adjustments including transfers of funding responsibility affecting the Central Supply and Maintenance program.

TRANSFERS

Increases of $26.3 million for aircraft and $6.6 million for missile maintenance result from transfer of labor funding for installing modifications from the aircraft and missile procurement appropriations to O&M in FY 74. This funding transfer complies with the recommendations in the FY 73 Report of the House Appropriations Committee.

Three classes of modifications are at issue: Class IV is for correction of deficiencies on out-of-production systems.

CLASS IV MODIFICATIONS/CORRECTION OF DEFICIENCIES

Senator MCCLELLAN. What deficiencies are referred to?

General DELUCA. Sir, the Class IV modifications are to correct deficiencies revealed in operational use. They fall into three broad categories: safety, mission essential and those required for logistics support. Some of the more prevalent reasons for Class IV modifications are to extend the service life of aircraft, improve reliability and maintainability of systems, convert high-failure electron tube equipment to solid-state to increase the mean time between failure, and to improve the performance of egress systems as a means of reducing risks to aircrews.

Updating changes are modifications to correct deficiencies revealed in test programs for new equipment and systems. These changes are necessary to assure the weapon systems meet design and performance specifications. Normally, the deficiency is corrected during production of later blocks of aircraft, and the retrofit is required on those produced before the correction could be incorporated in production.

CLASS V MODIFICATIONS

Chairman MCCLELLAN. Proceed.

General DELUCA. Class V provides for new capability on in-service systems; and updating changes are to correct deficiencies revealed in test programs for new systems.

For many years the O&M appropriations or other operating accounts, such as the Airlift Service Industrial Fund, have been used to fund the installation costs of Class IV and Class V modifications. However, procurement appropriations have paid for installation of updating changes since such modifications are extensions of the acquisition program to assure that new weapon systems meet design specifications. Procurement funds have also been used for major modernization programs when the scope of the work to extend service life or to upgrade capability is so great as to constitute a new capital investment.

The Air Force recommends that procurement appropriation funds be charged for modification labor when such modifications are an integral part of the acquisition process or when large investments are involved to increase capability. Otherwise, O&M funds will be used to subsidize the procurement accounts, overstating the cost of maintenance and understating procurement costs.

As noted earlier, beginning in FY 74, funding for Advanced Range Instrumentation Ships (ARIS) ($11.5 million) will transfer from Major Force Program III to Major Force Program VII since the mission of the ships is primarily test support rather than intelligence.

Depot operations

Fiscal year:	*Millions*
1973	$782.9
1974	780.9
Change	2.0

The depot operations activity funds the operations of five depots of the Air Force Logistics Command. The depots provide for the management, receipt, storage and disposal of material used by the Air Force, the Air Force Reserve, the Air National Guard and specific items for other agencies of the Department of Defense. The supply inventory managed is valued at approximately $9.6 billion and consists of about 775,000 line items.

The principal item of expense funded by the O&M appropriations is the payroll of the civilian work force which will total 47,327 in FY 74 down 3,086 from 50,413 in FY 73.

The installation of ADP equipment for the Advanced Logistic System (ALS) will continue during FY 74. The ALS is a project to modernize the Air Force Logistics operation to improve management across the complete spectrum of logistics activities. It will enhance the efficiency and economy of depot operations by improving the quality of management decisions and by reducing the response time of supply and resupply.

A $2.4 million increase in service engineering is for several weapon systems for which engineering management responsibility will transfer from the procurement appropriations to O&M in FY 74. These include the Minuteman III, F–111 D/F, FB–111A, RF–4C and subsystems, including engines, of several other weapon systems. Contractors are used to avoid unnecessary duplication of engineering expertise, data and test facilities in the Air Force. Service engineering is required to analyze in-service problems and propose corrective action. Included in this category is the Component Improvement Program for engines, through which a constant increase in reliability of components is derived, avoiding costs for maintenance and spares.

An increase of $2.2 million in contractual Civil Engineering Services is for investigational engineering studies on such things as building materials, reinforced concrete, protective coating, solid waste management, combustion of contaminated fuels for useful heat, fire protection capability, and aircraft shelter systems design.

Duplication of Engineering Expertise

Chairman McClellan. Please explain how much duplication of engineering expertise would arise?

General DeLuca. Sir, it is Air Force policy to rely on contractors for service engineering support, specifically so we can avoid duplication of the facilities and capabilities of the contractors. Thus, so long as we can obtain satisfactory engineering services through contract channels, no Air Force capability will be established and no duplication of engineering expertise will exist.

Chairman McClellan. Proceed.

Contractual Civil Engineering Services

Increases and Decreases—Depot Operations

Significant increases

General DeLuca. Rental of ADPE equipment due to installation of computers for the Advance Logistics System, $14.5 million.

In-service engineering by contract for the MM III, F–111, RF–4C, A–7D, CH/HH–3, CH/HH–53 Program, $2.4 million.

Civil Engineering services by contract for investigational engineering studies, $2.2 million.

Significant decreases

Civilian personnel reduction of 3,086 civilian personnel spaces as offset by full year impact of the FY 73 pay raise, $16.1 million.

Supply and equipment requirements resulting from reduced activity, $6.6 million.

Procurement operations

Fiscal year:	*Millions*
1973	$79.0
1974	82.6
Change	+3.6

The funds for procurement operations include Prime Procurement and Contract Administration. The Prime Procurement function includes negotiation and award of contract, amendments, changes and terminations for the procurement of major electronic systems and follow-on spares for weapon systems. Contract Administration provides for the administration of prime and sub-contracts. It encompasses contract readjustment, property administration, pricing and financial analysis, contractor procurement evaluation, termination of contracts and quality assurance. This activity is a key function in the process of insuring that the Air Force receives what it pays for in quality, quantity, availability and timeliness at going prices.

Pay of the civilian work force of 5,266 requires 95% of the total request. There is a $3.6 million increase for the full year cost of the January 1, 1973, pay raise.

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Depot maintenance

Fiscal year:	*Millions*
1973	$1,096.7
1974	1,095.0
Change	−1.7

Depot maintenance funds are required for the repair, overhaul and modification of equipment that is beyond the repair capability of operational units. Depot level maintenance requires skills, facilities and equipment not available in field organizations. Maintenance is accomplished in depots and contractor industrial facilities or by specialized depot and contractor teams deployed to operational sites.

Depot maintenance is managed through the Depot Maintenance Industrial Fund (DMIF) to provide detailed and visible financial data of both organic and contractual depot maintenance activities to financial managers. Air Force O&M funds are used to purchase materiel and services from the DMIF. The work is performed either by an Air Force Depot (organic) or by private industry (contractor). The funding for purchases from the DMIF are categorized in Table 31. The purchases will average out to essentially the same level funding as in FY 73.

TABLE 31.—PURCHASES FROM DEPOT MAINTENANCE INDUSTRIAL FUND

[In millions of dollars]

	Fiscal year—		
	1973	1974	Change
Aircraft maintenance	230.3	266.9	+36.6
Missile maintenance	7.9	12.3	+4.4
Exchangeables	615.3	588.1	−27.2
Engine maintenance	156.0	148.6	−7.4
Area/base support, local manufacture	41.1	36.1	−5.0
Other major items	32.9	29.2	−3.7
Total	1,083.5	1,081.2	−2.3

In addition to the maintenance which will be procured from the Depot Maintenance Industrial Fund, funds are required for storage of aircraft, missiles and vehicles, to calibration programs, and for procurement of changes to technical data.

Revision of Aircraft Modification Schedule—F–4E

Chairman McClellan. Can't the current aircraft maintenance schedule be revised to shift some of the less critical work to future periods when the budget crunch may be less severe? For example, why is it necessary in 1974 to install two position hydraulically operated leading edge slats on the F–4E?

General DeLuca. Mr. Chairman, our efforts of the past three years have been oriented toward elimination or deferral of any aircraft work not essential to mission capability or airworthiness. The budget request for FY–74 reflects the results of these efforts; consequently, we believe that none of the work can be shifted to future periods. The leading edge slats modification for the F–4E will significantly improve combat performance, maneuvering and handling capability. This will allow the F–4E to counter the primary threat aircraft in several areas of the combat performance envelope. F–4E aircraft being produced at this time are equipped with the leading edge slats. The companion effort is to retrofit all other F–4Es on a priority basis, and to this end the procurement of modification kits was begun two years ago. Through FY–73, $80 million of aircraft modification funds has been invested in this program. The requested O&M funds are to install the kits being delivered from production during FY–74.

Aircraft Maintenance

Chairman McClellan. Proceed.

General DeLuca. The Air Force has continued efforts to reduce aircraft maintenance costs by extending the intervals for scheduled inspection and repair (IRAN). Since last year, the cyclic IRAN has been eliminated on the A–1, C–47, C–119, C–7, C–121, C–123, B–57, EB–66, F–101, T–28, T–33 and T–39. In addition,

an engineering review has been made with the objective of eliminating nonessential tasks from the IRAN work specifications. Emphasis has been placed on increasing the depth and scope of analytical condition inspections to improve knowledge of what the maintenance requirements are for each type of aircraft. The objective is to do only that work essential to maintaining safe and capable aircraft.

Some of the decreases in costs of depot maintenance for aircraft are offset by large increases for modifying B–52Gs and Hs and the F–4E. The installation of several modifications to modernize the B–52s will cause a peak workload in FY 74, costing $12.6 million more than the modification program in FY 73. These modifications include the Short Range Attack Missile (SRAM), Electro-Optical Viewing System, cartridge starters on all engines and improved ECM. Survivability, weapons load and penetration capability will be greatly improved when these modifications are installed.

The installation of a two-position, hydraulically-operated leading edge slat on the F–4E aircraft will significantly improve combat performance and maneuvering capability and high angle of attack handling characteristics. This modification has been given a very high priority by the Air Force and as a result, the installation will be virtually completed in 2 years, starting in FY 74. The cost for installing the slats in 275 aircraft in FY 74 is $21.5 million.

In October 1972, the Air Force began a project for replacing electrical connectors in 1,100 F/RF–4s. The full year cost in FY 74 represents an increase of $3.8 million over FY 73. Also, the initial IRAN cycle for the A–7D will begin in FY 74, in conjunction with the installation of the MAVERICK Missile, costing $5.5 million.

Engine Maintenance

The Air Force plans to overhaul less than 1,000 reciprocating engines in FY 74 as aircraft using reciprocating engines continue to phase out of the inventory. The funds requested are only one-third of the amount used in FY 70.

The trend is toward gas turbine jet engines even in ground equipment. The J–57 used in B–52s and KC–135s remains the largest engine overhaul cost, followed by the J–79 for the F–4. Other major engine programs are the J–85 for the T–38, T–56 used on C–130s, TF–30 for the F/FB–111, and the TF–41 for the A–7D.

During FY 74, the time between overhaul removal will be shorter on several series of the J–57 engines, the J–75 for the F–106, the J–79, the J–85, the T–56 and the TF–41, thus increasing the quantity to be overhauled per element of operation. On the other hand, the overhaul removal interval will increase on the TF–30, TF–33 and several other engines. These intervals are based on actuarial computations applied to the accumulated operating hours on in-use engines.

Area and Base Support

Area support is technical assistance given by the depots to the operating commands to assist them in doing a better maintenance job at base level. Base support is the field level maintenance support provided to tenant units assigned to the depot bases, such as the B–52 wing at Robins Air Force Base and the helicopter training unit at Hill Air Force Base. The funding requirement is $36.1 million in FY 74, $5 million less than in FY 73 because of reduced requirements for technical assistance to units in Southeast Asia.

Other Major Items

The funds required in this category, $29.2 million in FY 74 versus $32.9 million in FY 73, are to repair various types of specialized vehicles, construction equipment, a wide variety of aerospace ground equipment, materials handling equipment, flight simulators, and other training devices, fire fighting equipment, mobile radar sets and Ground Control Approach vans.

Missile Maintenance

For maintenance of in-service missiles, about 80 per cent of the funds are required for cyclic repair and update of the Minuteman weapon system. The balance is for rework requirements on various air-to-air and air-to-ground missiles, such as the Falcon, Sparrow, Sidewinder, Quail, Hound Dog, Standard ARM and Maverick.

EXCHANGEABLES

The largest single category in the Depot Maintenance program is the repair of exchangeables or recoverable items. Each year about four million such units are repaired, involving approximately 30,000 different items. Expressed in dollars, the Air Force has $4.7 billion invested in exchangeables. The value of annual issues to replace worn out items amounts to more than $13 billion for a yearly turnover of about 300 per cent. Approximately 96 per cent of the worn out items can be repaired and returned to service. The using commands repair 60 per cent of the reparable units, with the balance coming back to the depot for overhaul at a cost of about 15 per cent of their value.

Over the past several years, Air Force witnesses have discussed the management actions taken to reduce the range and quantity of spares in the inventory. The resulting improvements were achieved through better asset visibility and the shorter shipping times made possible by airlift. A basic premise for the reduction of stock levels was that reparable items would be repaired promptly. Reparable items are not being repaired at a rate that warranted the reduction in stock levels. The inventory in the repair cycle, which is unserviceable, was 33.2 per cent during FY 72, and this year it has risen to 37.5 per cent. The result is a very unsatisfactory support posture for the combat forces.

The depot fill rate for requisition is down to 46 per cent; the monthly backorders are up to 90,000; the dollar value of backorders exceeds $600 million. The aircraft and engines not operationally ready-supply (NORS) have continued to increase. The number of demands being met through cannibalization from other equipment and by lateral shipment from other bases has increased. Stock at bases and depots, including war reserve, have continued to decline as the overhaul program falls behind demand. The FY 74 estimate for the exchangeable program is based on a significant reduction in flying hours, offset in part by the overflow of reparables from Southeast Asia operations in FY 73 and the degraded stockage position overall. The request for this area is $588.1 million, and although down $27.2 million from FY 73, will provide for improving the support trend now being experienced.

Increases and decreases—Depot maintenance

Significant increases

For the assumption of funding responsibility for modification labor costs. These costs were funded in the aircraft and missile procurement appropriations during FY 73, $32.9 million.

For the first year of a 2-year program for modifying F–4E aircraft with leading edge slats, $21.5 million.

For modifications to B–52G and H aircraft. The modifications will improve mission effectiveness and involve the SRAM, the Electro-Optical Viewing System, cartridge starters and Phase VI ECM, $12.6 million.

For the initial A–7D cyclic maintenance program, $5.5 million.

For a full year program to replace electrical connectors in most of the F–4s. The program began in October 1972, $3.8 million.

Significant decreases

Exchangeable overhaul is reduced as the overall flying hour program decreases, $27.2 million.

Reduction as the T–39 rehabilitation is completed in early FY 74, $8.7 million.

Engine overhaul costs have also decreased, as flying hours have; the overhaul removal interval has decreased on many engines, $7.4 million.

Reduction of the C–135 modification workload, $5.1 million.

Area support to operating units decreased with the phasedown in SEA, $5 million.

Decrease follows completion of corrosion work on F–111s in FY 73, $4 million.

The requirement for overhaul of major end items is also less because of the phasedown in SEA, $3.7 million.

The maintenance program has decreased with the phasedown of the B–52D and F force which is an offset to the costs of the structural modification of 80 B–52Ds, $3.2 million.

Transportation

Fiscal year:	Millions
1973	$319.5
1974	240.5
Change	−79.0

Funds are required for commercial transportation from Air Force depots to forces in the U.S. and overseas. Transportation costs included are for commercial airlift between bases within the Continental United States; transportation to overseas bases via the Airlift Service and the Military Sealift Command; transportation of APO mail, and port handling and demurrage costs. Second destination transportation workload for FY 74 compared with FY 73 is shown in Table 32.

TABLE 32.—2D DESTINATION TRANSPORTATION WORKLOAD

	Fiscal year 1973	Fiscal year 1974	Change
Military Sealift Command:			
Measurement tons of cargo	2,390,115	1,499,056	−891,059
Measurement tons of stevedoring	2,000,507	1,152,689	−847,818
Military Airlift Command:			
Short tons of channel cargo	131,790	118,868	−12,922
Special assignment flying hours	7,852	5,551	−2,301
Ton miles of APO mail	178,788	170,168	−8,620
Commercial transportation:			
Short tons by surface	372,238	252,915	−119,323
LOGAIR plane miles	13,229,858	13,229,858	
Short-tons by air	3,524	3,426	−98

A $90.8 million decrease occurs in FY 74 because of reductions in the Air Force flying hour program and Southeast Asian activity. The decrease is offset by $11.8 million for the full year costs of transportation rate increases which became effective during FY 73.

Other logistics support activities

Fiscal year:	Millions
1973	$64.7
1974	65.3
Change	+.6

Funds for other logistics support activities are for the operation of the Air Force flight test facility at Palmdale, California; Air Force-wide printing requirements; payment to the Post Office for postage used in the Continental United States; payments to the Army for real estate management; and Bureau of Employee Compensation payments to injured Air Force civilian personnel.

Eastern test range

Fiscal year:	Millions
1973	82.0
1974	91.7
Change	+9.7

Funds are for the operation of the Eastern Test Range which provides trajectory measurement, telemetry, optical, range safety data processing and communications for ballistic missile and space launches from Cape Kennedy and the NASA Merritt Island Launch Area. Major operating stations are at six locations and on ten aircraft and three ships. Services are provided to NASA, Air Force, Navy, Army and other agencies. The funding requirements for the Eastern Test Range are shown in Table 33.

TABLE 33.—TYPES OF EASTERN TEST RANGE COSTS

[In millions of dollars]

	Fiscal year—		
	Fiscal year 1973	Fiscal year 1974	Change
ARIS ship operations		11.5	+11.5
Contract operation and maintenance	42.5	40.7	−1.8
Other direct operation and maintenance	39.5	39.5	
Total	82.0	91.7	+9.7

In FY 73, the Range Operation and Maintenance Contract was opened to competitive bid for the first time in 17 years. A new contract was awarded to the incumbents (Pan American and Radio Corporation of America, now in a joint venture rather than a prime/sub-contractor relationship) starting September 1, 1973. The full year impact of this contract will reduce FY 74 costs by $1.8 million.

Beginning in FY 74, funding for Advanced Range Instrumentation Ships (ARIS) ($11.5 million) will transfer from Major Force Program III to Major Force Program VII. The $11.5 million transfer for the support of ARIS, offset by the full year savings in the Range Operation and Maintenance Contract, produces a net increase of $9.7 million in the Program VII Eastern Test Range activity.

Major Force Program VIII

Training, Medical and Other General Personnel Activities

Major Force Program VIII provides for training, medical and other activities associated with personnel as individuals rather than as members of organizations. The funds provide for the individual training of members of the Regular Air Force, Air Force Reserve, Air Force Academy Cadets, AFROTC, and Air National Guard. Foreign students and students from other Services and Government organizations are included. This program also provides for recruiting activities and for overseas dependent schools. The medical portion provides medical care for active duty and retired military personnel, their dependents, dependents of deceased military and other recipients authorized by law.

The funding and manpower requirements are summarized in Tables 34 and 35.

TABLE 34.—TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES FUNDING

[In millions of dollars]

	Fiscal year—		
	1973	1974	Change
Training and other general personnel activities	513.1	565.4	+52.3
Medical	328.9	387.8	+58.9
Total	841.9	953.2	+111.3

TABLE 35.—TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES MANPOWER

	Fiscal year—		
	1973	1974	Change
Military	150,518	148,261	−2,257
Civilian	29,961	30,837	+876
Total	180,479	179,098	−1,381

The $111.3 million increase for FY 74 over FY 73 shown in Table 34 is approximately equally divided between the training and medical programs. Manpower

requirements overall will decrease and military spaces will be civilianized raising O&M while reducing military personnel funding requirements.

Specific categories of training and O&M costs are shown in Table 36.

TABLE 36.—COST BY CATEGORY OF TRAINING

[In millions of dollars]

	Fiscal year—		
	1973	1974	Change
Recruiting and examining	24.8	33.0	+8.2
Recruit and specialized training	77.9	79.4	+1.5
Flight training	84.7	89.1	+4.4
Professional training	26.0	32.6	+6.6
Training operations	219.4	245.4	+26.0
Service academy	26.6	27.8	+1.2
ROTC	13.3	14.4	+1.1
Overseas dependent schools	40.4	43.7	+3.3
Total	513.1	565.4	+52.3

FISCAL YEAR 1974 TRAINING INCREASE

Chairman McClellan. Why is training being increased in fiscal 1974?

General DeLuca. I will discuss each category of the Training Program in the order in which it is presented in Table 36.

The Recruiting and Examining program portion of the increase is $8,200,000. The funds are required for the advertising and recruiter services needed to reach authorized strengths now that the draft is no longer a motivating force.

An increase of $1,500,000 is required in the Specialized Training area for additional students who will enter the factory training program. Students in the program take courses at plants manufacturing new aircraft and equipment. The graduates then become either the nucleus of operational units receiving the new equipment or instructors in training courses to introduce the new equipment.

The Flight Training Program requires $4,400,000 of the increase. The pilot training syllabus has been increased from 192.5 to 210 jet flying hours on the basis of stated requirements by senior field commanders for improved pilot capabilities. Start up costs are also required for the phase in of the new T–43A jet navigator trainer.

Professional Training requires an increase of $6,600,000. Of this total, $5,200,000 is for the Armed Forces Health Professions Scholarship Program (P.L. 92–426). The program provides full scholarships for students accepted by accredited health professions institutions and was operational for only a part of FY 73. The increased funds are for a full year of operation.

There is an increase of $26,000,000 for Training Operations. Of the total, $4,700,000 is for a worldwide expansion of the voluntary off-duty education services program to encourage both enlistment and reenlistment in the Air Force, $1,000,000 is for increased utility rates, $1,100,000 is for equipment for new facilities, and $19,200,000 is for requirements which were deferred from fiscal year 73 as a result of the program and funding imbalance. The deferrals cannot be deferred again in FY 74 without substantial determination of valuable physical assets and a degradation in the quality of Air Force training.

The increase includes $1,200,000 for the Air Force Academy for the full year cost of the January 1973 civilian pay raise, increased utility rates, replacement equipment for classrooms and airman dormitories and maintenance and repair of facilities.

There is an additional $1,100,000 for the ROTC. The FY 74 program will have 40 additional Junior ROTC units. An increase in the average cost per scholarship student is also required in the Senior Program for tuition and book price increase.

An increase of $3,300,000 is requested in the Overseas Dependent Schools Program for pay raises and the implementation of a vocational education program in overseas schools.

Chairman McClellan. Proceed.

General DeLuca. 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 74 are shown in Table 37.

TABLE 37

AIR FORCE TRAINING INSTALLATIONS

Recruit/specialized training bases	5
Pilot training bases	10
Navigator training bases	1
Professional training bases	2
Academy	1

The undergraduate pilot training base at Laredo AFB, Texas will begin phasing out in FY 74. When the phase out is completed by FY 76, the net O&M savings will be $4.9 million.

Recruiting and examining

Fiscal year:	*Millions*
1973	$24.8
1974	33.0
Change	+8.2

The USAF Recruiting Service is responsible for recruiting all enlisted personnel entering the active Air Force. The airmen non-prior service recruiting objective for FY 74 is 73,361; the FY 73 objective was 96,529. The increase in O&M funds is for advertising and recruiter services needed to attain manpower strengths without the motivation of the draft. Although the Air Force has not drafted personnel, it is estimated that about 23% of enlistments in CY 72 were draft-motivated. The elimination of the draft for the first time since 1948 will increase the open market competition for recruits with the requisite quality to meet Air Force-wide commitments in sufficient numbers.

Recruit and specialized training

Fiscal year:	*Millions*
1973	77.9
1974	79.4
Change	+1.5

All new enlistees receive a six-week recruit training course at Lackland plus screening and testing for future assignments. Following recruit training, approximately 90% are selected for one of the five Technical Training Centers for further specialized training in a particular career field. Courses range in length from five to 52 weeks, the average being 15 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. The training program is 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.

Tables 38 compares FY 73 and FY 74 student loads, or average number of students, in training at one time. The active forces student load will decrease in FY 74 because of reduced personnel accessions, offset by increased costs for factory training in support of new aircraft and weapons systems, such as the F–15 and the Short Range Attack Missile (SRAM).

TABLE 38
BASIC MILITARY AND TECHNICAL TRAINING LOADS

	FY 73	FY 74	Change
Basic Military Training			
Regular AF	12,288	9,343	-2,945
ANG	1,019	1,079	+ 60
Reserve	317	414	+ 97
Total	13,624	10,836	-2,788
chool of Military Science (Officer)			
Regular AF	820	696	- 124
ANG	14	7	- 7
Reserve	20	86	+ 66
Total	854	789	- 65
Basic Technical Training			
Regular AF (Airmen)	22,174	18,869	-3,305
Regular AF (Officers)	1,050	1,194	+ 144
ANG (Airmen & Officers)	1,782	2,000	+ 218
Reserve (Airmen & Officers)	245	334	+ 89
MAP	402	335	- 67
Other	223	177	- 46
Total	25,876	22,909	-2,967
Advanced Technical Training			
Regular AF (Amn, Off, Civ)	4,695	5,118	+ 423
ANG (Airmen & Officers)	109	79	- 30
Reserve (Refresher & Other)	45	34	- 11
MAP	201	208	+ 7
Other	581	452	- 129
Total	5,631	5,891	+ 260

Flight training

Fiscal year:	*Millions*
1973	$84.7
1974	89.1
Change	+4.4

Funds are required for the undergraduate training of pilots and navigators, selected advanced and specialized courses such as electronic warfare officer and instructor pilot and instructor navigator courses.

The increase of $4.4 million results from the return to the 210 hour program and startup costs for the T–43A. In FY 71 the Air Force, on an experimental basis, reduced the undergraduate pilot training course syllabus from 210 hours to 192.5 hours. Based upon evaluations of the resulting pilot graduates, the syllabus was reinstated to 210 flying hours per student in FY 73.

The Air Force will start phasing in the first of 19 T–43A aircraft for the Undergraduate Navigator Training System during FY 74. This aircraft, when incorporated into a revised undergraduate flying training program in FY 75, will enable the Air Force to reduce the navigator training flying hour program from 186 flying hours to 145 flying hours per student and the course length from 36 to 33 weeks.

Undergraduate navigator production for the active force is programmed to remain at the 1,300 level in FY 74. To meet the Air Force Reserve requirements, undergraduate navigator production will be increased from five in FY 73 to 20 in FY 74.

Programmed undergraduate jet pilot production for the active force for FY 74 is 2,565; a reduction of 310 from FY 73. The Army will continue to train Air Force helicopter pilots, both undergraduate and conversion type training. The Air Force must temporarily continue the latter training to maintain operational experience in the field. Conversion helicopter production in FY 74 is programmed to be 24 versus 32 in FY 73. The undergraduate program will drop from the FY 73 level of 225 to an FY 74 production of 150.

The Air National Guard requirements for jet pilot production decreases from 280 in FY 73 to 200 pilots in FY 74. The Air Force Reserve production will remain at the FY 73 level of 150 pilots.

The flight training program is summarized in Table 39.

TABLE 39
UNDERGRADUATE FLYING TRAINING
STUDENT OUTPUT

	FY 73	FY 74	Change
Pilot Training			
USAF	2,875	2,565	- 310
German Air Force	65	65	-
MAP	242	277	+ 35
FWMAF (Jet)	150	181	+ 31
FWMAF (Prop)	152	-	- 152
ANG	280	200	- 80
AFRES	150	150	-
Total	3,914	3,438	- 476
Navigator Training			
USAF	1,300	1,300	-
MAP	50	68	+ 18
ANG	54	54	-
AFRES	5	20	+ 15
FWMAF	0	2	+ 2
Total	1,409	1,444	+ 35
Advanced & Specialized Flying Training			
Specialized Flying (Pilot)	1,381	1,395	+ 14
Advanced Navigator	484	406	- 78
Specialized Flying (Nav)	392	412	+ 20
AFA Flight Indoctrination	631	714	+ 83
Total	2,888	2,927	+ 39
Helicopter Tng			
Undergraduate	225	150	- 75
Conversion	32	24	- 8
Total	257	174	- 83
Survival Training	26,219	26,182	- 37
Total Tng	34,687	34,165	- 522

Professional training

Fiscal year:	Millions
1973	$26.0
1974	32.6
Change	+6.6

Air Force professional education is the mission of the Air University with headquarters at Maxwell AFB, Alabama. The Air University is the professional education center of the Air Force. Its responsibilities include resident schools for professional military training, the Air Force Institute of Technology program at Wright-Patterson Air Force Base, Ohio, and non-resident schools in civilian colleges throughout the country. The Extension Course Institute at Gunter Air Force Base, Alabama provides correspondence training in professional Air Force military education directed towards reaching additional personnel.

Medical and dental training is conducted at Brooks Air Force Base in Texas and at various Air Force hospitals and civilian institutions throughout the country. Included are two new programs designed to obtain better qualified medical personnel for the Air Force. First, the Armed Forces Health Professions Scholarship Program (P.L. 92–426) which provides full scholarships for students accepted by accredited health professional schools. Participants in the program will be commissioned as second lieutenants in the Air Force Reserve and detailed as students at accredited civilian institutions. Second, is the Student Nurse Financial Assistance Program. Qualified applicants are third or fourth year students accepted by or attending an accredited institution leading to a baccalaureate degree in nursing, Applicants are enlisted in airmen status as E–3s until certification as registered nurses at which time they are commissioned first lieutenants in the Air Force Nurse Corps.

The graduate education program of the Air Force is based upon requirements, identified on manpower data files of Air Force organizations. The Air Force manages this program through an Advanced Academic Degree Management System outlined in Air Force Manual 36–19. This manual prescribes how the Air Force determines and validates graduate requirements, how the graduate program is determined through inventory versus requirement comparison, how students are selected and how the graduates are utilized.

Requirements are determined by coordinated action, review and validation involving all levels of the Air Force. The process begins with a desk-by-desk audit of supervisors Air Force-wide and ends with final validation by an Air Staff functional manager and the Air Force Education Requirements Board. Guidelines stated in the manual standardize the requirements in 16 functional areas and provide guidance to assist supervisors in making semiannual requirement determinations. The 11,754 graduate degree requirements were validated by the Education Requirements Board in 1972.

Graduates of graduate degree programs are assigned to positions requiring their degrees. The objective is 100 percent utilization upon graduation and follow-on assignments wherever possible in concert with career progression patterns.

Professional military education (PME) is continually re-evaluated 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.

In FY 72 the Air Force conducted a position by position analysis of all line field grade officer positions to identify and validate those positions having a priority requirement for PME school graduates. Air Force functional managers furnished guidelines to assist position supervisors in identifying positions requiring PME school graduates. Approved requirements were forwarded for review through both functional manager and command channels to the Air Force Education Requirements Board for final review and validation. The Board validated 8,259 intermediate position requirements and 4,855 senior position requirements. These requirements equate to a need for 1,101 intermediate school graduates annually and 571 senior school requirements annually.

Tables 40 summarizes professional training student loads.

TABLE 40.—PROFESSIONAL TRAINING STUDENT LOADS

	Fiscal year—		
	1973	1974	Change
Professional military schools	2,194	2,196	+2
AFIT resident schools/courses	1,197	1,207	+10
Specialized schools	316	351	+35
Total service schools	(3,707)	(3,754)	(+47)
Civilian institutions	2,510	2,790	+280
Medical training	1,878	3,508	+1,630
Total	8,095	10,052	+1,957

The increase in the medical training program is the result of Public Law 92–426 which provides for the establishment, and maintenance of an Armed Forces Health Professions Scholarship program to obtain adequate numbers of commissioned officers on active duty who are qualified in the health professions.

Training operations

Fiscal year:	*Millions*
1973	$219.4
1974	245.4
Change	+26.0

The Air Training Command operates sixteen Air Force training installations and the Air University two installations. The training operations activity funds the operation and maintenance of these installations including the training and Air University Command headquarters. The program activity also includes funds for off duty education of personnel throughout the Air Force. The increase over FY 1973 is partially the result of depressed FY 73 requirements which account for $19.2 million of the $26.0 million difference.

A $4.7 million increase in FY 74 is for an expansion of the off duty education program. This program provides academic and technical/occupational adult educational opportunities to Air Force members. Programs are conducted for eligible personnel from the elementary level through graduate university studies to enable individuals to further develop academic occupational, professional and personal capabilities.

Equipment for new facilities required for new airmen dormitories at Lowry AFB, Keesler AFB, and a retraining group complex accounts for the $1.1 million remaining increase in FY 74 over FY 73.

Air Force Academy

Fiscal year:	*Millions*
1973	26.6
1974	27.8
Change	+1.2

The enrollment, manyears and funding requirements of the Air Force Academy remain essentially stable in FY 74 as compared to FY 73. The pertinent data are summarized in Table 41.

TABLE 41.—AIR FORCE ACADEMY DATA

	Fiscal year—	
	1973	1974
Beginning fiscal year cadet population	4,390	4,417
Attrition	671	675
Cadet graduations	850	825
Cadet entries	1,548	1,500
End fiscal year cadet population	4,417	4,417
Cadet man-years	4,184	4,184

The O&M funding increase of $1.2 million is because of the civilian pay raises; utility rate increases; maintenance and repair of facilities; and the replacement of equipment in classrooms and dormitories.

Reserve Officer Training Corps

Fiscal year:	*Millions*
1973	$13.3
1974	14.4
Change	+1.1

The Air Force Reserve Officer Training Corps includes Senior and Junior ROTC programs. The Senior program has a two-year and a 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 4 week summer camp also before the junior year. Public Law 92–166 authorizes the Air Force to grant 6500 ROTC students financial assistance. The Senior program is essentially stable as shown by the summary data in Table 42. A $.4 million increase in the Senior program is the result of increases in the cost of textbooks and tuition.

TABLE 42.—SENIOR ROTC DATA

	Fiscal year 1973	Fiscal year 1974	Change
AFROTC detachments	184	172	−2
Graduates commissioned	3,844	3,486	−358
Average student enrollment	21,498	21,955	+457
Number of cadets to enter flight instruction program	1,850	1,850	
Number of cadets to summer training camp:			
4 weeks	3,643	3,479	−164
6 weeks	1,521	1,472	−49
Number of financial grants awarded	6,500	6,500	
Funds (millions)	$10.5	$10.9	+$0.4

Chairman McClellan. To what is the average student enrollment increase attributed? How will this increase ultimately lessen recruitment costs, if any?

General Lewis. The increase in enrollment is based on the results of changes in national and campus attitudes, and on our intensified recruiting program for AFROTC. The personnel assigned to ROTC units have redoubled their efforts to attract candidates from the high schools and junior colleges. Their efforts have been supplemented by advertising in national and campus publications. The withdrawal of our troops from Vietnam has resulted in a generally improved attitude toward the military on campus, both among students and faculty groups. The end of the draft has been a strong offsetting factor for ROTC enrollments and no decrease in recruitment costs is predicted.

JUNIOR ROTC

Chairman McClellan. Proceed.

General DeLuca. The ROTC program also includes Junior ROTC units. A total of 275 are authorized compared to 235 in FY 73. Junior ROTC data are summarized in Table 43.

TABLE 43.—JUNIOR ROTC DATA

	Fiscal year 1973	Fiscal year 1974	Change
Number of schools participating	235	275	+40
Average student enrollment	25,234	30,234	+5,000
Funds (millions)	$2.8	$3.5	+$0.7

Overseas dependent schools:

Fiscal year:	*Millions*
1973	$40.4
1974	43.7
Change	+3.3

The Air Force is responsible for the education of all Department of Defense dependents in the Pacific area. There are 62 schools with a student enrollment of 36,450 students. In addition approximately 4,900 students will attend non-DOD operated schools. The funding requirement increase is because of civilian pay raises, the implementation of a vocational education program designed to offer the student the opportunity to acquire occupational skills, employment of additional teachers and increased transportation costs.

INCREASES AND DECREASES—TRAINING AND OTHER GENERAL PERSONNEL ACTIVITIES

Significant increases

To provide the recruiter in the field assistance needed to attain an all-volunteer force, $8.2 million.

ASSISTANCE FOR RECRUITERS

Chairman MCCLELLAN. What specific assistance will the recruiter receive?

General LEWIS. The recruiters will receive assistance from increased advertising programs. The programs will emphasize the recruitment of medical professionals and minorities as well as information common to all services on the values of a military career. A commercial advertising agency will produce most of the art and printing, develop radio and television scripts and films, and place advertisements in magazines and periodicals.

The new Armed Services Vocational Aptitude Battery (ASVAB) is planned for use during FY 74. It is a single test which combines the qualification tests and the vocational aptitude batteries now being administered by recruiting personnel. The ASVAB will be used by all of the services and will greatly simplify the job of the recruiter.

Chairman MCCLELLAN. Proceed.

General DELUCA [continuing].

Factory training in support of new aircraft and weapons systems, $1.5 million.

Increased jet flying hours in undergraduate flying training program and phase in of T–43A aircraft, $4.4 million.

Expansion of medical training programs, $5.2 million.

Additional 40 schools scheduled to enter the Junior ROTC Program in FY 74, $0.7 million.

Increased tuition and text book costs at universities participating in the Senior ROTC Program, $0.4 million.

Addition of vocational education program in overseas dependent schools, $1.3 million.

Expansion of the off-duty education services program under Project Volunteer, $4.7 million.

Deferral of requirements from FY 73, $19.2 million.

DEFERRED FISCAL YEAR 1973 REQUIREMENTS

Chairman MCCLELLAN. What requirements were deferred from fiscal 1973?

General DELUCA. The fiscal year 1973 fund shortage caused the deferral of facility maintenance and repair projects by contract, such as repair of taxiways, resurfacing streets, replacement of roofs and guttering, and the repair of termite damage; contractual services such as water and POL tank cleaning and inspection and calibration of utilities systems controls; civil engineering supplies and equipment required to replenish depleted bench stock levels; and operating supplies and equipment in support of eighteen installations.

Chairman MCCLELLAN. Proceed.

MEDICAL PROGRAM

	Fiscal year 1973	Fiscal year 1974	Change
Medical	$328.9	$387.8	+$58.9
Air Force	173.4	186.1	+12.7
CHAMPUS	155.5	201.7	+46.2

General DeLuca. The major elements of this program provide for:

Operation of 108 hospitals and attendant community health services in FY 73 and 103 in FY 74.

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.

Health services for handicapped independents of active duty military personnel from civilian sources.

Identification and rehabilitation of personnel with drug and alcohol problems.

Aeromedical evacuation for all DOD forces to include operation of 6 Aeromedical Staging Units.

Decreases in active duty Air Force personnel and dependents are more than offset by increases in the number of retired, their dependents and dependents of deceased military personnel.

This increasing population, and the rising costs of medical services continue to result in year-to-year increased dollar requirements.

Medical workload data are summarized in Table 44.

TABLE 44.—MEDICAL WORKLOAD DATA

	Fiscal year 1973	Fiscal year 1974	Change
Hospital admissions (thousands):			
AF hospitals	298	286	−12
Civilian hospitals (CHAMPUS)	148	171	+23
Average daily patient load (ADPL):			
AF hospitals	6,100	5,823	−277
Civilian hospitals (CHAMPUS)	3,863	4,442	+579
Outpatient visits (thousands): AF hospitals (including dental)	31,142	31,794	+652

In-patient workload in Air Force hospitals continues to decline because of decrease in active duty strength, increased emphasis on treating patients on an outpatient basis, and a decrease in average length of hospital stay. The in-patient workload decline is confirmed by a 5% decrease in average bed occupancy and a 4% decrease in hospital admissions. At the same time there is a significant increase in the inpatient workload performed under the Civilian Health and Medical Programs of the Uniformed Services (CHAMPUS) auspices. This increase is because of the increasing numbers eligible for CHAMPUS benefits. The average length of CHAMPUS hospital stay is higher than in Air Force hospitals and is because of relatively long term care of chronically ill patients.

The Dependents Medical Care Act of 1956 authorized payment for all in-patient and limited outpatient medical care provided in civilian facilities and by civilian physicians for dependents of active duty military personnel. PL 89-614, enacted September 30, 1966, expanded the benefits by providing for expanded outpatient medical care and care for physically handicapped and certain mentally retarded dependents of active duty military personnel, and by providing for payment for inpatient and outpatient medical care for retired members and their dependents, as well as for dependents of deceased members.

In 1969, the House Armed Services Committee investigated the degree to which eligible personnel were aware of and using the CHAMPUS benefits available to them. It was determined that a lack of knowledge of this program by eligible personnel prevailed, and the Department of Defense was instructed to intensify the publicity given to the CHAMPUS Program. This was accomplished by sending a brochure on the CHAMPUS Program to each retiree and the continued use of all public information programs available at military bases (base newspapers, commanders call, hospital waiting rooms, and base radio stations).

The use of the CHAMPUS Program has sharply increased—first, because of the increasing awareness of available benefits by members, former members and dependents and second, the continuing increase in the number of personnel eligible. Table 45 compares the growth in the number of eligible personnel.

TABLE 45.—PERSONNEL ELIGIBLE FOR CHAMPUS

	Active duty dependents	Retired servicemen	Dependents of retired members	Total
Fiscal year:				
1970	1,381,866	226,671	516,043	2,124,580
1971	1,355,241	253,607	575,395	2,184,243
1972	1,312,765	283,405	647,138	2,243,308
1973	1,258,362	321,932	715,214	2,295,508
1974	1,202,514	350,616	776,402	2,329,532

INCREASES AND DECREASES—MEDICAL

Significant increases

The increase results from growth in population of retired military personnel and their dependents who become eligible for Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) benefits, and increased use of the CHAMPUS by all eligible beneficiaries, and the rising costs of civilian medical care, $46.2 million.

PERSONS ELIGIBLE FOR CHAMPUS AND COST

Chairman MCCLELLAN. Please provide the subcommittee with a chart showing the numbers of persons eligible for each fiscal year since 1964—projected through 1980—together with the cost of such health and medical service?

General DELUCA. We will be glad to do so.

[The chart follows:]

	Persons eligible	Cost (million)
Fiscal year:		
1964	1,883,590	$24.4
1965	2,002,767	22.3
1966	2,052,228	20.9
1967	2,057,682	26.4
1968	2,096,533	41.9
1969	2,164,154	58.7
1970	2,124,580	73.0
1971	2,184,243	97.2
1972	2,243,308	118.8
1973	2,295,508	155.5
1974	2,329,532	201.7
1975	2,340,314	229.6
1976	2,359,934	250.1
1977	2,410,884	280.0
1978	2,446,646	309.8
1979	2,494,251	339.8
1980	2,543,468	370.8

Increases in medical supply prices, $6.2 million.

Increase of 183 civilian employee man-years and full year costs of FY 73 pay raises, $4.1 million.

Equipment for modernization and replacement and initial outfitting of new facilities, $1.6 million.

Travel for certification and license of airmen specialists and technicians and training of professional personnel, $1.5 million.

Significant decrease

Aeromedical Activities based on reduced operations of SEA phase down, $1.1 million.

MAJOR FORCE PROGRAM IX

ADMINISTRATION AND ASSOCIATED ACTIVITIES

The FY 74 requirement of $217.1 million for administration and associated activities is an increase of $12.9 million over the FY 73 level of $204.2 million. The funds are required for the purposes summarized in Table 46.

TABLE 46

ADMINISTRATION AND ASSOCIATED ACTIVITIES FUNDING

[$ Millions]

	Fiscal year—		
	1973	1974	Change
Departmental headquarters	$51.5	$52.2	+$0.8
Field headquarters and activities	77.6	86.6	+9.0
Servicewide support	63.3	66.2	+2.9
Other support activities	11.9	12.1	+.2
Total	204.2	217.1	+12.9

Three-fourths of the funds required by this program are for civilian personnel pay. Table 47 compares the FY 73 and FY 74 manpower end strengths.

TABLE 47

ADMINISTRATION AND ASSOCIATED ACTIVITIES MANPOWER

	Fiscal year—		
	1973	1974	Change
Military personnel	19,258	16,986	−2,272
Civilian personnel	11,439	11,205	−234
Total	30,697	28,191	−2,506

The military strength decrease includes a transfer of 1,667 Air Force spaces for Supreme Headquarters Allied Powers Europe to Major Force Program X. Other military decreases are the result of the phase down in SEA and military to civilian conversions. The FY 74 civilian end strength includes 84 military positions which were converted to civilian.

DEPARTMENTAL HEADQUARTERS

Funds are included for the operation of the Headquarters of the Air Force. These offices in Washington 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 2,471 in FY 74 down 89 from 2,560 in FY 73. Fund requirements for civilian pay will increase slightly ($396,000) as a result of the pay raise. GSA labor, guard services and other costs also increase slightly ($360,000) accounting for the $0.8 million increase.

FIELD HEADQUARTERS AND ACTIVITIES

Funds are required for the operation of the USAF Southern Command at Albrook AFB and Howard AFB in the Panama Canal Zone; 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.

Civilian personnel end strengths have also been reduced in these activities. The FY 74 civilian end strength will be 4,937 down 93 from 5,030 in FY 73. Military end strengths reduce 1,871 spaces from 7,975 in FY 73 to 6,104 in FY 74. Fund requirements for civilian pay increase $4.8 million because of pay increases notwithstanding the reduced end strength.

At the Accounting and Finance Center, civilian personnel requirements of the Joint Uniform Military Pay System (JUMPS) will increase. The increase is necessary because of the previously recognized requirement to manually process data during the conversion period while familiarity with the system is being gained. The necessary civilian manpower was phased in during FY 73. The FY 74 requirement will be 342 spaces requiring $3.2 million. These personnel will insure a smooth transition to JUMPS as more personnel and bases are converted to the new system. Numerous inquiries and rejected transactions occur because of unfamiliarity with the new system. These inquiries and rejects must be manually reviewed and processed. In many cases, inquiries can be processed automatically through JUMPS without human intervention. Correspondents are informed of this capability when answers are furnished.

As familiarity with the system increases at a converted base, manual processing requirements decrease. When the system is fully operational, the manpower savings will be 713 spaces. In addition, the system will provide prompt, accurate payments, leave and earnings statements and timely management reports. Substantial cost savings will accrue as a result of reductions in errors; elimination of overpayments; fewer individual checks by increased use of checks to banks; elimination of necessity to close out and manually transfer pay records each time an individual transfers; reduction in claims; and more detailed and continuous audits.

The Survivor Benefits Program, Public Law 94–425 increased the workload of the Military Personnel Center and the Air Force Accounting and Finance Center by 52 man-years because the participation of eligibles is expected to rise to 80 percent as compared to 18 percent under the previous Retired Servicemen's Family Protection Plan.

System software conversion for the World-Wide Military Command and Control System (WWMCCS) requires $.9 million to convert approximately 600 existing programs to the standard system at Headquarters USAF.

The data base for the program Legal Information Through Electronics (LITE) will be expanded ($.4 million) to complete the automated file of decisions rendered by the Supreme Court and the Board of Contract Appeals.

Also included is $.3 million for full year funding of equipment installed in FY 73 at the Air Force Accounting and Finance Center to provide the operational configuration for the implementation of JUMPS.

An additional $1.5 million is required for the Data Automation Agency to finance full year costs for an IBM 360/75 at the Data Services Center, leased components and maintenance for a government owned IBM 360/65 at the San Antonio Data Services Center initial funding for the Multiplexed Information and Computing System (MULTICS) primarily to provide unique capabilities in support of the Office of the assistant Secretary of Defense (Systems Analysis), and installation of remote equipment for Air Staff agencies. A $.4 million increase in site preparation costs is associated with installation of equipment at the Pentagon.

Service-Wide Support

Service-wide support funds are for the operation of the Air Force Inspection and Safety Center, Air Force Audit Agency, the Air Force Military Personnel Center, the Postal and Courier Service, the Air Force Intelligence Service, and the Civil Air Patrol.

Civilian manpower for these activities has decreased 54 spaces from 3,284 in FY 73 to 3,230 in FY 74. The civilian employee pay increase offsets the reduction for a net increase of $1.2 million.

The installation of computers at the Military Personnel Center for the Advanced Personnel Data System and MICROFORM increases funding requirements $1 million. The Advanced Personnel Data System is an improved computer system to assist in better personnel (both military and civilian) management of the active and reserve forces. MICROFORM is a data system that is used to reduce hard-copy master personnel record documents to microfilm, with a computerized storage and retrieval capability.

A third management improvement through data automation funded in this activity is the Air Force Audit Agency Control System (AUDGEN Central). This improvement requires $.1 million in FY 74. It will provide the Air Force Audit Agency with the planning and scheduling information for a reduced force of auditors through remote access devices to a data bank maintained on a central computer.

Other Support Activities

The funds are for the Headquarters Audio-Visual Activities and for the USAF Band. The total includes $.5 million to provide the Secretary of the Air Force with flexibility to meet emergency or extraordinary situations.

Major Force Program X

Support of Other Nations

A total of $352.0 million is requested in FY 74 for operational, logistical and training support of Vietnamese and Lao forces in Southeast Asia; 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 and Missions (MAAGs) in Europe, the Pacific and South America.

VIETNAM

Over the past three years, the U.S. Air Force has provided additional aircraft to the VNAF so Vietnam could better assume responsibility for its own defense. This force structure has been developed by a series of improvement and modernization efforts. In June 1970, the Secretary of Defense approved a Consolidated RVNAF Improvement and Modernization Program (CRIMP) to provide aircraft to build the VNAF from a 22 squadron force of 481 UE aircraft to a 51 squadron force of 1,317 UE aircraft. This objective was to be achieved by FY 4/74. In May of 1972, Project Enhance modified the original CRIMP to provide an expanded force by FY 2/75. Project Enhance Plus provided for further force changes which will be accomplished by FY 3/74. The VNAF aircraft inventory will consist of those aircraft which the Air Force supports through the Military Assistance Service Funded (MASF) program.

VNAF requirements decrease $57.7 million because of the one-time costs incurred during FY 73 for the accelerated delivery of aircraft and equipment to the VNAF. In FY 74 contract support is also reduced as VNAF capability increases.

LAOS

The Lao Air Force is also supported by the MASF program. Total squadrons remain at the FY 73 level. Changes in force structure are programed in FY 74. The Air Force funds are for POL, maintenance, and supply support of these aircraft.

Laos requirements decrease $5.4 million because of a decrease in flying hours; the completion of 0–1 aircraft modifications during FY 73; and a reduction in T–28 aircraft modifications required in FY 74.

INTERNATIONAL MILITARY HEADQUARTERS AND AGENCIES

The Air Force support of NATO, CENTO, SEATO, and SHAPE military headquarters funded in this program increases $500 thousand because military and civilian spaces and support costs for SHAPE have been transferred from Major Force Program IX—Administration and Associated Activities. These spaces are more properly categorized as support of other nations rather than general administration.

MILITARY ASSISTANCE ADVISORY GROUPS AND MISSIONS

The MAAGs and Missions will decrease by 2,442 military and six civilians during FY 74. The O&M funding requirement in Program X is larger by $2.9 million in FY 74 as compared to FY 73 because MAAG and Mission funding for civilian personnel has been consolidated in this program.

SUMMARY

In summary, the Operations and Maintenance requirements of the Air Force during FY 74 total $6.589 billion. This requirement has been stringently reviewed by the Air Force, OSD and OMB. The process began in January 1972 and has been continuous since that time. The funding is the minimum needed to pay for the Operation and Maintenance of the Air Force program described in the budget. It is important that if adjustments are necessary, they be made in both program and funding to maintain the proper balance between responsibilities and resources.

The FY 73 O&M program is still not in balance. Approval of the pending reprograming and supplementals is essential to meet non-deferrable FY 73 requirements.

Mr. Chairman, this completes the formal statement of the Air Force O and M requirements and we are ready to answer your questions.

AIR FORCE REVOLVING FUNDS

Chairman MCCLELLAN. As is customary, we shall provide at this point in the record a statement on the Air Force Stock Funds and the Air Force Industrial Fund as submitted by Lt. Gen. William W. Snavely, Deputy Chief of Staff for Systems and Logistics.

[The statement follows:]

STATEMENT OF LIEUTENANT GENERAL WILLIAM W. SNAVELY

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

STOCK FUND

The Air Force Stock Fund is used for effective financial and supply management of specified consumable expense type stocks. The coverage of this fund remains essentially the same as in past years.

There are seven management divisions in the fund:

-- Clothing Store
-- Commissary
-- Fuels
-- Academy Cadet Store
-- Medical-Dental
-- General Support
-- Systems Support

The Stock Fund facilitates the development of requirements, the execution of the procurement process, and the management of storage and issue, as a common function for the entire Air Force. Charges to the using Air Force program to reimburse the Stock Fund records expenses as they are incurred.

PROGRAM REQUIREMENTS

Program levels are determined by the sales program, which is based upon meeting customer requirements. For example, the number of hours in the Air Force flying hour program is the key factor in setting the level of operations in the aviation fuels category of the Fuels Division of the stock fund. The hours flown by each aircraft, multiplied by the consumption rate, determine the amount of fuel required for the aircraft. Total fuel required, multiplied by a standard price, provides a calculation of the dollar value of projected sales from the stock fund.

Using sales requirements, inventory positions are determined to assure satisfactory logistical support for normal peacetime operations. However, operating inventories are maintained at

levels required for emergency demands. A war readiness material (WRM) requirement is established based on stocks needed to support approved war plans. For example the FY 1974 aviation fuel WRM requirement is $138.2 million.

PLANNED FINANCIAL OPERATIONS

Tables I and II showing actual and planned operations are shown below:

TABLE I
AIR FORCE STOCK FUND
Sales, Inventory, and Procurement
(In Millions)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Total Sales	$3,104.1	$3,140.1	$3,176.2
Total Procurement	3,006.6	3,060.6	3,051.3
Total Inventories	1,864.0	1,734.2	1,749.2

The increases in sales are basically in the Commissary Division and are because of increased cost of goods, improved sales and warehouse facilities, increased store hours and increased line item authorizations. Offsetting reductions accrue in other divisions resulting from reductions in Air Force Programs.

Inventory reductions since FY 1972 are a result of continuing evaluation of retention policy.

The actual FY 1972 and projected FY 1973 financial condition of the Air Force Stock Fund is shown in Table II.

As shown in Table II the FY 1973 estimate projects a net cash increase of $33.3 million in FY 1973 and an additional $135.3 million in FY 1974. Inventory fluctuations in response to changing requirements, changes in scope of operations and supply management result in capital drawn down or the generation of cash. The FY 1974 cash balance of $202.7 million is approximately $8.0 million above the desired cash level recommended by the Department of Defense.

TABLE II
DEPARTMENT OF THE AIR FORCE
Air Force Stock Fund
Statement of Financial Condition
(In Millions)

	June 30, 1972 Actual	June 30, 1973 Estimate	June 30, 1974 Estimate
Assets:			
Cash with Treasury	$ 34.1	$ 67.4	$ 202.7
Accounts Receivable	209.7	118.6	98.3
Inventories:			
Operating and Other	997.9	973.2	951.7
War Readiness	162.9	175.1	175.3
Long Supply	703.2	585.9	622.2
Total Inventories	1,864.0	1,734.2	1,749.2
Other Assets	31.1	41.0	40.5
Total Assets	2,138.9	1,961.2	2,090.7
Liabilities:			
Accounts Payable	291.2	302.0	353.9
Other Liabilities	(84.4)	(87.3)	(90.2)
Total Liabilities	206.8	214.7	263.7
Government Investment:			
Cash Authorization	(885.7)	(1,047.2)	(1,047.2)
Capitalized Inventories	2,830.2	2,770.0	2,767.5
Operating Results	(12.4)	23.7	106.7
Total Government Investment	1,932.1	1,746.5	1,827.0
Total Liabilities and Government Investment	2,138.9	1,961.2	2,090.7

Table II also shows total assets remaining somewhat constant for the three year period. During FY 1973 total assets decrease slightly due to the decline in inventory and accounts receivable. The net cash on hand increase resulting from the decline of these accounts, after considering the programmed cash transfer of $161.5 million, is $33.3 million. The increase in FY 1974 assets is attributed to the increase in cash.

The total government investment decreases $105.1 million over the three year period. Cash authorization declines by the amount of the programmed cash transfer of $161.5 million. Capitalized inventories decline $62.7 million during the same period due to item responsibility transfers. These reductions in government investment are offset by an operating result increase of a $119.1 million caused by better use of long supply assets.

AREAS OF ACTIVITY

Clothing Store Division. Uniform clothing items are sold directly to military personnel on a cash basis. Initial sales at the time of enlistment are charged against a credit established on the enlistee's pay record. Subsequently, each airman receives a cash monthly maintenance allowance for replacement items he needs. Revenue for the Clothing Store Division in FY 1974 is estimated at $36.6 million and total inventory at $9.7 million. Operating stocks of $7.6 million represent a turnover rate of 4.8 which, because of the required stocking of back-up sizes, is quite satisfactory.

Commissary Division. Perishable and non-perishable subsistence items are included in the Commissary Division. Food sales are of two types -- troop feeding, with charges against the Military Personnel appropriation, and sales to authorized individual customers from commissary stores on a cash basis. Total revenue in FY 1974 is estimated at $1,136.0 million and

total inventory at $98.0 million. Based on operating stocks of $84.8 million, the turnover is 14.3.

Fuels Division. Aviation and missile fuels and related items are issued to and resulting charges are made to the appropriation of the using organization. Total division income in FY 1974 is estimated at $718.5 million and total inventory at $204.3 million. With operating stocks of $53.6 million, this reflects a turnover rate of 13. Sixty-eight percent of the stocks in the fuels division are War Readiness Material.

Air Force Academy Cadet Store Division. Clothing, school supplies, and personal items are sold to the cadets on both a charge basis against their pay account and for cash. Revenue in FY 1974 is estimated at $4.0 million and end year inventory at $2.5 million. This is a turnover rate of 1.6. Inventory backup required at the end of the year to meet size demands in all of the cadet distinctive and other clothing items results in the low turnover rate.

Medical-Dental Division. The Air Force Medical program is supported by this division. Sales are made to Air Force medical facilities on a charge basis, with reimbursement to the fund from the operating appropriations. Income in FY 1974 is estimated at $58.8 million, inventory at $22.9 million. The bulk of this inventory is WRM. Considering operating stocks of $8.8 million, the annual turnover rate is 6.7.

General Support Division. All base procured items not included in another stock fund division, such as office supplies, equipment, and housekeeping supplies, are included in the General Support Division. Sales are made from base supply outlets to base customers, and charged against the customers' accounts. Sales are estimated at $709.4 million in FY 1974, and inventory at $179.8 million. Operating stocks will constitute $109.2 million, and the resultant turnover rate is 6.2.

Systems Support Division. Inventory requirements for expense items procured and distributed through the Air Force depot system are financed in the Systems Support Division. Included are aircraft, missile, vehicular, communications, and electronics repair parts. These items are stocked in depots and base supply outlets. Issues are charges against customers' funds. Revenue in FY 1974 is estimated at $512.9 million and inventory at $1.2 billion. Considering operating stocks of $575.2 million, the turnover is .9. The turnover rate is lower than in other Divisions of the stock fund because of the necessity to maintain stocks at all bases and depots. Also, the great variety of items for all Air Force supported systems results in the requirement to maintain at least small quantities of many items at numerous operational locations.

INDUSTRIAL FUND

I shall now review the planned operations of the Air Force Industrial Fund for Fiscal Year 1974.

The Industrial Fund finances commercial and industrial type services to meet the demands of various users. Under the Industrial Fund concept, each activity is reimbursed by the authorized using organization, program, or individual, at the time the service is rendered. Therefore, cash working capital is provided to pay operating expenses as they come due, until reimbursements are received from customers for goods or services furnished. Reimbursement rates are established and designed to keep the fund solvent without either a profit or loss. Also in conformity with the nature of these activities, development of the budget estimate and operating program is based upon users' stated requirements.

AREAS OF ACTIVITY

In FY 1974 the Air Force Industrial Fund will finance the world-wide Military Airlift Command, Airlift System; 28 Laundry

and Dry Cleaning plants; the depot maintenance activities at the five Air Material Areas and Newark Air Force Station (including contract work administered by them), and 9 Printing and Duplicating plants.

DEPOT MAINTENANCE

The Depot Maintenance activity provides for organic depot level maintenance in Air Force depots, or Navy Depots, and contractor maintenance for aircraft repair and modification, missile repair, engine overhaul, overhaul of exchangeable items, area support, emergency local manufacture and other major item repair and modification. Organic depot maintenance is performed by (1) Ogden Air Materiel Area; (2) Oklahoma City Air Materiel Area; (3) Sacramento Air Materiel Area; (4) San Antonio Air Materiel Area; (5) Warner Robins Air Materiel Area; and (6) Newark Air Force Station. Organic depot maintenance activities provide facilities, equipment and personnel of higher technical skill than are available at organizational and intermediate maintenance levels.

The Air Force organic depot level maintenance capability meets only mission essential requirements on a continuing basis to sustain operations for emergency or wartime conditions. This means that organic depot maintenance capability is planned to accomplish no more than 70 percent of gross mission essential depot maintenance workload requirements with a facility capacity loading at a minimum rate of 85 percent, on a 40-hour week, one shift basis.

Contract depot maintenance is used to meet all other depot maintenance requirements beyond the defined organic depot maintenance capability.

Revenue in FY 1974 will total $1.5 billion. Service is provided primarily to the Air Force with financing from the Operation and Maintenance appropriation of the Air Force, Air

National Guard, Air Force Reserve, and from the MAC Airlift Service Industrial Fund.

MILITARY AIRLIFT COMMAND AIRLIFT SERVICE

The principal and basic function assigned to MAC is that of maintaining and operating a global military airlift system designed to support an adequate emergency readiness position. This function is the key to the MAC mission of providing airlift services required by the Department of Defense under all conditions. To insure the capability to accelerate immediately to flying rates necessary to perform emergency and wartime missions, the entire military airlift system must be operated and exercised at a rate which will provide adequate training and realistic operational experience. MAC must have in being the necessary military airlift system, which consists of bases, aircraft, air crews, aerial ports, communication systems, supporting personnel, and equipment. The maintenance of the high levels of training and readiness produces an airlift capability which, in the interest of economy, should be and is used to minimize DOD airlift and logistics costs. To be prepared for its wartime mission, MAC operates a peacetime airlift service under Air Force Industrial Fund.

The airlift service provides air transportation between the United States and overseas areas for the Department of Defense and for other authorized agencies of the US government. The service includes: (1) established channel scheduled transportation of passengers, cargo and mail; (2) joint service exercises and air-borne training; (3) special assignment missions; (4) international and domestic aeromedical evacuation; and (5) special missions for the President and other US and foreign dignitaries.

The role of the Commercial Carriers is to augment the strategic military airlift capability in meeting those require-

ments which do not have to be met with military aircraft and/or when the military situation dictates the application of integrated military/civil airlift capability at a particular time or place. We have been successful in obtaining continuing air carrier participation in the Civil Reserve Air Fleet (CRAF) program with modern aircraft, and this civilian cooperation is forecasted to continue. By legislative direction and DOD policy, commercial airlift is used for the movement of DOD passengers and mail, except to locations where use of US commercial air carriers is impractical.

Users' stated airlift requirements are for .6 billion passenger ton miles, 1.6 billion cargo ton miles, 1.2 billion special assignment and exercise and training ton miles, and .3 billion mail and other ton miles. To satisfy these requirements in FY 1974 will require augmentation of the MAC military airlift force with $256-million of commercial airlift. The airlift service revenue in FY 1974 will total $679-million. Of this total revenue 31% will be from the Army, 18% Navy, 50% Air Force, and 1% non-DOD. The Transport Mission, which does not include Aeromedical and Special Air Missions, will incur expenses of $655-million, of which $256 million, or 39% will be incurred with commercial carriers.

PRINTING AND DUPLICATING PLANTS

These plants provide area support for the Air Force and other military agencies. Sales in FY 1974 are expected to total $18.0 million. These plants will produce 1.6 billion printing units, while 1.4 billion units will be obtained through contract. A printing unit is one 8 inch by 10½ inch sheet of paper printed on one side in one color.

LAUNDRY AND DRY CLEANING PLANTS

These plants provide area support for military personnel, hospitals and other Department of Defense agencies. In FY 74 sales will amount to $6.7 million, of which 32 percent is for individuals and non-appropriated fund activities. Total production will be 54.5 million pieces of laundry and dry cleaning.

FINANCIAL OPERATIONS

Table I summarizes the Air Force Industrial Fund operations for fiscal years 1972 through 1974. Revenue decreases over the period are due to the elimination of service funding of research activities and a decline in customer requirements for airlift transportation. There is a slight increase in user requirements in the depot maintenance activity. Expenses correspondingly decrease in keeping with the lesser workload to meet the customer demands. Revenues and expenses will balance by the end FY 1974.

FINANCIAL STATUS

Table II shows the financial status of the Air Force Industrial Fund for end FY 1972 and a comparable estimate for end FY 1973 and FY 1974. Accounts receivable, inventories and current liabilities will decline from FY 1972 level as a result of improvements in billing procedures, progress payments, and overall lower sales as total customer requirements decline. Government investment is forecast to equalize in the FY 1973 and 1974 time period after a decline due to a FY 1972 deficit and subsequent recovery in FY 1973.

TABLE I
DEPARTMENT OF THE AIR FORCE
Air Force Industrial Fund
Statement of Revenue and Expense
(In Thousands of Dollars)

	1972 Actual	1973 Estimate	1974 Estimate
Revenue:			
Depot Maintenance	$1,409,834	$1,410,244	$1,461,574
Military Airlift	824,721	750,791	678,971
Printing and Duplicating	17,336	17,309	18,098
Laundry and Dry Cleaning	7,140	6,740	6,714
Closed Activities	119,973	....	....
Total Revenue	$2,379,004	$2,185,084	$2,165,357
Expenses:			
Materials, supplies and parts used	584,143	588,145	577,941
Salaries and wages	615,094	616,162	630,701
Contractual services	1,178,286	944,262	932,859
Other	24,226	20,366	17,856
Cost of goods and services produced	2,401,749	2,168,935	2,159,357
Decrease in unbilled cost	3,291	8,984	6,000
Cost of goods & services sold	2,405,039	2,177,919	2,165,357
Net income or loss	-26,036	7,165	....
Analysis of retained earnings:			
Retained earnings, start of year	2,456	-32,297	-25,136
Adjustment of prior year revenue	865	....	....
Adjustment of prior year expense	-9,583	-4	....
Balance at end of year	-32,297	-25,136	-25,136

TABLE II
DEPARTMENT OF THE AIR FORCE
Air Force Industrial Fund
Statement of Financial Condition
(in thousands)

	June 30, 1972 Actual	June 30, 1973 Estimate	June 30, 1974 Estimate
Assets:			
Cash with Treasury	$110,064	$158,464	$182,864
Accounts Receivable	240,630	93,923	84,657
Inventories:			
Work in process	59,990	52,004	47,004
Work in process, contract plants	79,080	78,080	77,080
Less: Progress payments collections	-84,127	-101,263	-116,111
Materials and supplies	101,676	83,504	84,939
Net inventories	156,619	112,325	92,912
Advances	401	399	399
Other Assets	21	20	20
Total Assets	507,734	365,131	360,852
Liabilities:			
Current liabilities	304,308	252,144	247,854
Reserve for major maintenance	8	6	3
Undistributed items	84,440	-13,144	-13,130
Total liabilities	388,756	239,006	234,727
Government Investment:			
Cash authorization	113,000	113,000	113,000
Assets capitalized, less liabilities assumed	38,275	38,262	38,262
Retained earnings	-32,297	-25,136	-25,136
Total Government Investment	118,978	126,125	126,125
Total Liabilities and Gov't Investment	507,734	365,131	360,852

SUMMARY

Mr. Chairman, in conclusion, the Air Force Industrial Fund, by the application of standard accounting methods, has improved the management of financial operations, and this has contributed to effective performance and accomplishment of this work.

Operation and Maintenance, Air Force Reserve

STATEMENT OF MAJ. GEN. HOMER I. LEWIS, CHIEF, AIR FORCE RESERVE

ACCOMPANIED BY MAJ. GEN. JOSEPH R. DeLUCA, DIRECTOR OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

PROGRAM AND FINANCING

Chairman McClellan. The next appropriation to be considered will be "Operation and Maintenance, Air Force Reserve."

At this point in the record there will appear certain program and financing information from the justifications.

[The information follows:]

JUSTIFICATION—PROGRAM AND FINANCING

[In thousands of dollars]

	1972 actual	1973 estimate	1974 estimate
Program by activities:			
Direct program:			
1. Mission forces	108,655	124,950	153,122
2. Depot maintenance	26,841	30,347	34,576
3. Other support	36,724	37,472	41,474
Total direct program	172,220	192,769	229,172
Reimbursable (total)	1,310	1,241	1,315
Total obligations	173,530	194,010	230,487
Financing:			
Receipts and reimbursements from:			
Federal funds		−1,196	−1,265
Non-Federal sources		−45	−50
Budget authority		192,769	229,172
Budget authority:			
Appropriation		189,250	225,600
Proposed supplemental for wage-board pay raises		1,900	
January 1973 pay increase supplemental/amendment		1,619	3,572

MISSION OF RESERVE

Chairman McClellan. General, you may proceed with your statement.

General Lewis. It is a privilege to appear again, Mr. Chairman, before this committee to present the operation and maintenance appropriation request for the Air Force Reserve.

For the first time, the request is presented as a separate appropriation established by the Congress last year in Public Law 92–570. Formerly, the request was part of the Air Force operation and maintenance appropriation.

The mission of the Air Force Reserve is to provide combat-ready forces immediately upon mobilization in the event of war or national

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emergency and on such other occasions as the Nation may require. We recognize the need for increased reliance on the Air Force Reserve in order to continue to meet Air Force responsibilities. A significant portion of Reserve units are or will be converting to more modern aircraft during the remainder of fiscal year 1973 and during fiscal year 1974.

Before I present fund requirements for the next fiscal year, I would like to take a few moments to highlight accomplishments during this past year and the force programed for the Air Force Reserve.

ACCOMPLISHMENTS OF THE RESERVE

USAFR accomplishments: During fiscal year 1972 and the first half of fiscal year 1973 there has been a continuing effort to modernize Air Force Reserve equipment and improve the combat-ready status of Reserve units through the conversion of many units to more modern aircraft.

While undergoing these conversions, USAFR crews continued to provide valuable assistance to the Active force as a byproduct of their training.

During fiscal year 1972 USAFR flying units flew 10,078 productive missions in support of almost every major command; however, the majority of these missions were flown for the Military Airlift Command and the Tactical Air Command. Reserve crews logged 43,819 flying hours airlifting 14,781 cargo tons for over 25 million ton-miles and 67,569 passengers for over 47 million passenger-miles. Reserve crews also airdropped 702 tons of cargo and 48,696 airborne troops.

During the first half of fiscal year 1973 USAFR units flew nearly 8,200 missions, during which they airlifted approximately 34,000 passengers for almost 27 million passenger-miles. They also airlifted nearly 5,380 tons of cargo for over 4 million ton-miles. Reserve aircrews airdropped over 26,300 airborne troops during the same period. This indicates a higher level of activity in Reserve flying units with 10,078 productive missions in all of fiscal year 1972 compared with over 8,200 productive missions during the first 6 months of fiscal year 1973.

Reserve units were involved in several major disaster relief efforts. For example, in May aircrews flew four missions assisting in relief operations during extensive forest fires in Arizona and in June airlifted personnel and equipment to South Dakota to assist in flood disaster relief operations. After Hurricane Agnes this past June, the Reserve aircrews flew 19 missions airlifting equipment and personnel in northeast United States to assist in disaster caused by extensive flooding. More recently one of our C–130's transported an inspection team to Managua, Nicaragua, to determine medical requirements for relief of victims of the earthquake-ravaged country.

"GALLANT HAND" JOINT EXERCISES

In March of 1972 six Reserve C–130's participated in a large-scale joint exercise called "Gallant Hand." This exercise was designed to develop combat-ready forces, test and establish doctrine and procedures to integrate new equipment. During this exercise, we flew 26 missions for 71 hours and airlifted 75 tons of cargo and 265 passengers.

In May we participated in a joint training exercise of the unified Atlantic Command in North Carolina called "Exotic Dancer." Ten aircraft were involved, flying 129 missions.

This past August we again participated in the "Ember Dawn" exercise, which is a joint Army-Air Force exercise conducted in Alaska.

Most of these exercises are held annually, and it is anticipated that Air Force reservists assigned to the C–130's, C–123's, and A–37 units will participate in 10 or 11 similar exercises during fiscal year 1974.

FORCE STRUCTURE

As I mentioned before, continuing efforts are being made to modernize equipment to improve the combat-ready status of Reserve units. During fiscal year 1973, eight units are converting to more modern aircraft and three new units are being activated.

In fiscal year 1974, we are programed to activate two additional C–141 military airlift units and to convert the following units to different-type aircraft:

(*a*) One HU–16/HH–34 composite air rescue squadron will convert to HH–34 aircraft.

(*b*) Two C–141 military airlift associate units will convert to C–5 associate units, and

(*c*) Three tactical airlift units presently equipped with C–130A aircraft will convert to C–130B aircraft.

By the end of fiscal year 1974, we will have 55 flying units as compared to 53 by the end of fiscal year 1973.

COMPARISON OF FORCE STRUCTURE FOR FLYING UNITS

Following is a comparison of a force structure for these flying units for the 2 years:

AIR FORCE RESERVE FLYING UNITS

	End fiscal year	
	1973	1974
Equipped units:		
C–130 tac airlift	18	18
C–123K tac airlift	4	4
C–7 tax airlift	2	2
Aerospace rescue and recovery	5	5
EC–121 airborne early warning and control	1	1
A–37 special operations	4	4
F–105 tactical fighter	3	3
Total equipped units	37	37
Associated units:		
C–141 mil airlift	13	13
C–5A mil airlift	2	4
C–9A aeromed evac	1	1
Total associated units	16	18
Total units	53	55

SQUADRONS AND PLANES

Chairman McClellan. What do these represent—18 planes or 18 squadrons or what?

General Lewis. These are units we are talking about.

Chairman McClellan. What is the component of a unit?

General LEWIS. It is 6 or 8 UE. You asked how many aircraft per squadron, Mr. Chairman? These are squadrons.

Chairman MCCLELLAN. C–130 TAC Airlift, 18. Is that 18 squadrons?

General LEWIS. That is 18 squadrons.

Chairman MCCLELLAN. How many planes in the squadron?

General LEWIS. In the 130's, we have from six to eight aircraft per squadron, depending on whatever they are "A" or "B" models.

Chairman MCCLELLAN. The next one?

General LEWIS. 123K—those are 16 per squadron, four squadrons—16 aircraft per squadron. The C–7 are two squadrons.

Chairman MCCLELLAN. One squadron has 16 planes; another has six. We never know how many planes. You know what it takes to compose a squadron of a given type of plane, but this chart doesn't show it.

General LEWIS. All of these units I have referred to are squadrons.

Chairman MCCLELLAN. It does not show the number of planes.

General LEWIS. No, sir. That is a separate chart.

Chairman MCCLELLAN. These are squadrons?

General LEWIS. Yes, sir.

ASSOCIATED UNITS

Chairman MCCLELLAN. What does "associated units" mean?

General LEWIS. Associated units are in the Air Force Reserve; associated units share the same equipment as the Active Force. They do not own their own aircraft.

Chairman MCCLELLAN. Do these aircraft in the Air Force Reserve flying units also service these associated units?

General LEWIS. No, sir. The associate units are at the bottom of this chart, page 4. The 141's, the C–5's, C–9's, all in the Military Airlift Command, are associate units. All of the other units are unit-equipped; they have their own aircraft.

Chairman MCCLELLAN. These associated units do not have weapons?

General LEWIS. Right.

Chairman MCCLELLAN. But the equipped units do?

General LEWIS. They have their own aircraft.

Chairman MCCLELLAN. How do these associated units train if they don't use your equipment?

General LEWIS. They share the active duty aircraft. They are all colocated on the same base, in the same area.

Chairman MCCLELLAN. They use the same equipment for training?

General LEWIS. They use the same aircraft; they share the active duty aircraft.

General DELUCA. They become the flying crews.

General LEWIS. And they maintain them, too.

Chairman MCCLELLAN. The equipment is all yours?

General LEWIS. No, sir; it is shared in the associate program.

Chairman MCCLELLAN. What is the difference between the associated program and equipped unit program?

General LEWIS. In the equipped units, the units are organically equipped, have their own aircraft, their own base, not sharing the aircraft with the active duty. In MAC—we just have it in Military Airlift Command—in that command, the associate program, the Reserve unit in association with the active duty unit side by side shares the same aircraft, the same shop facilities, the same equipment as the Active Force.

Chairman McClellan. The associated units use the Active Force equipment.

General Lewis. They do; they share it.

Chairman McClellan. For the purpose of training, they use the same equipment that the equipped units use?

General Lewis. Exactly.

Chairman McClellan. They use that equipment though they have no equipment of their own?

General Lewis. That is right.

Chairman McClellan. I was trying to say that. Maybe I was not able to do it in a clear manner.

General Lewis. It is a very unique program. It is a different program. I explained it as I usually explain it. I don't know whether I explained it fully or not.

Chairman McClellan. It is like having a substitute ballplayer who has no glove. When he starts to play, he must be furnished with a glove and a bat. Proceed.

BUDGET REQUEST JUSTIFICATIONS

General Lewis. This request provides for the operation of 37 equipped flying units and 18 nonequipped associate flying units along with one tactical airlift training unit and 138 nonflying units. In addition, we have included requirements for base operating support at the two bases for which we have been designated as host and for the Air Reserve personnel center.

The request includes civilian pay, travel, and transportation of civilian and military employees, aviation fuels, depot-level maintenance of aircraft and equipment, operation and maintenance of facilities, and sundry supplies and equipment, all in support of year-round and summer training of reservists.

To a great degree, the combat readiness is dependent upon the level of the flying hour program, which in turn is the product of aircraft availability and maintenance. Air Reserve technicians—ARTS—serve as the backbone of the training and maintenance programs by providing, on a full-time basis, both flying and ground support.

Of equal importance, these skilled experts also fill Air Force Reserve spaces in the units in which they are employed. Thus, they mobilize right along with the other reservists in their unit. They provide the needed continuity in a critical area and are an extremely valuable resource in view of the complexity of today's aircraft and the cost of training personnel to fly and support these weapon systems.

FINANCIAL ASPECTS

For fiscal year 1974, we are requesting $229.2 million, which is an increase of $36.4 million from current fiscal year 1973 requirements of $192.8 million. We have included $1.6 million in fiscal year 1973 and $3.6 million in fiscal year 1974 for the January 1973 pay raise for graded employees. The full year impact of three units added in fiscal year 1973, the two new units in fiscal year 1974, pay raises, price increases, and the operation of more modern weapon systems are the basis of the higher request for fiscal year 1974.

I would like to mention at this point that, subsequent to the formulation of this budget, a decision was made to transfer Hamilton and

Westover Air Force Bases to the Air Force Reserve during fiscal year 1974. This action will have an impact on the operation and maintenance fund requirements for the Air Force Reserve and will require an adjustment to the funding currently reflected in the fiscal year 1974 budget.

Chairman McClellan. You mean you will have to have an increase in this amount in the form of a supplemental appropriation?

General Lewis. What I am trying to say is that we have not programed the cost of operating these two bases in this request.

Chairman McClellan. Where are you going to get the money?

General DeLuca. Sir, our proposal would be to reduce the Air Force budget.

Chairman McClellan. To do what?

General DeLuca. To submit to you a reduction in the Air Force O. & M. budget because we were going to run those bases and we are not now going to run them.

Chairman McClellan. The money is in your budget?

General DeLuca. And we will transfer to the Reserve.

Chairman McClellan. That does not signify any increase in the budget?

General DeLuca. I would hope the Reserve could run it as economically as we could have. I was just testing General Lewis here.

Chairman McClellan. Do you permit that? I don't know who outranks whom.

General Lewis. I will now discuss, by budget program, the major differences in our fiscal year 1974 request over 1973.

MISSION FORCES

This program provides for the direct operating costs of Reserve units, excluding the cost of depot maintenance, which I will speak about later. Within this program, requirements are identified under two subactivities—aviation fuel and oil and mission training.

Aviation fuel cost for fiscal year 1974 is $10.9 million and is an increase of $1.8 million over fiscal year 1973.

Chairman McClellan. Does that represent an increase in the cost of the same amount of fuel? Would there be that much increase in the cost of a certain number of gallons?

General Lewis. We are going to require more fuel in 1974. But it does include a price increase, too.

Chairman McClellan. It includes both?

General Lewis. Yes, sir.

This is caused by an additional 18,811 flying hours in fiscal year 1974 over fiscal year 1973, along with higher fuel prices.

MISSION TRAINING

In mission training, the fiscal year 1974 requirement of $142.2 million is an increase of $26.3 million over fiscal year 1973. This increase occurs primarily in civilian personnel, $13.7 million; reimbursements to the Air Force Airlift Service Industrial Fund, $9.3 million; aircraft maintenance supplies and tools, $1.6 million; other contractual services, $1.3 million, which includes prorata sharing of operating expenses at municipal airport locations, and contract maintenance of nonflying equipment; and, finally, all other costs, $0.4 million.

DEPOT MAINTENANCE

Depot maintenance funds support the more complex level of maintenance necessary for Reserve weapon systems which is beyond the capability of our units. It includes programed depot maintenance—PDM; analytical condition inspection—ACI; engine overhaul; repair of other major end items; repair of exchangeable components; area support; and in-service engineering. The costs of these services are reimbursed to the Air Force Depot Maintenance Industrial Fund by the Air Force Reserve.

The requirement increases from $30.3 million in fiscal year 1973 to $34.6 million in fiscal year 1974 and is the result of gaining 27 additional aircraft in fiscal year 1974 along with the increase of 18,811 flying hours.

OTHER SUPPORT

The remaining O. & M. requirements are identified within this program in the amount of $41.5 million, which is an increase of $4 million over the fiscal year 1973 requirement of $37.5 million. Within other support are the four subactivities of command support, Air Reserve personnel center, other base support, and medical support.

Command support includes the operation of Headquarters Air Force Reserve and its three subordinate region headquarters. Of the $4 million total increase in other support, $2.9 million is in command support, $0.8 million in other base support, and $0.3 million in the Air Reserve personnel center.

The increases are caused by the January pay increase of $0.9 million; net increase for civilian personnel, $0.9 million; advertising and out-of-pocket expenses incidental to recruiting, $1.2 million; industry technical representatives, $0.4 million; increased facilities maintenance and repair, $0.3 million; and $0.3 million net increase in all other expense categories.

Chairman McCLELLAN. Are these increases primarily because of the increase in the cost?

General LEWIS. Yes, sir, increase in cost, increase in salaries paid, a slightly larger program.

In summary, Mr. Chairman, our request of $229.2 million will fully support the Reserve program for training 37 equipped and 18 associate flying units, 138 nonflying units, operation of the Air Reserve personnel center, and operation of the two bases for which the Air Force Reserve has been designated host.

However, as I mentioned earlier in this statement, subsequent to the preparation of our fiscal year 1974 budget request, the Air Force Reserve has been programed to assume hosting responsibility for Hamilton and Westover Air Force Bases during fiscal year 1974. A funding adjustment will be required to support this program change.

Mr. Chairman, this concludes my statement, I will be happy to answer any questions.

Chairman McCLELLAN. Thank you very much, gentlemen. As you know, we will submit to you some questions for the record after we have the opportunity to review these statements that you have presented today.

JUSTIFICATION

At this point in the record there will be included additional information from the justifications.

[The justification follows:]

Justification

OPERATION AND MAINTENANCE, AIR FORCE RESERVE

PERSONNEL SUMMARY

	FY 1973 Estimate	FY 1974 Estimate
Total number of permanent positions	10,340	10,875
Full-time equivalent of other positions	63	110
Average paid employment	9,880	10,583
Average GS grade	7.0	6.9
Average GS salary	$11,442	$12,124
Average salary of ungraded positions	$11,205	$11,585

DEPARTMENT OF THE AIR FORCE
JUSTIFICATION OF ESTIMATES FOR FY 1974

APPROPRIATION: OPERATION AND MAINTENANCE, AIR FORCE RESERVE

INTRODUCTORY STATEMENT

The Operation and Maintenance, AFR Appropriation was created by Public Law 92-570 and contains those resources necessary for the operation and maintenance of the Air Force Reserve formerly included as a part of the Operation and Maintenance, AF Appropriation. The following justification material contains supporting data for civilian personnel, aviation fuels, aircraft maintenance and other general support expenses required to train and maintain the Air Force Reserve in a readiness posture equal to its mission in time of war or national emergency. In addition, this appropriation supports the operation of the Air Reserve Personnel Center.

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:

	Flying Units (End Year)		
Weapon Systems	FY 1972	FY 1973	FY 1974
C-124 Military Airlift	3		
C-130 Tactical Airlift	17	18	18
C-123 Tactical Airlift	2	4	4
C-7 Tactical Airlift	2	2	2
Aerospace Rescue and Recovery			
HH-34 and HU-16	3	3	3
HC-97	2		
HC-130		2	2
Special Operations Forces			
C/AC-119	1		
A-37	4	4	4
EC-121 Airborne Early Warning and Control	1	1	1
F-105 Tactical Fighter	1	3	3
Total Equipped Units	36	37	37
Associate Units (non-equipped)			
C-141 Military Airlift	13	13	13
C-9 Aeromedical Airlift	1	1	1
C-5 Military Airlift		2	4
Total Associate Units	14	16	18
Total Flying Units	50	53	55

Civilian personnel provide the full-time support to maintain aircraft and facilities and administrative continuity in support of the 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 position. The civilian personnel requirements are summarized as follows and include the Air Reserve Personnel Center:

	Civilian Personnel (End Strength)	
	FY 1973	FY 1974
Air Reserve Technicians	6,208	6,751
Other	4,132	4,124
Total	10,340	10,875

The flying hour program supports the level of training for the aircrews. Reserve flying training must meet standards set by the active Air Force major air command to which their unit will be assigned upon mobilization. These gaining command minimum requirements are the basis of the flying hour program. The total flying hours programmed for Air Force Reserve equipped units is 133,962 in FY 1973 and 142,773 in FY 1974. 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 appropriation. The Associate unit aircrews must meet gaining command minimums just as do aircrews in the equipped units.

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.

A summary of current and projected readiness status for the Air Force Reserve flying units supported by this budget request is as follows:

	Flying Unit Readiness								
	Current 1 Jan 73			Projected 30 Jun 73			Projected 30 Jun 74		
	Ready	Marginal	Not Ready	Ready	Marginal	Not Ready	Ready	Marginal	Not Ready
Tactical Airlift	3	9	11	9	5	10	15	8	1
Tactical Fighter			3		1	2	2	1	
Aérospace Rescue and Recovery	3		2	2	2	1	4	1	
Special Operations	1	1	2	2		2	2	2	
Airborne Early Warning and Control			1		1		1		
Military Airlift (Associate)	11	1	3	11		4	8	4	5
Aeromedical Airlift (Associate)	1			1			1		
	19	11	22	25	9	19	33	16	6

Key
Ready: Mission capable.
Marginal: Partial mission capability.
Not Ready: Not ready to perform mission.

In addition to the training of reserve unit personnel, this appropriation 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.

SUMMARY OF SIGNIFICANT CIVILIAN MANPOWER INCREASES

Fiscal Year 1973 to Fiscal Year 1974

(Full-time Permanent Employees)

Operation or Activity	Year End Increases
Increase for Two Additional C-5A Associate Units	+390
Increase for Revised C-141 Maintenance Manhour Factor	+ 93
All other manpower adjustments (net)	+ 52
Net Change	+535

DIRECT HIRE CIVILIAN EMPLOYMENT
OPERATION AND MAINTENANCE, AIR FORCE RESERVE

(Dollars in Thousands - Strength in Whole Numbers)

	FY 1973 ESTIMATE			FY 1974 ESTIMATE		
	Average Strength	June 30 73 End Str	Est Oblig	Average Strength	June 30 74 End Str	Est Oblig
Direct Hire Civilians						
Full-time Permanent	9,880	10,340	$125,320	10,583	10,875	$140,616
Other	63	210	230	110	365	428
Total Direct Hire Civilians	9,943	10,550	$125,550	10,693	11,240	$141,044
Detail by Budget Activity						
Mission	7,370	7,772	$94,523	8,020	8,289	$108,209
Other Support (includes other than full-time permanent)	2,573	2,778	$31,027	2,673	2,951	$32,835
Reimbursable Obligations (included above)			($553)			($565)

(Dollars in Thousands)

	FY 1973 Estimate	FY 1974 Estimate
Overtime and Holiday Pay	$542	$610
Sunday and Night Differential	74	83
Post Differential and Cost of Living	31	96
Premium Pay (including firefighters)	439	494
Other Compensation	820	900
Total	$1,906	$2,183

FORCE PROGRAM V: AIR FORCE RESERVE

PURPOSE AND SCOPE

The funds requested for this program are required by the Air Force Reserve to maintain and train units in a reserve status to assure their readiness for immediate mobilization, and to provide administrative support for the Air Reserve Personnel Center.

TOTAL OBLIGATIONS BY BUDGET PROGRAMS

Budget Programs	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
A. Mission Forces	$124,950	$153,122
B. Depot Maintenance	30,347	34,576
C. Other Support	37,472	41,474
Total, Air Force Reserve	$192,769	$229,172
A. MISSION FORCES	$124,950	$153,122

PURPOSE AND SCOPE

This estimate provides for the operation and training of all Air Force Reserve units, consisting of 55 flying units, 138 non-flying units, 10 Air Force Reserve flying installations, the flying and mission training of an average strength of 49,773 reserve component personnel in the Selected Reserves. Activities supported include aircraft operations, ground training, base level aircraft maintenance, maintenance of other equipment, supply activities, and security for Air Force Reserve resources.

	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
Aircraft Fuel and Oil	$9,078	$10,904

This estimate provides for aircraft fuel and lubricating oil for the operation of mission aircraft assigned to the Air Force Reserve. The flying hours programmed are for training of reservists to attain and maintain combat readiness in the weapon system and for mission qualification. The cost estimate is computed on consumption and cost factors based on actual experience of the USAF.

PROGRAM DATA

Mission	Aircraft Flying Hours FY 1973	FY 1974
Tactical Airlift	79,217	93,802
Tactical Fighter	8,653	15,985
Aerospace Rescue and Recovery	7,909	8,198
Airborne Early Warning and Control	2,496	2,520
Special Operations	23,360	22,268
Military Airlift	2,327	-0-
Total	123,962	142,773

During FY 1973 and FY 1974 there are projected to be 1,535 and 1,593 average number of pilots assigned to units for which aircraft

pilots in training during FY 1974, an increase in flying due to transition training in units converting to different aircraft, and after completion of conversion period, a restoration of the training level necessary to attain and maintain combat readiness and mission qualification.

	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
Mission Training	$115,872	$142,218

This estimate provides funds for expenses, other than for aircraft fuel and oil or depot maintenance incident to the mission training of Air Force Reserve units. Includes funds for civilian personnel services and benefits; travel and transportation expenses of military and civilian personnel; transportation of material; rental of automated data processing equipment; commercial communications services and maintenance of equipment including vehicles; and for purchase of supplies, equipment, and services from stock and industrial funds and from commercial sources. Includes funds for expenses of field training, exercises and maneuvers, training equipment and supplies.

PROGRAM DATA

	FY 1973	FY 1974
Forces		
Flying Units	53	55
Non-Flying Units	137	138
Aircraft (Authorized UE)	405	432
Civilian Personnel: (Direct Hire)		
End Strength	7,772	8,289
Manyears	7,370	8,020
Reserve Component Personnel: (Selected Reserve)		
Officers - Average Drill Strength	10,498	10,393
Enlisted - Average Drill Strength	38,589	39,380
Military Personnel End Strength	444	424
Number of Reserve Flying Installations	10	10

The funds requested will provide for such activities as aircraft operations, ground training, aircraft maintenance at base level, communications, maintenance of other equipment, and security of Air Force Reserve resources. These functions are essential to the operation, training and combat readiness of the Air Force Reserve units. These operations support the training of reserve component military personnel programmed for an average strength of 10,393 officers and 39,380 enlisted men assigned to 55 flying units and 138 non-flying units.

The following tabulation is a comparison of the expense categories included in support of mission training of the Air Force Reserve units:

	(In Thousands of Dollars) FY 1973	FY 1974
Civilian Personnel	$94,490	$108,176
Travel and Transportation of Persons	1,355	1,510
Transportation of Things	340	532
Rents, Communications and Utilities	505	666
Printing and Reproduction	47	43
Other Services	8,299	18,852
Supplies and Materials	8,984	10,573
Equipment	1,852	1,866
Total Requirements	$115,872	$142,218

The major changes in costs from FY 1973 to FY 1974 are: (In Thousands of Dollars)

a. Civilian personnel pay increases for wageboard employees and classified personnel (including January 1973 pay raise) annualized in FY 1974 ..... + 2,670

b. Civilian personnel manning increases of 517 end strength and 650 manyears as detailed below..... +11,016

	End Str	Manyears
1. For two additional C-5A units	+390	+321
2. To support increased aircraft maintenance manhour factor for C-141 aircraft	+ 93	+ 81
3. Additional support necessary for heavy equipment maintenance in Civil Engineering Sq (Hv Repair)	+ 11	+ 8
4. Full-year requirements F-105 units	+ 9	+222
5. Reduction in employment consistent with President's announced economic goals	- 35	- 25
6. Transfer of recruiting to Command Budget Program	- 48	- 48
7. Minor adjustments in all other force programs (net)	+ 97	+ 91

c. The major increase in Other Services is for the cost of increased training flying hours for the two additional C-5A Associate Units, plus increased rates for C-9A and C-141 aircraft, which is reimbursed to Air Force Airlift Service Industrial Fund ..... +9,273

d. Increased contractual services at municipal airports, and commercial contracts for maintenance of non-flying equipment ..... +1,280

e. The increase in Supplies and Materials is to support the additional 18,811 flying hours programmed in FY 1974, and for spare parts and hand tools for the two additional C-5A Associate Units..... +1,589

	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
B. DEPOT MAINTENANCE	$30,347	$34,576

PURPOSE AND SCOPE

This estimate provides for funds from which the Air Force Reserve will reimburse the Air Force Depot Maintenance Industrial Fund for depot level maintenance including corrective maintenance of aircraft, equipment and accessories, electronic and communications equipment, vehicles and other equipment. Depot level maintenance includes repair, overhaul, modification, reclamation, manufacture, assembly and disassembly, inspection, testing, and in-service engineering, including contractor-furnished supplies and equipment incident to maintenance, and modification service performed under contract. Also includes Government furnished materials (GFM) procured from Air Force Stock Funds by the Depot Maintenance Industrial Fund and consumed by the depots in support of the Air Force Reserve.

The requirements for this activity are computed on the same basis as used by the active Air Force in determining its depot maintenance support. The following tabulation is a summary of the costs:

	FY 1973	FY 1974
Aircraft Repair/Modifications	$13,910	$15,506
Engine Overhaul	5,648	6,526
Other Major End Items Repair/Modifications	264	309
Exchangeable Items Overhaul	8,927	10,437
Area Support	278	298
In-Service Engineering	1,320	1,500
Total	$30,347	$34,576

The significant program changes which cause the increase of $4,229 thousand in FY 1974 over the FY 1973 estimate are as follows:

a. The repair and modification of airframes is on a time phased schedule and is performed on the basis of Programmed Depot Maintenance (PDM). During FY 1974 the programmed input of C-130 aircraft has increased, and the full-year requirements for HC-130 and F-105 aircraft are programmed, which causes the increased cost in FY 1974.

b. Engine overhaul is based on flying time. The increase of 18,811 flying hours programmed increases the number of engines to be overhauled in FY 1974.

c. The estimate for overhaul of exchangeable items is computed on Air Force Logistic Command factors for each weapon system and is based on flying hours. The increase of 18,811 flying hours causes the increased cost in FY 1974.

	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
C. OTHER SUPPORT	$37,472	$41,474

PURPOSE AND SCOPE

The funds requested for this budget program are required for the command function of Air Force Reserve, the administrative activities of Air Reserve Personnel Center, other base support not included in the Mission Forces activity, and medical support. The comparative costs for FY 1973 and FY 1974 are identified in the following summary:

	FY 1973 Estimate	FY 1974 Estimate
Command Support	$9,523	$12,431
Air Reserve Personnel Center	8,345	8,624
Other Base Support	19,374	20,190
Medical Support	230	229
Total, Other Support	$37,472	$41,474

Program data, support costs and major changes of these sub-activities are identified as follows:

Command Support	$9,523	$12,431

This estimate provides for civilian personnel, and other expenses in support of the Command function and administrative activities of the Air Force Reserve. Included are the Headquarters at Robins AFB, and three geographically oriented headquarters, the Eastern Region at Dobbins AFB, the Central Region at Ellington AFB and the Western Region at Hamilton AFB. These headquarters are responsible for the command, administration, operation and supervision of the training of all Air Force Reserve forces consisting of 55 flying units and 138 non-flying units located throughout the Continental United States.

PROGRAM DATA

	FY 1973	FY 1974
Civilian Personnel: (Direct Hire)		
End Strength	540	578
Manyears	526	569
Military Personnel End Strength	364	363

The following tabulation is a comparison of the expense categories included:

	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
Civilian Pay	$8,054	$9,054
Travel	624	676
Transportation	15	19
Rents, Communications and Utilities	167	186
Printing and Reproduction	49	68
Other Services	408	2,222
Supplies and Materials	141	141
Equipment	65	65
Total	$9,523	$12,431

The major changes in costs from FY 1973 to FY 1974 are:

(In Thousands of Dollars)

a. FY 1973 pay increases for wageboard employees and classified personnel (including January 1973 pay raise) annualized in FY 1974 ..... +277

b. Civilian personnel manning increase of 38 end strength and 43 manyears as detailed below .... +723

	End Str	Manyears
1. Increase for recruiting (In FY 1973 48 end strength and 48 manyears are included in Mission Forces budget activity.)	+65	+64
2. Decrease in manning for civilian pay, accounting and finance activities, transferred to Air Force in connection with Centralized Civilian Pay System	-17	-12
3. Reduction in employment consistent with President's announced economic goals	-10	- 9

c. Increase in Other Services for recruiting advertising and out-of-pocket incidental expenses for recruiters ..... +1,200

d. Increase for aircraft maintenance technical representatives to be assigned to regions in lieu of flying units, for better manpower utilization ..... + 400

	(In Thousands of Dollars) FY 1973 Estimate	FY 1974 Estimate
Air Reserve Personnel Center (ARPC)	$8,345	$8,624

This estimate provides for support of the Air Reserve Personnel Center, located in Denver, Colorado. The center administers and participates in the development of policies, plans and programs applicable to personnel management, mobilization, and personnel administration of Air Force Reserve personnel not on extended active duty. The center performs personnel record maintenance functions for Air National Guard officers and Air Force Reservists not on extended active duty and those assigned or attached to ARPC.

In addition, the center maintains records of enlistment in Air Force ROTC and at graduation issues commissions and orders officers to active duty. The center also will maintain records, issue Reserve Commissions, and orders for active duty training, and call to extended active duty for participants in the recently enacted Health Professions Scholarship Program.

PROGRAM DATA

	FY 1973	FY 1974
Civilian Personnel: (Direct Hire)		
End Strength	742	726
Manyears	724	731
Military Personnel End Strength	111	111

The following tabulation is a comparison of the expense categories included:

	FY 1973	FY 1974
Civilian Pay	$7,868	$8,128
Travel	101	101
Transportation	27	27
Rents, Communications and Utilities	39	39
Printing	60	60
Other Services	31	31
Supplies and Materials	180	199
Equipment	39	39
Total Requirements	$8,345	$8,624

The major changes in costs from FY 1973 to FY 1974 are: (In Thousands of Dollars)

a. The civilian personnel requirements reflect annualization of the January 1973 graded pay raise	+168
b. Civilian personnel increased 3 end strength and 3 manyears for administration of the Health Professions Scholarships Program	+33

	(In Thousands of Dollars) FY 1973	FY 1974
Other Base Support	$19,374	$20,190

This estimate provides for the cost of civilian personnel, supplies, materials, equipment and purchased services in support of base operations and real property maintenance of the Air Force Reserve. Covered are activities such as facility repair and maintenance, utilities, custodial services, snow removal, fire protection, food service and supply services. The flying hours are included for base operational and administrative support of the Air Force Reserve.

PROGRAM DATA

	FY 1973	FY 1974
Aircraft-Support	8	8
Flying Hours	4,136	4,800
Civilian Personnel: (Direct Hire)		
End Strength	1,281	1,277
Manyears	1,255	1,258
Military Personnel End Strength	337	337

The following tabulation is a comparison of the expense categories included:

	(In Thousands of Dollars) FY 1973	FY 1974
Civilian Pay	$14,519	$15,050
Travel	56	58
Transportation	55	66
Rents, Communications and Utilities	1,275	1,235
Printing and Reproduction		1
Other Services	1,399	1,651
Supplies and Materials	1,794	1,846
Equipment	276	283
Total	$19,374	$20,190

The major changes in costs from FY 1973 to FY 1974 are:

	(In Thousands of Dollars)
a. Civilian personnel pay increases for wageboard employees and classified personnel (including January 1973 pay raise) annualization in FY 1974 of FY 1973 pay increase.....	+495
b. Increase for maintenance and repair of real property facilities.....	+252

	(In Thousands of Dollars) FY 1973	FY 1974
Medical Support.....	$230	$229

This estimate provides for the cost of manpower, materials and services in support of the medical services rendered to active duty military personnel and their dependents at Ellington AFB, and retired military personnel and their dependents in the geographical area.

PROGRAM DATA

	FY 1973	FY 1974
Civilian Personnel: (Direct Hire)		
End Strength.....	5	5
Manyears.....	5	5
Military Personnel End Strength.....	71	73
Out-Patient Visits.....	24,000	24,000

The following tabulation is a comparison of the expense categories included:

	(In Thousands of Dollars) FY 1973	FY 1974
Civilian Pay.....	$66	$71
Travel.....	12	12
Transportation.....	-	-
Rents, Communications and Utilities.....	1	1
Printing.....	-	-
Other Services.....	16	13
Supplies and Materials.....	130	130
Equipment.....	5	2
Total Requirements.....	$230	$229

No major change in costs from FY 1973 to FY 1974.

OPERATION AND MAINTENANCE, AIR FORCE RESERVE

Headquarters Operation and Administration

(Dollars in Thousands; Strength in Whole Numbers)

	FY 1973 Estimate			FY 1974 Estimate		
	Military End Strength	Civilian Estimated Manyears	O&M Obligations	Military End Strength	Civilian Estimated Manyears	O&M Obligations
Total Headquarters						
Operation and Administration	135 2/	157	$2,777 1/	134 2/	157	$2,839

Notes:

1/ Includes $62 in FY 1973 for graded civilian personnel pay raise effective 1 Jan 73.

2/ Active duty military personnel paid from

	73	74
Appropriation 3500:	104	103
Appropriation 3700:	31	31

Service Support Contracts

(In Thousands of Dollars)

Type of Contract	FY 1973 Estimate	FY 1974 Estimate
Management Services	None	None
Technical Engineering Services	$1,228	$1,205
Contractor-Operated Facilities	None	None
Personnel Services	1,512	1,564
Total	$2,740	$2,769

Automatic Data Processing

(Dollars in Thousands - Manyears in Whole Numbers)

Type of Expenditure	FY 1973 Estimate	FY 1974 Estimate
Rental of Equipment	$ 403	$ 412
Software Costs	57	68
Maintenance Costs	2	2
Civilian Pay	1,966	1,501
Civilian Manyears	(157)	(70)
Total	$2,428 1/	$1,983 1/

Note:

1/ Includes graded pay raise effective January 73:
FY 73 $48
FY 74 $97

Communications

(O&M Dollars in Thousands)

System	FY 1973 Estimate	FY 1974 Estimate
Post and Base Telecommunications		
Commercial Type Communications Services:		
AUTODIN	-0-	-0-
All Other	$700	$786
Total Commercial Communications Services	700	786
Total Communications	$700	$786

OPERATION AND MAINTENANCE, AIR FORCE RESERVE

Maintenance of Real Property

(O&M Dollars in Thousands)

Category of Maintenance	FY 1973 Estimate	FY 1974 Estimate
Maintenance	$ 165	$ 136
Repair	198	790
Minor Construction and Alterations	233	158
Subtotal: Facility Projects by Contract	($ 596)	($1,084)
In-House Maintenance	2,704	3,116
Total	$3,300	$4,200

Operation and Maintenance, Air National Guard

STATEMENT OF MAJ. GEN. FRANCIS S. GREENLIEF, CHIEF, NATIONAL GUARD BUREAU

ACCOMPANIED BY:

MAJ. GEN. JOSEPH R. DeLUCA, DIRECTOR OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

MAJ. GEN. I. G. BROWN, DIRECTOR, AIR NATIONAL GUARD

PROGRAM AND FINANCING

Chairman McClellan. The next appropriation to be considered will be that for "Operation and Maintenance, Air National Guard." At this point in the record there will appear certain program and financing information from the justifications.

[The justifications follow:]

JUSTIFICATION—PROGRAM AND FINANCING

[In thousands of dollars]

	1972 actual	1973 est.	1974 est.
Program by activities:			
Direct program:			
1. Operation of aircraft	41,583	46,916	45,427
2. Logistical support	67,787	78,014	88,906
3. Training support	305,025	335,561	387,941
4. Medical support	566	630	730
5. Servicewide support	2,359	2,518	2,706
Total direct program	417,320	463,639	525,710
Reimbursable (total)	6,758	9,100	9,800
Total obligations	424,978	472,739	535,510
Financing:			
Receipts and reimbursements from:			
Federal funds	−7,364	−9,000	−9,700
Nonfederal sources	−294	−100	−100
Unobligated balance lapsing	3,312		
Budget authority	420,632	463,639	525,710
Budget authority:			
Appropriation	420,632	456,726	518,400
Proposed supplemental for wage-board pay raises		3,800	
January 1973 pay increase supplemental/amendment		3,113	7,310

SUPPORT OF AIR TECHNICIAN PROGRAM

Chairman McClellan. General Greenlief.

General Greenlief. I will be accompanied by General Brown, Director of the Air National Guard.

Mr. Chairman, I am prepared to present a blue-lined version to you of our statement in support of the operation and maintenance, Air National Guard.

If you prefer, I can shorten that up and highlight it for you.

Chairman McClellan. All right, but I want you to have the opportunity to make a proper presentation.

As I just indicated to the others here, we will have questions later, I am sure, for all of you.

General Greenlief. Mr. Chairman and members of the committee:

Since I will cover the program and accomplishments of the Air National Guard in my presentation of the "National Guard Personnel, Air Force" appropriation, with your concurrence I will not repeat them here.

I will speak only of the air technician program and the financial requirements for the "Operation and Maintenance, Air National Guard" appropriation for fiscal year 1974.

AIR TECHNICIANS AND OTHER CIVILIANS

Air technicians are the daily work force essential to the entire Air National Guard program. They maintain the equipment, conduct the training for unit military members and conduct most of the on-going operational and administrative business of the unit. They are also members of the military unit which they support. When a unit is mobilized, the technicians are also mobilized.

The Air Guard technician program is unique in that its strength is limited by statute. Early in 1971, the Guard asked for and received authorization to man its technician force at 100 percent of its requirements.

It was the intention of Public Law 92–119 to man the Air Guard at 22,550, or 100 percent, by the end of fiscal year 1973.

Since 1971, force decisions have been made which will convert 70 percent of ANG flying units to higher performance aircraft by end of fiscal year 1974. These decisions have driven manning requirements from 22,550 to 24,203 in fiscal year 1974. So, instead of 100 percent manning, we are limited to 92 percent.

In addition, the fiscal year 1974 request includes 938 Department of the Air Force civilians, required to operate and maintain facilities at three installations previously operated by the Air Force. This number includes 416 civilians which were in the fiscal year 1973 request for the operation of Selfridge Air National Guard Base, Mich., and an increase of 522 for the operation of Otis Air Force Base, Mass., and Ramey Air Force Base, Puerto Rico, effective July 1, 1973.

Since preparation and submission of the budget, decisions have been made which may alter these requirements. The Air National Guard will assume operation of Forbes Air Force Base, Kans., in lieu of Ramey. The approval of the fiscal year 1974 request will not allow us to man at 100 percent of the requirements, but will enhance our capability to maintain the complex weapon systems and improve our combat readiness.

FUNDING ASPECTS

Gentlemen, I will devote the remainder of my time to the funding aspects of the fiscal year 1974 program.

The total request for this appropriation is $525.7 million. This compares with $463.6 million in fiscal year 1973. The amount for fiscal

year 1973 includes a $6.9 million supplemental for pay raises not previously reflected.

Since preparation and submission of the budget, Congress has approved $6.5 million of the request and the Air National Guard has absorbed $.4 million. Increases in the Operation and Maintenance Appropriation are required to support full year costs for weapon system modernization concurring in fiscal year 1973, and those scheduled for fiscal year 1974.

It provides for additional technicians essential to maintain Air National Guard forces, civilian personnel necessary to support the operation of installations previously operated by the Air Force, and for a force relocation action. I will identify the major changes within each portion of the appropriation.

OPERATION OF AIRCRAFT

This program provides for the purchase of aviation fuel. Aviation fuel will cost $45.4 million in fiscal year 1974; $1.5 million less than in fiscal year 1973. The decrease is attributable to an overall reduction in flying hours resulting from changes in the force mix which is offset by a slight price increase.

LOGISTICAL SUPPORT

The logistical support program includes airframe repair, engine overhaul, and repair of major components. The requirements for fiscal year 1974 are $88.9 million, a $10.9 million increase. Approximately $7 million of this increase is for more expensive engine overhaul requirements and spare engines previously furnished at no cost to the Air Guard from excess inventory.

Other major factors include a larger number of aircaft inspection and repair (IRAN) requirements, and higher costs for exchangeable overhaul items, particularly the electronic components associated with our new complex weapon systems such as F–106's, F/RF–4's, and A–7's.

TRAINING SUPPORT

Training support provides for base operation and maintenance. This includes technician and civilian pay, base operation and maintenance agreements, travel and transportation, rental and services, supplies and equipment, and major repairs and minor construction. The training support program requirement is $388 million; $52.4 million more than fiscal year 1973.

In the technician program, the ANG is requesting $283.5 million to support 21,621 end strength and 21,356 man-years. Also requested is $12.7 million to support 938 end strength and man-years for Department of the Air Force civilians. This is an increase of $35.5 million over fiscal year 1973.

Of this amount, $11.2 million is required for the annualization of fiscal year 1973 wage rate increases, the classified pay raises, and programed step increases. The increase of 522 Air Force civilians to operate two additional installations will cost $7.2 million. Included is $2.1 million for 168 technicians to support the Southern Perimeter Defense mission, not previously funded. The remaining $15.0 million

increases is the cost of 1,190 man-years required to support modernization and increased readiness.

Again, I would like to emphasize that this request will support an air technician strength, by close of fiscal year 1974, which approaches the 22,550 authorized by Public Law 92–119 for fiscal year 1973, despite the fact that we have had a sharp increase in manpower requirements since the law was passed.

The cost of base operation and maintenance is up $4.8 million. This recognizes a new requirement of $3.2 million for installations formerly operated by the active Air Force.

In addition, $1.6 million is for improvements required as a result of mission changes and for increases in the cost of utilities.

As in the past, the States have agreements with the Federal Government whereby they fund about 25 percent of the costs for base operation and maintenance while the Federal Government pays the remaining 75 percent. This creates cost consciousness on the part of each State and thereby keeps Federal spending at a minimum.

Travel and per diem costs are up $0.4 million, primarily as a result of the transfer of funding responsibility from the active Air Force to the Air Guard in support of the European based "Creek Party" mission and force modernizations.

Transportation of materiel is $0.9 million greater because of higher transportation rates, and increased shipments of reparable electronic equipment.

ADP equipment rental increases by $0.4 million for leasing and one-time installation costs for remote terminals at Air Guard bases that are linked to Air Force B–3500 computers to support the base level military personnel system.

The communications service requirement is up $0.4 million as a result of annualization of the rental cost of data communication terminals installed during fiscal year 1973, offset by a reduced requirement for base message service.

$0.9 million increase in other services primarily reflects additional man-years for contract engineering and technical services required to support force modernization; increases in vehicle maintenance contracts to support an older fleet of vehicles; and increases in office equipment maintenance, contract housing, and tuition fees.

The amount requested for supplies and equipment appears to increase $5.8 million in fiscal year 1974. However, you will recall that the Joint Conference Committee reduced the fiscal year 1973 request by $1.6 million in this area.

Force changes and assumption of the Southern Perimeter Defense Mission, which occurred subsequent to the 1973 submission, increased requirements in the supply and equipment accounts. The result was that our requirements exceeded our original request and compounded the effect of the reduction. This is the reason we requested authority to reprogram a minimum of $2.2 million into this area in fiscal year 1973.

Your recent approval has enabled the ANG to sustain an acceptable level of combat readiness and maintain flying safety.

In reality, the amount requested for fiscal year 1974 is only $3.6 million greater than the minimum amount required in 1973. This is a result of assuming operation of two new installations, full year costs

of the Southern Perimeter Defense Mission, full year costs of conversions to high performance weapon systems acquired during fiscal year 1973, and increased costs of conversions taking place in 1974.

We have established a separate account to identify Project Volunteer recruiting and advertising expenses. Our request this year is $2.3 million. The $1.5 million increase reflects the intensified recruiting and retention efforts necessary to maintain required military strength levels in a zero draft environment.

MAJOR REPAIR AND MINOR CONSTRUCTION

Major repair and minor construction requirements are up $1.8 million due to the operation of two new installations, and repairs and alterations directly attributed to aircraft conversions.

MEDICAL SUPPORT AND SERVICEWIDE SUPPORT

The fiscal year 1974 requirements in the medical support program, which includes medical equipment, supplies, and medical care in non-Air Force facilities, increases $0.1 million as a result of increases in military strength and higher equipment costs.

The request for the servicewide support program, which encompasses command administrative costs, is $0.2 million higher in fiscal year 1974 primarily as a result of the full year impact of the fiscal year 1973 pay increase, and additional travel and per diem costs to support increased headquarters participation in major command inspections, evaluations, and management of ANG units.

SUMMARY AND CONCLUSION

In conclusion, I believe that the funding requested will enable Air National Guard units to fulfill their responsibility to national defense as part of the total force. I earnestly request your continued confidence in, and support of, the Air National Guard. I am prepared to answer questions concerning the proposed operation and maintenance program for fiscal year 1974.

Chairman McClellan. Thank you, General Greenlief. General Brown, do you have any comment?

General Brown. No, sir.

Chairman McClellan. You are from Arkansas. You had better give me some good, sound philosophy and advice.

General Brown. I fully support the statement of my chief when he says that we feel confident that we can fulfill the obligations levied on us by the Department of Defense. We are very proud of our organization. We have a very ready organization, and we appreciate the support that the Congress has given us in the past.

Chairman McClellan. Thank you very much, gentlemen.

JUSTIFICATION

At this point in the record, there will be included additional information from the justifications.

[The justification follows:]

Justification

AIR NATIONAL GUARD

Operation and Maintenance

PERSONNEL SUMMARY

	FY 1972 (Actual)	FY 1973 (Estimate)	FY 1974 (Estimate)
Total number of permanent positions	20,900	22,214	23,158
Full-time equivalent of other positions .	339	65	-0-
Average number of all employees	19,007	21,000	22,891
Average GS grade	7.7	7.6	7.5
Average GS salary	$ 11,659	$ 12,082	$ 12,493
Average salary of ungraded positions	$ 10,618	$ 11,481	$ 11,572

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JUSTIFICATION OF ESTIMATES FOR FY 1974

APPROPRIATION: Operation and Maintenance, Air National Guard

GENERAL STATEMENT

The Operation and Maintenance (O&M) estimate has been carefully developed and the funds requested are the minimum necessary to attain and maintain the readiness posture necessary to support Total Force requirements. The O&M request for FY 1974 exceeds the FY 1973 amount and reflects primarily the increased costs associated with operating and maintaining newer, more sophisticated weapon systems, annualization of FY 1973 pay raises and costs resulting from force relocations.

The massive conversion and modernization of Air National Guard units which reached a peak in FY 1972 will largely be concluded during FY 1974. Much of the increase in O&M costs for FY 1974 is for additional maintenance and other critical Air Technicians upon whom lies the responsibility for the safety and readiness of the modernized Air National Guard. Relatively simple systems like the F/RF-84 and F-86 have been replaced by the highly complex and sophisticated F/RF-4 and F-105. Former F-102 units are now to fly the nuclear capable F-106 interceptor. Airlift has been updated with the shift from obsolescent strategic airlift to modern tactical aircraft as the C-97/C-121/C-124 are replaced by the C-130 Hercules. The placement of these first-line systems in the Air National Guard has brought a concurrent demand that these forces attain a degree of readiness comparable to that achievable by the active Air Force. To attain and maintain the necessary increased readiness the Air National Guard requires the funding levels requested in this estimate.

Specifically, the budget provides $11.2 million for annualization of FY 1973 wage rate increases, the classified civilian pay raise and, anticipated step increases; a $10.9 million increase in depot maintenance, $7.0 million of which is an increase in engine overhauls resulting from depletion of assets from the USAF previously furnished the Air National Guard at no cost; $13.9 million for additional Air Technicians requested to support force modernization and increased readiness; and an increase of $1.5 million in Project Volunteer funds.

Included in the estimate is $2.9 million to fund ANG costs resulting from Southern Perimeter Air Defense, an Aerospace Defense Command mission that became operational during FY 1973.

The budget also provides $14.0 million for force relocations programmed during FY 1974.

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROJECT NO	TITLE		FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
410	Operation of Aircraft	Direct	$ 41,583	$ 46,916	$ 45,427
		Reimbursements	-0-	-0-	-0-
		Total	41,583	46,916	45,427
430	Logistical Support	Direct	67,787	78,014	88,906
		Reimbursements	123	-0-	-0-
		Total	67,910	78,014	88,906
440	Training Support	Direct	305,025	335,561	387,941
		Reimbursements	7,535	9,099	9,799
		Total	312,560	344,660	397,740
470	Medical Support	Direct	566	630	730
		Reimbursements	-0-	1	1
		Total	566	631	731
480	Service-Wide Support	Direct	2,359	2,518	2,706
	Total	Direct	$ 417,320	$ 463,639	$ 525,710
		Reimbursements	7,658	9,100	9,800
		Total	424,978	472,739	535,510

PROGRAM 410: Operation of Aircraft

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROJECT NO	TITLE		FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
412	Aircraft Fuel	Direct	$41,583	$46,916	$45,427

PART I - PURPOSE AND SCOPE

This estimate provides for the direct expenses of aviation fuel for the operation of Air National Guard aircraft. It also provides fuel for jet engine block testing. In accordance with a Department of Defense directive, financing for aviation oil was transferred to P448.10 under Base Operation and Maintenance, on 1 July 1972.

PART II - JUSTIFICATION OF FUNDS REQUESTED

This estimate is based on the requirements for aircraft fuel and is computed by multiplying the programmed flying hours (by model of aircraft) by the average hourly consumption rate. Consumption factors utilized in the computation of fuel costs reflect actual experience of the USAF. The following table shows a comparison of the flying hours and costs by mission for FY 1972, 1973 and 1974.

PROGRAM 430: Logistical Support

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROJECT NO	TITLE		FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
431	Depot Maintenance	Direct	$ 67,787	$ 78,014	$ 88,906
		Reimbursements	123	-0-	-0-
		Total	67,910	78,014	88,906

PART I - PURPOSE AND SCOPE

This project provides funds from which the Air National Guard will reimburse the Air Force for depot level maintenance including corrective maintenance of aircraft, equipment and accessories, electronic and communications equipment, vehicles and other equipment. Depot level maintenance includes repair, overhaul, modification, reclamation, manufacture, assembly and disassembly, inspection, testing, and in-service engineering, including contractor-furnished supplies and equipment, incident to maintenance and modification service performed under contract. It also includes Government furnished materials (GFM) procured from Air Force Stock Funds by the Depot Maintenance Industrial Fund and consumed by the depots in support of the Air National Guard.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The fund requirements for this project are computed on the same basis as used by the regular Air Force in determining its depot maintenance and dollar support requirements. The computations were made by the Air Force Logistics Command (AFLC) depots and are reviewed in detail by Hq AFLC, Hq USAF, and the ANG. The depot requirements

are priced using actual unit direct man-hour experience. The contractual requirements are priced using contractual unit dollar costs obtained by analyzing previous and current years' contracts and/or negotiations. GFM requirements are based on AFLC consumption data.

PROGRAM 440: Training Support

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROJECT NO	TITLE		FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
448	Base Operation and Maintenance	Direct	$ 298,485	$ 332,761	$ 383,391
		Reimbursements	7,535	9,099	9,799
		Total	306,020	341,860	393,190
449	Major Repair	Direct	6,540	2,800	4,550
440	Total	Direct	$ 305,025	$ 335,561	$ 387,941
		Reimbursements	7,535	9,099	9,799
		Total	312,560	344,660	397,740

PROJECT 448: Base Operation and Maintenance

	PROJECT REQUIREMENTS (In Thousands of Dollars)		
	FY 1972	FY 1973	FY 1974
Direct	$298,485	$332,761	$383,391
Reimbursements	7,535	9,099	9,799
Total	306,020	341,860	393,190

PART I - PURPOSE AND SCOPE

This estimate provides funds for expenses incident to the base operation and maintenance of Air National Guard installations having training support as a primary mission. It includes funds for civilian personnel services and benefits; operation, maintenance and repair of facilities by contract, including leased property rentals and service agreements; travel and transportation expenses of military and civilian personnel; transportation of material; rental of punch card and electronic accounting machines, commercial communications services and maintenance of base equipment including vehicles; and for purchase of supplies, equipment and services from stock and industrial funds and from com-

mercial sources. It also includes funds for expenses of field training, exercises and maneuvers, training equipment and supplies.

PART II - JUSTIFICATION OF FUNDS REQUESTED

This estimate provides for the operation of all Air National Guard units and the maintenance of 151 separate Air National Guard installations. The funds requested will provide for such activities as base supervision and management, runway alert, aircraft operations, ground training, base operations, aircraft maintenance, supply, communications, and other equipment maintenance and security of Air National Guard equipment and supplies. These activities are the keystone to the successful operation, training and mobilization readiness of the Air National Guard. Included are necessary requirements of supply activities covering all facets of logistical support for the flying training and ground training of various type units. The operations at Air National Guard facilities cover the military personnel administration for an average of 12,269 officers and 80,022 airmen in FY 1974. The requirements provide for those necessary expenses related to the base maintenance of 151 Air National Guard bases: 89 flying bases, including 4 Permanent Field Training Sites, and 62 nonflying bases. At those installations where heavy communications and radar units are located, provision is made for the necessary electronics maintenance and operations security. This estimate also provides funds required to support force relocation actions programmed for FY 1974.

PROJECT 449: Major Repairs and Minor Construction

PROJECT REQUIREMENTS
(In Thousands of Dollars)

	FY 1972	FY 1973	FY 1974
Direct	$6,540	$2,800	$4,550

PART I - PURPOSE AND SCOPE

This estimate provides for the repair, rehabilitation, modification, alteration, and minor construction of Air National Guard real property for flying and support units including Aircraft Control and Warning Squadrons and Communications Squadrons.

PART II - JUSTIFICATION OF FUNDS REQUESTED

This estimate is generated by a continuing requirement for major maintenance and repairs to facilities including runways, aircraft parking aprons, supply and issue buildings, hangars, fuel storage and other storage facilities, and utility systems and plants. It is for the development of installations to a degree consistent with the minimum Air National Guard standards and criteria and to permit the maximum utilization of existing facilities and structures in lieu of performing new construction. It also provides for restoration, replacement and rehabilitation of facilities damaged by fire, storm and floods.

Maintenance	$ 800,000
Repair	$ 1,750,000
Alteration, Additions and Minor Construction	$ 2,000,000
TOTAL	$ 4,550,000

The major changes in program cost from FY 73 to FY 74 were caused by:

Force relocations	$ 550,000
Repairs and alterations directly attributed to aircraft conversions	$1,200,000

PROGRAM 470: Medical Support

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROJECT NO	TITLE		FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
472	Medical Equipment and Supplies	Direct	$ 468	$ 511	$ 611
		Reimbursements	--	1	1
		Total	468	512	612
475	Medical Care in Non-Air Force Facilities	Direct	98	119	119
470	Total	Direct	566	630	730
		Reimbursements	--	1	1
		Total	566	631	731

PROJECT 472: Medical Equipment and Supplies

	PROJECT REQUIREMENTS (In Thousands of Dollars)		
	FY 1972	FY 1973	FY 1974
Direct	$ 468	$ 511	$ 611
Reimbursements	--	1	1
Total	468	512	612

PART I - PURPOSE AND SCOPE

This project provides for the procurement of medical supplies and equipment in support of the ANG.

PART II - JUSTIFICATION OF FUNDS REQUESTED

This estimate provides for medical supplies and equipment for ANG base dispensaries and training sites.

Supplies ..... $ 511,417

a. Base Dispensaries: A factor of $3.54 times the total number of guardsmen is used for medical supplies for base dispensaries. $3.54 X 91,590 ..... $ 324,229

b. Field Training: A factor of $0.84 times the number of personnel expected to attend field training is used for field training supplies. $0.84 X 82,187 ..... $ 69,037

c. Various Immunization vaccines as required by Air Force regulations. Average cost per individual for vaccines is $1.29 times the total number of guardsmen. $1.29 X 91,590 ..... $ 118,151

Equipment: ..... $ 99,500

This estimate provides for medical equipment for Air National Guard dispensaries (91 medical fund accounts).

TOTAL ..... $ 610,917

Rounded to ..... $ 611,000

PROJECT 475: Medical Care in Non-Air Force Facilities

	PROJECT REQUIREMENTS (In Thousands of Dollars)		
	FY 1972	FY 1973	FY 1974
Direct	$ 98	$ 119	$ 119

PART I - PURPOSE AND SCOPE

This project provides for authorized medical care of ANG personnel by other Government Agencies or civilian hospitals, for emergency care, and for hospitalization.

PART II - JUSTIFICATION OF FUNDS REQUESTED

This estimate provides for medical and hospital expenses of ANG personnel who contract a disease or illness or suffer an injury in line of duty while participating in authorized training such as drills, field training or other training exercises, and for those who contract a disease or sustain an injury not in line of duty for the period of training duty, and when Air Force facilities are not available.

Average number requiring medical care 12,740 X $9.34 = $ 118,992

TOTAL REQUIREMENTS $118,992

ROUNDED TO $119,000

PROGRAM 480: Service-Wide Support

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

PROJECT NO	TITLE	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
481	Command Administration .....Direct	$ 2,359	$ 2,518	$ 2,706

PART I - PURPOSE AND SCOPE

This project provides for personnel compensation and benefits for those civilian employees assigned to staff functions of the Air component within the National Guard Bureau. It also provides travel and per diem expenses for those officers and civilians assigned to staff functions of the Air component of the National Guard Bureau, and for those Air National Guard liaison officers assigned to the Air Force Logistics Command, who are engaged in service-wide support functions pertaining to administration, training, logistics, and operations.

PART II - JUSTIFICATION OF FUNDS REQUESTED

P481.01 - Civilian Personnel Services ..... $ 2,456,000

This estimate is based on 155 man-years and 155 end strength. Related costs are as follows:

Personnel Compensation	$ 2,264,471
Personnel Benefits	$ 191,652
Total Civilian Personnel Services	$ 2,456,123
Rounded to	$ 2,456,000

P481.02 - Travel and Per Diem ..... $ 250,000

This estimate provides for official travel and per diem performed by officers and civilians assigned to air staff functions in the National Guard Bureau, and those ANG officers assigned to AFLC in a liaison capacity. Based on past experience approximately 130 officers and civilians perform travel in connection witn conferences at major air commands, normal staff visits to ANG bases, one-time command assistance visits to ANG bases when required, and liaison visits to Air Force units where joint ANG/AF exercises or operations are in effect.

The major changes in program cost from FY 73 to FY 74 were the full year cost of the FY 73 civilian pay increase and additional travel and per diem costs to support increased headquarters participation in major command inspections and evaluations of, and assistance provided to Air National Guard units ..... $ 110,000

Direct Hire Civilian Employment
(Dollars in thousands, strength in whole numbers)

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Average Strength	End Strength June 30, 1972	Obligations	Average Strength	End Strength June 30, 1973	Estimated Obligations	Average Strength	End Strength June 30, 1974	Estimated Obligations
Direct Hire Civilians									
Technicians	18,991	19,881	$229,707	20,570	21,784	$262,393	21,939	22,206	$290,880
Non-Technicians	16	15	246	430	430 1/	5,513	952 2/	952	12,960
Total Direct Hire Civilians	19,007	19,896	$229,953	21,000	22,214	$267,906	22,891	23,158	$303,840

1/ 14 non-technicians are employed by the National Guard Bureau; 416 are employed at Selfridge Air National Guard Base, Michigan to perform base host responsibilities.

2/ The increase of 522 non-technicians is required to support force relocation actions programmed for FY 1974.

APPROPRIATION: OPERATION AND MAINTENANCE, AIR NATIONAL GUARD

TOTAL OBLIGATIONS BY PROGRAM ELEMENT GROUPINGS
(In Thousands of Dollars)

PROGRAM ELEMENT GROUPINGS	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Strategic Forces	$ 77,154	$ 100,169	$ 123,998
General Purpose Forces	230,511	265,818	288,946
Airlift and Sealift Forces	33,772	6,980	10,644
Depot Maintenance	67,787	78,014	88,906
Command	8,096	12,658	13,216
Total Operation and Maintenance	$ 417,320	$ 463,639	$ 525,710

Headquarters Operation and Administration
(Dollars in thousands; strength in whole numbers)

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Military End Strength	Civilian ES/ Man-years	O&M Oblig	Military End Strength	Civilian ES/ Man-years	O&M Oblig	Military End Strength	Civilian ES/ Man-years	O&M Oblig
Total Headquarters									
Operation & Administration	1/ 26 2/ 50	143/149	$2,359	1/ 35 2/ 50	155/150	$2,518	1/ 35 2/ 50	155/155	$2,706

1/ ANG Members funded under 3850
2/ Active AF members funded under 3500

SERVICE SUPPORT CONTRACTS

	($ In Thousands)		
	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
OPERATION AND MAINTENANCE			
Technical/Engineering Services	$2,245	$2,790	$3,000
TOTAL OPERATION AND MAINTENANCE	$2,245	$2,790	$3,000

AUTOMATIC DATA PROCESSING
(Dollars in Thousands; man-years in whole numbers)

Type of Expenditure/Appropriation	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Rental of equipment	$ 2,467	$ 2,709	$ 3,126
Supply costs	275	275	279
Civilian pay	2,637	2,765	2,958
Civilian man-years	(281)	(280)	(292)
Total obligations	$ 5,379	$ 5,749	$ 6,363

COMMUNICATIONS

(O&M dollars in thousands)

System	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Post and Base Telecommunications	$ (634)	$ (350)	$ (690)
Commercial-Type Communications Services:			
AUTODIN		578	600
All other	130	130	185
Total Commercial Communications Services	(130)	(708)	(785)
Total Communications	$ 764	$1,058	$1,475

Travel and Transportation of Persons (OC 21)
(In Thousands of Dollars)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Air National Guard	$ 3,608	$ 3,866	$ 4,288

Maintenance of Real Property
(O&M dollars in thousands)

Category of Maintenance	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Maintenance	$ 225	$ 400	$ 800
Repair	3,708	1,000	1,750
Minor Construction and Alterations	2,607	1,400	2,000
Total Maintenance of Real Property	$ 6,540	$ 2,800	$ 4,550

Depot-level Maintenance
Aircraft, Engines and Accessories
(dollars in millions)

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Contract	In-house	Total	Contract	In-house	Total	Contract	In-house	Total
Maintenance									
Operation and Maintenance	42.2	25.6	67.8	39.4	38.6	78.0	46.9	42.0	88.9

Air National Guard Depot Level Maintenance is performed by Air Force Logistics Command and as such is reimbursed to the Depot Maintenance Industrial Fund and Air Force Operation and Maintenance Appropriation.

AIRCRAFT OPERATIONS

AIRCRAFT FLYING HOURS SUPPORTED FROM O&M FUNDS

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Air National Guard	427,677	446,823	432,206

AIRCRAFT OPERATIONS

ACTIVE AIRCRAFT INVENTORY

	Actual June 30, 1972	Planned June 30, 1973	Planned June 30, 1974
Air National Guard	1,962	1,857	1,816

SUBCOMMITTEE RECESS

Chairman McClellan. Our next meeting will be Tuesday afternoon. We will recess until then.

[Whereupon, at 4 p.m., Friday, June 15, the subcommittee was recessed, to reconvene at 2 p.m., Tuesday, June 19.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1974

TUESDAY, JUNE 19, 1973

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. John L. McClellan [chairman] presiding.

Present: Senators McClellan and Young.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

AIRCRAFT AND MISSILE PROCUREMENT

STATEMENT OF LT. GEN. OTTO J. GLASSER, DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT, HEADQUARTERS

ACCOMPANIED BY:

MAJ. GEN. JOSEPH R. DE LUCA, DIRECTOR OF BUDGET, HEADQUARTERS

MAJ. GEN. JAMES A. HILL, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES, HEADQUARTERS

PROGRAM AND FINANCING

Chairman MCCLELLAN. The subcommittee will come to order.

This afternoon the subcommittee will hear witnesses in support of the fiscal year 1974 budget request for Air Force procurement appropriations.

The first of these will be the testimony on two appropriations: "Aircraft Procurement, Air Force" and "Missile Procurement, Air Force." At this point in the record, there will appear certain program and financing information from the justifications.

[The justifications, which do not include Southeast Asia adjustments, follow:]

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Justification

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-3010-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1972 ACT	1973 EST	1974 EST	1972 ACT	1973 EST	1974 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1. COMBAT AIRCRAFT	877,300	988,600	1,123,500	1,058,048	920,200	1,030,954
	2. AIRLIFT AIRCRAFT	339,200	216,600	223,700	477,358	215,200	85,985
	3. TRAINER AIRCRAFT	41,000	46,100	100	47,946	43,900	8,237
	4. OTHER AIRCRAFT	8,700	151,500	190,100	47,993	127,650	80,670
	5. MODIFICATION OF INSERVICE AIRCRAFT	577,300	465,700	527,700	636,828	537,200	546,664
	6. AIRCRAFT SPARES AND REPAIR PARTS	407,900	521,000	579,500	538,790	487,450	640,542
	7. AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	791,300	250,300	268,200	824,628	232,172	298,450
	TOTAL DIRECT	3,042,700	2,639,800	2,912,800	3,631,591	2,563,772	2,691,502
	REIMBURSABLE (TOTAL)	1,635,377	870,200	450,000	1,119,393	1,195,228	554,498
10	TOTAL	4,678,077	3,510,000	3,362,800	4,750,984	3,759,000	3,246,000
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-68,568	-51,900	-89,000	-46,755	-51,900	-89,000
13	TRUST FUNDS	-1,590,361	-827,800	-360,500	-1,196,184	-827,800	-360,500
14	NON-FEDERAL SOURCES	-1,448	-500	-500	-1,497	-500	-500
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-2,073,497	-1,318,207	-997,149
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-125,442	.....	.....	-125,442	.....
	REPROGRAMING FROM (-) OR TO PRIOR YEAR BUDGET PLANS	-266,442	-72,058	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-158,700	-443,000	.....	-158,700	-443,000	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	181,000	250,000	.....	181,000	250,000	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	1,318,207	997,149	1,113,949
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	125,442	.....	.....	125,442	.....	.....
	BUDGET AUTHORITY	2,899,000	2,239,300	2,912,800	2,899,000	2,239,300	2,912,800

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1972 Actual	1973 Estimate	1974 Estimate
Combat aircraft	$ 877,300	$ 988,600	$ 1,123,500
Airlift aircraft	339,200	216,600	223,700
Trainer aircraft	41,000	46,100	100
Other aircraft	8,700	151,500	190,100
Modification of inservice aircraft	577,300	465,700	527,700
Aircraft spares and repair parts	407,900	521,000	579,500
Aircraft support equipment and facilities	791,300	250,300	268,200
TOTAL DIRECT PROGRAM	$ 3,042,700	$2,639,800	$ 2,912,800
Reimbursable program	1,635,377	870,200	450,000
TOTAL PROGRAM REQUIREMENTS (Current)	$ 4,678,077	$3,510,000	$ 3,362,800
Less: Portion of program to be obligated in subsequent fiscal years	-1,011,025	-830,208	-752,208
Plus: Obligations incurred against prior year program funds	1,083,932	1,056,790	755,580
TOTAL OBLIGATIONS	$ 4,750,984	$3,736,582	$ 3,366,172

BIOGRAPHY

Chairman McCLELLAN. The first witness to appear is Lt. Gen. Otto J. Glasser, Deputy Chief of Staff, Research and Development, Headquarters, U.S. Air Force. General, do you have a prepared statement?

General GLASSER. I have, sir.

Chairman McCLELLAN. Let the biographical sketch of General Glasser be printed in the record at the beginning of his testimony.

[The biography follows:]

LIEUTENANT GENERAL OTTO J. GLASSER

Lieutenant General Otto John Glasser was born in Wilkes-Barre, Pa., in 1918, and was graduated from Cornell University in 1940 with a degree in electrical engineering. He was commissioned a second lieutenant in May of 1940, and was called to active duty with the Army Signal Corps in February 1941. For the next several years, he was assigned to the Caribbean area and was responsible for the installation and operation of early warning radar systems.

He entered flying training in September 1943, and graduated the following June. In September 1945, he was assigned as Chief of the Radar Branch, Headquarters, Continental Air Forces (later the Strategic Air Command). He attended Ohio State University in 1946 and received a master's degree in electronic physics in 1947. General Glasser was then assigned to the Armed Forces Special Weapons Project, Albuquerque, New Mexico. In January 1951, he entered the Air Command and Staff School. Upon completion in May 1951, he was assigned to Headquarters, U.S. Air Force, as Chief, Munitions Branch, Research and Development Directorate.

General Glasser joined the Air Research and Development Command (ARDC) in 1954, and went to the Air Force Ballistic Missile Division, Los Angeles, California. He was one of the initial group assembled to develop the first intercontinental ballistic missile. He later became Program Director for both the Atlas and Minuteman missiles. In October 1959, he was reassigned to Headquarters, ARDC, serving first as Chief, Ballistic Missiles and Space Systems Division, and later as Assistant Deputy Chief of Staff, Research and Engineering. In February 1961, he became Special Assistant to the Commander, ARDC, with additional duty as Chief of the Command Special Projects Office.

In July 1962, General Glasser became the Vice Commander of the Electronic Systems Division, Air Force Systems Command. In July 1965, he was reassigned to the Office of the Deputy Chief of Staff, Research and Development, Headquarters, U.S. Air Force; first as Deputy Director of Operational Requirements and Development Plans, and then to the position of Assistant Deputy Chief of Staff, Research and Development.

In February 1970, General Glasser was assigned as the Deputy Chief of Staff for Research and Development, Headquarters, U.S. Air Force.

His military decorations include the Distinguished Service Medal, the Legion of Merit, and the Air Force Commendation Medal.

PROCUREMENT INFLATION INDEXES

Chairman McCLELLAN. General, you may proceed.

General GLASSER. Thank you, Mr. Chairman.

It is my privilege to present to you once again the Air Force request for aircraft and missile procurement funds. Although our request of $4.5 billion approximates that of last year, this year's request of $100 to $200 million less in terms of actual purchasing power.

Chairman McCLELLAN. What inflation index do you use for aircraft and missile procurement? Compare this with the indexes used for other Air Force appropriations accounts.

General GLASSER. The inflation indexes used in the procurement of aircraft and missile weapon systems is primarily based on specific

data, considering such factors as contract provisions, labor agreements, productivity and quantity changes, and the extent to which material is in hand or under fixed price contract. In cases where specific information is not available, the current OSD Comptroller indexes are used. For those major weapon systems which specifically identify an escalation factor, the current factors are contained in the March 31, 1973 selected acquisition report (SAR). For programs based on specific data, the indexes range from an average annual factor of 4 percent to 5.6 percent. The R.D.T. & E. and military construction appropriations base their escalation indexes on the same rationale at procurement; that is, they use specific data primarily.

OSD COMPTROLLER ESCALATION INDEX

All remaining nonsystems do not escalate their budgets. This is in accordance with OMB Circular No. A–11, section 13.5A, dated June 12, 1972. I will provide for the record an OSD Comptroller escalation index list for comparative purposes.

[The information follows:]

FY	PROCUREMENT	RDT&E	MIL. CONST.
73	100.00	100.00	100.00
74	102.66	103.73	105.82
75	105.84	107.36	110.79
76	109.12	111.12	116.00
77	112.51	115.01	121.45
78	115.99	119.03	127.16
79	119.59	123.20	133.14
80	123.30	127.51	139.40
81	127.12	131.97	145.95
82	131.06	136.59	152.81
83	135.12	141.37	159.99
Beyond 83	3.1% per yr.	3.5% per yr.	4.7% per yr.

BUDGET REQUEST

Chairman McCLELLAN. This is the total amount you are requesting for all procurement in the Air Force?

General GLASSER. Aircraft and missiles.

Chairman McCLELLAN. Some $4.5 billion for aircraft and missiles. All right.

General GLASSER. The fiscal year 1974 procurement request was prepared to avoid concurrent development and procurement. I am confident that this year's procurement request contains only those items necessary to maintain an effective force and is in consonance with the "fly-before-buy" concept.

Chairman McCLELLAN. That is, you know you are getting the weapon that you want before you place the contract for procurement, is that correct?

General GLASSER. That is correct, sir.

AIRCRAFT PROCUREMENT

Chairman McCLELLAN. You may proceed.

General GLASSER. The aircraft procurement program request for fiscal year 1974 is $2.9 billion.

The request includes 154 aircraft for the Active Force of the Air Force. In addition, 308 UH–1H and 24 CH–47C helicopters are requested as a payback to the U.S. Army for aircraft transferred to the Vietnamese and we have programed 71 F–5E aircraft for the VNAF in this year's budget. Also included is a request for funds to reimburse the military assistance program for the costs associated with providing 116 F–5A's to the Vietnamese.

AIRCRAFT TRANSFERRED TO VIETNAMESE AIR FORCE

Chairman McCLELLAN. Describe the financial and accounting procedures to implement the payback of 332 helicopters which the Army transferred to the Vietnamese and also for the 71 F–5E aircraft which are in your budget for the Vietnamese Air Force. Will any of these funds be charged against military assistance accounts?

General GLASSER. For the 332 helicopters: The Army gave to the Office of the Secretary of Defense (Comptroller) an accounting of the helicopters which they had transferred to the Vietnam Air Force. Army validated to the Office of the Secretary of Defense (Comptroller) its requirement for payback of the helicopters with a cost estimate to buy new helicopters. The Office of the Secretary of Defense (Comptroller) entered the number of helicopters and the estimated cost as military assistance service funded items in the Air Force budget.

The 71 F–5E's requested in fiscal year 1974 are to replace in-country VNAF F–5A's on a one-for-one basis to provide self-sufficient air defense capability. The F–5E's are to be funded from the military assistance service funded (MASF) program.

Senator YOUNG. Do you have a breakdown of these 154 aircraft?

LISTING OF AIRCRAFT

General GLASSER. Yes, sir, the table on the next page will give you a detailed listing of all the aircraft we are requesting.

Chairman McClellan. You may proceed.

General Glasser. I would like now to briefly review the fiscal year 1974 budget request for aircraft procurement which also includes fund requests for aircraft modifications, spares and repair parts, and support equipment and facilities. I want to assure you that actions taken by Congress in fiscal year 1973 are being implemented according to the letter and spirit of the authorization and appropriations reports.

Senator Young. Where is your breakdown of the 154 aircraft in table I?

General Glasser. Unfortunately, Senator, the chart is not constructed to show you the 154, per se.

Senator Young. What aircraft are they?

General Glasser. It includes the F–4E's, it includes the 77 F/TF–15A's. It includes the 36 C–130H's. It includes one airborne command post and 16 CX–X.

Senator Young. How many F–15's?

General Glasser. Seventy-seven of the F–15's. If you go down that column, you see 24 F–4E's, 77 F–15's, 36 C–130's, 1 airborne command post, and 16 CX–X. All the other aircraft you see there are either in the Vietnamese or other categories.

Senator Young. The F–5A——

General Glasser. Those are the aircraft we recovered from various holders to transfer to the Vietnamese. What we are now doing is requesting the funds to reimburse the MAP account for the costs associated with providing those aircraft.

Chairman McClellan. What is MAP?

General Glasser. Military assistance program, sir.

These are not new aircraft. These are F–5A's that were gotten from various countries that were holding them. They turned them in to us. We then turned them over to the Vietnamese Air Force and these funds that we are now requesting are to reimburse the military assistance program for the costs the United States had to incur to make those aircraft available to Vietnam.

Senator Young. How many of the airplanes are going to South Vietnam? I am thinking particularly of the 154 aircraft. Do any of these go to Vietnam?

General Glasser. No, sir. The 154 are for the U.S. Air Force.

Senator Young. You have them interlaided in the table.

General Glasser. That is correct, sir, because we are listing everything that the Air Force must buy. This is the procurement list for this year.

PLANES TRANSFERRED TO SOUTH VIETNAMESE

Senator Young. Could you list the planes and how many there are in this table?

General Glasser. All the other airplanes on this list with the exception of one.

Senator Young. Can you name them?

General Glasser. 116 F–5A's have already been turned over to Vietnam. This is a reimbursement request. The 71 F–5E's are to go to Vietnam. The T–41D's do not. There are three. The 24 CH–47C helicopters, the UH–1H helicopters also go to Vietnam.

Chairman McClellan. What do you mean, "go to Vietnam"?

General Glasser. They are aircraft that are turned over to the Vietnamese Air Force.

REPLACEMENT OF PLANES TRANSFERRED

Chairman McClellan. They have already been turned over. This is a replacement, is it not?

General Glasser. This is a replacement to the U.S. Army in the case of the helicopters.

Chairman McClellan. For what has been turned over?

General Glasser. Yes.

Chairman McClellan. In other words, you want to replenish your U.S. Air Force strength in weapons.

General Glasser. Yes, sir.

Chairman McClellan. These are to replace weapons that were given to South Vietnam.

General Glasser. That is correct.

Chairman McClellan. Already given to them.

General Glasser. All except the 71 F–5E's.

Senator Young. As I recall, about $900 million of the Air Force budget goes to Southeast Asia.

General De Luca. $902 million of the Air Force budget as submitted is for the support of South Vietnam and Laos, but that includes O. & M., other procurement, munitions as well as aircraft. This is being revised downward to approximately $627 million in view of the cease-fire in Vietnam and Laos. The aircraft portion is what General Glasser is now addressing. You can break out between what goes to VNAF and the U.S. Air Force.

AIRCRAFT SPREAD BY USAF AND VNAF

General Glasser. If we may, we will supply for the record at this point a categorization that Senator Young has suggested showing those for our own forces and those for Vietnam.

[The information follows:]

The following list identifies those FY 1974 aircraft that will go to the U.S. Air Force and those for the VNAF:

Aircraft	U.S. Air Force	VNAF
F–4E	24	
F–5A (reimburse to MAP)		116
F–5E		71
F/TF–15A	77	
C–130H	36	
T–41D		[1] 3
AABNCP	1	
CH–47C		[2] 24
UH–1H		[1] 308
CX–X	16	
Total	154	522

[1] VNAF and Laos.
[2] Payback to U.S. Army.

F–5 PROCUREMENT

Senator YOUNG. Has the F–5 proven to be a good aircraft for our allies?

General GLASSER. Yes, sir. Less developed countries have been able to effectively use the F–5 aircraft by taking advantage of its characteristics and ease of operation and maintenance.

Senator YOUNG. How many have been procured?

General GLASSER. The following quantities of F–5 aircraft have been or will be procured:

F–5A/B and RF–5A aircraft delivered	955
F–5E's are currently funded for production	289
F–5E's in approved programs	198
F–5E's in coproduction programs	[Deleted.]
Total F–5-type aircraft	[Deleted.]

F–5 AIRCRAFT RECIPIENTS

Senator YOUNG. Please provide the names of the countries that have received the F–5 aircraft and how many each received.

General GLASSER. The following countries have received the F–5 aircraft and the quantities are indicated:

United States	37
Iran	140
Republic of Korea	110
Greece	77
Philippines	22
Republic of China	102
Turkey	108
Norway	108
Ethiopia	15
Morocco	24
Thailand	18
South Vietnam	[1] 164
Libya	10
Saudi Arabia	20
Total	955

[1] 116 transferred from other countries and their totals reduced accordingly. [Deleted] from China, [deleted] from Korea, and [deleted] from Iran.

AIRCRAFT ON LOAN FOR PILOT TRAINING

Senator YOUNG. How many F–5 aircraft does the Air Force have for training allied pilots?

General GLASSER. Sir, there are nine each F–5A and eight F–5B aircraft on loan from MAP/MASF at Williams Air Force Base for training allied pilots.

Chairman MCCLELLAN. Insert in the record the table indicating aircraft procurement estimates.

[Table 1 follows:]

TABLE I
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 AIRCRAFT PROCUREMENT ESTIMATES
(In Millions of Dollars)

		QTY	ESTIMATES
COMBAT AIRCRAFT			
A-10	Attack Aircraft (Advance Procurement Current Year)		$ 30.0
E-3A	Command and Control (Advance Procurement Current Year)		11.7
F-4E	Tactical Fighter	24	98.6
F-5A	Freedom Fighter (Reimburse to MAP)	116	69.3
F-5E	International Fighter	71	112.0
F/TF-15A	Tactical Fighter	77	801.9
		288	$ 1,123.5
AIRLIFT AIRCRAFT			
C-5A	Cargo/Transport (Prior Year Unfunded Deficiencies)		$ 43.1
C-130H	Cargo/Transport	36	180.6
		36	$ 223.7
TRAINER AIRCRAFT			
T-41D	Pilot Trainer	3	.1
OTHER AIRCRAFT			
AABNCP	Advanced Airborne Command Post	1	$ 32.3
CH-47C	Helicopter	24	51.5
UH-1H	Helicopter	308	96.7
CX-X	MAAG/Attache	16	9.6
		349	$ 190.1
MODIFICATION OF IN-SERVICE AIRCRAFT			$ 527.7
AIRCRAFT SPARES & REPAIR PARTS			$ 579.5
AIRCRAFT SUPPORT EQUIPMENT & FACILITIES			
	Common Ground Equipment		$ 82.0
	Component Improvement		25.9
	Industrial Facilities		23.9
	War Consumables		.9
	Other Production Charges		106.0
	Classified Programs		29.5
			$ 268.2
TOTAL DIRECT PROGRAM		676	$ 2,912.8
FINANCING:			
	New Obligational Authority		$ 2,912.8

A–10

Chairman McClellan. You may proceed.

General Glasser. The A–10 is being developed specifically to enhance the capability to provide effective close air support for friendly ground forces.

Chairman McClellan. You mean we are going to turn them over to other countries?

General Glasser. This is to provide close air support to our own forces or our allies as we work with them.

Chairman McClellan. You may proceed.

General Glasser. Key design features include large ordnance and fuel payload, capability to operate from forward bases, and maneuverability, simplicity, low support requirements, and high survivability.

The prototype competition between the Northrop A–9 and Fairchild A–10 has been completed. During the prototype phase, the A–9 and the A–10 each flew in excess of 300 hours in a flight test program which clearly established the airworthiness of each design.

DIFFERENCE BETWEEN A–9 AND A–10

Chairman McClellan. What were the major differences between the A–9 and A–10 aircraft? What factors determined the final selection of the A–10 for further development?

General Glasser. The A–10 engine location being high and on the aft fuselage minimizes potential foreign object damage when operating from forward, semiprepared airfields. The engine placement permits maintenance and servicing while the engines are running. The A–10 engine exhaust is tilted upward to eliminate adverse jet blast effects on personnel, equipment, tests, et cetera. The A–9 engines would be subject to foreign object damage and ingestion of gun gas and stores debris. The A–9 engine jet blast would adversely affect ground personnel. Servicing and maintenance of the A–9 could not be conducted simultaneously with the engines running.

The A–10 wing is essentially clean and optimized for carrying ordnance. Pylon spacing provides for excellent access with minimal need for special ordnance loading techniques. The A–9 wing loses considerable space because of the large engine inlet ducts. Thus, the A–9 wing pylons are more closely spaced and adversely affect ordnance loading and carriage.

The gun installation in the A–10 is superior to the A–9 installation because of better accessibility. The gun reaction forces pass within about 6 inches of the A–10 center of gravity as compared to 28 inches in the A–9. This permits an uncomplicated design in the A–10 and tends to minimize aircraft pitch changes when the gun is fired. Although both aircraft would be very survivable, the A–10 has some advantages over the A–9.

Finally, the A–10 prototype is more similar to the production configuration than is the A–9. This increases the utility of the A–10 prototypes in future testing and leads to less technical risk in the future development efforts.

Chairman McClellan. You may proceed.

General GLASSER. The evaluation included assessments of performance and flying qualities, operational suitability, weapons delivery, subsystem performance and maintainability. Rigorous testing of cockpit armor and fuel tanks was conducted separately, substantiating the improved survivability features of both designs. After considering the results of the prototype aircraft evaluation and the contractors' proposals for development and production, the Secretary of the Air Force determined that the cost goal could be met and selected Fairchild to continue development of the A–10.

FLY-BEFORE-BUY

The concept of fly-before-buy will be carried forward into full-scale development and production phases. We intend to continue flight testing the A–10 prototype aircraft for an additional 400 hours before an initial production decision in May 1974. This testing will include additional aerodynamic investigations, 30-millimeter gun-airframe flight testing and initial operational test and evaluation. After delivery of the production test aircraft, additional development and initial operational testing will be performed to support the major production decisions. This approach has been structured to maximize the benefits of prototype testing and to insure that adequate testing is performed to support each milestone while also providing program continuity.

A–10 INVENTORY OBJECTIVE AND UNIT COST

Chairman MCCLELLAN. What is the inventory objective for the A–10 and what will the program unit cost be?

General GLASSER. The inventory objective for the A–10 is a total of 743 aircraft at a program unit cost (in then year dollars) of $3.35 million. The 743 aircraft consist of 4 prototypes, 10 R.D.T. & E. aircraft and 729 production aircraft.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The fiscal year 1974 request to implement this program is $30 million for advanced procurement of engines and airframe components. It is necessary to buy these long lead items to support the initial production decision.

AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)

E–3A airborne warning and control system.

The airborne warning and control system (AWACS) will support tactical operations as well as air defense of the continental United States.

A–10 PROCUREMENT

Senator YOUNG. How many prototype A–10 aircraft have been procured?

General GLASSER. Two A–10 prototype aircraft, sir. Of course, two A–9 aircraft were also procured under the A–X competitive prototype program.

Senator YOUNG. Will the Air Force procure additional prototypes or research and development aircraft for testing before the production decision is made in May 1974?

General GLASSER. The Air Force initiated development of 10 A–10 R.D.T. & E. aircraft on March 1, 1973. The first flight of these aircraft is scheduled for December 1974. The release of long lead items for the first 26 production aircraft in May 1974 will be based upon the flight test experience gained to that point with the 2 prototype aircraft previously procured, and does not constitute a firm commitment to production. The decision, or commitment, to production will be made in November 1974 following the completion of engine qualification testing.

AWACS/WHEN DEVELOPED AND EXPENDITURES

Chairman MCCLELLAN. How long has the airborne warning and control system been in development, and how much has been expended to date?

General GLASSER. The AWACS R.D.T. & E. approved funding through fiscal year 1973 is $512.4 million, which includes $194.2 million in fiscal year 1973. All fiscal year 1972 and prior year funds ($318.2 million) have been obligated and expended. The fiscal year 1973 fund status as of April 30, 1973, is $191.7 million obligated and $14.1 million expended. The forecast of contractor expenditures through June 30, 1973, is $111.2 million. The total program expenditures through April 1973 is $332.3 million.

Chairman MCCLELLAN. You may proceed.

General GLASSER. A single AWACS hardware configuration is being developed for both applications. Changing from one mission to the other requires only that a tape containing the appropriate software program be read into a data processor. This system will replace some of the current surveillance and communications elements in both air defense and tactical forces. Its large surveillance volume and the capability to detect and track low-flying aircraft provide AWACS significant advantages over vulnerable ground radars. AWACS has intrinsic survivability through mobility, its capability to maintain awareness of the developing tactical situation and the ability to command weapons as appropriate in its own defense. Integrated presentation of the tactical situation on a near real time basis and command of the resources needed to influence combat results make AWACS a significant addition to the command and control forces of the Air Force.

AWACS INVENTORY OBJECTIVE AND UNIT COST

Chairman MCCLELLAN. What is the inventory objective for the AWACS program and what will the program unit cost be?

General GLASSER. The aircraft inventory objective for AWACS under the approved program is 42. The procurement unit cost through fiscal year 1980 is estimated to be $32.5 million. The program acquisition unit cost (including R.D.T. & E. funds) is $56.8 million.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The AWACS radar, which was the high risk technical item, has been demonstrated in a flyoff competition using two modified Boeing 707–320B aircraft. The Westinghouse radar has been

selected for further development. A systems integration demonstration, using the Westinghouse radar and one of the modified Boeing 707–320B aircraft will be conducted to demonstrate that all of the AWACS subsystems are interoperable. Fiscal year 1973 R.D.T. & E. funds were appropriated to start reconfiguration of the nonselected brassboard aircraft and fabrication of two new aircraft as Development Test and Evaluation (D.T. & E.) aircraft. Following completion of testing, these aircraft will be refurbished and enter the operational inventory. The test and demonstration of AWACS in Europe was an unqualified success and we are very gratified with the results.

The request for a production decision will be supported by technical feasibility and operational suitability data obtained from the system integration demonstration and initial operational test and evaluation. These efforts have been scheduled to eliminate concurrency in the program by testing individual items and system operability prior to the production decision. Fiscal year 1974 funds of $11.7 million are needed to provide the necessary long lead items in support of the full production decision to be made in fiscal year 1975.

AWACS/USE OF FUNDS AND R.D.T. & E. BUDGET

Chairman McClellan. Just what will the $11.7 million which you request for AWACS be used for?

General Glasser. I will provide for the record a breakout of the $11.7 million requested for AWACS.

[The information follows:]

	Millions
Air frame structures	$4.8
Propulsion (less engines)	.8
Rotodome assembly	.5
Electronics (mission avionics)	2.3
Mission avionics for peculiar training equipment	3.3
Total	11.7

AWACS R.D.T. & E. BUDGET REQUEST

Chairman McClellan. How much is in the Air Force R.D.T. & E. fiscal year 1974 budget request for AWACS?

General Glasser. $197.8 million.

AWACS PROCUREMENT

Senator Young. What is the Air Force's confidence level in the AWACS system to perform equally well in support of tactical operations and air defense?

General Glasser. The Air Force has high confidence in the fact that AWACS can perform equally well in the tactical and the air defense mission.

Senator Young. Has it been necessary to compromise in one or both missions to develop a single system?

General Glasser. No compromise has been made to develop a single system to perform both missions.

Senator Young. Ultimately, how many AWACS aircraft will the Air Force request?

General GLASSER. Based on our present forecasts, we intend to remain within the approval program of 42 AWACS aircraft.

Senator YOUNG. Where will these aircraft be assigned in the Air Force?

General GLASSER. For planning purposes, 25 aircraft are designated for ADC and 10 for TAC. Seven aircraft are designed for command support and will provide systems for training and attrition replacement.

Senator YOUNG. Will the tactical Air Force or the Air Defense Command manage the maintenance and configuration of these aircraft?

General GLASSER. Overall maintenance management for AWACS will be provided by the Air Force Logistics Command. Configuration will be managed during development by Air Force Systems Command and by Air Force Logistics Command after turnover of engineering responsibility.

Senator YOUNG. Who will make the decision to commit these aircraft when there are conflicting requirements?

General GLASSER. The decision on AWACS commitment when requirements conflict will be made by the Joint Chiefs of Staff.

FUNDS FOR SOUTHEAST ASIA

Chairman MCCLELLAN. General, before we go on, as I understand there is some $900 million of money in this bill to take care of South Vietnam or Southeast Asia. Which is it?

General DELUCA. Southeast Asia.

General GLASSER. Those are total funds. They are not all within aircraft procurement.

Chairman MCCLELLAN. Were you limited in the amount of assistance you could give Southeast Asia at any time at all?

General DELUCA. Yes.

Chairman MCCLELLAN. Was this a decision made by the military?

General DELUCA. No, sir.

Chairman MCCLELLAN. What is the authority for it and what is the limit that you operated under?

General DELUCA. For example, there is a limit in 1973 and I think defensewide that limit was very close to $2.7 billion. That was the limit. The limit going into 1974 which is being proposed, Senator, is $2.1 billion. In a restructuring of the program subsequent to the cease-fire the Office of the Secretary of Defense is resizing that $2.1 to $1.7 billion.

Senator YOUNG. That is awaiting approval by the Armed Services Committee.

General DELUCA. Yes, sir; that is going to the Armed Services Committee for authorization.

Chairman MCCLELLAN. The Armed Services Committee in the authorizing legislation places the limit?

General DELUCA. Places a ceiling.

To come back to Senator Young's point, sir, in that $902 million that we presently have in the 1974 Air Force budget related to South Vietnam and to Laos, in the aircraft account of that $902 million is approximately $330 million. Those are the airplanes that the general

is addressing. Then there is O. & M., another $344 million, and there is $38 million for other procurement, primarily munitions and 22—so your $902 million is made up of aircraft, O. & M., support of VNAF and munitions.

Senator YOUNG. I think I can sell the people in my State on a more modern Air Force, but I don't know that I can sell them on our giving a billion dollars or more to Southeast Asia when we know we should modernize our own Air Force.

F–4E

Chairman MCCLELLAN. Let us go to the F–4E. You may proceed.

General GLASSER. The F–4E continues as a first line tactical fighter. It can carry a wide spectrum of weapons and is capable of worldwide deployment.

The fiscal year 1973 approved program provides for the procurement of 48 F–4E aircraft as attrition replacements. Delivery of the first of these aircraft is planned for December 1974.

DIFFERENCES IN F–4 SERIES

Chairman MCCLELLAN. How does the F–4E aircraft differ from other series of F–4 aircraft?

General GLASSER. The most significant difference between the F–4E and other models of the aircraft is the internally mounted 20-millimeter cannon in the F–4E. It is also equipped with a more sophisticated fire control system, an advanced attack radar, and a more survivable flight control system, all of which enhance combat effectiveness. Additionally, the F–4E has slightly better speed/range performance characteristics than the older models.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The fiscal year 1974 budget request is for 24 F–4E's at a cost of $98.6 million. These are needed to offset additional losses in Southeast Asia to reduce existing force structure deficits.

F–4E LOSSES IN SOUTHEAST ASIA

Chairman MCCLELLAN. How many F–4E's were lost in Southeast Asia? How many of these were lost as a result of enemy action?

General GLASSER. There has been a total of 73 F–4E losses, 70 of which were due to enemy action.

F–5A

Chairman MCCLELLAN. You may proceed.

General GLASSER. The F–5A is a twin jet, single seat fighter aircraft in use by 15 nations of the world. The aircraft is easy to fly and maintain and is relatively inexpensive. These proven features have established the F–5A as an effective weapon system for our allies.

The fiscal year 1974 request of $69.3 million for 116 F–5A's is to fulfill Vietnamization program commitments. These aircraft were reacquired from certain allies and transferred to the VNAF in accordance with established programs. These represented military assistance program assets for which reimbursement funds are required. No new procurement of F–5A's is contemplated.

F–5A AIRCRAFT FOR VIETNAM

Chairman McClellan. Explain fully what actions were taken to bring about the request for $69.3 billion for 116 F–5A's to fulfill Vietnamization program commitments.

General Glasser. The increased Southeast Asia (SEA) activities during the 2d quarter of fiscal year 1973 necessitated augmentation of the Vietnamese Air Force (VNAF) force structure to provide an interim air defense capability and make available 116 F–5A aircraft to the VNAF for a later one-for-one exchange between F–5A and F–5E aircraft.

Since F–5A aircraft were not in production nor available within Air Force inventories, availability of these aircraft was negotiated with the Governments of the Republic of China, the Republic of Korea, and the Empire of Iran from their active F–5A inventories.

Title of these aircraft was transferred to these countries previously under the military assistance program (MAP) and these allied nations were not obligated to return the aircraft to MAP so long as they were required for the purpose which furnished.

The previously mentioned governments have a continuing requirement for the F–5A aircraft, nevertheless, these governments agreed to return the F–5A aircraft to MAP for certain specified considerations.

To meet the immediate needs of the VNAF, 116 F–5A aircraft were reacquired by the MAP account of the Defense Security Assistance Agency for release to the Department of the Air Force for subsequent transfer to the Republic of Vietnam under the Military Assistance Service Funded (MASF) program.

Specific quantities of aircraft provided by each country is shown below:

Country:	*Aircraft quantity*
China	[deleted.]
Korea	[deleted.]
Iran	[deleted.]
Total	116

To consummate the foregoing transaction, the U.S. Government entered into quid pro quo agreements with involved allied nations and as a result of these agreements incurred costs of $69.3 million.

The quid pro quo agreements are as follows:

China.—For the [deleted] F–5A aircraft, the U.S. Government agreed to [deleted]. These bailment costs are $9.7 million for a 30-month period. Also, the U.S. Government agreed to [deleted]. The cost of [deleted] is $45.9 million.

Korea.—For the [deleted] F–5A aircraft, the U.S. Government [deleted]. The cost of the bailment and spares is $13.7 million for a 30-month period.

A summary of the quid pro quo estimated costs associated with China and Korea follow:

[In millions of dollars]

	China	Korea	Total
[Deleted]	9.7		9.7
[Deleted]	45.9		45.9
[Deleted]		13.7	13.7
Total	55.6	13.7	69.3

Iran.—For the [deleted] F–5A aircraft, the U.S. Government agreed to [deleted] on a similar basis. Additionally the U.S. Government agreed to [deleted]. Iran will pay for these costs under Foreign Military Sales (FMS).

No part of the $69.3 million is associated with Iranian quid pro quo agreements.

Chairman McClellan. Are you requesting funds for the Air Force to replace military assistance program funds which were expended? If so, why aren't these funds being requested in the MAP budget request?

General Glasser. Yes sir, the $69.3 million requested by the Air Force will be reimbursed to MAP to cover the cost of quid pro quo agreements with China and Korea. The aircraft obtained from these countries were needed to satisfy VNAF requirements which are the funding responsibility of the Air Force under Military Assistance Service Funded (MASF) procedures. Failure to fund this requirement in the Air Force Appropriation would cause the Air Force to be unable to meet an obligation made in good faith and under accepted procedures. Such retroactive change would have an adverse effect on interagency assistance and cooperation in the national interest in the future.

F–5E

Chairman McClellan. You may proceed.

General Glasser. The F–5E, which is being produced for a number of foreign nations, is an improved version of the F–5A. The newer F–5E with its increased capability provides our allies with an effective fighter and interceptor aircraft.

Chairman McClellan. When we produce it for foreign nations do they reimburse us?

General Glasser. It comes in various categories. Most of the aircraft will be on a reimbursement basis. For Vietnam of course these are under the Air Force military assistance service funded program.

Senator Young. Which countries are nonreimbursable besides South Vietnam?

General Glasser. On foreign military sales we have Saudi Arabia for [deleted] aircraft.

Senator Young. They will pay for them?

General Glasser. Yes, sir. [Deleted] to Iran. Of course they will be paying for them. [Deleted] to Malaysia. The balance of them are South Vietnam.

Senator Young. Are there any other nonreimburseables?

General Glasser. There are [deleted] in Korea under the military assistance program. There are in the works at this time an additional [deleted] in China which will be [deleted]. They will actually be [deleted].

Chairman McClellan. You may proceed.

General Glasser. In fiscal year 1973, the Congress approved $90.4 million for the procurement of 57 F–5E aircraft. The fiscal year 1974 budget includes a request of $112 million for 71 F–5E aircraft for the VNAF. These Military Assistance Service Funded aircraft will replace F–5A's currently in the VNAF force structure.

DIFFERENCE IN F–5 SERIES OF AIRCRAFT

Chairman McClellan. How does the F–5E differ from other series of F–5 aircraft?

General Glasser. The F–5 series of aircraft includes the F–5A, the F–5B, which is a two-seat version of the A model, and the F–5E. The F–5E contains all the basic elements of the F–5A, but incorporates major design improvements which significantly improve its overall mission performance over the F–5A. The F–5E is configured with new engines which provide 22 percent more thrust than those in the F–5A. The fuselage has been modified to provide a 15-percent increase in internal fuel capacity as well as a capability to carry a larger external fuel tank. The wing area has also been enlarged and the wing flaps redesigned for use as maneuvering flaps. Additionally, the F–5E is equipped with an integrated fire control system incorporating a search and range track radar, a lead-computing sight, and a missile in-range computer.

Chairman McClellan. Explain your reference to "Military Assistance Service Fund" aircraft.

General Glasser. Sir, all the defense articles and services transferred to Laos and South Vietnam are procured under the authority contained in the Department of Defense Appropriation Act and is recorded as "Military Assistance Service Funded." Aircraft is one of the Defense articles.

Chairman McClellan. Does this have any relationship to the military assistance program?

General Glasser. The military assistance program (MAP) is annually authorized and funded under the Foreign Assistance Act whereas Military Assistance Service Funded (MASF) programs are authorized and funded within the military service budgets. Military Assistance Service Funded programs are recorded and reported under the same procedures as are the military assistance programs.

F–15A

Chairman McClellan. You may proceed.

General Glasser. The F–15A is a single-seat air superiority fighter. Its high performance and maneuverability will provide an air-to-air combat capability superior to any threat aircraft projected through the 1980's. Its key design features are low wing loading, high thrust-to-weight ratio, and its capability to employ the full spectrum of air-to-air armament, including a cannon and advanced Sparrow and Sidewinder missiles. The performance of the F–15 will provide a major improvement in our capability to achieve air superiority during the next decade.

Congress approved $421.6 million in fiscal year 1973 for 30 production airplanes to be delivered starting in November 1974. A significant milestone was achieved in July 1972 with the first flight of the F–15.

RECENT F–15 DECISION

Chairman McClellan. The Congress has recently been notified of a Department of Defense decision to consider the F–15 for possible use by the Navy and Marine Corps. Discuss just what is transpiring

in this matter and what effect it may have on the Air Force F–15 program.

General GLASSER. The Deputy Secretary of Defense has directed the Navy to develop a prototype flyoff program involving the F–15N and F–14D. If this program is conducted, the resulting evaluation will support a selection decision in calendar year 1976. The impact on the Air Force F–15 program as a result of any future decision to buy the F–15 for Navy/Marine operational use cannot be assessed at this time.

Chairman MCCLELLAN. You may proceed.

General GLASSER. This achievement has been followed by a highly successful development, test, and evaluation phase which led to the decision to approve the release of long lead funds. The fiscal year 1974 request is $801.9 million for 77 airplanes to be delivered starting in October 1975. The present production funding cycle provides the optimum balance between leadtime requirements for product and the fly-before-buy concept. The contractual arrangements support this balanced approach.

Based on the successful completion of a modified 150-hour endurance test in April 1973, the Air Force has authorized F–100 engine production. However, because the full performance envelope of the engine has not been tested, the Air Force has elected to fund the contractor on a partial allotment basis until additional modification and testing can be accomplished. This added testing is underway and is expected to be completed by September 1973. Negotiations are being held with the contractor to establish the cost of the increased testing. Flight test of the series 2 engines began in November 1972 and most of the propulsion and performance flight test data will be obtained from these engines. The program requirement to meet demonstration milestones prior to each major production decision point, and the low production rates until flight tests are complete minimize concurrency.

F–15 ENGINE FAILURES

Chairman MCCLELLAN. Just how many engine failures have occurred in the testing of the engine for the F–15? Bring the committee up to date on this situation which has been receiving quite a bit of criticism from the press.

General GLASSER. The number of engine development incidents experienced since January 1, 1972, totals 57. The number reported since January 15, 1973 (initial 150-hour endurance test start date) is 8. The incidents reflect the nature of the task of development, test, and evaluation and are common to the engine development programs.

F–100 engine No. 022 began a modified 150-hour endurance qualification test run on April 1, 1973, and successfully completed this effort on April 17, 1973. This engine incorporated thicker fan blade tips and improved turbine cooling to correct deficiencies discovered during the initial 150-hour test run. The test was modified from the original test in that it subjected the engine to less than the design maximum engine inlet pressures. This was accomplished by eliminating two test points at mach 2.3 and substituting test points at mach 2.2. In addition, the total number of altitude cycles was reduced from 25 to 15 to reduce

the number of starts/shutdown and thereby to reduce the opportunity for operator error.

The criteria for the 150-hour endurance test was relaxed because earlier development testing of the F–100 engine identified a possible design deficiency in the fan stator assembly. The fan stator assembly as designed apparently has insufficient structural rigidity to assure rotor/stator clearance at the design maximum engine inlet pressures. The high pressure test points were eliminated to preclude the unwarranted risk of damage to the test engine. A modification to correct this problem has been fabricated and is currently undergoing verification testing. An engine with the modified fan stator assembly has been successfully operated at the design maximum engine inlet pressure without incident.

Because of previous commitments to both OSD and the Congress, the modified 150-hour test was not certified as a milestone demonstration. SECAF has directed that an engine with the modified fan stator assembly will be tested to the original 150-hour endurance test criteria. This test will constitute the formal 150-hour endurance qualification and is expected to be completed by September 30, 1973.

Chairman McClellan. Was not the advanced F–14 engine originally planned for use in the F–15?

General Glasser. No, sir, the advanced F–14 engine—Pratt & Whitney F–401—has never been planned for use in the F–15.

Chairman McClellan. What has happened to this program? How has this affected the cost of the F–15?

General Glasser. The Navy has not chosen to exercise production of the F–401 engine. This has necessitated Air Force consideration in the planning and scheduling of the F–100 engine development. Renegotiation of the engine contract after deletion of the engines to be procured for the Navy F–14B resulted in a cost increase to the F–15 program of $551.95 million. This increase, which covers both development and planned production of the F–100 engine, includes some costs which transferred from Navy to Air Force programs, some increases directly attributable to the Navy actions, and others, probably independent of the Navy program.

F–15 PROCUREMENT

Senator Young. How many F–15 aircraft has the Air Force accepted from the contractor?

General Glasser. The Air Force has accepted delivery of seven F–15 research, development, test, and evluation (R.D.T. & E.) aircraft.

Senator Young. How has the aircraft performed thus far in test and evaluation?

General Glasser. The F–15 flight test performance has been excellent and, as of June 19, had completed over 470 flights totaling over 500 hours since the first F–15 flight on July 27, 1973.

Senator Young. Other than the engine problem, have the established milestones been met?

General Glasser. Yes, every program milestone has been accomplished on or ahead of schedule except the completion of the 150-hour endurance test of the F–100 engine.

Senator YOUNG. Are F–100 engines being installed in F–15 aircraft and flown within certain prescribed limits?

General GLASSER. The current F–100 flight test engines have been restricted from operating at the very highest engine inlet pressure pending qualification of a modified fan stator assembly. The redesigned fan stator has been built and tested to these high engine inlet pressures, and will be cleared for flight by September 1973. Meanwhile, the flight test program is not being hampered by this restriction.

Chairman MCCLELLAN. Before we get to the C–5, the F–15 is a plane that you have had trouble with involving delays on account of the engine?

General GLASSER. We have had some difficulty. It has not been delayed as of this time. We have been able to work around our problems.

Chairman MCCLELLAN. Are they having to redesign the engine?

General GLASSER. No, sir. There were some items discovered in the ground test program that required rerun and which prevented us passing certain mandatory demonstration milestones on the contract.

Chairman MCCLELLAN. It is going to take from now until September——

General GLASSER [continuing]. To run additional reruns. Meanwhile, the engines are in aircraft and flying today and we have not been experiencing difficulties with the engines in flight. This is not at all an abnormal situation.

Chairman MCCLELLAN. Do these engines meet the specifications that were originally required?

General GLASSER. In general; yes, sir. I say in general because there are always some relatively minor but nevertheless significant areas that do have to still be worked out in the development program. To the lay observer, the answer is yes, they do meet the specification.

Chairman MCCLELLAN. Do you feel now it is proper in going ahead and giving long leadtime orders for this plane?

General GLASSER. We think we are prudent in doing that, Senator, because if we look at the alternatives and you weigh them one against the other, the attraction is all on the side of going out for the long lead. The risk is relatively small. You are putting at risk only a small amount of long lead money. If you don't put that long lead money out, then you build an automatic hold in the middle of the program. Admittedly, you are now in a very safe posture because you are not going to lose any long lead money but you are going to pay the added cost of stopping the program and restarting later, which turns out to be a number of times greater than the long lead money. So, on balance, it looks prudent to gamble, if you will on a low risk approach, some long lead money to preserve the opportunity to go ahead if everything works out as you anticipate.

REDUCTION IMPACT ON A/C PROCUREMENT

Chairman MCCLELLAN. Let me ask you: What would be the impact on these plane procurement programs and the missile procurement programs of $4.5 billion if we cut that appropriation for those purposes about $2 or $2½ billion? What would be the consequence if, instead of getting $4.5 billion, you get $2 or $2.5 billion?

General GLASSER. Unquestionably it would be a very traumatic situation. Some of the programs I think under a circumstance like that would have to be simply cancelled. It would not be prudent to continue.

Chairman MCCLELLAN. They would have to be canceled?

General GLASSER. We would have to terminate some of the programs.

Chairman MCCLELLAN. Let me ask this question: If we have to cut this Defense appropriation $10 billion by putting a ceiling of $10 billion less than the Defense Department's total budget, where can we cut the $10 billion unless we cut some of these programs?

General GLASSER. I should perhaps ask General Hill to comment on this but let me start by——

Chairman MCCLELLAN. You are under a threat, a challenge, in view of all the conditions today, some that are favorable and some that are unfavorable, such as the fiscal situation, and those that relate to other demands made on the Government. Suppose we say we have to cut $10 billion out of the $85 billion for the Department of Defense. Is there any way to cut that $10 billion without doing one of two things, either reducing procurement, research and operations or drastically reducing personnel? Drastically reducing personnel would be really drastic because you would have to reduce the Armed Forces about 50 percent, would you not?

General GLASSER. No, sir. The cost of personnel represents something like 56 percent of the budget. There are three broad categories of funds in a military defense budget. One is the operation and maintenance of the force in being. The other, the one we are speaking of right now, is the modernization of the force. The third is laying down for the future of the force.

Depending on whom you talk to, you will get different answers to what you ought to cut. My own personal view is if you have to cut, and I can understand the circumstances under which that might be the thing to do, do it in a balanced way. You would have to reduce the force structure some, you would have to defer some of the modernization and you probably would have to accept some greater risk in the preparation for the future.

Chairman MCCLELLAN. This means that to meet the situation in the future you would have to cut weapons procurement.

General GLASSER. We would have to terminate some of the programs because it would not be wise to go in and cut every one of them by 10 percent. In my judgment that would be a very unwise approach.

There is no use going into the 71 F–5E's and taking 10 of those, or the 77 F–15A's and taking 10 of them out. I think you should make a calculated judgment that the thing I can do best without is A–10's or, whatever it turns out to be. Or maybe you decide you are not going to reequip VNAF or something like that. I probably should defer to General Hill, who is in charge of this in the Air Force, but I personally would recommend strongly against the very tempting approach of taking a little bit of everything.

Chairman MCCLELLAN. General Hill?

General HILL. If, say, a third of that $10 billion were to come out of the Air Force, what that would entail is a look at the deferrals of our intended procurement which would affect modernization, as General Glasser says. We might not be able to continue with procurement of the F–15. We would have to look at war materiel or war re-

serve materiel. A reduction of that magnitude would entail major force reductions. We would not be able to maintain 21 tactical fighter wings. We would have to look at the strategic force in terms of both missiles and aircraft. We would have to examine the air defense posture and face up to major reductions in those forces. We would also have to face, as a result of having to take those cuts, significant drops in manpower. There you would achieve some big money in terms of manpower that you would save near term.

Finally, it would open the way to sizable base adjustments.

In the face of an already constrained budget in order to provide present day forces to meet present day commitments in terms of escalation of the dollar, when considering the reduced spending power of the dollar versus last year and 10 years ago, the $25 billion plus that we are requesting in this budget is already constrained by that total amount. It is constrained in terms of purchasing power. It is constrained in terms of devaluation and it is constrained in terms of maintenance of a force to meet the Nation's commitments.

Chairman McClellan. We will get into that later. I just wanted to get some idea about it.

Off the record.

[Discussion off the record.]

Chairman McClellan. On the record.

B–1

Senator Young. Following through on the chairman's discussion regarding pressure that we have to cut $10 billion out of this budget, how much money have we spent on the B–1 up to the present and how much is there in the budget now?

General Glasser. We are asking for $473.5 million for 1974. We have spent to date $1,134 million.

Senator Young. All of that money would be lost if you didn't build it?

General Glasser. A major chunk of it would be lost, yes, sir.

Senator Young. If you wanted to postpone it, you would have to terminate the contracts?

General Glasser. The costs are going up and up. If you wanted to finish it you would have to pay a lot more for it than you otherwise would have. You would have to cut back on the work forces, terminate the contractors.

Chairman McClellan. There is another factor. You have a budget for 150 planes to be procured on a given schedule. If you cut them back to 100 and ultimately you intend to buy the other 50, the delay increases the overall cost of the weapons system.

General Glasser. That is another of the unhappy mathematical facts of this business. If you are going to buy 100 airplanes and somebody says that is too much money, let us buy half of them, you don't get that for half the money. You pay maybe three-quarters of the money and you get half the airplane.

C–5A

Chairman McClellan. You may proceed.

General Glasser. The C–5A is continuing to prove itself in worldwide strategic airlift operations while completing the final phases of operational test and evaluation.

We are requesting $43.1 million in fiscal year 1974 to provide for forecast Lockheed expenditures and other contractual obligations through June 1974.

C–5A PROGRAM COSTS

Chairman McClellan. Explain the Lockheed expenditures and other contractual obligations with respect to the C–5 program for which you request $43.1 million in fiscal year 1974.

General Glasser. I will provide for the record a breakdown of the $43.1 million for the C–5 program in fiscal year 1974.

[The information follows:]

In January the fiscal year 1974 Budget reflected a $43.1 million C–5A Program, however, later revisions resulted in a decrease of $5.9 million as shown below.

[In millions of dollars]

81 aircraft	January 1973	May 1973	Difference
Fatigue test	7.0	7.0	
Flight test	.1	.1	
Other test	1.2	1.2	
Design engineering (ECPS)	10.6	9.1	−1.5
Ave data		2.7	+2.7
Engineering support/training	.5	.5	
Refurbishment	4.1	4.1	
Depot AGE	1.9	1.9	
Data	4.5	1.8	−2.7
AF adds (non-Lockheed)	13.2	8.8	−4.4
Total	43.1	37.2	−5.9

STUDY OF C–5 STRUCTURE

Chairman McClellan. You may proceed.

General Glasser. During 1972 an independent structural review team was formed to perform an intensive study of the entire C–5 structure. As a result of the study we are implementing flight and fuel management techniques and we are going ahead with an active lift distribution control system to reduce stress on critical wing areas during flight. We expect that the cost of these measures can be accommodated within the current program funding. By this action and by limiting loads and mission profiles to levels required by usage to date, we can achieve a service life in excess of 20,000 hours. This does not preclude using the C–5 for higher loads and other mission profiles if necessary under special circumstances.

DESIRED SERVICE LIFE OF C–5A

Chairman McClellan. In the original design specifications for the C–5 aircraft, what was the desired service life?

General Glasser. The desired service life for the C–5 aircraft in the original design specifications was 30,000 hours.

Senator Young. Does this mean if you fully load the C–5's that their life will be greatly reduced?

General Glasser. That is correct, sir. That is true of any very large structure. The amount of fatigue damage that it sustains is a significant function of the loads to which it is subjected. So, by offloading

these airplanes, which, incidentally, rarely is a constraint because most large cargo airplanes end up being volume limited rather than weight limited, by the time you fill up all the volume you are still way below the weight carrying ability of the airplane.

Senator YOUNG. I understood a year ago that the C–5 had wing weakness structural.

General GLASSER. That is correct.

Senator YOUNG. Has that been corrected?

General GLASSER. What we are saying here is that there are a number of things you can do about that. You can go back and replace the wing at a great expense or you can do some of these very inexpensive things like this load distribution control system which adjusts the loads across the wing and removes some of the damage or you can restrict the aircraft during normal usage to lighter loads than the aircraft is capable of carrying, and greatly increase its life.

Now, when you need to use it, if you have to in time of war and need to use these heavy loads, it is fully capable of doing it, but you are going to be extracting life from the airplane at a more rapid rate.

Senator YOUNG. Thank you.

C–130H

Chairman MCCLELLAN. You may proceed.

General GLASSER. The C–130 is the backbone of the tactical airlift force and is currently the only tactical airlift aircraft in production.

DIFFERENCE BETWEEN TACTICAL AND STRATEGIC AIRLIFT

Chairman MCCLELLAN. How do you differentiate between tactical and strategic airlift?

General GLASSER. Strategic airlift is the continuous or sustained air movements of units, personnel, and materiel in support of all DOD agencies; between area commands; between the CONUS and overseas areas; within an area command when directed. Strategic airlift resources possess a capability to airland or airdrop troops, supplies, and equipment for augmentation of tactical airlift forces when required. Tactical airlift is the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas through airlanding, extraction, airdrop, or other delivery techniques, and the air logistic support of all theater forces, including those engaged in combat operations.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The C–130s procured in fiscal year 1972 were designated C–130Es and have T–56A–7B engines. New C–130s procured since 1972, are equipped with increased thrust T–56A–15 engines and are designated the C–130H.

In fiscal year 1973, Congress approved $90 million for procurement of 20 C–130 aircraft to replace Southeast Asia losses. Delivery of the first aircraft is scheduled for July 1974.

C–130 AIRCRAFT IN RESERVE FORCE

Chairman MCCLELLAN. Are there any C–130 aircraft in the Air Force Reserve forces? If so, discuss.

General GLASSER. In fiscal year 1974, the force structure contains 18 C–130 units with 114 UE aircraft in the Air Force Reserve and 11 C–130 units with 88 UE aircraft in the Air National Guard. The 232 aircraft in the Reserve Forces represent approximately 50 percent of the total C–130 aircraft authorized the combined active and reserve tactical airlift forces.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The fiscal year 1974 budget request is for 36 C–130H aircraft at a cost of $180.6 million. These aircraft are needed as replacements for C–130A and C–7 aircraft which have been transferred to the VNAF.

T–41D

The T–41D continues to be used by allies in Southeast Asia as an effective utility transport and pilot training aircraft. This single engine aircraft has side-by-side seating for two pilots and provisions for two additional passengers. The T–41D is manufactured by Cessna Aircraft in Wichita, Kans., on a firm fixed price contract and is funded within our military assistance service funded program. Although the budget request this year is $100,000 for three additional aircraft, we now have information that the T–41s that are surplus to the Army can be used to satisfy a portion of this request, therefore, only one T–41 is required.

ADVANCED AIRBORNE COMMAND POST

The proposed advanced airborne command post (AABNCP) is a modified Boeing 747 commercial aircraft specially equipped to serve as the national emergency airborne command post (NEACP) for the National Command Authorities (NCA) and supporting staff, and as the Headquarters Strategic Air Command (SAC) Airborne Command Post.

TOTAL NUMBER OF AABNCP TO BE PROCURED

Chairman MCCLELLAN. What is the total number of advanced airborne command post aircraft that you will procure? For what will each aircraft be used?

General GLASSER. The Air Force will procure seven aircraft. Aircraft 1, 2, and 3 will be used initially as interim national emergency airborne command posts (NEACP). Aircraft 4 will be used initially for the research, development, and test program, after which it will become one of the operational advanced NEACP's. Aircraft 5, and 6 will be used as advanced NEACP's. Aircraft 7 will be a SAC advanced airborne command post. Aircraft 1, 2, and 3 will be retrofitted with the advanced command and control package after use as the interim NEACP, and be used as SAC advanced airborne command posts.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The 747 AABNCP's will replace EC–135's now serving this role and will incorporate those features which are most essential to enhance the survivability, reliability, and flexibility of command and control operations of both the NCA and SAC.

Procurement funds of $69 million were appropriated in fiscal year 1973, to acquire two interim 747 NEACP's. We plan to modify these

747's and transfer the existing EC–135 equipments to them. The request in fiscal year 1974, is $32.3 million for the procurement of a third interim NEACP aircraft.

The design work leading to the requests for proposal has confirmed that an aircraft as large as the 747 is necessary for the advanced airborne command post role. Further refinement of the requirements, in coordination with the users, has identified a need for nearly 100,000 pounds of payload and 3,000 square feet of floor space.

The program has been reviewed and the schedule changed to provide for more thorough testing. Procurement of the three production AABNCP's will not be requested until after development has been completed.

Chairman McClellan. How many do you propose to procure?

General Glasser. The final fleet will be seven aircraft: Three used here by the National Command Authority, three by the Strategic Air Command and one as a command support aircraft which will be operationally assigned to SAC.

Chairman McClellan. What will they cost per unit?

General Glasser. If you look at the total program cost and divide it, on the basis of seven aircraft, into the total cost of the program, it will be $66.8 million. If you look at what the aircraft themselves cost on a unit basis, it is $42 million.

Chairman McClellan. What makes the difference? I don't understand.

General Glasser. In one case I am saying if I want to buy one more airplane how much do I pay for it? It is $42 million. If I take everything I spend on the program, the research and development and spares, and I divide that by the seven aircraft I intend to buy, then that becomes $66.8 million.

Chairman McClellan. Why can't we get along with two or three instead of seven?

General Glasser. Well, sir, we will ultimately be getting along with a lot less than the 20-odd that they will be replacing. It is a more efficient way of doing the job than we are doing today.

CH–47

Chairman McClellan. You may proceed.

General Glasser. The CH–47 request represents another portion of the Vietnamization program in which the Air Force pays back the Army for in-country assets turned over to the VNAF.

The fiscal year 1974 request is $51.5 million for the 24 CH–47's. These aircraft are required to sustain the Army's approved force structure for heavy lift helicopters.

CH–47 HELICOPTER CHARACTERISTICS

Chairman McClellan. What is the payload for the CH–47 helicopter? What is its cruising speed and range?

General Glasser. A combat configured CH–47 can carry a maximum payload of 17,000 pounds approximately 100 nautical miles at a cruising speed of 140 knots.

UH–1H

Chairman McClellan. You may proceed.

General Glasser. The UH–1H is the standard Army utility group transport helicopter which provides tactical mobility for ground combat troops. In 1969, the Army and Air Force agreed that the Army would provide UH–1H's, as part of the Vietnamization program to the VNAF from in-country assets, and that the Air Force would pay back the Army on a 1-for-1 basis.

In fiscal year 1973, Congress approved funds of $53.3 million to procure 180 UH–1H helicopters to repay the Army. Payback is based on DOD determination that these helicopters are required to sustain the approved Army force structure. The fiscal year 1974 request is $96.7 million for 308 UH–1H's. This will complete repayment to the Army for UH–1H helicopters transferred to the VNAF.

CX–X

The CX–X is an FAA certified, off-the-shelf, twin turbine powered transport aircraft. These aircraft will be used in support of the Defense Attaché Service, military assistance advisory groups and military groups to replace obsolete C–54's, C–47's, C–131's, and T–29's. Current plans provide for the acquisition of 30 CX–X aircraft, 28 of which will be used as replacement aircraft and 2 for training.

Congress approved the fiscal year 1973 request of $8.4 million for the first 14 aircraft. The fiscal year 1974 request is for the remaining 16 aircraft at $0.6 million each for a total of $9.6 million. This concludes the procurement for this type aircraft.

LETTER FROM UNDER SECRETARY OF THE ARMY

Chairman McClellan. I have a lengthy letter here from Under Secretary BeLieu, dated June 18. One paragraph says:

> As a consequence of the differing requirements discussed above, the basis for a joint procurement does not exist. With your concurrence and that of the other Committee chairmen, the Army intends to resolicit industry in a two-step formally advertised procurement for an aircraft that will satisfy its minimum performance requirements as testified to before your committee, at the lowest possible cost as determined by full competition. I understand that the Air Force plans a separate competitive procurement for an aircraft to meet the DIA/MAAG/MILGP requirements.

What are we talking about here? Is this the same aircraft?

General Glasser. What we are talking about here is that there are two aircraft of somewhat similar performance requirements, that are required by the Army in one case and by the Air Force in the other case. It has been the opinion of the Congress, and indeed it was the opinion of people in the Air Force, that if it were feasible we should join these two requirements in a common procurement for the normal benefits that one gets from a multiple requirement of that sort. This was attempted and when the source selection was almost completed, but not yet announced. Secretary of the Army Froehlke at that time, in reviewing this, determined to cancel that procurement for reasons he outlined in a letter he sent to each of the committee chairmen.

Significant among his reasons for that was that he thought, first of all, that the selected aircraft appeared to be, although it was never announced as such, a turbo-fan aircraft, Cessna Citation, and that the Army in their testimony before the committees of Congress had been very direct in their comments that they would be selecting a turbo-prop aircraft.

Also, it was his opinion that the Army would be buying an aircraft with performance in excess of their true requirements, they didn't think that was appropriate, and he was also concerned about the leaks which seemed to attend a source selection that was a bad precedent.

For those reasons he canceled the procurement. There has followed since then a number of discussions between the Army and the Air Force and a number of letters that had been written back and forth between the Army and the various committees of the Congress.

We are in a situation now where we certainly agree with the conclusion that Secretary BeLieu reached because the Army requirement is much less stringent than that of the Air Force for good and sufficient reasons. The Army therefore feels that since they have these very minimal requirements that can be met by rather minimal aircraft, that they can afford to procure these airplanes by a so-called two-step advertised approach.

Stated very, very briefly what that approach amounts to is that anyone who wants to bid comes in and states his specification and if those specifications are determined to meet the minimum requirements then the offeror is asked to give a price quote and the award goes to the lowest price quoted.

SAFETY OF AIRCRAFT

What that normally results in then is that you get the minimum performance aircraft. The aircraft that would result is unacceptable to the Air Force because it would be an unsafe airplane to be used in the circumstances in which the Air Force has to use these aircraft.

Chairman McClellan. Would it not also be unsafe to the Army?

General Glasser. No, because the requirement they have for the aircraft would not put them in this kind of problem. I am speaking of the safety aspects associated with single-engine operation at higher altitudes. Since ours is used by the military groups, MAAG's and so forth, we find that a number of them are operated at airfields at relatively high altitudes and the minimum en route altitudes that these people must travel, because of the countries in which they are located, are substantially higher than the minimum aircraft would be capable of performing in. We have tried to figure out how to get around this and there is no reasonable way because, as I understand the problem now, if you join the Army and Air Force procurement you find either the Air Force gets an aircraft which is unsafe for the mission to which it will be assigned, or the Army buys an aircraft that is more capable than they require for their mission.

Chairman McClellan. Do both branches of the service agree on this?

General Glasser. Yes, sir, this letter was coordinated with the Air Force before coming over here.

COMPETITION FOR JOINT ARMY-AIR FORCE PROCUREMENT OF THE UX/CX–X UTILITY AIRCRAFT

Chairman McClellan. When the witnesses appeared before the committee during the Army's aircraft procurement hearings, I placed in the record correspondence between the Secretary of the Army and myself on the subject. On May 8, 1973, in response to Secretary Froehlke's letter to me of April 12, 1973, I asked a number of questions. I believe it would be advantageous if those two letters were also to appear in the record here today, as well as the response by the Department of the Army to the questions I asked, when it is delivered.

[The information follows:]

LETTER FROM ROBERT F. FROEHLKE

SECRETARY OF THE ARMY
WASHINGTON

12 April 1973

Dear Mr. Chairman:

On January 29, 1973, I notified you of my decision to cancel the competition for joint Army-Air Force procurement of the UX/CX-X utility aircraft. At that time I outlined the difficulties which had led me to that decision and indicated that we would develop new specifications and resolicit industry for a propeller driven aircraft.

The review of the whole situation that was a necessary prerequisite to this work has been completed by the Army and Air Force, and I want to inform you of the results of this study. The review included a reexamination of the basic mission requirements, aircraft characteristics requirement which the mission imposed, the FY 73 legislative history of our request, and the intent of Congress conveyed in the legislation and reports of the Committees. Specifically, it is clear that maximum competition is required, a joint Army-Air Force procurement was intended, and off-the-shelf aircraft is appropriate, and the unit price should not exceed $600,000.

Accordingly, to develop a workable approach to satisfy both Service requirements and conform to guidance, I concluded that the following were necessary.

A specification which will attract as many qualified competitors as possible so as to obtain the most economical aircraft-support package for the tax dollar which would necessarily include full consideration of technical, performance and related cost factors.

Removal of the limitation that only a turboprop aircraft would suffice in order to avoid artifically precluding the most economical solution. Thus, both turboprop and turbofan models may be proposed.

Upward revision of the joint performance specification so as to provide a greater margin of safety under remote mountainous area operations which has the effect of eliminating the U21F from contention.

A provision that all aircraft proposed must be FAA certificated prior to delivery.

The approach inherent in the above set of conclusions deviates from my previously expressed intentions only on the propeller issue and appears to remain consistent with the expressed intent of the Congress.

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Therefore, I have directed that a new solicitation be prepared and released to industry in accordance with the approach contained in the preceding paragraphs.

Secretary Seamans agrees with this approach. The ultimate winner, be it turboprop or turbofan, will be the most economical aircraft-support package which meets the requirement and conforms to the basic guidance provided by Congress as cited above.

I am prepared to discuss this action with the committee or individual members as you desire.

Your continued support of our Army programs is appreciated.

Sincerely,

Robert F. Froehlke

Robert F. Froehlke

LETTER TO SECRETARY FROEHLKE FROM CHAIRMAN McCLELLAN

United States Senate
COMMITTEE ON APPROPRIATIONS
WASHINGTON, D.C. 20510

May 8, 1973

The Honorable Robert F. Froehlke
Secretary
Department of the Army
Washington, D.C.

My dear Mr. Secretary:

This refers to your letter of April 12, 1973, concerning a new solicitation for procurement of the UX/CX-X utility aircraft.

Since the revised specifications for awarding this contract appear inconsistent with previous expressions of Congressional intent and testimony of the Army, I would hope that this procurement could be deferred until Congress has fully considered the matter in connection with defense appropriation requests for fiscal 1974.

In this regard, I would appreciate receiving information on the following points:

What necessitated the inclusion of remote mountainous areas in the proposed mission for this aircraft? Where are such regions? How many planes out of the total proposed buy would be utilized in these areas and for what purpose? What types of aircraft are assigned to these regions now?

Why does the Army now feel that a jet plane might better fulfill its mission than a turbo prop plane, and what economies would be effected thereby?

What other revisions were made in the original specifications?

Thank you for your assistance in this matter and with best regards, I am

Sincerely yours,

John L. McClellan
Chairman

LETTER FROM UNDERSECRETARY BeLIEU

DEPARTMENT OF THE ARMY
OFFICE OF THE UNDER SECRETARY
WASHINGTON, D.C. 20310

18 June 1973

Honorable John L. McClellan
Chairman
Committee on Appropriations
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is in further reply to your recent letter requesting information concerning the proposed joint Army/Air Force UX/CX-X procurement.

The specific information you requested is set forth in the attachment hereto. However, in view of your interest and concern, I believe it would be helpful to briefly set forth the history of this procurement. As you will recall, the Army during the 1973 appropriations hearings testified as to its requirement for a utility aircraft and made clear that the U-21F turbo prop aircraft would fully satisfy its operational requirements. During these hearings, the Air Force similarly requested funds for the competitive procurement of a medium weight executive transport to serve the needs of the Defense Attache Service to be utilized by the Defense Intelligence Agency, Military Assistance Advisory Group (MAAGs), and Military Groups (MILGPs). In view of a similarity of the two requests, the report of the House and Senate Conference directed that the services make a common procurement of a single aircraft. Also implicit was the direction that competition be maximized and that the average unit cost not exceed $600,000. The Department of Defense tasked the Army to conduct the joint procurement.

Accordingly, a Request for Proposals was issued on October 6, 1972 with specifications incorporating "minimum" and "desired" levels of performance. Subsequent to receipt and evaluation of proposals, Secretary Froehlke on January 29 canceled the procurement because among other reasons it was not clear that the Army had completely justified the requirements for a jet aircraft during FY 73 Congressional hearings.

Since cancellation of this negotiated procurement, the Army and the Air Force have been meeting to reach agreement on the specifications to be utilized in resoliciting for the procurement of this aircraft. The Army's minimum requirements have not changed since its testimony before the Congress, i.e., a U-21F type aircraft would comply with and satisfy its operational requirements. The Air Force, on the other hand, has determined that its requirements are higher than the U-21F in two

areas. These are single engine rate of climb and single engine service ceiling. The two-step procurement procedures contemplated by the Army would not allow for consideration of the higher Air Force requirements, whereas negotiated procurement procedures would. In order to accommodate the Air Force requirement and thereby maintain a joint competitive procurement for this utility aircraft, in April of this year, Secretary Froehlke, as the designated procurement agent, decided that the joint specifications should be revised upward to provide for safe flight operations over the more extensive route structure including remote and mountainous regions which the Air Force must fly. Since these revisions would exclude the U-21F from the competition, Secretary Froehlke determined not to proceed upon this basis until you had been advised of the revision and had an opportunity to comment.

In addition to your letter of May 12, 1973, the Chairmen of the Senate Armed Services and House Appropriations Committees have also expressed their concern as to the proposed upward revision in performance requirements. As you have done, they too have advised that if the procurement is not based upon performance characteristics which would include the U-21F, the procurement should be deferred pending further Congressional review and consideration.

The procurement action was consequently stymied: on the one hand, we had clear and unequivocal Congressional and Defense directions to make a joint competitive procurement; and on the other, the Army and Air Force had different minimum performance requirements stemming from operational necessity.

To resolve this dilemma and to permit the expeditious replacement of the deteriorating fleet of utility aircraft, discussions have continued between the Services. The attempted single service consolidated procurement did not produce the desired result since requirements for the Army and Air Force aircraft are somewhat different. Performance requirements representative of the U-21F type aircraft satisfy the Army's minimum operational requirements. However, the Air Force has taken the position that an increased capability is needed for the CX-X to assure that minimum safety of flight performance requirements can be satisfied. This is explained more fully in the attachment. In view of the above and if approval of the four Congressional Committees can be secured, the Deputy Secretary of Defense has authorized the Army and Air Force to procure the UX and the CX-X aircraft separately.

With regard to competition, I am told that the procurement cannot be restricted to turbo prop aircraft. Specifically, our lawyers have advised that legally we may not exclude turbo fan aircraft from this competition. It is their legal opinion that since either Service requirement can be satisfied by either a turbo prop or a turbo fan aircraft, to restrict the procurement to either type would violate the procurement statutes.

As a consequence of the differing requirements discussed above, the basis for a joint procurement does not exist. With your concurrence and that of the other Committee Chairmen, the Army intends to resolicit industry in a two-step formally advertised procurement for an aircraft that will satisfy its minimum performance requirements as testified to

before your Committee, at the lowest possible cost as determined by full competition. I understand that the Air Force plans a separate competitive procurement for an aircraft to meet the DIA/MAAG/MILGP requirement.

This letter has been coordinated with the Air Force. Both the Army and Air Force personnel are available to provide you additional information. The need for these aircraft remains constant. With the concurrence of the four Committee Chairmen, the Services will proceed expeditiously to complete this procurement. A similar letter is being sent to the other Committee Chairmen.

With highest regards,

Sincerely,

Kenneth E. BeLieu
Under Secretary of the Army

ATTACHMENT

Question

What necessitated the inclusion of remote mountainous areas in the proposed mission for this aircraft? Where are such regions? How many planes out of the total proposed buy would be utilized in these areas and for what purposes? What type of aircraft are assigned to these regions now?

Answer

The Air Force has advised that the CX-X will be required to perform flights over remote and mountainous regions of Africa, Asia, and South America, where weather forecasts are unreliable and electronic navigation aids and airports are widely spaced. Twenty-three of the thirty aircraft to be procured will be based in regions requiring the high altitude capability. Eight of the airfields utilized as beddown bases range in elevation from 13,355 feet at La Paz, Bolivia to 3,303 feet at Teguciagalpa, Honduras. These eight airfields have daily mean temperatures which range from 73°F at Pretoria, South Africa to 91°F at Tananarive, Malagasy. Eight aircraft assigned to these bases and fifteen more CX-X aircraft will normally travel routes with minimum enroute altitudes which range from 10,000 feet to 28,000 feet. The combination of the above factors dictates the necessity of procuring a high performance, medium weight executive transport with a single engine service ceiling of at least 13,500 feet (standard day)

to assure safe operation. It is anticipated that the following aircraft will be capable of meeting the Air Force requirements: Beech Super 100, Cessna Citation C-500, Piper Turbo-navajo, and Swearingen Merlin III. Army minimum requirements can be satisfied with a U-21F type aircraft as testified before the Congress.

The Air Force advises that it has been using reciprocating engine powered aircraft such as C-47's, C-54's, and T-29's in the above described locations. Selection of these aircraft was never optimized for the Attache/MAAG/MILGP mission. Because they have a relatively large or excess payload capability, they could and have been operated at greatly reduced payloads when required to meet essential mission requirements under high temperature and high altitude conditions. The CX-X replacement aircraft will be a much smaller aircraft and performance requirements, therefore, must realistically match the planned usage in order to minimize the reduction of payload or fuel under high temperature and high altitude conditions.

It should also be noted that maintenance and operational problems inevitably associated with the use of "aged" aircraft based at the end of a long supply line is impairing mission effectiveness. All C-47/C-54 aircraft assigned this mission are presently flying under command operational safety waivers. In addition, the C-54's are flying with a nine-month extension to the scheduled Programmed Depot Maintenance and will be retired at expiration of this extension. Therefore, expeditious procurement of a replacement aircraft such as the CX-X is imperative.

Question

Why does the Army now feel that a jet plane might better fulfill its mission than a turboprop plane, and what economies would be effected thereby?

Answer

While a jet aircraft may in certain respects outperform a turboprop aircraft and in this sense be desirable, the Army's position is that a jet aircraft is not necessary to meet its minimum operational requirements. It is the Army's position that a contract to fulfill its utility aircraft requirements should be awarded on the basis of the lowest cost offer meeting its minimum needs; and that no premium should be paid for performance in excess of such needs. The most economical solution cannot be positively determined until binding offers are received, and at this time it cannot

positively be determined whether a turboprop or turbofan (jet) would win a price competition. The Air Force concurs that any aircraft, turboprop or turbofan, which is capable of meeting operational performance requirements will be considered in their competition.

Question

What other revisions were made in the original specifications?

Answer

The original specifications contained in the Request for Proposals (RFP) issued October 6, 1972 for a negotiated procurement, contained both "minimum" and "desired" performance characteristics. The "minimums" continue to represent minimum Army requirements that could be satisfied by a U-21F type aircraft. When the Army cancelled the original procurement on January 29, 1973, and changed the procurement approach to a two-step advertised procurement, it became necessary for the Air Force to specify its "minimum" requirements with no allowance for a "desired" objective. The Air Force indicated a need for higher performance in two areas -- single engine rate of climb and single engine service ceiling. Consequently, the combination of the two-step advertised procurement and the revised performance specifications indicated above would have excluded the U-21F from competition. No other revisions proposed would have adversely affected the capability of any aircraft to meet requirements. If the Army were to procure aircraft to meet its minimum needs, it would essentially be procuring on the basis of the minimums set forth in the October 6, RFP, without reference to "desired" features above those minimums, and thus would entail no substantial change in the originally specified minimums. The Air Force, on the other hand, contemplates a competitive procurement for an aircraft which will meet its stated DIA/MAAG/MILGP requirements.

Senator YOUNG. Mr. Chairman, it seems to me the savings to the Government go beyond the first purchase. If you continue two similar types of planes in service over the years, you run into parts difficulties. I can't see the Army's position, even though the first cost might be a little bit more. They are both designed to perform the same kind of service.

Chairman MCCLELLAN. In other words, the Air Force would have no objection if the Army wanted it.

General GLASSER. We have no objection at all to the Army's buying an aircraft which meets the Air Force requirement. But we believe that has been unacceptable to some of the committees of Congress.

Senator YOUNG. What does the Army use the aircraft for?

General GLASSER. They are utility aircraft.

Senator YOUNG. Just carrying passengers?

General GLASSER. Yes, sir. They are a utility transport aircraft.

General HILL. Small loads of passengers and small units of cargo.

Senator YOUNG. How many passengers?

General HILL. Probably not more than six, six to eight passengers.

Chairman MCCLELLAN. I can't understand why the two services can't use the same kind of plane to carry passengers.

General GLASSER. There is no question that we could use the same kind.

General HILL. It is a question of what part of the world our aircraft can operate in that the Army aircraft cannot—for example, Afghanistan and Bolivia. At LaPaz the elevation of the airfield is over 10,000 feet at take off. In order to go to other parts of South America, as the military assistance group or the air attache has reason to do periodically, in order to proceed to another country in South America you must go at an altitude above 20,000 feet, at altitudes on the airways ranging from 22,000 to 25,000. So, you should have an aircraft capable of performing above 20,000 feet. The Army does not have that requirement. Therefore, they don't have to have aircraft to operate at that altitude.

Chairman MCCLELLAN. They don't require this particular ability, but they can use it for their purpose?

General HILL. Yes, sir.

Chairman MCCLELLAN. The question then is an actual mathematical balancing of cost, upkeep, and so forth.

General HILL. The economics; yes, sir.

Chairman MCCLELLAN. Can the Army procure their share of these? How many do they want? What is their need?

General GLASSER. It is approximately the same number. I don't have the numbers with me.

Senator YOUNG. They are looking for a single-engine plane?

General GLASSER. I don't think they care what it is. It wouldn't be a single-engine, I am quite certain they would all be twin-engine. They are in a regime where turboprops would probably be the competitive aircraft.

Senator YOUNG. If they want a simple plane, why don't they repair some of those that are in inventory now? They can get enough of those Convairs and other aircraft.

General GLASSER. The number is 20 that the Army is requiring in fiscal year 1974. The total requirement for the Army is 40.

Chairman MCCLELLAN. You have how many?

General GLASSER. We have 30 in total.

Chairman MCCLELLAN. I think you ought to be able to make a calculation—the Defense Department is probably the proper one to do it—to give us the approximate cost over 5 or 10 years for the 20 and also the 30. You want the 30.

General GLASSER. All of these are relatively off-the-shelf aircraft.

Chairman MCCLELLAN. At the same time you have to buy parts and so forth. You buy a supply of those when you buy a plane.

General GLASSER. In our case I know we will be having contractor support on the aircraft so that we would not be stockpiling parts.

Chairman MCCLELLAN. You would not?

General GLASSER. No, sir.

Chairman MCCLELLAN. I guess if that is good for the Air Force I don't know why it would not be good for the Army.

General GLASSER. I am not sure how they propose to do it.

Chairman MCCLELLAN. No matter how it is proposed, if it is economical to do it that way I would be inclined to do so. You may proceed.

MODIFICATION OF IN-SERVICE AIRCRAFT

General GLASSER. We are requesting $527.7 million for the aircraft modification program is fiscal year 1974. A major portion of the request, $334.1 million, is for modifications to the B–52 and F–4 aircraft. The remainder of the request will be used to improve the performance of other existing weapon systems, and to extent aircraft service life.

Senator YOUNG. What modification of the F–4 aircraft are you planning on? Are these older aircraft?

General GLASSER. No, sir, these are mods to improve the characteristics and performance of the aircraft. These are not taking old aircraft and bringing them up.

Senator YOUNG. Is there modification of new buys?

General GLASSER. No; they are aircraft that exist in the inventory. For example, making F–4's capable of carrying a Maverick, we do the mods on that, put leading edge slats on the F–4E's, for the more maneuverable one. We are taking the smoke out of the engine, things of this sort that improve the capability of the aircraft.

Senator YOUNG. You mentioned taking the smoke out of the engine. I thought we had completed that change-over quite a long time ago.

General GLASSER. The development of that program but not the actual modification of the aircraft as we go along.

Senator YOUNG. In the commercial aircraft several years ago the Rolls Royce engine had no smoke problem.

General GLASSER. That is a matter of design choice of the engine designer, whether he wants an engine that does not smoke and whether he does. There are a lot of problems that go with an engine that doesn't smoke.

Senator YOUNG. The engine in the Viscount did not emit any smoke for several years past.

[Off the record.]

Chairman McClellan. On the record. You may proceed.

General Glasser. As we informed you last spring, the B–52D, the bomber most heavily involved in Southeast Asia operations, has developed serious cracks in its wing structure. This has resulted in extensive flight restrictions. A decision has been made to phase out all except 80 of these aircraft and these must be modified to insure safety of flight during their program life.

B–52D MODIFICATIONS

Chairman McClellan. What is the current status of the reprograming proposal for the use of fiscal year 1973 funds for B–52 modifications? Is the $61.9 million you request for fiscal year 1974 in addition to the fiscal year 1973 reprograming proposal?

General Glasser. Hearings have been held by the House and Senate Appropriations and Armed Services Committees. The Armed Services Committees have approved the reprograming.

The $61.9 million requested in fiscal year 1974 is in addition to the fiscal year 1973 reprograming request. The fiscal year 1974 funds are to exercise the first production option.

Chairman McClellan. You may proceed.

General Glasser. In fiscal year 1974, $61.9 million is required to continue this modification. The procurement programs for SRAM and electro-optical viewing subsystem modifications, which significantly enhance the capability of the B–52Gs/Hs, will be completed with this year's request. In addition, we plan to continue modifying B–52Gs/Hs with an improved capability to counter enemy defensive systems; and $95.6 million is requested for the F/RF–4, part of which is to complete funding for the leading edge slat modication which considerably enhances the performance of the F–4E. In addition, a modification to improve laser guided bomb delivery is planned with funds from this year's request.

The remaining portion of the request for aircraft modifications is for increased capability and correction of deficiencies on various aircraft, including the A–7, F/FB–111, C–5A, C–130, and the C–135.

AIRCRAFT SPARES AND REPAIR PARTS

This program provides for replenishment spares in support of in-service aircraft as well as initial spares for new aircraft. Spares support is also provided for aircraft modifications and for aerospace ground equipment (AGE).

The fiscal year 1973 program is $521 million, of which $93.2 million was approved for initial spares and $427.8 million for replenishment spares.

The budget request for fiscal year 1974 is $579.5 million. This includes $199.9 million for initial spares and $379.6 million for replenishment spares. The initial spares request will be used to support the fiscal year 1974 aircraft procurement program, the common AGE procurement program and the approved aircraft modification program. The replenishment spares request will support the fiscal year 1975 flying hour program.

AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES

This portion of the request is for a wide spectrum of equipment and facilities. Congress approved $246.4 million in fiscal year 1973 for this segment of the aircraft procurement program. The request for fiscal year 1974 is $268.2 million.

In this category, our common ground equipment request includes the introduction of new equipment as well as replacement of worn out equipment such as generators, jet engine test stands, and radio-radar test sets. The fiscal year 1974 request is $82 million which will continue the replacement of depleted equipment, replace equipment provided to the VNAF, and provide support requirements for the Air National Guard, Air Force Reserve and new weapon systems entering the inventory.

Since submission of the fiscal year 1974 budget, the Air Force has completed definition and evaluation of an undergraduate pilot training instrument flight simulator program. This program will provide state-of-the-art flight simulators for the instrument phase of training. These simulators are the military equivalent of the devices in use by the major commercial airlines. We are confident that through their use pilot training graduates will be of higher quality, with increased training efficiency. We believe this to be of sufficient priority to initiate funding in the fiscal year 1974 budget. Approximately $5.5 million will be required.

UPT INSTRUMENT FLIGHT SIMULATOR FUNDS

Chairman McClellan. Will you submit a budget amendment for the additional $5.5 million for flight simulators? If not, how do you propose to fund the program?

General Glasser. A budget amendment will not be submitted. As I suggested in my statement, we are proposing that the program be included as an adjustment in the aerospace ground equipment account within the current budget. There is no requirement to change any line item.

Chairman McClellan. You may proceed.

General Glasser. This adjustment within the procurement program should be made along with other fact-of-life adjustments when the request is marked up. We will be happy to work with the committee staff, as in the past, to provide details on necessary adjustments that always develop subsequent to submission of the budget request.

COMPONENT IMPROVEMENT PROGRAM

The component improvement program provides funds to improve Government furnished aeronautical equipment, primarily aircraft engines. Examples of the fiscal year 1973 effort include improvement or correction of deficiencies in the TF–30 engine installed in the F/FB–111; engine flight endurance testing of the A–7 engine; and improvements in the exhaust nozzle actuator cooling in the F–5 engine.

Chairman McClellan. Have these deficiencies in the F/FB–111 aircraft caused aircraft accidents? Explain the deficiencies and how you are correcting them.

General GLASSER. Mr. Chairman, these are deficiencies in the sense that test programs and operational experience have revealed inadequacies in equipment operation that adversely affect reliability, maintainability, or in several cases, operational effectiveness. They are not safety-of-flight deficiencies that have led to any accidents although one modification will correct a radar problem that causes smoke in the cockpit which is certainly a potential hazard.

As operational and maintenance problems emerge from field experience with new weapon systems, our AFLC systems managers, together with SPO and contractor assistance, if needed, develop corrective hardware and verify its adequacy through tests. To the extent that the corrective action is applicable to aircraft still in production, procurement funds are utilized to include the new hardware during manufacture. Updating funds are then required to retrofit the change into already delivered aircraft.

Other F/FB–111 examples of updating modification requirements in the budget include such items as a hydraulic shutoff device in the wings to preclude loss of hydraulic fluid in the event of a break in the line and a correction to the radar scope recording camera installation to eliminate both the interference with the scope and the occurrence of unusable photos.

Chairman MCCLELLAN. You may proceed.

General GLASSER. This year we are requesting $25.9 million to continue the component improvement program.

The component improvement program is directed solely at items approved for production. These funds are for service engineering efforts necessary to improve reliability and maintainability and to reduce operating cost. The request does not include any effort to expand the performance envelope of any item of equipment.

INDUSTRIAL FACILITIES PROGRAM

The industrial facilities program contributes to maintenance of a viable industrial base while complying with overall Government policy to reduce Government ownership of industrial facilities wherever possible. In fiscal year 1974 we are requesting $23.9 million for this effort.

There is no new construction of Government-owned facilities included in this program other than that required to correct environmental pollution deficiencies at existing facilities.

WAR CONSUMABLES PROGRAM

The war consumables program provides for war reserve materiel such as fuel tanks, pylons, and ejector racks which may be jettisoned from aircraft for tactical reasons or during inflight emergencies. The program affords support for our projected force levels through the procurement period.

The approved fiscal year 1973 program of $15.5 million was largely for the acquisition of fuel tanks for the F/FB–111 and A–37 aircraft. The fiscal year 1974 request includes $0.9 million for tanks in support of the F–5E aircraft.

OTHER PRODUCTION CHARGES

The other production charges request for fiscal year 1974 is $106 million. The bulk of this fund request will be used for improvement in electronic countermeasures and for the logistical support of the SR–71.

The classified programs request, which includes projects sensitive to national defense, has been reduced in fiscal year 1974. This concludes my discussion of Aircraft Procurement.

JUSTIFICATION

Chairman McClellan. At this point in the record there will be included additional information from the justification.

[The justification follows:]

Justification

(In Thousands of Dollars)
Program Requirement - FY 74 .. $3,362,800
Program Requirement - FY 73 .. $3,510,000
Program Requirement - FY 72 .. $4,678,100

PART I PURPOSE AND SCOPE

This appropriation provides for the procurement of aircraft, spares and repair parts, components, industrial facilities, supporting aerospace ground equipment, and modification of in-service aircraft of all types. 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.

The four aircraft activities each provide the following elements:

1. Gross Program Cost, which includes:

a. Flyaway Cost - Complete aircraft ready to be flown away from the manufacturer's plant which 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 - Items of equipment 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 airborne 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 to squadron organizations in phase with deliveries of the weapon system.

2. Credits from Advance Procurement Prior Year - Application of assets to this program from advance procurement provided in prior year programs for items having a longer lead time than the airframe.

3. Advance Procurement Current Year - The items associated with follow on aircraft programs which have a longer procurement lead time than the airframe and therefore must be procured in advance of the airframe.

JUSTIFICATION OF FUNDS REQUESTED

The program to be financed with the appropriation for fiscal year 1974 includes additional modern aircraft for the combat forces, $1,123.5 million; the airlift forces, $223.7 million; training aircraft, $.1 million, and other aircraft, $190.1 million. To support this request, the airframe and major components of new aircraft will be ordered during fiscal year 1974 and for the C-5 aircraft $43.1 million is required to cover prior year production costs in excess of those provided in the prior year budgets.

Provision is made in the estimates in the amount of $527.7 million for fiscal year 1974 for modification-modernization of in-service aircraft and components to insure correction of service-revealed deficiencies, to improve combat capabilities, and to extend the service life of active operating aircraft. This estimate compares with programs of $465.7 million and $577.3 million for fiscal years 1973 and 1972 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; to support the modification program, and peculiar and common aerospace ground equipment programs; and the replenishment spares category which provides support for Air Force operational, and maintenance and overhaul programs. For fiscal year 1974, the request amounts to $579.5 million compared to $521.0 million for fiscal year 1973; and $407.9 million for fiscal year 1972.

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 1974 are $268.2 million as compared to $250.3 million in fiscal year 1973 and $791.3 million in fiscal year 1972.

The requirements for the reimbursable program for fiscal year 1974 are $450.0 million; for fiscal year 1973, $870.2 million; and for fiscal year 1972, $1,635.4 million. This program provides for those aircraft and related items which must be procured to satisfy customer orders.

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(In Thousands of Dollars)
Program Requirement - FY 74 ... $1,123,500
Program Requirement - FY 73 ... $ 988,600
Program Requirement - FY 72 ... $ 877,300

ACTIVITY: Combat Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new production aircraft to continue modernization of the combat forces.

PART II JUSTIFICATION OF FUNDS REQUESTED

The fiscal year 1974 program includes funds for the procurement of E-3A (AWACS) aircraft, F,5A, F-5E, F-4E, A-10, and F/TF-15 tactical fighters.

The mission of combat aircraft is to attain and maintain air superiority in hostile zones and to support ground forces through interdiction, close air support and reconnaissance. These forces can be used to counter a variety of threats and offer options of response ranging from the use of diversified conventional weapons through a variety of nuclear weapons. A description of each of the aircraft requested in the fiscal year 1974 program follows:

E-3A (AWACS)

The AWACS will be an airborne surveillance, command, control, and communications system for use by tactical and defensive forces. The airborne platform, a modified Boeing 707 aircraft, will be common for both defensive and tactical operations. Interchangeability in missions will be easily accommodated with change of central processor software. The FY 1974 budget request includes $11.7 million for advance procurement of this aircraft.

F/TF-15A Tactical Fighter

The F-15 is an advanced tactical fighter being developed for the Air Superiority mission. It will replace the F-4 as the primary Air Superiority aircraft in the mid-seventies. The FY 1974 budget request includes $801.9 million for procurement of 77 aircraft.

A-10 Close Air Support Attack Aircraft

The A-10 is a single-placed, twin turbo fan powered, fixed wing, subsonic attack aircraft capable of carrying 16,000 pounds of ex- of external load. It will be armed with one 30MM rapid fire high muzzle velocity gun and is specifically designed for the close air support role. The FY 1974 budget request includes $30 million for advance procurement of this aircraft.

F-5A

The F-5A is a single-placed, lightweight, twin engine jet (after-burning) super-sonic fighter aircraft. The F-5A provides free-world forces with an aircraft possessing offensive capability of air superiority, interdiction, and close air support of ground forces. The FY 1974 budget request includes $69.3 million.

F-4E

The F-4E is a two place, twin afterburning engine, swept wing tactical fighter. It is designed to perform the tactical missions of counter air, interdiction and close support. It can employ a wide spectrum of tactical weapons in varying combinations. The FY 1974 budget request includes $98.6 million for procurement of 24 aircraft.

F-5E

The F-5E is a twin engine jet fighter designed to be uncomplicated to fly and to maintain. This aircraft will provide the Free World Forces in Southeast Asia an increased air-to-air, self defense capability, permitting them to shoulder a greater portion of the common defense burden and help to accelerate the withdrawal of U.S. combat forces in Vietnam. The fiscal year 1974 budget includes $112.0 million for procurement of this aircraft.

(In Thousands of Dollars)
Program Requirement - FY 74 ... $223,700
Program Requirement - FY 73 ... $216,600
Program Requirement - FY 72 ... $339,200

ACTIVITY: Airlift Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new production aircraft to continue modernization and improvement of the airlift forces.

PART II JUSTIFICATION OF FUNDS REQUESTED

$223.7 million proposed for fiscal year 1974 provides funds to cover increased production cost incurred in prior year procurements of the C-5A and for the procurement of C-130E/H transport aircraft for continued modernization of the tactical airlift fleet.

C-5A Cargo/Transport GALAXY

The C-5A is a heavy logistic 4 engine jet transport which has a high cruise speed of 470 knots and will carry a maximum pay load of 265,000 lbs. The basic mission range is 5,800 nautical miles. This heavy transport provides a fast reaction capability to airlift outsized cargo in support of combat or support units of all services under general or limited war conditions. The C-5A has the capabilities to carry cargo from the continental U.S. directly to support areas worldwide. It has a large cargo envelope designed for rapid loading and unloading and has an airdrop capability. The approved force requirements were completed

with the fiscal year 1970 buy. The $43.1 million requested in fiscal year 1974 will support prior year unfunded deficiencies and a revised contract which includes a change in the delivery rate schedule.

C-130E/H Transport

The C-130 is a medium size tactical transport powered by four T-56 dash 7B or dash 15 turboprop engines. It has a ferry range of 4500 NM, operating at a service ceiling of 35,000 feet while cruising at a speed of 280 knots. The C-130 provides immediate and responsive air movements and delivery of combat troops and supplies directly into objective areas through airlanding, extraction, airdrop and other delivery techniques. The FY 1974 budget request includes $180.6 million for 36 aircraft.

(In Thousands of Dollars)
Program Requirement - FY 74 ... $ 100
Program Requirement - FY 73 ... $ 46,100
Program Requirement - FY 72 ... $ 41,000

ACTIVITY: Trainer Aircraft

PART I PURPOSE AND SCOPE

This activity provides for new production aircraft to meet current pilot training requirement for the Military Assistance Service Funded countries.

PART II JUSTIFICATION OF FUNDS REQUESTED

The T-41D aircraft is being requested under the Military Assistance Service Funded (MASF) program two aircraft for Laos and one for South Vietnam to be used for pilot training.

A description of the aircraft requested in the fiscal year 1974 program follows:

T-41D Trainer MESCALERO

The T-41D is required to meet the needs of the Free World Forces in Southeast Asia for pilot training. It is an all metal high-wing, single engine aircraft with fixed tricycle landing gear. The aircraft has dual controls with side-by-side seating for 2 pilots and provisions for 2 additional passenger seats. The fiscal year 1974 budget request contains $.1 million for procurement of 3 aircraft.

(In Thousands of Dollars)
Program Requirement - FY 74 .. $190,100
Program Requirement - FY 73 .. $151,500
Program Requirement - FY 72 .. $ 8,700

ACTIVITY: Other Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of helicopters to pay back the Army for in-country assets which were previously furnished the VNAF, utility type aircraft to replace antiquated aircraft currently used in support of the attache and MAAG missions, and aircraft for the Airborne Command Post system.

PART II JUSTIFICATION OF FUNDS REQUESTED

Advanced Airborne Command Post (AABNCP)

The AABNCP will provide the National Command Authorities (NCA) with an Airborne Command Post system with significantly greater physical size, endurance, flexibility, and Nuclear War Command and Control Capability than the current EC-135 aircraft. This Airborne Command and Control System will significantly improve the current capability to control and direct strategic force during a nuclear conflict between the US and other major powers. Larger battle staffs supported by improved communication and automatic data processing would significantly improve the command and control capability. The FY 1974 budget request is $32.3 million for the procurement of one aircraft.

UH-1H Helicopter Iroquois

The Air Force is procuring these aircraft as pay back to the Army for in-country assets turned over to the VNAF as part of the Vietnamization program. The UH-1H is a low silhouette, high performance helicopter powered by a single T-53 gas turbine engine. It is the standard Army small troop transport carrying 11 personnel. The fiscal year 1974 budget request contains $96.7 million for the procurement of 308 of these aircraft.

CX-X

These aircraft are required for replacement of antiquated aircraft such as the C-47s and C-54s in support of the attache mission, MAAGs, and Military Groups. These aircraft would be logistically supported in the field by the contractor. The proposed CX-X will be an FAA-Certified off-the-shelf, medium-weight executive transport with a classified modification to serve the needs of the Defense Attache Service (DAS). Procurement will be on a competitive basis. The fiscal year 1974 budget request is $9.6 million for procurement of 16 of these aircraft.

CH-47

The CH-47 "CHINOOK" is a medium transport helicopter with twin T-55 engines and dual rotor. The integral rear ramp permits

straight-in loading and unloading. It provides air mobility to military forces in the field by transport of personnel, weapons, bulk liquids and cargo in both combat assault support and logistical support roles. The fiscal year 1974 request is $51.5 million for procurement of 24 of these aircraft.

(In Thousands of Dollars)
Program Requirement - FY 74 ... $527,700
Program Requirement - FY 73 ... $465,700
Program Requirement - FY 72 ... $577,300

ACTIVITY: Modification of In-Service Aircraft

PART I PURPOSE AND SCOPE

This budget activity provides 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 life. The program is designed so that the Air Force's aircraft inventory is maintained at the most modern configuration level at minimum cost.

PART II JUSTIFICATION OF FUNDS REQUESTED

Technological advances necessitate modifications to enable the strike, defense, tactical and support forces to maintain superiority over hostile forces, to extend the active service life of aircraft, and to keep abreast of changing mission requirements. To insure maximum safety for the aircraft and crews and to enhance capabilities of aircraft in a combat environment, many priority modification requirements are necessary. Modifications to be accomplished are closely examined and priorities are established so that the most essential modifications are accomplished with the funds available.

Air craft modifications are accomplished by several means. The more complex modifications are done in house at Air Material Areas or at contractors facilities, depending upon relative costs and capability of the facility. Less complicated modifications are done in the field by squadron personnel or field teams from the Air Material Area or contractor facility.

The major modifications and their fiscal year 1974 cost by aircraft weapon system are:

A-7 ($10.1 million) Follow-on program to provide the capability to carry and launch the Maverick missile requires $3.0 million. Update of the Radar Homing and Warning System requires $4.4 million, and $2.7 million is required for various other programs.

B-52 ($238.5 million) The final procurement for the SRAM missile capability requires $46.7 million and for the Electro-Optical Viewing System $37.5 million. Follow-on programs for Quick Start capability is $8.4 million, improvements and updating of electronic countermeasure defensive systems requires $69.4 million, and $5.0 million is programmed for updating the radar homing and warning system. $61.9 million is programmed to maintain the structural integrity of the D series, $3.0 million for procurement of equipment to solid state the ALT-28 Frequency Control Module and $6.6 million for various other programs.

C-5A (17.4 million) Follow-on program for the fire suppression modification requires $4.5 million and $12.9 million is programmed for correction of deficiencies revealed during initial operational testing and evaluation (IOT&E).

C/EC/HC/KC/RC/WC-135 ($11.0 million) Follow on program for the quick start capability requires $6.0 million, Sattelite communication Terminals are programmed for $2.7 million and $2.3 million is programmed for various other modifications.

F/RF-4 ($95.6 million) Follow on program to complete the procurement of Leading Edge Slats for the F-4E force requires $19.3 million, $11.0 million is required to continue the Smoke Abatement on the F/RF-4 engine, $8.1 million to continue procurement to update the radar homing and warning systems, $8.3 million required for laser guided bomb delivery capability, $4.9 million required to provide capability to carry the Maverick missile on early E series aircraft, $4.2 million continues procurement of the Identification Friend or Foe modification, $23.3 million is required to modify F-4D's with the capability to search out and destroy hostile radar systems, $7.3 million to continue procurement of enviornmental connectors to replace potted electrical connectors and $9.2 million for various other modifications.

F-111 ($24.0 million) Follow on programs for multiple off-sets requires $2.8 million, and $17.4 million will be used to correct deficiencies.

Other Aircraft ($48.8 million) $24.0 million is required to initiate a modification to provide solid state components for the tactical air navigation system and the ultra-high frequency radios across the entire spectrum of aircraft types models and series in the Air Force, and $24.8 million is for various modification costing less than $2.0 million for a single weapon system in FY 1974.

Operational Necessity ($20.0 million) These funds will be used across the entire inventory of Air Force aircraft to correct unforseen operational deficiency that will have an adverse effect on mission performance if not corrected in an expeditious manner.

The table below depicts the total fund requirements for fiscal year 1974 by aircraft and category.

Aircraft/Category	(In Millions of Dollars) FY 1974
A-7	$ 10.1
B-52	238.5
FB-111	5.0
C-5	17.4
C/HC/RC/WC	9.2
C/RC/WC-135	11.0
C-141	2.8
F/RF-4	95.6
F-106	8.0
F-111	24.0
T/AT-37	3.4
T-38	6.2
Other Aircraft	48.8
Operational Necessity	20.0
Classified Programs	18.1
Support of Allies	9.6
Total Modification on In-Service Aircraft	$ 527.7

(In Thousands of Dollars)
Program Requirement - FY 74 .. $579,500
Program Requirement - FY 73 .. $521,000
Program Requirement - FY 72 .. $407,900

ACTIVITY: Aircraft Spares and Repair Parts

PART I PURPOSE AND SCOPE

This activity provides funds for centrally procured and managed, investment type spare components and repair parts to support the aircraft being procured, the aircraft in the inventory, the modification and modernization program, and related aircraft support equipment. Investment type items are defined as reparable assemblies, spares and repair parts which are centrally managed, and most items which have a unit cost of $1,000 or more.

PART II JUSTIFICATION OF FUNDS REQUESTED

Provision is made for the procurement of investment initial spares, for which the funds must be committed in fiscal year 1973 in order to provide support for new production aircraft, the common Aerospace Ground Equipment and the aircraft modification program. Replenishment or follow-on spares and repair parts funds must also be committed and obligated for those items required to support the flying hour program for FY 74 (procurement lead time away).

Following is a table which shows the fiscal year comparison in the various spare and repair parts categories which make up the total funds requirement:

	(In Millions of Dollars)		
	FY 1972	FY 1973	FY 1974
Initial Weapon System Spares	$ 50.4	$ 59.7	$ 144.7
Initial Modification Spares	40.1	31.8	53.0
Initial Common AGE Spares	2.0	1.7	2.2
Total Initial Spares	$ 92.5	$ 93.2	$ 199.9
Replenishment Spares	315.4	427.8	379.6
Total Spares and Repair Parts	$ 407.9	$ 521.0	$ 579.5

Included in this combined initial/replenishment spares program are spare engines and those recoverable/replacement type items which are normally repaired and returned to stock. The basic determinant to computation of spares level requirements is how long the item will operate before it must be removed and repaired. This capability is addressed as Mean Time Between Failure (MTBF) and is expressed in operating hours. The MTBF of an item is then applied to the operating program of the weapon system which results in the determination of how many reparables will be generated during the period concerned. From this, required pipeline quantities, base stock, depot stocks, and attrition replacements are determined. Maximum consideration is given to improved management actions, faster repair, air transportation, and selective management of high cost items. Twice annually, the buy requirements are intensively reviewed by an Air Force management review team which result in minimum essential commitments and obligations.

Initial spares funds requirements for fiscal year 1974 cover the buy of spare engines and those new type recoverable/replacement items which are required to initially support the quantities, types, and planned operations of aircraft being procured. Replenishment requirements are based on past historical data and the operating programs to be supported. The fiscal year 1974 increase over FY 1973 is in the initial spares area, the result of the start of the F-15A program, the buy out of the F-5E, the initial support for the Airborne Command Post and continuing spares support for the aircraft modification program.

(In Thousands of Dollars)
Program Requirement - FY 74 .. $268,200
Program Requirement - FY 73 .. $250,300
Program Requirement - FY 72 .. $791,300

ACTIVITY: Aircraft Support Equipment and Facilities

PART I PURPOSE AND SCOPE

This activity provides for many items of aerospace ground support equipment which are required to service and test aircraft and their components; for costs incurred incident to production component improvement; for industrial machinery equipment and facilities required in the manufacture of items covered by this appropriation; for those war consumable items required to be on hand over and above the peacetime inventory for immediate use in the event of war; and for other charges associated with this program, such as aircraft fuel and oil furnished to contractors and electronic countermeasure equipment.

PART II JUSTIFICATION OF FUNDS REQUESTED

The estimate for this activity is composed of the following segments: common aerospace ground equipment amounting to $82.0 million; component improvement programs totaling $25.9 million; industrial facilities amounting to $23.9 million; war consumable items for a total of $0.9 million and other charges associated with this program totaling $135.5 million.

COMMON AEROSPACE GROUND EQUIPMENT (AGE) - $82.0 million

This program provides for the procurement of organizational, base and depot level AGE used in direct support of aircraft requirements for out-of-production aircraft, common support for new aircraft entering the inventory, and for aircraft being modified. It is used on the flight line, in maintenance shops, in hangars, and in the depots.

The fiscal year 1974 budget of $82.0 million represents an increase level of effort of $27.4 million over the fiscal year 1973 budget of $54.6 million. The program contains such items as generators, de-icers, hydraulic test stands, engine test stands, radio and radar test stands, air conditioners, munitions handling equipment, and non-destructive inspection equipment.

The following table shows a three-year comparison of the broad categories of the Common AGE program:

(In Millions of Dollars)

	FY 1972	FY 1973	FY 1974
- Common Ground Servicing Equipment	$ 14.8	$ 15.7	$ 18.1
- Common Maintenance and Repair Shop Equipment	13.6	15.6	20.7
- Common Instruments & Laboratory Test Equipment	8.2	12.8	15.8
- Other Miscellaneous Equipment	4.5	4.6	4.9
- AGE to Support Aircraft Modifications	5.1	5.9	4.9
- Enhance Plus Items (Too numerous to List)	-0-	-0-	17.6
Total Common AGE	$ 46.2	$ 54.6	$ 82.0

COMPONENT IMPROVEMENT - $25.9 million

The Component Improvement program provides for engineering services and related efforts by producing contractor, primarily aircraft engines to extend useful life.

RDT&E funds are used to qualify an item of equipment for service use. In the case of aircraft engines, R&D funds are used to provide for the MQT (Military Qualification Test) (150 hours). After qualification, CIP (Component Improvement Program) funds are used to provide for required engineering to correct service revealed problems while the engine is in production, as well as to increase reliability, maintainability, durability, and to improve repair techniques. Upon completion of the production cycle, these types of efforts are funded in the O&M appropriation.

The fiscal year 1974 budget of $25.9 million represents a decrease of $13.0 million from the fiscal year 1973 program of $38.9 million. The most significant decrease, $8.5 million, occurred in the F-100 engine which is used in the F-15 aircraft.

The following table shows a three-year comparison of the items in the Component Improvement program:

(In Millions of Dollars)

	FY 1972	FY 1973	FY 1974
TF-41 Engine (A-7)	$ 7.2	$ 3.7	$ 3.5
J-79 Engine (F/RF-4)	0.5	0.9	0.6
J-85 Engine (F-5)	2.6	4.3	4.4
TF-30 Engine (F/FB-111)	13.2	11.5	7.4
TF-39 Engine (C-5A)	23.0	-0-	-0-
T-53 Engine (UH-1H)	0.2	-0-	-0-
F-100 Engine (F-15)	-0-	18.5	10.0
T-64 Engine (HH-53)	2.2	-0-	-0-
Other Equipment	1.3	-0-	-0-
Total Component Improvement	$ 48.1	$ 38.9	$ 25.9

INDUSTRIAL FACILITIES - $23.9 million

The Industrial Facilities program provides for capital type rehabilitation to real property at Air Force owned industrial facilities; preparation for shipment of Government production equipment to the Defense Industrial Plant Equipment Center or to other priority Air Force users; provides funds for the Air Force Industrial Readiness and Mobilization Planning Program. This latter program provides for investigation of deficiencies in our industrial base and assists the Air Force in determining the corrective action to be taken to resolve these deficiencies. Funds are also requested for the manufacturing methods program, a program which assures the timely establishment and improvement of manufacturing processes, techniques, or equipment required to support current and projected Air Force programs.

The fiscal year 1974 budget for Industrial Facilities is $23.9 million, which is $1.2 million more than the fiscal year 1973 program of $22.7 million.

The following table shows a three-year comparison of the broad categories of the Industrial Facilities program:

	(In Millions of Dollars) FY 1972	FY 1973	FY 1974
Expansions	$ -0-	$ -0-	$ -0-
Preparation for Shipment	1.8	1.4	0.5
Capital-Type Rehabilitation	2.1	5.3	6.7
Manufacturing Methods	9.2	11.0	13.0
Industrial Readiness	0.6	1.3	0.3
Environmental Protection	2.5	3.7	3.4
Total Industrial Facilities	$ 16.2	$ 22.7	$ 23.9

WAR CONSUMABLES - $0.9 million

The funds requested in the fiscal year 1974, along with prior funded assets, will afford initial wartime support and a production base which could be expanded in the event of hostilities. Included in this program are auxiliary fuel tanks, pylons, and ejector racks required to support war plans. Due consideration has been afforded to supporting normal operational requirements.

The following table shows a three-year comparison of the War Consumables program:

	(In Millions of Dollars) FY 1972	FY 1973	FY 1974
Slotted Angle Crates	$ -0-	$ 1.6	$ -0-
F-111 Aircraft			
Auxiliary Fuel Tanks	$ -0-	$ 7.9	$ -0-
Pylons Fixed	-0-	-0-	-0-
Bomb Rack Unit	-0-	-0-	-0-
FB-111 Aircraft			
Fixed Pylon/Tank Assy	$ 2.1	$ 4.0	$ -0-
Pivot Pylon/Tank Assy	2.3	-0-	-0-
Pivot Weapons Pylon	3.5	-0-	-0-
F-5E Aircraft			
275 Gal Tank	$ -0-	$ -0-	$ 0.9
A-37 Aircraft			
100 Gal Tank	$ -0-	$ 2.0	$ -0-
Total War Consumables	$ 7.9	15.5	$ 0.9

OTHER PRODUCTION CHARGES AND CLASSIFIED PROGRAMS - $135.5 million

The other production charges program procures Electronic Countermeasures (ECM) pods for tactical fighter aircraft, electronics warfare and intelligence requirements, and funds Air Force classified programs. Also, funds in the amount of $2.9 million are required in this program to reimburse the AF Stock Fund for fuel required by contractors to test aircraft; and for related fuel consuming equipment scheduled for the operational inventory; and for the initial fill of aircraft prior to flyaway. This budget project also provides for First Destination Transportation charges in the amount of $5.9 million for the initial delivery to an Air Force facility.

(In Millions of Dollars)

	FY 1972	FY 1973	FY 1974
ECM Pods	58.8	24.9	60.9
Alternate Mission Equipment	7.7	14.1	11.1
Stock Fund Fuel	2.0	2.9	2.9
Classified Programs	20.9	27.0	24.9
FAC Night Attack Equipment	0.3	0.3	0.3
First Destination Transportation	4.2	5.1	5.9
Total Other Charges	93.9	74.3	106.0
Classified Programs (Excluding above)	579.0	44.3	29.5

Missile Procurement, Air Force

PROGRAM AND FINANCING

Chairman McClellan. At this point in the record there will appear certain program and financing information from the justifications.

[The justification follows:]

Justification

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-3020-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1972 ACT	1973 EST	1974 EST	1972 ACT	1973 EST	1974 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1, BALLISTIC MISSILES	745,200	663,600	667,700	690,685	710,841	642,324
	2, OTHER MISSILES	318,900	328,900	319,300	334,476	286,988	293,568
	3, MODIFICATION OF INSERVICE MISSILES	43,400	36,900	43,400	47,379	60,206	40,947
	4, SPARES AND REPAIR PARTS	42,600	41,900	47,100	46,225	51,571	39,085
	5, OTHER SUPPORT	529,600	615,100	495,700	523,533	633,308	561,249
	TOTAL DIRECT	1,679,700	1,686,400	1,573,200	1,642,298	1,742,914	1,577,173
	REIMBURSABLE (TOTAL)	8,751	5,500	1,050	5,833	10,086	1,827
10	TOTAL	1,688,451	1,691,900	1,574,250	1,648,131	1,753,000	1,579,000
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-594	-3,500	-50	-601	-3,500	-50
13	TRUST FUNDS	-8,120	-2,000	-1,000	-7,476	-2,000	-1,000
14	NON-FEDERAL SOURCES	-37	.....	.....	-42	.....	.....
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-451,226	-459,914	-359,814
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-4,000	.....	.....	-4,000	.....
	REPROGRAMING FROM (-) OR TO PRIOR YEAR BUDGET PLANS	-31,000	-39,000	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-50,000	-35,000	.....	-50,000	-35,000	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	31,000	61,600	.....	31,000	61,600	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	459,914	359,814	355,064
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	4,000	.....	.....	4,000	.....	.....
40	BUDGET AUTHORITY (APPROPRIATION)	1,633,700	1,670,000	1,573,200	1,633,700	1,670,000	1,573,200

SUMMARY OF REQUIREMENTS (in thousands of dollars)

ACTIVITY	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Ballistic missiles	$ 745,200	$ 663,600	$ 667,700
Other missiles	318,900	328,900	319,300
Modification of in-service missiles	43,400	36,900	43,400
Spares and repair parts	42,600	41,900	47,100
Other support	529,600	615,100	495,700
TOTAL DIRECT PROGRAM	1,679,700	1,686,400	1,573,200
Reimbursable program	8,751	5,500	1,050
TOTAL PROGRAM REQUIREMENTS	1,688,451	1,691,900	1,574,250
Less: Portion of program to be obligated in subsequent fiscal years	334,839	319,726	301,484
Plus: Obligations incurred against prior year program funds	294,519	380,826	306,234
TOTAL OBLIGATIONS	1,648,131	1,753,000	1,579,000

BUDGET REQUEST

General GLASSER. The missile procurement program request for fiscal year 1974 is $1.6 billion. We are requesting funds for continued deployment of Minuteman III as well as improvements to Minuteman through the force modernization program. We plan to complete the procurement of SRAM this year needed to equip the B–52/FB–111 force. We also plan to continue production of Maverick for our tactical aircraft. In addition, we are requesting funds for the AIM–7F Sparrow air-to-air missile, for the AGM–45A Shrike air-to-ground missile, and funds for procurement of target drones.

To support the missile procurement program, funds are needed for missile modifications, spares, repair parts and support equipment and facilities. The missile procurement program is summarized in table II.

At this time I will briefly discuss the individual items in the missile procurement request.

Chairman MCCLELLAN. Insert table II in the record.

[Table II follows:]

TABLE II
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 MISSILE PROCUREMENT ESTIMATES
(In Millions of Dollars)

	TYPE	QTY	ESTIMATES
BALLISTIC MISSILES			
Minuteman II/III (LGM-30F/G)	Strategic ICBM	136	$ 401.2
Minuteman III (LGM-30G) (Advance Procurement)			13.3
Minuteman Force Modernization			253.2
			$ 667.7
OTHER MISSILES			
Shrike (AGM-45A)	Anti-Radar		11.0
Maverick (AGM-65A)	Air-to-Ground	6,000	107.1
SRAM (AGM-69A)	Air-to-Ground	454	136.7
Sparrow (AIM-7F)	Air-to-Air		51.5
Target Drones			13.0
			$ 319.3
MODIFICATION OF IN-SERVICE MISSILES			$ 43.4
MISSILE SPARES & REPAIR PARTS			$ 47.1
MISSILE SUPPORT EQUIPMENT & FACILITIES			$ 495.7
TOTAL DIRECT PROGRAM			$ 1,573.2
FINANCING:			
New Obligational Authority			$ 1,573.2

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MINUTEMAN

General GLASSER. The Minuteman force is a vital element of the strategic TRIAD. The program request for Minuteman consists of the force modernization program and additional quantities of Minuteman III missiles.

The Minuteman III has greater range, accuracy and defense penetration capability than any of its predecessors. When the presently planned deployment of Minuteman III is completed in fiscal year 1975, we will have a Minuteman missile force of 550 Minuteman III's and 450 Minuteman II's.

MIRV WARHEADS

Chairman MCCLELLAN. Which of the Minuteman missiles are equipped with the Multiple Independent Reentry Vehicle (MIRV) warheads?

General GLASSER. The Minuteman III missiles are equipped with MIRV. These are deployed at Minot AFB and Grand Forks AFB in North Dakota, and are being deployed at Warren AFB, Wyoming. It is also planned to deploy these in 50 sites at Malmstrom AFB, Montana.

Chairman MCCLELLAN. You may proceed.

General GLASSER. The fiscal year 1973 program of $396.4 million will procure into Minuteman III missiles and their associated equipment as well as long lead items related to the fiscal year 1974 request. The fiscal year 1973 program requested procurement of 128 Minuteman III missiles. The purchase of only 120 was authorized. This decrease was accommodated by modifying the operational testing program. The outstanding performance of Minuteman III in early testing was a key factor in making this adjustment. The fiscal year 1974 request for 136 missiles provides for continued deployment of Minuteman III and for support of the operational test program. Deployment of these missiles will complete the 550 Minuteman III force. We are requesting $414.5 million for procurement of Minuteman III missiles including $23.1 million to protect the option to continue production of the Minuteman III beyond fiscal year 1974. It is vital that we protect this, the only current option for continued qualitative improvement of the ICBM force.

We are continuing the force modernization program which consists of three wholly integrated elements: Basic Force Modernization which will make Minuteman ground systems compatible with the Minuteman II and III missiles; Upgrade Silo to improve in-silo survivability against nuclear effects of blast shock and electromagnetic pulse; and Command Data Buffer to provide the capability to remotely retarget Minuteman III missile from launch control facilities.

STRATEGIC ARMS LIMITATIONS

Chairman MCCLELLAN. What are the restrictions placed on the Minuteman force by the SAL Agreement?

General GLASSER. The Interim Agreement prohibits new construction of additional, fixed, land-based ICBM launchers. This restriction limits us to the 1,054 fixed ICBM launchers which are currently operational. Since these restrictions deal with launcher numbers we cannot

build new operational Minuteman launchers, although we may make qualitative improvements to existing launchers.

Chairman McClellan. Will the fiscal year 1974 program reach the maximum force level allowed under the agreement?

General Glasser. We have already reached the 1,054 operational, fixed ICBM launchers allowed under the Interim Agreement. The fiscal year 1974 program deals with making qualitative improvements—such as replacing Minuteman I with Minuteman III missiles, et cetera—to our present ICBM force. These qualitative improvements are not limited by the Interim Agreement.

Chairman McClellan. You may proceed.

General Glasser. The $267.2 million in fiscal year 1973 will procure hardware for one squadron at Wing III, Minot, N. Dak., and two squadrons at Wing V in Wyoming. It also includes site activation funds for the two squadrons at Wing V. The $253.2 million in fiscal year 1974 will procure the final squadron of site activation effort for Wing V; the last two squadrons of hardware and site activation for Wing III; and long lead hardware for Wing VI, Grand Forks, N. Dak.

SITE DEFENSE

Senator Young. Don't you have a program called site defense?

General Glasser. That is a possible program. There is a current development program being currently conducted by the Army on site defense. It is not an approved production program nor has it progressed far enough to know exactly where it will lead.

Senator Young. It is an Army program?

General Glasser. In support of the Air Force, that is correct, in support of the Minuteman. It would be local defense of the Minuteman sites.

Senator Young. You don't know how far along they are?

General Glasser. I don't have a current understanding of it. They have been at it a little over 1 year now.

REPLACEMENT OF MINUTEMAN II'S

Senator Young. If the production of Minuteman III were to be continued beyond fiscal year 1974 would Minuteman II's be replaced or would a limited production be for the purpose of product improvement and attrition?

General Glasser. If production of Minuteman III were to be continued beyond fiscal year 1974, the disposition of the Minuteman II missiles would be based upon a thorough consideration of all factors, including the threat, the availability of funds, the age of the force, the need for test missiles, and all other pertinent factors.

Chairman McClellan. Proceed.

COMMAND DATA BUFFER

General Glasser. Our high confidence in the success of the Command Data Buffer program was substantiated last November when the completely integrated system performed all of the required functions in a test at the Boeing Co.

COMMAND DATA BUFFER PROGRAM

Chairman McClellan. Describe how the Command Data Buffer program functions. What improvements will it give over past systems?

General Glasser. Command Data Buffer provides rapid, remote retargeting for the Minuteman III. Present retargeting procedures require entry into each silo to insert prepared targeting information into the missiles through the ground electronics. With Command Data Buffer, the information is prepared and inserted remotely from the launch control facility. The targeting computations and data transmission are accomplished by a digital computer in the launch control facility. A secure data unit in the launch control facility and in each launch facility encrypts transmission of the data and provides security protection of missile status information. Command Data Buffer reduces the time required to change the missile targeting and increases system responsiveness and flexibility. As an example, it reduces the emergency retargeting time for a single missile from the present 16 to 24 hours to about 36 minutes.

Chairman McClellan. You may proceed.

General Glasser. We are buying weapon system computers, bulk storage memory units, secure data units, aerospace ground equipment and training equipment for two squadrons. Work is now in progress at F. E. Warren Air Force Base to initially deploy the Command Data Buffer system as an integral part of the Upgrade Silo program. Initial operational capability is planned for midyear. The Command Data Buffer and Upgrade Silo programs in fiscal year 1974 have been slowed to level funding requirements and workload.

SHRIKE (AGM–45A)

The Shrike anti-radiation missile is designed to destroy enemy ground radars by homing on the source of the radiation. This weapon is carried on F–105 and F–4 aircraft and has been in the Air Force operational inventory since 1966. Congress approved funds for procurement of 300 missiles and related equipment in fiscal year 1973. We are requesting approval to buy additional missiles this year at a cost of $11 million to support war reserve materiel requirements.

Chairman McClellan. Is there a missile being developed to replace the Shrike missile?

General Glasser. The next generation antiradiation missile is being developed by the Navy. It is called the High Speed Anti-Radiation Missile, or HARM, and will supplement the Shrike antiradiation missile inventory.

Chairman McClellan. You may proceed.

MAVERICK (AGM–65A)

General Glasser. The Maverick is an air-to-surface missile equipped with automatic television homing guidance for use by the F–4D/E, A–7D, and A–10 tactical aircraft worldwide against fixed or moving hard targets. The Maverick with exceptional accuracy, high degree of destructive potential against hard targets, and standoff capability

will increase aircraft survivability and lower the cost per target destroyed.

We have completed development test and evaluation, the adverse weather tests in Europe and the joint Air Force-Army operational test. Operational test and evaluation launches using production missiles began last fall.

The test program to date has been very successful and in November 1972 the Secretary of Defense released Maverick for foreign military sales.

Chairman McClellan. Which countries have placed orders for the Maverick missile and in what quantities?

General Glasser. The [deleted] Air Force signed a letter of offer for [deleted] Maverick missiles and associated support equipment on May 23, 1973. No other orders have been placed.

Chairman McClellan. You may proceed.

General Glasser. Release to our NATO allies is of course predicated on satisfying priority U.S. military requirements first. Release to other allies was also granted with availability dependent upon both satisfying U.S. requirements and allowing NATO a reasonable opportunity to express their requirements.

The $66.1 million approved program for fiscal year 1973 will procure 3,000 missiles. We now have 5,000 missiles on contract. The first production missile was delivered in August 1972, 3 weeks ahead of schedule.

The fiscal year 1974 request for $107.1 million will be used to procure an additional 6,000 missiles. We plan to continue production of the Maverick for a total buy of 17,000 missiles.

SRAM (AGM–69A)

The Short Range Attack Missile (SRAM) is an air-to-surface missile, armed with a nuclear warhead.

Chairman McClellan. Does the SRAM missile also have a conventional warhead?

General Glasser. No, sir.

Chairman McClellan. You may proceed.

General Glasser. It possesses a standoff attack capability which allows the attacking bomber to avoid defenses surrounding the targets. It can also be employed to open corridors through enemy defenses enhancing penetration. The basic SRAM development was completed with fiscal year 1972 funds. Four B–52 squadrons and two FB–111 squadrons are now SRAM equipped.

The approved fiscal year 1973 request provided $195.2 million for procurement of 480 missiles. The operational test and evaluation program has been initiated using production missiles. Operational launches are being made from Strategic Air Command aircraft. Our fiscal year 1974 request of $136.7 million is for procurement of the final 454 missiles to complete the current 1,500 missile SRAM program.

SPARROW (AIM–7F)

The AIM–7F is a radar guided air-to-air missile with an all weather capability against high performance aircraft. It is planned for use on the F–4E and F–15.

The initial operational test and evaluation program was accomplished in calendar year 1972 by a joint Navy/Air Force group.

SPARROW DIFFICULTIES

Chairman McClellan. Have you experienced difficulties and cost increases in the development of the Sparrow (AIM–7F) missile program? Please discuss.

General Glasser. The Air Force entered the AIM–7F program in 1971. The development program encountered some technical difficulties during the joint Navy/Air Force test program that was completed in December 1972. These problems have been corrected and follow-on IOT&E testing is scheduled to start in July/August 1973. The 1971 budgetary estimate for the initial 50 Air Force missiles was $8.0 million. The Air Force portion of the contract definitized in June 1973 for these initial missiles was approximately $8.7 million, an increase of about 9 percent.

Chairman McClellan. You may proceed.

General Glasser. The results indicate that the AIM–7F has superior range, lethality, and reliability than the AIM–7E2 and support release of the fiscal year 1973 funds for initial limited production. Additional joint-service initial operational testing of the missile and initial testing of the F–15 with the AIM–7F will be accomplished during 1973. This testing will complete the verification of the final production configuration and should allow a decision for the award of a full production contract by February 1974.

Approval of $51.5 million is requested in fiscal year 1974 for the purpose of the first quantity of full production missiles to support the F–4E and F–15 operational test programs and initial inventory requirements.

EFFECT OF F–14/F–15 PROTOTYPE DEVELOPMENT

Chairman McClellan. What effect does the DOD decision of June 15 to develop prototype versions of the F–14 and F–15 aircraft for Navy/Marine Corps fighter modernization have on your request of $51.5 million in fiscal year 1974 for Sparrow operational test programs for the F–15?

General Glasser. The DOD decision to develop prototype versions of the F–15/F–14 and F–4J aircraft will not affect the Air Force fiscal year 1974 planned Sparrow program of $51.5 million. These missiles will support the F–15/F–4E OT&E programs, and will provide AIM–7F assets for the F–15 squadrons as they are activated.

TARGET DRONES

Chairman McClellan. You may proceed.

General Glasser. Under this category of procurement, we are requesting a total of $13 million in fiscal year 1974 of which $1.9 million is for the Firebee I (BQM–34A) and Firebee II (BQM–34F).

Procurement funds are also being requested for the first time for the triservice high altitude supersonic target (HAST) which is nearing the end of its development phase. HAST will provide a maneuvering, high altitude target capable of speeds up to mach 4.0 at altitudes up to 100,000 feet. It will be used by the Air Force to test and evaluate high altitude aircraft and missile weapon systems. This year, the request is for an initial purchase of 25 targets at a cost of $5.2 million.

We are also requesting funds for another drone effort, the PQM–102. This program will use excess F–102 aircraft, converting them to low-cost, supersonic, afterburning targets to closely approximate present threat aircraft. The PQM–102 will be the primary Air Force target for test and evaluation of new air superiority aircraft and missile weapon systems. For fiscal year 1974, we request $5.9 million for an initial procurement of 22 PQM–102's.

MODIFICATION OF INSERVICE MISSILES

This program provides for modifications to inservice missile systems to correct deficiencies, eliminate safety hazards, and to improve their capability and performance. Our fiscal year 1974 request is $43.4 million.

This includes $16.5 million to continue installation of the software status authentication system in the Minuteman II force modernized launch facility; to provide an improved fuze system for the AIM–7E Sparrow missile; to provide an ECM jamming system for the tactical electronic warfare support drone; and to modify the Bomarc B missiles to a target drone configuration.

MINUTEMAN SOFTWARE AUTHENTICATION SYSTEM

Chairman McClellan. Describe the software status authentication system in the Minuteman II force modernized launch facility.

General Glasser. The Minuteman command control and communications systems and the missile status—launch configuration, target settings, warhead status, security status, et cetera—are currently transmitted in clear text [not encrypted]. The status authentication system involves the incorporation of cryptographic routines into the missile and launch control center computer programs. This modification is being accomplished to further comply with secure communications standards dictated by nuclear safety requirements.

Chairman McClellan. You may proceed.

General Glasser. An addjtional $26.9 million is requested for Minuteman update to provide for efforts such as the incorporation of hardness fixes against the effects of dust erosion for Minuteman III missiles which have been delivered to the operational force. These funds will also complete the retrofit of the remaining 287 Minuteman III missiles with a modified gyro in the guidance platform to extend its postattack capability.

MISSILES SPARES AND REPAIR PARTS

This procurement category contains replacement equipment, initial and replenishment spares to support the current and programed Air Force missile inventory. Congress approved $43.9 million in fiscal year 1973 for Air Force missile spares and replacement equipment. Our fiscal year 1974 request is $47.1 million which includes $41.7 million for spares support for systems such as Minuteman, Maverick, and SRAM. The replacement equipment request is $5.4 million, most of which is required for the Minuteman and SRAM.

MISSILE SUPPORT EQUIPMENT AND FACILITIES

This final category of our missile procurement program contains the industrial facilities program request and significant portions of the space effort. The fiscal year 1973 program includes $615.1 million

for this procurement category. The fiscal 1974 request is $495.7 million and I want to briefly discuss planned programs for the year.

The maintenance of an industrial production base which is adequate to sustain current production of missiles and related components is the primary responsibility of the industrial facilities program. Directives and policies aimed at reducing Government ownership of existing industrial production facilities are being adhered to. Such assets are being sold or leased under terms that are mutually advantageous to the Government and industry. We request $3.2 million in fiscal year 1974 for minor expansions, nonrecurring maintenance, and industrial preparedness planning.

The work titled "expansions" does not include any new construction or modification of real property. It does cover installation and replacement of equipment, special tooling, and supporting hardware at the operating locations for updating the Minuteman missile system. Replacement and modernization of some equipment will result in a more efficient operation by reducing downtime for repairs and eliminating marginal equipment.

Under our space effort, we plan, through the Defense Satellite Communications Systems program, to procure two spacecraft and one Titan III C launch vehicle. Our request for fiscal year 1974 is $51.1 million for this procurement and associated support.

One of the smallest but most effective space programs is the Defense Systems Application program.

DEFENSE SYSTEMS APPLICATION PROGRAM

Chairman McClellan. Describe the Defense Systems Application program.

General Glasser. The Defense Systems Application program (DSAP) is a satellite system which provides timely, high-quality meteorological data to the military weather services in support of worldwide military commitments. Two satellites provide the data, one in the early morning and early evening, and the other near local noon and midnight. The satellites operate in stored and real-time modes, providing both visual and infrared data of ⅓ and 2 NM resolution. The stored data are recorded globally and dumped to one of two CONUS receiving stations, from which they are simultaneously relayed to Air Force Global Weather Central at Offutt Air Force Base, where they are processed and used. For tactical support, local area data are transmitted in real time to mobile receiving terminals. On December 8 of last year, DSAP data were declassified and made available on a routine basis to the civilian weather community through the National Oceanic and Atmospheric Administration.

Chairman McClellan. You may proceed.

General Glasser. The fiscal year 1973 approved funding of $12.9 million is providing for modification of dedicated ground terminals, prelaunch activities, and an upper stage for the last of the current satellites. The fiscal year 1974 funding request of $15.8 million is planned for procurement of an integrated spacecraft, primary sensor system, a final stage motor, refurbishment and replacement of program-peculiar aerospace ground equipment, and logistics and support services for scheduled launches.

The fiscal year 1973 program of $164.9 million for the Defense Support program is being used to procure the 9th through 12th satel-

lite/booster sets, and to provide a software capability which will enable us to receive, process, and correlate mission data from two satellites in the Defense Support program ground facility computers. Because of the longer than expected on-orbit life of satellites experience to date, our fiscal year 1974 request has been reduced to $30.3 million.

DEFENSE SUPPORT PROGRAM

Chairman McCLELLAN. What was the original request for the Defense Support program which has now been reduced to $30.3 million?

General GLASSER. Initially, the Air Force anticipated a fiscal year 1974 missile procurement (3020) request of $154.6 million for the Defense Support program (DSP). By early calendar year 1973, it was clear that DSP satellite on-orbit lifetime would exceed original expectations. This has reduced the Air Force requirement for replacement satellites allowing a reduction of fiscal year 1974 missile procurement funding.

Chairman McCLELLAN. You may proceed.

General GLASSER. The Air Force Satellite Communications System funding request for fiscal year 1974 is $4.3 million. The requirement is for acquisition and integration of production transponders for this program.

The Satellite Data System program request for the fiscal year 1974 effort of $30.1 million will support the procurement of flight model spacecraft No. 2 and one launch vehicle plus associated system engineering and support efforts.

The classified drones and special programs requests for fiscal year 1974 are $5.7 million and $355.2 million, respectively.

SUMMARY

The Air Force aircraft and missile procurement program request for fiscal year 1974 is $4.5 billion of which $2.9 billion is for aircraft procurement and $1.6 billion is for missile procurement. I believe this request is justifiable for meeting Air Force commitments in countering the current and projected threat to our national security.

I will be happy to respond to your questions.

FORCE MODERNIZATION PROGRAM

Senator YOUNG. After fiscal year 1974 what will be required to complete the force modernization program?

General GLASSER. It is estimated that $959.8 million of procurement funds will be required to complete the program.

Chairman McCLELLAN. Do you have any further questions, Senator Young?

Senator YOUNG. I have no further questions.

JUSTIFICATION

Chairman McCLELLAN. At this point in the record there will be included additional information from the justifications.

[The justifications follow:]

Justification

PURPOSE AND SCOPE OF APPROPRIATION

The Missile Procurement, Air Force appropriation provides for procurement, modification, installation, and checkout of missiles, boosters, payloads, drones, and the associated ground support and checkout equipment. It also procures technical data, spares support, transportation, expansion, and nonrecurring maintenance of industrial facilities, machine tool modernization, and classified project activities support.

1. Ballistic missiles - Provides funds for the procurement of Minuteman intercontinental ballistic missile systems required for operational squadrons and crew training. It also provides for the procurement, installation, and checkout of missiles, aerospace ground equipment, specialized training equipment, the required technical data for the intercontinental ballistic missile program and Minuteman force modernization.

2. Other missiles - Provides for the procurement of the Shrike antiradiation missile, the Short Range Attack Missile (SRAM) for use on strategic bombers, the Maverick air-to-ground missile, air-to-air missiles, and Target Drones for test and training requirements.

3. Modification of in-service missiles - Provides for continued Minuteman updating, and the modification of missiles and support equipment to improve safety, and increase mission capability resulting from technical advances, service use and continuing test programs.

4. Spares and repair parts - Provides for initial and replenishment spare subsystems, components, and spare parts for ballistic and other missiles including provisioning documentation.

5. Other support - Provides for special programs, modernization and maintenance of Government-owned production facilities and support of operational space activities.

ACTIVITY: 1. Ballistic missiles

(in thousands of dollars)

Program Requirements - FY 1974	$ 667,700
Program Requirements - FY 1973	$ 663,600
Program Requirements - FY 1972	$ 745,200

PART I - PURPOSE AND SCOPE

This activity provides for complete operational intercontinental ballistic missiles, including the airframe structure and installed power units, communications guidance and control equipment, re-entry vehicle (excluding nuclear payloads), instruments and auxiliary equipment installed in the missiles, and penetration aids. It also provides for aerospace ground equipment in direct support of operational ballistic missiles including ground guidance and control systems, equipment to maintain the operational status of the system, specialized ground handling equipment, and system trainers. The ground equipment is used to transport, assemble and disassemble, maintain checkout, launch and guide ballistic missiles. The specialized training equipment includes system trainers for proficiency training of maintenance and operator crews. Site activation, which supports the assembly and checkout of complete weapon systems, is accomplished prior to acceptance of the operational system by the Air Force. This activity also provides for the modernization of ballistic missile launch and launch control facilities. It includes hardware, training equipment, data and site activation effort required to modernize ballistic missile facilities.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The MINUTEMAN is a three stage solid propellant strategic offensive Intercontinental Ballistic Missile (ICBM). MINUTEMAN II carries a single re-entry vehicle and has the capability to penetrate area type defenses. MINUTEMAN III is designed to have a capability for the deployment of multiple re-entry vehicles. The FY 1974 estimate provides for the procurement of flyaway missiles, aerospace ground equipment, technical data, specialized training equipment and site activation effort for the MINUTEMAN III intercontinental ballistic missile. The MINUTEMAN III missiles programmed are for operational testing to determine system reliability and for the replacement of MINUTEMAN I missiles. Funds are also included for the procurement of long lead items to preserve a FY 1975 procurement option, and hardware and necessary effort required to modernize MINUTEMAN launch and launch control facilities. This includes the conversion of MINUTEMAN I sites and launch control facilities to a configuration that will receive a MINUTEMAN III missile; upgrade silo hardening to enhance prelaunch survivability; and the modernization of MINUTEMAN III facilities to incorporate the Command Data Buffer system which will more effectively posture and maintain the single integrated operational plan (SIOP).

The following tabulation indicates the composition of ballistic missile program requirements for FY 1974 and FY 1973.

FY 1974

(in thousands of dollars)

WEAPON SYSTEM	FLYAWAY	AGE	TRAINING	TECHNICAL DATA	SITE ACTIVATION	TOTAL
MINUTEMAN II/III (Sqdns)	$ 392,400	$ 7,500	$ 6,900	$ 6,900	$ 800	$ 414,500
Force Modernization						253,200
TOTAL WEAPONS SYSTEM COST	$ 392,400	$ 7,500	$ 6,900	$ 6,900	$ 800	$ 667,700

FY 1973

MINUTEMAN II/III (Sqdns)	$ 363,000	$ 11,500	$ 7,600	$ 12,400	$ 1,900	$ 396,400
Force Modernization						267,200
TOTAL WEAPONS SYSTEM COST	$ 363,000	$ 11,500	$ 7,600	$ 12,400	$ 1,900	$ 663,600

ACTIVITY: 2. Other missiles

(in thousands of dollars)

Program Requirements - FY 1974 $ 319,300
Program Requirements - FY 1973 $ 328,900
Program Requirements - FY 1972 $ 318,900

PART I - PURPOSE AND SCOPE

This activity provides for complete air-to-surface and air-to-air missiles and target drones required by the Air Force in the performance of its operational missions. Included are airframe structure, power units, guidance and control equipment, conventional payloads, and other instruments and auxiliary equipment installed in the missile. This activity also provides for aerospace ground equipment such as hoists, slings, test and checkout equipment, and personnel trainers for the testing, maintenance, training and combat readiness of operational units.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Funds requested provide for the procurement of the SHRIKE, MAVERICK, Short Range Attack Missile (SRAM), SPARROW missiles, and Target Drones. Annual procurement programs support DOD logistic and procurement guidance in addition to Air Force established training, evaluation, and pipeline requirements.

The following tabulation indicates missile program requirements for FY 1974 and FY 1973. The table is followed by an explanation of each weapon system comprising the FY 1974 request.

FY 1974

WEAPON SYSTEM	FLYAWAY	AGE	TRAINING	TECHNICAL DATA	SITE ACTIVATION	TOTAL
SHRIKE	$ 10,300	$ 300	$ -0-	$ 400	$ -0-	$ 11,000
MAVERICK	79,500	23,800	2,300	1,500	-0-	107,100
SRAM	121,400	11,800	500	1,700	1,300	136,700
SPARROW	49,600	1,400	400	100	-0-	51,500
Target Drones	9,700	1,800	200	1,300	-0-	13,000
TOTAL WEAPONS SYSTEM COST	$ 270,500	$ 39,100	$ 3,400	$ 5,000	$1,300	$319,300

FY 1973

WEAPON SYSTEM	FLYAWAY	AGE	TRAINING	TECHNICAL DATA	SITE ACTIVATION	TOTAL
SHRIKE	$ 10,600	$ 300	$ -0-	$ 400	$ -0-	$ 11,300
MAVERICK	45,800	15,400	4,200	700	-0-	66,100
SRAM	154,600	36,000	1,000	2,200	1,400	195,200
SPARROW	9,750	-0-	-0-	-0-	-0-	9,750
SIDEWINDER	5,150	-0-	-0-	-0-	-0-	5,150
STANDARD ARM	37,600	1,400	-0-	-0-	-0-	39,000
TARGET DRONES	2,300	-0-	-0-	100	-0-	2,400
TOTAL WEAPONS SYSTEM COST	$ 265,800	$53,100	$ 5,200	$ 3,400	$ 1,400	$ 328,900

AGM-45A SHRIKE - An anti-radiation air-to-ground missile designed for detection and destruction of emitting radars. After detecting a target, the SHRIKE missile is propelled in a semi-ballistic trajectory by a solid fuel rocket motor to a point where it homes on radiations emanating from the target. The FY 1974 program of $11,000 thousand provides for the continuation of the production of missiles for use against various types of radar emissions.

AGM-65A MAVERICK - An air-to-ground missile with automatic television homing guidance designed for destruction of visible targets, such as tanks, armored personnel carriers, field fortifications, and reinforced buildings. A TV guided missile makes "launch and leave" delivery possible increasing aircraft survivability. The $107,100 thousand for FY 1974 is required to exercise production options through June 1974.

AGM-69A SRAM - An air-to-ground missile equipped with a nuclear warhead designed to attack heavily defended targets. The FY 1974 requirement of $136,700 thousand completes procurement of the four-year SRAM program.

AIM-7F SPARROW - A supersonic, semi-active, all weather air-to-air missile with solid state electronics that uses continuous wave guidance techniques for guidance. The FY 1974 requirement of $51,500 thousand will provide for the initial procurement of AIM-7F SPARROW missiles for use by F-4B and F-15 aircraft.

Target Drones - Target Drones are airborne vehicles which can be used to simulate subsonic and supersonic enemy aircraft. They are used by the Air Force to develop air-to-air missile tactics, to train aircrews in air-to-air missile intercepts, and to test and evaluate aircraft and missile weapon systems. The FY 1974 estimate of $13,000 thousand is for the procurement of recoverable, high altitude, supersonic target (HAST) drones and the full scale, maneuverable, after burning, non-manrated (PQM-102) target drones.

ACTIVITY: 3. Modification of in-service missiles

	(in thousands of dollars)
Program Requirements - FY 1974	$ 43,400
Program Requirements - FY 1973	$ 36,900
Program Requirements - FY 1972	$ 43,400

PART I - PURPOSE AND SCOPE

This activity provides for updating, modification of missile systems and drones, direct ground support equipment, missile training equipment and components of these equipments. Also included are modification kits, special tools, revised handbooks and engineering effort. These programs are designed to improve reliability, enhance performance, and increase maintainability by incorporating approved alterations resulting from technical advances, service use and continuing test programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The modification programs provide for two categories: (1) MINUTEMAN Update which includes funds for the MINUTEMAN III dust retrofit program, aging and surveillance support, and continuation of the updating of MINUTEMAN III subsystems to improve the capability, reliability and safety of the system; and (2) Class IV Modification support of the total Air Force in-service inventory including such systems as MINUTEMAN, SRAM, MAVERICK and Target Drones.

The following table reflects missile modification program requirements for FY 1973 and FY 1974.

SYSTEM	(in thousands of dollars) FY 1973	FY 1974
Class IV/V Modifications	$ 6,000	$16,500
MINUTEMAN Update	30,900	26,900
TOTAL	$36,900	$43,400

ACTIVITY: 4. Spares and repair parts

(in thousands of dollars)
Program Requirements - FY 1974 $ 47,100
Program Requirements - FY 1973 $ 41,900
Program Requirements - FY 1972 $ 42,600

PART I - PURPOSE AND SCOPE

This activity provides for the procurement of initial and replenishment spares and repair parts for ballistic missiles, other missiles, target drones, aerospace ground equipment, training equipment, replacement depot test equipment, provisioning documentation, and spares to support modification programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Spares and repair parts requirements are developed by detailed provisioning actions which consider operational deployment of the end-item, usage rate trends, and service life, i.e., time change items. The spares and repair parts requirements are principally for MINUTEMAN, SRAM and MAVERICK weapon systems. Items with a high unit cost, such as MINUTEMAN and SRAM Guidance and Control Unit Components, are individually computed and procured within this category.

The following table lists the initial spares requirements by weapon system for FY 1973 and FY 1974.

WEAPON SYSTEM	(in thousands of dollars) FY 1973	FY 1974
MINUTEMAN	$ 10,600	$ 10,300
SRAM	4,900	3,100
SPARROW	-0-	-0-
MAVERICK	4,800	5,100
Classified Drones	2,900	500

	(in thousands of dollars) FY 1973	FY 1974
Target Drones	$ 400	$ 300
Other	1,600	1,000
Total Initial Spares	25,200	20,800
Replenishment Spares	16,700	26,300
TOTAL SPARES & REPAIR PARTS	$ 41,900	$ 47,100

ACTIVITY: 5. Other support

(in thousands of dollars)
Program Requirements - FY 1974 $ 495,700
Program Requirements - FY 1973 $ 615,100
Program Requirements - FY 1972 $ 529,600

PART I - PURPOSE AND SCOPE

Funds budgeted under this activity are for support of industrial facilities, space programs, and special programs. Industrial facilities provides for expansion or modification of Government-owned production facilities, nonrecurring maintenance and modernization of machine tools and equipment, preparation, crating, and shipping of Government tools, improved manufacturing methods, and environmental protection measures instituted at Government-owned plants. Space programs provide launch vehicles, space vehicles, peculiar ground support equipment, and miscellaneous launch support costs other than those chargeable to the Operation and Maintenance appropriation.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 budget request of $495,700 thousand is comprised of $3,200 thousand for Industrial Facilities, plus $132,100 thousand for Space Programs, and $360,400 thousand for other projects.

Funds requested for Industrial Facilities include $485 thousand for Capital Type Rehabilitation, $700 thousand for Industrial Preparedness, $175 thousand for Packing and Crating, and $1,840 thousand for Expansion. Capital Type Rehabilitation will take place in FY 1974 at Air Force plants 56, 57, 77 and 78 and includes renovation and rehabilitation of steam and air conditioning systems, underground water distribution lines and electrical power distribution systems. These repairs are required to comply with health and safety standards and to protect the Government investment in these plants.

Details of the Other Projects and space program content are classified.

CONCLUDING REMARKS ON GEN. GLASSER RETIREMENT

Chairman McClellan. Thank you very much, General Glasser.
Senator Young. General is this your last appearance?
General Glasser. This is my last appearance.
Senator Young. Are you retiring?
General Glasser. I am retiring in less than 2 weeks.
Senator Young. We will miss you. You have been very helpful.
General Glasser. Thank you.

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Other Procurement, Air Force

STATEMENT OF MAJ. GEN. JONAS L. BLANK, ASSISTANT DEPUTY CHIEF OF STAFF, SYSTEMS AND LOGISTICS, HEADQUARTERS

ACCOMPANIED BY:

MAJ. GEN. JOSEPH R. DE LUCA, DIRECTOR OF BUDGET, HEADQUARTERS

MAJ. GEN. JAMES A. HILL, DIRECTOR OF PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

MAJ. GEN. LEE M. PASCHALL, DIRECTOR OF COMMAND CONTROL AND COMMUNICATIONS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES

PROGRAM AND FINANCING

Chairman McClellan. The next appropriation to be considered is "Other procurement, Air Force."

At this point in the record there will appear certain program and financing information from the justifications.

[The justifications, which do not include Southeast Asia adjustments, follow:]

Justification

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-15-3080-0-1-051	BUDGET PLAN (AMOUNTS FOR PROCUREMENT ACTIONS PROGRAMED)			OBLIGATIONS		
		1972 ACT	1973 EST	1974 EST	1972 ACT	1973 EST	1974 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1, MUNITIONS AND ASSOCIATED EQUIPMENT	742,249	819,984	598,500	707,244	792,745	596,649
	2, VEHICULAR EQUIPMENT	52,931	32,200	52,000	65,829	38,969	56,503
	3, ELECTRONICS AND TELECOMUNICATIONS EQUIPMENT	231,046	234,817	337,200	248,803	274,809	315,170
	4, OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT	547,772	992,799	1,017,200	535,549	987,092	1,025,547
	TOTAL DIRECT	1,573,998	2,079,800	2,004,900	1,557,425	2,093,615	1,993,869
	REIMBURSABLE (TOTAL)	40,117	50,000	50,000	28,765	36,385	48,131
10	TOTAL	1,614,115	2,129,800	2,054,900	1,586,190	2,130,000	2,042,000
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-24,130	-11,700	-11,700	-20,967	-2,721	-11,700
13	TRUST FUNDS	-43,939	-53,000	-38,000	-68,197	-54,849	-38,000
14	NON-FEDERAL SOURCES	-248	-300	-300	-292	-352	-300
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-502,634	-340,728	-325,654
	AVAILABLE TO FINANCE NEW BUDGET PLANS	.....	-51,830	.....	.....	-51,830	.....
	REPROGRAMING FROM (-) OR TO PRIOR YEAR BUDGET PLANS	-210,970	-7,796	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-90,000	-23,200	.....	-90,000	-23,200	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	182,340	117,326	.....	182,340	117,326	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	340,728	325,654	338,554
	AVAILABLE TO FINANCE SUBSEQUENT YEAR BUDGET PLANS	51,830	.....	.....	51,830	.....	.....
	BUDGET AUTHORITY	1,478,998	2,099,300	2,004,900	1,478,998	2,099,300	2,004,900

BIOGRAPHY

Chairman McClellan. We will insert in the record at this point the biographical sketch of General Blank.

[The biography follows:]

Major General Jonas L. Blank

General Blank is Assistant Deputy Chief of Staff, Systems and Logistics, Headquarters USAF. The Deputy Chief of Staff for Systems and Logistics, Headquarters U.S. Air Force, Washington, D.C. is responsible for all Air Force logistics support, which includes procurement policy, maintenance engineering, transportation, supply and services, and foreign military assistance and sales.

Major General Jonas L. Blank was born in Greensburg, Pennsylvania on 9 April 1921. He graduated from the United States Military Academy, West Point, New York, and received his pilot wings in June 1943. He was assigned to the 483d Bombardment Group and flew 48 combat missions as a B–17 pilot in the European Theater of Operations during World War II. Returning to the United States in 1945, General Blank was assigned to the Personnel Requirements Division in Washington, D.C. From 1947 to 1949, he was the United States Air Force member of the Secretariat to the Munitions Board. After two years of study at the Harvard Graduate School of Business Administration, General Blank was assigned to the Headquarters Air Materiel Command Industrial Resources Division at Wright-Patterson Air Force Base, Ohio where he became Chief of the Plans and Operations Office in July 1954. After a year at the Air Command and Staff College, Maxwell Air Force Base, Alabama, he was assigned to the Directorate of Procurement and Production, Headquarters Middletown Air Materiel Area, Olmstead Air Force Base, Pennsylvania. He served as Chief of the Production, Contract Administration, and Procurement Divisions. In October 1958, he was assigned to Headquarters USAF in the office of the Deputy Chief of Staff for Materiel, and the following year, he served as Executive to the Assistant Secretary of the Air Force (Materiel). After attending the Industrial College of the Armed Forces for a year, he was assigned to SHAPE Headquarters in Paris in 1963 as Chief of the Logistics Division's Plans and Policy Branch. Between 1966 and 1967, General Blank served as Chief of the Procurement and Comptroller Division of the Director of Inspection, 1002d Inspector General Group, and Chief, Resources Management Division, Norton Air Force Base, California. He was Commandant of the Squadron Officers School at Maxwell Air Force Base, Alabama from 1967–68, and Commandant of the Air University Air Command and Staff College from 1968–70. General Blank served as Director of Supply and Services at Air Force Headquarters in the Pentagon from June 1970 to January 1973. He also served on the Armed Forces Exchange and Motion Picture Service Boards, and as Chairman of the Permanent Air Force Uniform Board. In January 1973 he was appointed Assistant Deputy Chief of Staff, Systems and Logistics.

General Blank's decorations include the Legion of Merit, Distinguished Flying Cross and the Air Medal with three oak leaf clusters. He holds a Command Pilot rating.

INTRODUCTION OF ASSOCIATES

Chairman McClellan. General Blank, you have some supporting witnesses.

General Blank. Yes. You know General DeLuca and General Paschall, director of Command Control and Communications.

BUDGET REQUEST

Chairman McClellan. You may proceed.

General Blank. Mr. Chairman and members of the committee, the Air Force other procurement appropriation request for fiscal year 1974 totals $2,004.9 million. The major programs for which these funds are required are: Munitions, vehicles, electronics and telecommunica-

tions, and other base maintenance and support equipment, shown in table A.

Chairman McClellan. Insert table A in the record at this point.

[Table A follows:]

TABLE A.—DEPARTMENT OF THE AIR FORCE FISCAL YEAR 1974 BUDGET—"OTHER PROCUREMENT" APPROPRIATION

[In millions of dollars]

Program/activity	Fiscal years		
	1972	1973	1974
Munitions	742.3	809.9	583.5
Vehicles	52.9	32.2	52.0
Electronics and telecommunications	231.0	234.8	337.2
COMSEC, SIGINT	16.8	28.2	28.6
Communications electronics	181.3	181.9	287.7
Modifications	32.9	24.7	20.9
Other base maintenance and support equipment	547.8	1,002.9	1,032.2
Total	1,574.0	2,079.8	2,004.9

1973 APPROPRIATIONS

General Blank. Excluding the selected activities program, which can be covered as the chairman desires in separate session, the funds requested in fiscal year 1974 for other procurement are $98.1 million less than fiscal year 1973 program.

Table A shows a reduction of $226.4 million in the munitions request. This decrease reflects a reduction in the level of activity in Southeast Asia.

CAMBODIA OPERATIONS

Chairman McClellan. You say your reduction of $226.4 million for munitions under fiscal year 1973 reflects a lower level of activity in Southeast Asia. Does the fiscal year 1974 request include funds for the continuation of bombing operations in Cambodia? What is the current daily level of munitions expenditures for the Cambodia operations?

General Blank. Sir, we have no funds specifically identified for Cambodia operations. The fiscal year 1974 air munitions procurement budget request does include funds intended to provide the capability for the U.S. Air Force to fly combat sorties in Southeast Asia during 1974 should circumstances require it. The current daily level of munitions expenditures for Cambodia operations has been averaging 1,448 tons.

MUNITIONS FOR SOUTH VIETNAM

Senator Young. How much of the requested munitions procurement is for support of South Vietnam?

General Blank. $33.241 million.

LISTING OF PROCUREMENT ITEMS OTHER THAN MUNITIONS

Senator Young. Please provide the committee with a listing of procurement items other than munitions for South Vietnam.

General Blank. Yes, Sir.

[The information follows:]

The only items other than munitions that are being procured for South Vietnam are spares and repair parts for communications-electronics equipment. The total amount requested is $100,000. $50,000 will be used for spares support of the SEEK POINT ground directed bombing system which was procured with prior year funds. The remaining $50,000 is for repair parts for Vietnamese communications electronics equipment for which the U.S. Air Force has logistic support responsibility.

INCREASES AND OFFSETTING REDUCTIONS

Chairman McCLELLAN. You may proceed, General.

General BLANK. However, within other parts of the other procurement programs there are some increases which partially offset the reduction in munitions. These adjustments are necessary to satisfy readiness requirements and to avoid or reduce expenditures on equipments that are increasingly uneconomical to maintain.

It is planned to phase down munitions production, commensurate with the reduced activity level in Southeast Asia, sufficient to sustain a warm production base. This will protect the capability of the U.S. and Free World Forces to meet their operational requirements and permit the phased rebuilding of war reserve materiel stocks.

The vehicle program is designed to recover partially from deferred replacement programs and initiate an orderly long-term inventory replacement schedule.

The fiscal year 1974 electronics and telecommunications program is designed to provide new or modified equipment essential for effective operation and control of weapon systems.

The depot plant modernization program, an important element in achieving major maintenance operating efficiencies, is continued.

As I have mentioned, the fiscal year 1974 munitions program, table I, of $583.5 million is $226.4 million lower than the current fiscal year 1973 program.

Chairman McCLELLAN. Table I will be inserted in the record.

[Table I follows:]

TABLE I.—*Department of the Air Force Munitions and Associated Equipment*

[Fiscal year 1974 program estimate]

	Millions
Rockets and launchers	$54.5
Cartridges	75.2
Bombs	362.1
Targets	.6
Other items	27.6
Fuzes	63.5
Total program	583.5

PROGRAM BASIS

General BLANK. This program was developed recognizing a substantial reduction in SEA requirements. Emphasis was placed on phasing down munitions production in such a way as to: (*a*) Maintain theater support stock levels; (*b*) retain a minimum production capability; (*c*) restore WRM stocks by providing for a proportionate share of munitions needed to meet required capabilities by end of fiscal year 1978 deliveries.

WAR RESERVES

Chairman McClellan. Do you plan to have war reserve munitions stocks at a desired level by the end of fiscal year 1978? To what previous year's level will this attain?

General Blank. Yes, sir, our current planning is designed to provide inventories consistent with the fiscal year 1978 force structure. The fiscal year 1978 munitions inventory objective approximates the January 1970 war reserve objective; however, we have never attained a stockpile of this magnitude.

Chairman McClellan. You may proceed, General.

General Blank. The program also provides for aircrew and individual training, weather rocket support, spares and repair parts and modifications.

ROCKETS AND LAUNCHERS

For rockets and launchers, $54.5 million is required. This is a decrease of $500,000 from fiscal year 1973.

CARTRIDGES

The $75.2 million for cartridges is $19.6 million more than the fiscal year 1973 program. This increase is almost entirely for 7.62 and 20mm cartridges for training and war reserve material.

Chairman McClellan. What calibers of cartridges do you have in the inventory? For what weapons is each used?

General Blank. Sir, we have a variety of cartridges in our inventory. We have .22 caliber ammunition used in small arms training weapons and survival weapons. The 5.56mm ammunition is used in the M16 rifle. The 7.62mm ammunition is used in the M14 rifle, the M60 machinegun and in airborne minigun systems on aircraft and helicopters. Caliber. .38 ammunition is used in standard revolvers. We also have small quantities of 9mm ammunition used in the 9mm automatic pistol. The caliber .30 ammunition is used in the M1 carbine. Caliber .45 ammunition is used in the M1 submachinegun and in the M1911 automatic pistol. Caliber .50 ammunition is used in the M3 aircraft machine gun and base defense crew served machine guns. The 20mm cartridge is used in the M3, M39, and M61 aircraft guns and the SUU–16 and SUU–23 gun pods. We have differing 40mm cartridges that are used in M148 and M79 shoulder fired launchers, helicopter launchers, and the 40mm MK1 BOFORS cannon mounted in AC–130 gunships. We use 81mm cartridges in mortars and 90mm cartridges in recoilless rifles for base defense. Our largest caliber cartridge is the 105mm which is fired from an M102 howitzer (modified) mounted in AC–130 gunships. We have .410 and 12-gauge shotgun shells for survival rifles and riot-control gun. We also have a variety of cartridges used to eject stores, start engines, dispense chaff, and other pyrotechnics, however, these are not expressed in calibers and are not fired from weapons.

Chairman McClellan. You may proceed.

BOMBS

General Blank. This category of munitions is the largest in the fiscal year 1974 munitions budget at $362.1 million. It also is the largest

category decrease ($196.2 million) from the fiscal year 1973 munitions program. The "iron bomb" requirement has decreased by $159.6 million because of the drop in Southeast Asia support requirements. Funding increases in the CBU–52 and CBU–71 cluster bombs are for war reserve materiel. Laser kits are included for $12.4 million, and all are programed for war reserve materiel.

LASER KITS FOR BOMBS

Chairman McClellan. Describe the laser kit for bombs. What is the unit cost per kit?

General Blank. The kit used on laser-guided bombs consists, basically, of a guidance section and a control section. The guidance section uses a silicon seeker head which detects laser energy reflected from a target being illuminated by either a ground or an airborne laser target designator. After weapon release and laser-energy detection, the control section operates to direct the laser guided bomb on a line-of-sight trajectory to the target.

The unit cost for the kit is approximately $2,800.

TARGETS

Chairman McClellan. You may proceed, General.

General Blank. $600,000 is requested for targets to support annual training allowances.

OTHER ITEMS

The other items requirement of $27.6 million includes flares, signals, arming wire, atomic ordnance training devices, spares and repair parts, and modifications. This category has decreased by $3.9 million because of reduced planned procurement of the LUU–2 parachute flares.

FUZES

There is a substantial decrease in the fuze program commensurate with the decrease in the bomb requirements. The reduction amounts to $45.4 million confined almost entirely to the M904 and M905 fuzes used with all "iron bombs."

IRON BOMBS

Chairman McClellan. What do you mean by "iron bombs"?

General Blank. Sir, we use the term "iron bombs" to describe the family of general purpose or demolition bombs that defeat targets by blast and heavy fragmentation. These bombs are generally steel cased and filled with a high explosive that approximates half the total weight of the bomb. Our current iron bomb inventory includes the MK81, MK82, MK84, and the M117 general-purpose bombs.

Chairman McClellan. You may proceed, General.

General Blank. Turning now to the vehicle program. The total vehicular program (table II) is for $52 million.

[Table II follows:]

Table II.—Department of the Air Force Vehicular Equipment

[Fiscal year 1974 program estimate]

	Millions
Passenger carrying vehicles	$6.9
Cargo and utility vehicles	11.6
Special purpose vehicles	10.6
Fire fighting equipment	9.7
Materials handling equipment	5.7
Base maintenance support	7.5
Total program	52.0

VEHICLE INVENTORY

General BLANK. Command emphasis, and authorization and utilization controls have reduced the vehicle inventory by 25,746, or 19.6 percent in the past 3 years. While these reductions eliminated many overaged vehicles, inventory quality is still a major problem. For example, 33 percent of the authorized inventory will exceed one or more of the established replacement criteria by end fiscal year 1974. This is the result largely of the need, in the past, to defer replacement programs in favor of other pressing requirements.

Senator YOUNG. Has the Air Force conducted a study on the total vehicular requirements? If so, has there been a reduction in the procurement for fiscal year 1974?

General BLANK. Sir, the Air Force conducts semiannual materiel management reviews to validate total vehicular requirements. There has not been a reduction in the procurement for fiscal year 1974 since our total validated requirements exceed the procurement quantities which we have included in the fiscal year 1974 budget. In recent years, the Air Force has deferred vehicle procurement because higher priority programs had to be accommodated. In fiscal year 1974, we have initiated a phased program which, over the next 6 years, will enable the Air Force to recover from the present situation.

ARMY WHEELS STUDY

Chairman MCCLELLAN. The Army witnesses have told the committee of a WHEELS study which has reduced their vehicle requirement by 25 percent and also simplified many design requirements. Have you conducted or do you plan to make a similar study for the Air Force?

General BLANK. Sir, the Army's WHEELS study addresses two objectives: one, to determine the quantity of commercial on-the-shelf vehicles that could be authorized in lieu of the more expensive military models, and two, to reduce vehicle requirements consistent with basic mission needs. I understand that when the Army's plan is implemented that the Army inventory will consist of approximately 55 percent military tactical design vehicles and 45 percent commercial vehicles. The Air Force conducted a similar study in the early 1950's and determined at that time that commercial vehicles could be utilized to fill most of the Air Force requirements at significant savings over the cost of military models. Since that time, the Air Force policy has been to use standard commercial design vehicles wherever they will adequately fill mission requirements. The Air Force inventory now consists of 90 percent commercial vehicles and 10 percent military design vehicles. With regard to numbers of vehicles required, since December 1969 the Air Force vehicle inventory has been reduced by over 19 percent. Con-

tinuing efforts are underway to further reduce vehicle requirements. In fact, the Air Force conducts semiannual vehicle management reviews and adjusts the requirements for types and quantities as determined by the Air Force mission. Therefore, the Air Force feels that a WHEELS type study is not required at this time.

Chairman McClellan. You may proceed, General.

General Blank. In fiscal year 1973, for instance, the vehicle request was considerably below the Air Force's requirements because other higher priority programs had to be accommodated. The fiscal year 1974 procurement schedule is designed to initiate an orderly and time-phased program over the next 6 years to recover from the present unfavorable conditions. The $52 million will replace about one-sixth of the eligible vehicles, thus beginning the program leading to a smoothed annual inventory turnover.

PASSENGER CARRYING VEHICLES

For passenger carrying vehicles; sedans, station wagons, buses, and ambulances $6.9 million is required. This will replace 46 percent of the vehicles eligible for replacement.

PASSENGER VEHICLES

Chairman McClellan. Are all passenger vehicles purchased from commercial on-the-shelf sources? Do you lease any passenger vehicles? What is the planned life for a passenger vehicle?

General Blank. Yes; the Air Force purchases all passenger vehicles from commercial on-the-shelf sources. The Air Force leases passenger carrying vehicles on a long-term basis—over 90 days—where it is more economical and feasible to do so. During 1972, 2,991 passenger-carrying vehicles were leased. The planned life for a passenger vehicle varies from 6 years and 72,000 miles for sedans to 17 years and 500,000 miles for our large buses.

CARGO AND UTILITY VEHICLES

Chairman McClellan. You may proceed, General.

General Blank. We require $11.6 million for cargo and utility vehicles to replace vehicles which are beyond economical repair. The increase of $3.9 million will permit added procurement of pickup trucks, stake and platform trucks, and 5-ton truck tractors. This will reduce the fraction of vehicles eligible for replacement in this segment of the inventory from 30 to 23 percent.

SPECIAL PURPOSE VEHICLES

For special purpose vehicles $10.6 million is required to replace vehicles which have outlived their economical life. The largest dollar item in this category—$3.7 million—is the R–9 aircraft refueler which will replace 20-year-old vehicles.

R–9 AIRCRAFT REFUELER

Chairman McClellan. What is the unit cost of the R–9 aircraft refueler? What is its capacity? Is this a commercial model?

General BLANK. Sir, the unit cost of the R–9 in fiscal year 1974 is $33,939. This aircraft refueling vehicle is a commercial model with a capacity of 5,000 gallons.

Chairman MCCLELLAN. You may proceed, General.

General BLANK. However, 17 percent of the special purpose vehicle inventory will still be overage.

FIREFIGHTING EQUIPMENT

The requirement for firefighting equipment is $9.7 million. The firefighting equipments perform two functions; aircraft crash/rescue and brush/structure firefighting. Aircraft crash/rescue includes the P–4, P–10, and P–13 firefighting vehicles. The brush/structure force includes the P–8 and P–12 firefighting vehicles. The P–4 is the largest dollar item in the vehicular equipment budget; 483 of these extremely effective, air transportable crash/rescue vehicles are programed through fiscal year 1977 to replace a fleet of 506 O–11A and B crash and rescue trucks, all of which exceed the replacement criteria and are becoming a serious maintenance problem. The P–4 was fully tested prior to production release in June 1972.

MATERIALS HANDLING EQUIPMENT

For materials handling equipment, $5.7 million is required to replace worn-out forklifts, aircraft loading trucks and other warehouse vehicles. This request will reduce the percent of vehicles exceeding the replacement criteria in this category from 31 to 26 percent.

BASE MAINTENANCE SUPPORT

The $7.5 million in the base maintenance support program is an increase of $2.3 million over fiscal year 1973. This funding provides for partial replacement of worn-out cranes, runway sweepers, and other roads-and-grounds equipment. Provision is also made for environmental protection equipment, vehicle modifications, and spares and repair parts.

ENVIRONMENTAL PROTECTION EQUIPMENT

Chairman MCCLELLAN. What sort of environmental protection equipment will you procure?

General BLANK. Sir, we plan to procure five environmental protection systems. Each system consists of one refuse shredder/pulverizer and one landfill loader/compactor. The shredder/pulvizer will process refuse such as glass, table top appliances, light furniture, cans, and paper so that 85 percent by volume will pass through a 3-inch screen. The loader/compactor will be diesel-engine driven and will have special steel wheels equipped with V-type cleats arranged to provide maximum traction and compaction. Use of the systems will increase by 50 percent the useful life of landfill areas at Air Force bases, reduce odor, minimize insect and rodent infestation, and permit reuse of the landfill area by eliminating excessive settling. These systems are being used by civilian communities in the United States and have been approved by the Environmental Protection Agency.

Chairman MCCLELLAN. You may proceed, General.

ELECTRONICS AND TELECOMMUNICATIONS

General BLANK. Continuing now with electronics and telecommunications equipment (table III), $337.2 million is needed to procure communications security, cryptologic, and communications-electronics equipment and modifications to this equipment.

Chairman MCCLELLAN. Insert table III in the record.

[Table III follows:]

TABLE III.—*Department of the Air Force Electronics and Telecommunications Equipment program*

[Fiscal year 1974 program estimate]

	Millions
Communications security equipment	$18.1
Signal intelligence equipment	10.5
Electronics programs	127.4
Special communications electronics projects	92.7
Air Force communications	5.3
Defense Communications Agency programs	9.5
Organization and base	52.8
Modifications (C–E only)	20.9
Total	337.2

General BLANK. This is an increase of $102.4 million over the fiscal year 1973 program of $234.8 million. The increase results largely from new starts plus increased activity of certain ongoing electronics programs and special communications-electronics projects.

COMMUNICATIONS SECURITY EQUIPMENT

The communications security equipment (COMSEC) procurement program provides cryptographic equipment and spare parts. This year's request is for $18.1 million, $2.0 million less than last year's program.

COMMUNICATIONS ENCRYPTION SYSTEMS

Chairman MCCLELLAN. Do most of your communications encryption systems provide for rapid encryption and decryption? Please discuss.

General PASCHALL. Most of the communications security systems used by the Air Force impose no time penalties on the transmission of the basic information. Over 99 percent of our secured record and voice communications are protected by "on-line" cryptographic systems. On-line means that the cryptographic equipment is connected directly to the signal line thus making encryption and decryption a single continuous process limited only by the speed of the communications link. However, we still employ a few "off-line" cryptographic systems for applications where on-line systems are not available or suitable. Off-line operations are manual or machine systems in which the encryption and decryption processes are self-contained operations and are not electrically connected to a signal line. Due to the many manual operations involved, the time required to process off-line encrypted communications far exceeds on-line methods. In addition to the off-line machines, we also have a very few manual encryption/decryption "paper" systems consisting of paper ciphers and code books. Although these manual systems are slow and cumbersome, they are used where

the need for security exceeds the necessity for rapid transmission of the information.

Chairman McClellan. You may proceed, General.

General Blank. This includes funds for the Minuteman Status Authentication System (SAS) equipment which was formerly funded under the missile procurement (3020) appropriation.

$5.8 million will be used to encrypt telemetry, command and control, and digital telecommunications to and from space vehicles, $3.1 million to procure cryptographic equipment to secure the Minuteman SAS, $2.3 million to continue procurement of DOD/AIMS equipment, and $3.3 million for procurement of other cryptographic key generators and test equipment. The remaining $3.6 million provides for procurement of initial and replenishment spares and equipment modifications.

Senator Young. Is cryptographic equipment part of NSA?

General Paschall. Yes, sir. The cryptographic equipment we use is almost entirely developed by the National Security Agency, NSA. We then provide funds to NSA to procure that equipment. NSA gathers together the funds from Army, Navy and Air Force and makes a consolidated buy to satisfy our requirements.

Senator Young. Does this come under DIA then? Part of it is intelligence?

General Paschall. No, sir, part of the National Security Agency's charter is to develop communications security equipment. They do not come under DIA.

SIGNAL INTELLIGENCE EQUIPMENT

Chairman McClellan. You may proceed.

General Blank. Equipment requirements for signal intelligence equipment procurement in fiscal year 1974 total $10.5 million, an increase of $2.4 million over the fiscal year 1973 program. Of this amount, $5.1 million will be used for spares to support previously authorized purchases, and to procure current systems for additional locations within the world-wide collection effort.

The remaining $5.4 million will purchase several new systems which have been designed to provide existing resources with increased speed and reliability or to fill gaps in present collection systems.

ELECTRONICS PROGRAMS

The fiscal year 1974 requirement for electronics programs totals $127.4 million which is an increase of $41.2 million over the fiscal year 1973 program.

$25.2 million is requested for the traffic control and landing system program (404L). The major procurement project within this fiscal year 1974 request is the AN/TPN–19 landing control central.

TRAFFIC CONTROL AND LANDING SYSTEM

Chairman McClellan. Describe the traffic control and landing system program. Is this similar to commercial systems?

General Paschall. Traffic control and landing systems (TRACALS) consists of a family of related airborne and ground electronic

equipments as opposed to a single end-item of equipment. This family consists basically of radar systems, instrument landing systems, control towers, navigation beacons, radios and simulators. The simulators are needed to train personnel to operate the more complicated systems.

Since air traffic control and navigation functions are continuing, TRACALS is also a continuing or "open ended" program, therefore there is no expected termination date associated with the program.

Approximately half of the TRACALS equipments are similar to commercial systems. An example of equipment which is similar to commercial systems is the AN/GPN–12 airport surveillance radar (ASR) which the Air Force now uses but was obtained through the FAA. In those instances where special Air Force requirements exist which demand mobility, ruggedness and quick reaction time under combat conditions, usually no commercial equipments exist and the Air Force must develop such equipment. An example is the AN/TPN–19 air traffic control radar which is now undergoing development testing.

LANDING CONTROL CENTRAL PROBLEMS

Senator YOUNG. What problems, if any, have been experienced with the landing control central (AN/TPN–19)?

General PASCHALL. The AN/TPN–19 landing control central has experienced the usual growing pains associated with any development program of its scope and sophistication. Three problem areas came to light during the development testing. The first was the volumetric radar coverage of the two radar antennas given size and weight constraints. The solution was to increase the number of feed horns in the case of the airport surveillance radar (ASR) and to increase the number of phase shifters in the precision approach radar (PAR). Both fixes gave the required beam shapes without increasing antenna size.

A second problem involved the AN/TPX–42 radar beacon system. The prototype TPX–42 was developed by Whitaker Corp. It was with this system that the TPN–19 was designed to interface. The TPX–42 production contract was awarded to Airborne Instrument Laboratories (AIL) and their design was digital rather than analog. This necessitated a complete redesign of the TPN–19 radar indicators and delayed the program for over 9 months.

The last problem occurred early in the flight test program. This concerned the difference which existed in comparing the actual radar range performance against the radar's theoretical performance. This difference was accounted for when it was discovered that the radar size of the test aircraft was much smaller than originally estimated. This finding was confirmed by independent Navy tests on the same aircraft. Once the difference was entered into the range equation, the radars performance correlated perfectly with that obtained in field testing.

Chairman MCCLELLAN. You may proceed, General.

General BLANK. The requested fiscal year 1974 funds ($20 million) will support continuation of procurement to be initiated with $15 million of approved fiscal year 1973 funds. This will provide for procurement of a total of 9 systems.

The remaining fiscal year 1974 request ($5.2 million) is to initiate and continue procurement for ancillary air traffic control items, such

as: Radar simulators, air-droppable navigational aids, and ground communications equipment.

The tactical air control systems improvements are being conducted under the 485L program. The $24.6 million requested for fiscal year 1974 is primarily to continue automation of the Tactical Air Control Center and procurement of microwave relay equipment.

The $7 million requested for automation of the Tactical Air Control Center provides for software to support the preproduction hardware purchased in fiscal year 1972 and fiscal year 1973. Production equipment is now programed to be bought in fiscal year 1976–77.

The sum of $15.3 million is requested for purchase of radio and radar microwave relay equipment needed to allow remote siting of radars and radios. These funds are the first portion of a production contract extending from fiscal year 1974 to fiscal year 1976 and totaling $40 million; $2.1 million is needed for engineering and technical support to the 485L program; $200,000 is required to initiate Air Force/Marine Corps procurement of a new man-pack radio.

MAN-PACK RADIO

Chairman McClellan. You request $200,000 to initiate joint Air Force/Marine Corps procurement of a new man-pack radio. How will the radio be used? Which service is the procuring agency?

General Blank. This new radio, the AN/PRC–104, will be used worldwide to provide improved high frequency communications for highly mobile tactical elements, such as forward air controllers and tactical air control parties. The Marine Corps is the procuring agency.

Chairman McClellan. You may proceed, general.

General Blank. The weather observation and forecasting (433L) program requires $2.4 million to provide resources to the air weather service to fulfill operational requirements of Air Force and Army forces for weather information.

The defense support program is a system of satellites, ground stations, and communications which provides reliable, near real-time information to our National Command Authority and other designated users.

Chairman McClellan. What sort of real-time information does the defense support program provide to National Command Authorities?

General Blank. The National Command Authority normally receives its defense support near real-time [deleted] information via the National Military Command Center (NMCC) located in the Pentagon. That near real-time information consists of the [deleted]. This information is received by SAC, CONAD/NORAD, and the NMCC in [deleted] or less for [deleted] are reported to SAC, CONAD/NORAD and the NMCC within [deleted].

Chairman McClellan. You may proceed, General.

General Blank. The fiscal year 1974 budget request of $17 million provides for maintenance of an improvements to mission and command control software; incorporate a command uplink, a security encryption system at the ground stations; and purchase of a software development computer ($3.2 million) to effect an annual lease cost avoidance of $1.6 million.

The SAC automated command and control system (SACCS) enables SAC to command and control its forces during peacetime, cold

war, limited war, and general war. The $2.3 million requested for fiscal year 1974 will complete the current program to update the data processing subsystem of the SACCS.

The NORAD Cheyenne Mountain Complex Improvement program (427–M) will update the data processing, communications, and display elements of the CINCNORAD/CONAD command and control system. The $24.2 million in fiscal year 1974 will procure software and augmentation equipment for two computers already purchased as a part of the worldwide military command control system computer update program. Additional consoles, displays and interfacing hardware will be acquired along with the system engineering necessary to integrate the various systems.

The $26.2 million requested in fiscal year 1974 for the SEA launched ballistic missile warning and assessment radar program will initiate the acquisition of the first of two long range, phased array radars to replace most of the existing network of relatively short range radars deployed under the SLBM detection and warning system.

SLBM WARNING AND ASSESSMENT RADAR

Chairman McClellan. Is the sea launched ballistic missile warning and assessment radar program conducted in coordination with the Navy? Describe the program.

General Paschall. The Office of the Joint Chiefs of Staff in coordination with the Services, has conducted a thorough study (the WWMCCS warning system plan), which considered all DOD Systems. After review by the Services, the JCS recommended deployment of the sea launched ballistic missile (SLBM) warning and assessment radars to DOD who in turn approved the program.

The Navy's role in the SLBM warning function is to track enemy submarines and provide to NORAD enemy submarines locations. The Air Force's role in the SLBM warning function is to detect SLBM launches and track the missiles' flight. This information is passed to NORAD. The relationships between SLBM warning and assessment radar returns and positions of known submarine activity assist NORAD in establishing the credibility of an SLBM attack.

Chairman McClellan. You may proceed, General.

General Blank. We intend to consider maximum practical use of components available from the cancelled perimeter acquisition radar at Malmstrom AFB, Mont., which are suitable for use in fabricating the two phased array radars planned under this deployment.

RECOVERIES FROM SAFEGUARD PROGRAM

Chairman McClellan. Just how much will the recovery of parts from the cancelled perimeter acquisition radar at the Montana Safeguard site save in funds?

General Paschall. Since termination of the contract for the Montana site, the Army will use some of these components as spares for the North Dakota site. The Army has not yet determined how much can be used as spares. The best estimate of the remaining components available to the Air Force, which will offset costs to complete the program, is between $15 and $20 million.

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Senator YOUNG. Does this mean you are phasing out some of your present radar stations?

General PASCHALL. Yes, sir, the current plan is that the seven radars that were old height finding radars modified as a sea launched ballistic missile detection system, will phase out. Four of these are on the east coast and three are on the west coast. There is an additional radar at Moorestown, N.J., that we will also phase out. It is a long distance radar but has a severe environmental problem as well as getting obsolescent.

Senator YOUNG. This would give you a more effective program at less cost?

General PASCHALL. The operating cost of the two radars as opposed to the current eight will reduce our operating expense by about $6 million a year. It will also provide coverage for the [deleted].

Senator YOUNG. This would not replace the radar stations you have in North Dakota?

General PASCHALL. No, sir, that is part of the Safeguard antiballistic missile program.

SAC AUTOMATED TOTAL INFORMATION NETWORK

Chairman MCCLELLAN. You may proceed.

General BLANK. The SAC automated total information network (SATIN) will improve the capabilities of SAC's record data communications system for the data command and control communications requirements of the National Command Authority and the Commander in Chief, Strategic Air Command. The $4 million requested for SATIN will begin to provide communications processing machines and display devices and supporting integration engineering and software.

The Emergency Rocket Communications System (ERCS) provides the NCA with a highly survivable emergency means of broadcasting emergency messages to SIOP forces. The $1.5 million requested in fiscal year 1974 funds, will buy the two payloads needed to support operational test launches.

EMERGENCY ROCKET COMMUNICATIONS SYSTEM

Chairman MCCLELLAN. Describe the Emergency Rocket Communications System.

General PASCHALL. The Emergency Rocket Communications System (ERCS) is a rocket launched communication package designed to provide a capability to broadcast emergency action messages to nuclear offensive forces. The communications payloads would be launched into ballistic trajectories by Minuteman missiles to provide one-way ultra-high frequency (UHF) communications to the nuclear forces. The system can be launched from the ground command operations center or the airborne command post, and its transmissions can be received at SAC's missile sites and wing command posts. The ERCS is included in the Department of Defense (DOD) minimum essential emergency communications network (MEECN). The MEECN concept combines various DOD facilities into a last ditch communications net to pass weapon release authorization to all U.S. Nuclear

Forces. In MEECN, ERCS transmissions will be used by SIOP (single integrated operations plan) forces of all services.

Chairman McClellan. You may proceed, General.

General Blank. During the past year, no funds were requested for this purpose and no additional funds will be requested until fiscal year 1976.

The fiscal year 1974 request for $92.7 million to finance special communications electronic projects is $57.4 million more than fiscal year 1973.

The request of $10.4 million for automatic data processing equipment is $3.3 million less than the fiscal year 1973 program. The $10.4 million will be used to purchase certain selected leased computer systems and peripheral equipment needed for computer systems previously purchased.

The Air Force satellite control facility (AFSCF) currently uses narrow band voice and data circuits to interconnect the Satellite Test Center (STC) at Sunnyvale, Calif., with its 10 worldwide remote tracking stations (RTS).

AIR FORCE SATELLITE PROGRAM

Chairman McClellan. Where are the 10 worldwide tracking stations for the satellite program located?

General Paschall. The remote tracking stations of the Air Force satellite control facility are sited at seven geographical locations: Vandenberg AFB, Calif.; New Boston, N.H.; Kaena Point (Oahu), Hawaii; Kodiak Island, Alaska; Nortwest Field (Andersen AFB), Guam Island; Mahe Island, Seychelles; and [deleted]. Dual stations exist at Vandenberg, New Hampshire, and Hawaii thus making up the total of 10 stations.

Chairman McClellan. You may proceed, General.

General Blank. The limited capacity of these circuits prevents real time transmission to or from the Satellite Test Center of satellite telemetry data. $3.4 million will implement the first phase of a program to integrate wideband military satellite circuits from the Defense Satellite Control Facility; $200,000 will be used to procure miscellaneous communications equipment for the remote tracking stations.

The requirement for Creek Rib is $3.3 million in fiscal year 1974. Creek Rib satisfies a portion of the USAFE operations plan in Europe. The USAF furnishes equipment, logistics, and engineering support.

CREEK RIB

Chairman McClellan. Will you provide the committee with a description of the Creek Rib program?

General Paschall. We will be glad to do so.

[A classified description of the Creek Rib program was provided to the committee.]

INTELLIGENCE DATA HANDLING SYSTEM

Chairman McClellan. You may proceed, General.

General Blank. The fiscal year 1974 intelligence data handling system procurement program consists of a number of diverse items re-

quired to support seven separate Air Force and three Unified Command intelligence computer installations. The requested $1.1 million will be used to upgrade the indications and warning data handling capabilities at SAC, CONAD, and ALCOM.

The SAC Security System is an intrusion detection system, using electronic surveillance aids, for monitoring aircraft alert areas. The SAC Security System will reduce the average required manning of 65 men per alert area to 40. Fiscal year 1974 funds, $2.015 million, will be used to procure Mass Apron Aircraft Alert Area Systems for 10 bases.

SAC SECURITY SYSTEM

Chairman McClellan. Explain how the funds requested for the SAC bases security systems will reduce manpower requirements. What will be the savings realized in manpower reduction?

General Paschall. The security police while performing protection duties in securing aircraft and nuclear weapons have three basic responsibilities: (1) To detect unauthorized approach of personnel to resources, (2) to sound the alarm when an intrusion takes place, and (3) to intercept intruders for the purpose of protecting the resources. Various portions of the security force are dedicated to performing these duties. It has been established through testing that detection and alarm functions can be more reliably accompanied by electronic detection and alarm systems. The acquisition of such equipments will permit the replacement of approximately 845 security policemen currently performing primary detection duties. These manpower savings will be realized during fiscal year 1975 through fiscal year 1977.

EASTERN TEST RANGE

Chairman McClellan. You may proceed, General.

General Blank. The Eastern Test Range, requires $800,000 in fiscal year 1974 to improve range instrumentation and telecommunications capability by replacing obsolete equipment.

The Military Airlift Command Integrated Management System is a computer based information system designed to collect, process and distribute the information required for the planning, operation, and management of the MAC airlift forces. $7.3 million is requested for fiscal year 1974.

Procurement of Cobra Dane, a multi-object missile tracking radar to be located at Shemya AFS, Alaska, will continue in fiscal year 1974. The requested funding is $25.1 million.

COBRA DANE

Chairman McClellan. Discuss the Cobra Dane program.

General Paschall. Cobra Dane is a proposed phased array long range radar to collect scientific and technical intelligence on Soviet ICBM's impacting into the Kamchatka Peninsula and the Pacific broad ocean area. The Cobra Dane requirement study was completed by the Foreign Technology Division, Air Force Systems Command, and a contract was let to Raytheon, Inc., in June 1973, for system engineering and installation. The radar should become operational during the third quarter of fiscal year 1976.

The primary mission of Cobra Dane is to collect Soviet ICBM radar intelligence and Spacetrack. In the event of a National alert, at or above DEFCON 3, the Dane system will revert to a primary warning and attack assessment status. Cobra Dane is a strategically placed radar and will have the capability to monitor Soviet missile technology under the Strategic Arms Limitation Agreements.

Chairman McClellan. You may proceed, General.

SPANISH AIRCRAFT CONTROL AND WARNING UPGRADE

General Blank. Spanish Aircraft Control and Warning Upgrade (Combat Grande), is an ongoing program to acquire a modernized (semiautomated) Aircraft Control and Warning System for the air defense of Spain and to attain increased security for U.S. Forces based in Spain. $17 million is requested in fiscal year 1974.

Chairman McClellan. Are any funds being provided by the Spanish Government to upgrade their air defense posture?

General Paschall. Yes, sir. In accordance with 6 August 1970 "Agreement of Friendship and Cooperation Between the United States of America and Spain," the Spanish Government will provide 30 percent and the United States 70 percent of the program costs. The objective of this program is to acquire a modernized and semiautomated Aircraft Control and Warning System for the air defense of Spain which in turn will provide increased security for United States Forces based in Spain.

LORAN–D

Chairman McClellan. You may proceed, General.

General Blank. $12.7 million is needed for procurement of a LORAN–D ground chain. This procurement will initiate a program to provide tactical long-range navigation equipment capable of being deployed anywhere in the world within 48 hours and of being operational within 72 hours.

The minimum essential emergency communications network (MEECN) assures delivery of emergency action messages. The Air Force Survivable Low Frequency Communications System (SLFCS) is part of the MEECN. The $5.6 million for Air Force support of MEECN will be used to purchase urgently needed equipment and technical data that will give the SLFCS an antijamming capability, double the effective range of the system and will provide compatibility with the Navy Low Frequency/Very Low Frequency System.

The continental operations range program provides a realistic, large scale, combat-like test and training environment in the Western United States.

CONTINENTAL OPERATIONS RANGE PROGRAM

Chairman McClellan. Discuss the continental operations range program.

General Paschall. Mr. Chairman, the continental operations range program involves the improvement and integration of three large, existing range complexes in the Western United States. The Continental Operations Range, abbreviated COR, will provide a facility

for operational testing, aircrew training, and limited development testing of air warfare systems. The COR will improve and tie together the testing and training facilities of Nellis AFB, Nevada; the Wendover, Hill, and Dugway ranges in Utah; and the ranges at Fallon NAS, Nevada. The program objective is to provide a realistic combat environment where squadron-sized strike forces can be fully exercised against a large scale, multiple defended area. It will integrate simulated enemy defensive radars and their command and control system with scoring systems, instrumentation, and extensive data processing capability. The threat systems will be mobile so that various combat conditions can be simulated. The program involves continuous growth of capability over the next 8 years, but is divided into three major acquisition phases: near-, mid-, and far-term.

The near-term actions primarily concern improving and consolidating existing range facilities at Nellis. The midterm—1975–1977—involves the expansion of capabilities at Wendover/Hill/Dugway and the linking of the W/H/D complex with Nellis. The far-term—1978–1982—phase will further improve the ranges and data communications systems and will tie Fallon NAS into the net.

The major output of the COR will be improved information upon which to base equipment acquisition and force structure decisions.

Chairman McClellan. You may proceed, General.

General Blank. The program calls for an initial electronics warfare operational test and evaluation capability at Nellis AFB by June 1974 with further range improvements and integration occurring in fiscal year 1975. $3.8 million will be used to procure special communications, data handling, and instrumentation equipment and integration engineering required to link the multiple range systems together.

AIR FORCE COMMUNICATIONS

The Air Force communications program provides the equipment required to permit access into, and use of, the worldwide Defense Communications System and commercial facilities. A total of $5.3 million is required for this program.

DCA PROGRAMS

This program provides $9.5 million for tasks assigned to the Air Force by the Defense Communications Agency. These tasks relate to the DCA managed Defense Communications System, the National Military Command System and the National Military Command Center. The $800,000 for AUTOVON Overseas Support is required for engineering support and technical improvements. $3.7 million will provide a large screen wall display at the Alternate National Military Command Center (ANMCC), and extend the Emergency Message Automatic Transmission System improvement program.

ALTERNATE NATIONAL MILITARY COMMAND CENTER

Chairman McClellan. You request $3.7 million to provide a large screen wall display at the AMNACC. Where is the center located?

General Paschall. At site R on Ft. Ritchie, Md.

Chairman McClellan. Are other services requesting fiscal year 1974 funds or is this solely an Air Force requirement?

General Paschall. The Air Force is the supporting service for the communications for the National Military Command System, of which the Alternate National Military Command Center is a part. As such, the large screen display is solely an Air Force responsibility and other services are not requesting funds to support this project.

Chairman McClellan. You may proceed, General.

General Blank. $1.2 million is required to complete time-phased equipment procurement for the expanded National Military Command Center (NMCC). The remaining $3.8 million continues DCA programs to upgrade wideband transmission and technical control facilities of the Defense Communications System.

ORGANIZATION AND BASE

$52.8 million is required to replace or augment organization and base equipment and for initial and replenishment spares. $19.2 million of this is for equipment issued to bases and units. The equipment consists of individual radios, teletype, and telephone equipment, training equipment, meteorological and other electronics equipment not provided elsewhere in this estimate; $33.6 million is required to procure initial and replenishment spare parts in support of the Air Force ground communications electronics equipment on procurement or in the operational inventory. Of this total $800,000 is required to continue the support of the Southeast Asia operation.

SOUTHEAST ASIA OPERATIONS

Chairman McClellan. Your request for fiscal year 1974 organization and base equipment includes $800,000 to continue the support of the Southeast Asia operation. Discuss the operation and just how the funds will be used.

General Blank. The $800,000 is requested to procure spares and repair parts for ground communications-electronics equipment operating in Southeast Asia. Of the total, $700,000 is requested for support of U.S.-owned equipment and $100,000 for support of Vietnamese equipment.

COMMUNICATIONS—ELECTRONICS MODIFICATION PROGRAM

Chairman McClellan. You may proceed, General.

General Blank. The fiscal year 1974 communications-electronics modification program is $20.9 million.

$5.6 million is being requested in fiscal year 1974 for modifications required for reasons of safety, for needed improvements revealed during in-service use of the equipment, or to achieve economies by improving logistic support.

The traffic control and landing system will require $13.3 million in fiscal year 1974. Of this, $8.9 million will be required for AIMS equipment in terminal radar facilities. The remaining $4.4 million will acquire for testing a terminal radar having less tactical mobility and lower cost than the AN–TPN–19.

We are requesting $1.1 million in fiscal year 1974 for the emergency rocket communications system to complete the nuclear survivability modification kit procurement, technical data update and hardware installation of this program which was begun with fiscal year 1972 funds and continued in fiscal year 1973.

Organization and base requires $200,000 to modify one AN/GPA–122 IFF coder-decoder, for the air defense weapons center.

Eastern test range (ETR) requires $428,000 in fiscal year 1974 for various improvement and modernization modifications as part of a continuing program to improve the ETR capability while reducing the Air Force logistics support commitments.

AIRCOM requires $250,000 in fiscal year 1974 to provide a secure voice capability on two AN/TRC–97 mobile communications equipments in support of the Air Force communications service tactical and contingency requirements.

My final program is other base maintenance and support equipment which requires $1,032.2 million as summarized in table IV.

Chairman McCLELLAN. Table IV will be inserted in the record.

General BLANK. This program provides for a variety of vital support equipment essential to the operation of Air Force activities worldwide. The $1,032.2 million is an increase of $29.3 million over the fiscal year 1973 program. Of this increase, $23.2 million is contained in the Selected Activities program. The remaining $6.1 million is spread throughout the other programs.

[Table IV follows:]

TABLE IV.—*Department of the Air Force Other Base Maintenance and Support Equipment*

[Fiscal year 1974 program estimate]

	Millions
Test equipment	$16.0
Personal safety and rescue equipment	3.9
Depot plant and materials handling equipment	27.4
Electrical equipment	5.6
Base support equipment	41.7
Special support projects	937.6
Total program	1,032.2

TEST EQUIPMENT

In the first category, $16 million is needed for test equipment, such as oscilloscopes, electronic counters, and engine analyzers. This equipment is acquired by Air Force air materiel depots and base level organizations worldwide to more effectively maintain and overhaul aircraft, missiles, automotive equipment, and communications and electronics equipment.

PERSONAL SAFETY AND RESCUE EQUIPMENT

Based on issues to new Air Force personnel and normal equipment attrition, $3.9 million is required for personal safety and rescue equipment.

Chairman McCLELLAN. You are requesting $3.9 million for personal safety and rescue equipment. Does this include any new types of equip-

ment or are the funds to be used for replacement and/or additional equipment?

General BLANK. These funds provide for replacement of overage, unserviceable, or uneconomically repairable personal safety items.

Chairman MCCLELLAN. You may proceed, General.

General BLANK. Included here are critical safety-of-flight life support items needed to protect personnel and to provide a means of survival until rescue can be made. Items of equipment are life rafts, flying helmets, protective clothing, and related articles.

DEPOT PLANT AND MATERIALS HANDLING EQUIPMENT

The requirement for depot plant and materials handling equipment is $27.4 million; $13 million for depot plant modernization and $11 million for base mechanization equipment supports continuation of the depot plant modernization program. This is a comprehensive effort in which capital investments are made in depot equipment and facilities to enhance worker productivity, decrease pipeline times, and improve the reliability of weapons systems.

To continue the mechanization of three air terminals in fiscal year 1974, $1 million is requested.

ELECTRICAL EQUIPMENT

Under the electrical equipment category we require $5.6 million; $1.2 million is required for an electrical powerplant to supply precise 400 Hz mobile electrical power used by active forces and reserve forces with the 407L tactical air communications system. For static no-break power units, we require $1.1 million to support fixed computer and essential communications equipment at three Air Force bases. The balance $3.3 million is for replacement of uneconomically reparable equipment in the worldwide inventory.

BASE SUPPORT EQUIPMENT

We required $41.7 million in base support equipment. The program provides for many and varied items such as relocatable classrooms, laundry and dry cleaning equipment, fuel servicing units, pumps and compressors, and air cargo pallets.

RELOCATABLE CLASSROOMS

Chairman MCCLELLAN. How much of the $41.7 million in base support equipment is for relocatable classrooms? Just what is a relocatable classroom, and why are they needed?

General BLANK. $3 million is included in the $14.7 million in base support equipment for relocatable classrooms. These are factory fabricated classrooms equipped with lighting, central heating and air conditioning, closets, and blackboards. These classrooms can be moved from base to base as requirements dictate and installed with minimum site preparation. Each is designed for an optimum class size of 40 students. These classrooms are required to support the rapidly growing Voluntary Education Services program. This is an on-base program which offers completion of high school, remedial education, technical

training, vocational training, and various levels of college courses ranging to a baccalaureate degree.

Chairman McClellan. You may proceed, General.

General Glasser. Also included in this category is ground photographic equipment such as cameras, processors, still picture viewers, and density analyzers utilized by base photographic laboratories. The major item in this category is base procured equipment at $25 million. This is for direct purchase of miscellaneous equipments costing $1,000 or more each, from DSA, GSA, other services, and commercial concerns by our operating bases. To procure spares and repair parts to maintain the varied items of equipment in this program $3.7 million is required and $2.4 million is required for replacement of wornout or obsolete equipment.

SPECIAL SUPPORT PROJECTS

The requirement for special support projects is $937.6 million. The largest requirement is $874.2 million for the selected activities line. Excluding this program, the request is for $63.4 million, of which $51.1 million is required for first destination transportation charges. The remaining $12.3 million is allotted to the following activities:

The intelligence production activity is composed of seven organizations with the major functions of processing, duplicating, and exploiting imagery reconnaissance and production of intelligence reports and target materials. It requires $1 million for replacement of obsolete and wornout equipment.

Scientific and technical intelligence is a function of the foreign technology division of the Air Force systems command.

For equipment to assist in the exploitation, analysis and processing of all-source intelligence information $3.9 million is required.

Air Force technical applications center operates worldwide to obtain and evaluate technical data involved in the exploitation measurement and tabulation of the effects of natural phenomena on the physical structure of the Earth and its atmosphere; $4.397 million is being requested.

AIR FORCE TECHNICAL APPLICATIONS CENTER

Chairman McClellan. Where is the Air Force technical applications center located, and what work does it perform?

General Blank. The Air Force technical applications center is located at Patrick AFB, Fla. Its mission is to [deleted].

Chairman McClellan. You may proceed.

General Blank. The major item buy for fiscal year 1974 ($2.916 million) is for use in replacing 9 of 19 10-year-old units in the basic system. Estimated lifetime of the new units is 10 years. The remaining 10 units will be procured in fiscal year 1975.

$1.481 million is for plant effluent diagnostic equipment and for data handling and correlation equipment.

Also included in this category is $2 million for industrial facilities and $1 million for modifications to other base maintenance and support equipments.

Mr. Chairman, that completes my prepared statement. I am ready to respond to any questions you or members of the committee may have.

QUESTIONS BY SENATOR THURMOND

Chairman McCLELLAN. We may have some questions later.

Senator Thurmond was unable to be present at this meeting but has asked that questions he has prepared be answered for the record. They will be included at this point.

[The questions and answers follow:]

AX A–10 AIRCRAFT FOR CLOSE AIR SUPPORT FOR THE ARMY

Senator THURMOND. General Glasser, I believe in testimony before the Senate Armed Services Committee you have stated that the Air Force plans to buy only [deleted] wings for the Active force of the AX A–10 aircraft designed primarily for close air support of the Army. Is that correct?

General GLASSER. No, it is not correct that the Air Force is planning only [deleted] Active force A–10 wings. Current planning envisions [deleted] wings at end fiscal year 1978, but building to [deleted] wings of A–10's by end fiscal year 1980. An additional [deleted] wings are planned for Reserve forces.

A–10 AIRCRAFT REQUIREMENTS

Senator THURMOND. How many aircraft would you require for these [deleted] wings?

General GLASSER. [Deleted] wings of A–10's would require approximately [deleted] aircraft based on the following factors:

a. Unit equipage (UE) [deleted] per wing	[Deleted]
b. Training [deleted]	
c. Command support [deleted]	
Total	

In addition to these specific requirements advanced attrition aircraft are required to maintain the force for the desired life span.

A–10/WHO PAYS FOR GUARD AND RESERVE AIRCRAFT?

Senator THURMOND. I understand the [deleted] wings planned for the Reserve and Guard would go directly to the Guard and Reserve. Who would pay for these aircraft and the subsequent support base for their operation in the Reserve and Guard?

General GLASSER. The USAF plans to procure [deleted] wings of aircraft for the Reserve and Guard forces. However, the operating support is funded through the Air Force Reserve and Air National Guard budget.

A–10/NORMAL TO PROCURE LARGE NUMBER OF ACFT FOR GUARD AND RESERVES

Senator THURMOND. Is it normal to buy such large numbers of aircraft for the Reserve and Guard as a part of the major procurement program?

General GLASSER. Generally, the Reserve Forces are equipped with aircraft phasing out of the active force. However, in accordance with the Total Force Concept the Department of Defense began an Air Reserve Force modernization program which includes direct procurement of new aircraft for the reserve components. For example A–37s and A–7s have or will be placed in the reserves directly from procurement. The A–10 is a follow-on of this practice.

A–10/HOW MANY AIRCRAFT TO BE PROCURED IF GUARD AND RESERVE BUY NOT APPROVED

Senator THURMOND. General Glasser, frankly I was shocked after all this talk about the Air Force wanting the close air support mission to learn that they intended only to buy [deleted] wings of the A–10. I believe your cost for the A–10 was based on 729 aircraft. How many aircraft would you actually be buying for the regular forces if the Reserve and Guard wings are not approved?

General GLASSER. Sir, the [deleted] active force wings you mention is the programmed A–10 active force size at end FY 78. Current planning envisions building to a [deleted] wing A–10 active force and a [deleted] wing Reserve

force by end of fiscal year 1980. If the [deleted] wings for Reserve forces were not approved, the total buy would be reduced by approximately [deleted] aircraft.

A–10/Army Position

Senator Thurmond. General Glasser, has the Army concurred that only [deleted] wings of the AX are needed for the tactical Air Force?

General Glasser. No Sir, the Army has not concurred that [deleted] wings of the AX are adequate. However, Senator Thurmond, I'm sure you remember that the [deleted] A–10 wings shown in fiscal year 1978 in the current 5-year Defense Plan (FYDP) represent an interim position. We intend to continue to procure A–10s in [deleted], building to our desired total of [deleted] A–10 wings. At no point, though, will we have only [deleted] wings of close air support capable aircraft. In fiscal year 1978, for example, while we show only [deleted] A–10 wings, we also have [deleted] A–7 wings and almost [deleted] F–4 wings in our total tactical fighter force. Both of these aircraft demonstrated excellent capability in the close air support role in SEAsia and would certainly be used in that role in Europe if the situation required.

A–X to Replace A–7

Senator Thurmond. General Glasser, will the AX replace the A–7D presently in the 21 wing tactical Air Force?

General Glasser. The A–10 will replace the A–7Ds in the active force plus approximately [deleted] of F–4 aircraft in the [deleted] wing tactical force.

TAC Force Structure

Senator Thurmond. What will be the tactical force structure make-up once the AX is a part of that structure?

General Glasser. The Tactical Force Structure will be made up of [deleted] F–4, [deleted] F–15, [deleted] F–111, and [delete] A–10 wings in fiscal year 1978. The current planning beyond that envisions the remaining F–15 and A–10 production becoming [deleted] wing force structure.

A–10/Basis for Determining Wing Requirement

Senator Thurmond. General Glasser, on what basis has the Air Force determined that only [deleted] of the tactical wings need to be close air support aircraft? How can you support 13 Army divisions with only [deleted] wings of A–10s?

General Glasser. Senator Thurmond, our current 5-Year Defense Plan (FYDP) shows that we will have only [deleted] wings of A–10s in FY 78. As you know, we intend to continue A–10 production and procurement beyond fiscal year 1978, building to a force of [deleted] active and [deleted] reserve A–10 wings—a total of [deleted] wings with [deleted] UE aircraft. The [deleted] wing A–10 force structure shown in fiscal year 1978 is, therefore, only an interim position enroute to our final desired A–10 force of [deleted] wings.

You must also remember, Senator Thurmond, that in fiscal year 1978, when we show only [deleted] wings of A10s, we also will have [deleted] wings of A7s and almost [deleted] wings of F4s in our total fighter force. These latter two aircraft demonstrated excellent close air support capabilities in SEAsia and would certainly be used in that role in Europe if the situation required.

A10 Only Close Air Support Aircraft

Senator Thurmond. The F–4 and the other aircraft in the tactical force structure are not primarily close air support planes so close air support will fall mainly on the AX. Is that correct?

General Glasser. Yes, the A–10 will be our primary close air support aircraft.

Senator Thurmond. Why are the A–7Ds which have only been in the tactical force structure a year or two being moved to the Guard and Reserve?

General GLASSER. The A–7s are being transferred to the ANG to improve the total Tactical Fighter Forces by phasing out 15 to 18 year old F–100s. The A–7 is the best candidate for this role since it has an air-to-ground mission comparable to the F–100, and the A–7 will be replaced in the active force by the A–10 which was designed primarily for close air support.

JUSTIFICATION FOR A–10 WINGS

Senator THURMOND. General Glasser, please provide for the record a complete justification of how the Air Force determines it needs only [deleted] wings of the AX for the Active Force?

General GLASSER. The Air Force plans to have [deleted] wings of A–10s in the active force to meet postulated enemy threats. Force structure is determined by projected enemy threats from National Defense and Intelligence Agencies. However, actual size is tailored to meet as much of the identified requirements as fiscal resources will permit.

AIRCRAFT USED FOR CLOSE AIR SUPPORT IN VIETNAM

Senator THURMOND. General Glasser, also provide for the record, the amount of aircraft used in Vietnam for close air support and the numbers of forces they were supporting?

General GLASSER. To state categorically the exact number of aircraft involved in the close air support role in Vietnam is very difficult since we did not have a specific aircraft dedicated to this particular mission. Basically, due to the exigencies of battle, all ordnance-delivering aircraft were involved in this role, at one time or another. This highlighted the need for an aircraft such as we envisioned in the A–10. In addition, it must be stated that the number of forces supported by close air support aircraft at any one time—except in isolated instances such as An Loc and Khe Sanh—is subject to wide variances.

To specifically answer your question, in the broadest sense, at a peak period such as June 1968, 729 aircraft flew 10,644 sorties in support of 295 Free World Force infantry battalions (approximately 1,539,000 troops).

A–10 COST

Senator THURMOND. General Glasser, if the Air Force only buys [deleted] wings of the AX for the Active force, what will be the ultimate program unit cost of the AX?

General GLASSER. The Air Force currently has no A–10 procurement program for the conditions you outline. However, were the A–10 Active forces limited to [deleted] wings, the Air Force would prefer to continue procurement of 729 production A–10 aircraft to provide a balanced total force. Those A–10's not utilized in the Active forces would be used to modernize the Air Reserve Forces. Under these conditions, the ultimate program unit cost for the A–10 would be $3.35 million. This program unit cost is based upon a total of 743 aircraft, which consists of 729 production, four prototype and ten RDT&E aircraft.

MARINE CLOSE AIR SUPPORT

Senator THURMOND. General Glasser, is it not true the Marines have one air wing for each ground division? How much of the Marine air wing is tailored to close air support?

General GLASSER. Yes, sir, the Marines have three air wings and three ground divisions. Each of the air wings is geographically situated and tailored to operate as part of the combined air/ground arms concept with a Marine division. I believe all of the fighter/attack aircraft assigned to a Marine Air Wing can provide close air support to their ground force.

A–X ALLOCATED TO NATO

Senator THURMOND. Under the [deleted] wing force structure for AX with 13 Army divisions how would the AX squadrons be allocated in NATO? Would you have one squadron per division?

General GLASSER. Senator Thurmond, the current Five Year Defense Plan (FYDP) shows that we will have only [deleted] wings of A–10s in fiscal year 1978. As you know, we intend to continue A–10 production and procurement beyond fiscal year 1978, building to a force of [deleted] active and [deleted] reserve A–10 wings—a total of [deleted] wings with [deleted] aircraft. The [deleted] wing A–10 force structure is, therefore, only an interim position enroute to our final desired A–10 force of [deleted] wings.

No plans have been made to allocate our A–10s among the Army divisions committed to Europe. Our Tactical Air Control System is designed to give the theater air commander the flexibility and options to use his tactical air forces in the mission and geographic location dictated by the land battle. Therefore our A–10s, whether we have [deleted] wings or [deleted] wings in the theater, will be allocated to the Army units having the most valid tactical requirement for them as the battle progresses.

You must also remember, Senator Thurmond, that in fiscal year 1978, when we show only [deleted] wings of A–10s, we also will have [deleted] wings of A–7s and almost [deleted] wings of F–4s in our total fighter force. These latter two aircraft demonstrated excellent close air support capabilities in SEAsia and would certainly be used in that role in Europe if the situation required.

ARMY WHEELS STUDY

Senator THURMOND. General Blank, are you familiar with the Army's WHEELS study whereby a significant savings was effected in wheel vehicles?

General BLANK. Yes, Sir. The study addressed two objectives; the determination of the quantity of commercial "on-the-shelf" vehicles which could be authorized in lieu of more expensive military vehicles and the reduction of vehicle requirements consistent with basic mission needs.

Senator THURMOND. Has the Air Force generated any savings in this area and if so, how and to what degree?

General BLANK. Although no documented cost data have been accumulated by the Air Force, we have long recognized the economic benefits to be derived from utilizing off-the-shelf commercial vehicles in lieu of military design vehicles. Since the early 1950's, it has been Air Force policy to use commercial vehicles to the maximum extent possible and as a result, commercial vehicles constitute 90 percent of our inventory today as opposed to only 46 percent in 1954. Additional savings have also been made by reducing vehicle requirements. Since December 1969, the Air Force vehicle inventory has been reduced by over 19 percent.

ROCKETS AND LAUNCHERS REQUIREMENT

Senator THURMOND. General Blank, why is the requirement for rockets and launchers only $500,000 less than the $55 million last year?

General BLANK. Sir, the reason our program is essentially the same is because we have a large war reserve requirement for rockets as well as a significant annual training requirement. This level of procurement is anticipated to continue in outyears.

Senator THURMOND. Cite for the record any cost changes, up or down, for the items in this account.

General BLANK. The only price adjustment from fiscal year 1973 to fiscal year 1974 is an estimated fiscal year 1974 reduction of $1.14 each on the 2.75" Rocket Head, Fragmentation, due to accumulation of metal parts at the Army load facility which are being applied as inventory assets.

PROBLEMS AS RESULT OF GUN PROLIFERATION

Senator THURMOND. General Blank, what problems are you having as a result of the proliferation in guns and the caliber of cartridges?

General BLANK. Sir, we are not having problems created by the variety of guns or cartridge calibers in our inventory. We have avoided proliferation to the maximum extent and our most recently developed aircraft gun, the M61 20mm Vulcan, was introduced into service in 1956. We exploited off-the-shelf systems when we developed the gunship program for Southeast Asian operations. We currently have 23 different aircraft and ground-fired weapons that use fifteen different caliber cartridges.

Special Problems of Storing Ammo Using Depleted Uranium

Senator Thurmond. Do you see any special problems reference cost or storing of ammo using depleted uranium? Using caseless cartridges?

General Blank. Storing ammunition containing depleted uranium components poses no problem since depleted uranium is not radioactive.

As to the caseless round, it is encapsulated in a flame retarding material. We anticipate no special problem in storing this class of munition.

The cost of ammunition using depleted uranium components is affected by the manufacturing techniques adopted. We are making every effort to develop optimum low-cost production methods.

Cost reduction of the caseless round is a priority item in the development program. Present indications are that acceptable production unit costs can be achieved.

JUSTIFICATIONS

Chairman McClellan. At this point in the record there will be included additional information from the justifications.

[The justifications follow:]

Justification

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	1972 Actual	1973 Estimate	1974 Estimate
Munitions and associated equipment	742,249	819,984	598,500
Vehicular equipment	52,931	32,200	52,000
Electronics and telecommunications equipment	231,046	234,817	337,200
Other base maintenance and support equipment	547,772	992,799	1,017,200
TOTAL DIRECT PROGRAM	1,573,998	2,079,800	2,004,900
Reimbursable (total)	40,117	50,000	50,000
TOTAL	1,614,115	2,129,800	2,054,900
Less: Portion of program to be obligated in subsequent fiscal years	-249,671	-262,373	-260,973
Plus: Obligations incurred against prior year program funds	221,746	262,573	248,073
TOTAL OBLIGATIONS	1,586,190	2,130,000	2,042,000

($ in Thousands)

Direct Program Requirements - FY 1974 - $598,500
Direct Program Requirements - FY 1973 - $819,984
Direct Program Requirements - FY 1972 - $742,249

ACTIVITY: Munitions and Associated Equipment

PART I - PURPOSE AND SCOPE

This activity provides for the procurement of munitions and associated equipment, armament training devices, spares and repair parts, and equipment modifications. This materiel is required for (1) the training of aircrews in the employment of weapons using the latest air warfare techniques; the training of special weapons personnel in the maintenance, storage, movement, assembly, loading and the operational use of nuclear munitions; (3) operations consumption, and (4) War Readiness Materiel (WRM).

PART II - JUSTIFICATION OF FUNDS REQUESTED

Major munitions planned for procurement in FY 1974 include: rockets and rocket components; 7.62 and 20 millimeter cartridges; fire bombs, cluster dispenser bombs, guided bombs, general purpose bombs, flares and associated fuzes. These funds will provide for procurement of training requirements, WRM, and Southeast Asia requirements.

Past, current and budget year program requirements for major categories of munitions and associated equipment are shown in the following table:

	Direct Program Requirements (In Thousands of Dollars)		
	1972	1973	1974
1. Rockets and Launchers	$32,714	$50,632	$66,179
2. Cartridges	68,942	52,468	89,309
3. Bombs	531,902	590,810	345,917
4. Targets	1,519	471	1,368
5. Other Items	41,685	29,561	43,657
6. Fuzes	65,487	96,042	52,070
Total Direct Program Requirements	$742,249	$819,984	$598,500

Rockets and Launchers - Provides for procurement of 2.75" Rocket Motors, warheads, launchers and rocket components used on trainer, fighter, attack, and helicopter aircraft and ground launched meteorological probes. Requirements of the Free World Forces for the 2.75" rocket motor MK-40, 2.75" rocket head fragmentation, and planned WRM procurement account for the increase in the 1974 program.

Cartridges - Provides for continued procurements of the 7.62MM cartridge used on helicopter and gunship aircraft, 20MM training/combat cartridges used in the M-39 and M-61 gun on fighter and gunship aircraft, and the .38 calibre cartridge. Requirements for provisioning War Readiness Materiel (WRM) account for approximately 50% of the 7.62MM M-13 link procurement and 85% of the 20MM combat procurement.

Bombs - Provides for procurement of General Purpose (250, 500, 750 and 2,000 lb.) bombs, anti-personnel and materiel dispenser munitions, guided weapons and practice bombs used for training operations. Decreasing requirements of USAF forces in Southeast Asia account for the reduced program in 1974. Provisioning of War Readiness Materiel (WRM) accounts for the entire 1974 procurement of the Laser Bomb Guidance Kit, E-O Bomb Guidance Kit, Dispenser & Bomb CBU-71, and Cluster Bomb MK-20 (ROCKEYE).

Targets - Provides for procurement of target devices such as the TDU-10b, the BIDOPS and DA3H scorers for training programs.

Other Items - Provides for the procurement of a variety of flares and signal kits, nuclear ordnance training devices (excluding nuclear materials), spares and repair parts, and miscellaneous modifications.

Fuzes - Provides for the procurement of various types of mechanical and electronic fuzes and delay elements used with general purpose bombs and dispenser type munitions. Planned 1974 procurements are in balance with the proposed bomb production. A portion of the FMU-56 Proximity Fuze used with the SUU-30 type dispenser munitions and the entire quantity of the FMU-54 Retard Fuze used with the general purpose bombs are planned for WRM.

($ in Thousands of Dollars)

Direct Program Requirements - FY 1974 - $52,000
Direct Program Requirements - FY 1973 - $32,200
Direct Program Requirements - FY 1972 - $52,931

ACTIVITY: Vehicular Equipment

PART I - PURPOSE AND SCOPE

This activity provides for the procurement of passenger carrying vehicles; general and special purpose vehicles, including trucks, tractors and trailers; firefighting equipment; materials handling equipment; base maintenance equipment; spares and repair parts, and equipment modifications. This equipment is used at combat and support bases for the transportation of (1) personnel; (2) cargo from railroad sidings and flying field aprons to depots, warehouses, hangars, and other places of storage or use, and (3) fuel, oil, supplies and materials for aircraft and base maintenance, including fire and rescue operations.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Major items planned for procurement in Fiscal Year 1974 include 1,577 passenger carrying vehicles for replacement only; pick-up, cargo, panel, stake & platform, and utility trucks; fuel tank trucks and tractors; firefighting equipment, including

crash, pumper and fire trucks; aircraft loaders, forklift trucks and warehouse tractors; and wheeled base maintenance equipment such as truck mounted cranes and runway sweepers.

The following table summarizes the program requirements for each of the major categories of equipment in the past, current and budget year programs:

	Direct Program Requirements (In Thousands of Dollars)		
	1972	1973	1974
1. Passenger Carrying Vehicles	$ 3,978	$ 5,734	$ 6,885
2. Cargo and Utility Vehicles	12,521	7,651	11,573
3. Special Purpose Vehicles	11,933	8,542	10,608
4. Firefighting Equipment	9,627	2,456	9,700
5. Materials Handling Equipment	7,147	2,669	5,717
6. Base Maintenance Equipment	7,725	5,148	7,517
Total Direct Program Requirements	$52,931	$32,200	$52,000

Passenger Carrying Vehicles - Provides for the replacement of light sedans, station wagons, 28-passenger buses and field truck ambulances.

Cargo & Utility Vehicles - Provides for the replacement of 2,075 (each) 1/2 ton pick-up trucks procured in FY 1967 and FY 1968. The $4.8 million required to cover this procurement necessitates an overall net increase of approximately $3.9 million over the Fiscal Year 1973 program.

Special Purpose Vehicles - Provides for the procurement of telephone maintenance trucks, R-9 refueler trucks, and A-C tow tractors. Air Force management objectives established in Fiscal Year 1973 provide for continuing a phased procurement program. The funding level for FY 1974 is, therefore, at the approximate level of funding approved for FY 1973.

Firefighting Equipment - Requirements for the P-4 and P-13 fire trucks account for the increase in the 1974 program. Production difficulties experienced in Fiscal Year 1973 necessitated slippage of P-4 and P-13 fire trucks to Fiscal Year 1974.

Materials Handling Equipment - Provides for the procurement of 40K A-C loaders and various tonnage fork lifts. The increase of $3.1 million in Fiscal Year 1974 is the result of slippage in procurement of the 40K aircraft loader from the Fiscal Year 1973 program because of production difficulties.

Base Maintenance Support Equipment - Provides for the procurement of 20T truck mounted cranes and runway vacuum cleaners. The increase in the Fiscal Year 1974 program, as compared to FY 1973, of approximately $2.3 million, is the result of additional requirements for minor replacement items and spares and repair parts.

($ in Thousands)

Direct Program Requirements - FY 1974 - $337,200
Direct Program Requirements - FY 1973 - $234,817
Direct Program Requirements - FY 1972 - $231,046

ACTIVITY: Electronics and Telecommunications Equipment

PART I - PURPOSE AND SCOPE

This budget activity provides for procurement, engineering and installation of items of equipment and modification kits, peculiar test and maintenance equipment for electronics and telecommunications systems, sub-systems, and supporting activities required for effective command and control of and communication with the forces, wherever deployed throughout the world. Provision is also made for support functions incidental to the world-wide operations of the Air Force, such as weather observation and forecasting, enroute and terminal navigational and landing guidance and assistance, intelligence, and security of Air Force activities, facilities and personnel. The broad spectrum of procurement encompasses items such as communications and navigational radio equipment, landline communications equipment, detection and surveillance radars, communications security devices, data processing and display equipment, meteorological equipment, peculiar test equipment used in the operation and maintenance of these systems, and the spares, repair parts, components, and modification kits needed for assurance of effective and continuous operations.

PART II - JUSTIFICATIONS OF FUNDS REQUESTED

The programs identified in this estimate are required to continue on going programs and to meet budget year programmed objectives for support of weapon systems in the Air Force program. The programmed electronic/telecommunications systems provide the necessary support to Air Force organizations and units in the control of the forces.

The following is a summary of past, current, and budget year program requirements distributed among the major systems and prime elements comprising this activity.

	Direct Program Requirements (In Thousands of Dollars)		
	1972	1973	1974
1. Cryptographic (Comm Security and Signal Intelligence) Equipment	$ 16,868	28,222	28,562
2. Traffic Control and Landing System (404-L)	5,985	18,953	25,248
3. Tactical Air Control System Improvements (485-L)	19,400	10,450	24,595
4. Weather Observation and Forecast System (433-L)	1,032	3,624	2,368
5. Defense Support Program	39,000	18,800	17,000
6. SAC Command and Control Networks (436-M)	1,953	12,626	2,278
7. Cheyenne Mountain Complex (427-M)	6,785	11,586	24,219
8. SLBM Phased Array Radar	-	7,000	26,200

	Direct Program Requirements (In Thousands of Dollars) 1972	1973	1974
9. SAC Automated Total Information Network	$ -	-	3,960
10. Emergency Rocket Comm System (494-L)	-	-	1,500
11. Completed Electronics Programs	4,282	3,113	-
12. Special Comm-Electronics Projects	52,136	35,271	92,699
13. Air Force Communications	5,625	7,071	5,318
14. DCA Programs	1,879	9,445	9,561
15. Organization & Base	43,247	43,922	52,793
16. Modifications	32,854	24,734	20,899
Total Direct Program Requirements	231,046	234,817	337,200

The 1974 program requirement increased approximately $102.4 million as compared with program requirements for 1973. Significant adjustments, as compared with the 1973 program, are discussed in the following:

Cryptographic Equipment: $18.1 million and $10.5 million, respectively, are requested for Communications Security equipment and Signal Intelligence equipment. This program is for procurement and installation of devices for encryption and decryption of communications, to ensure security of voice, teletype and data communications.

Procurement is continued for space-oriented cryptographic systems to provide for satellite command and control.

Procurement is continued for the cryptographic equipment and ancillaries for the Air Force portion of the Department of Defense AIMS (MARK XII). This equipment satisfies a requirement for a rapid, secure, positive aircraft identification system.

Requirements for Signal Intelligence equipment provide for procurement of special communications and electronic intelligence equipment which is used by the USAF Security Service for world-wide collection, processing, and reporting of intelligence information.

System 404-L (Traffic Control and Landing Equipment: This system provides for orderly upgrading of navigational aids and air traffic control equipment for mission requirements and not provided by the FAA. The $25.2 million requested in FY 1974 includes $20.0 million for the procurement of AN/TPN-19 Mobile Traffic Ground Approach Radars. The balance of $5.2 million is for other equipment as covered on Page 152 (Data Sheet).

System 485-L (Tactical Air Control System Improvements): The $24.6 million requested in FY 1974 continues the program initiated in FY 1972 to automate the Tactical Air Control System. $7.0 million is included in FY 1974 for software. Page 154 (Data Sheet) provides additional information on the program.

System 433-L (Weather Observation and Forecast System): This system provides for the acquisition of a variety of weather equipment, including wind measuring equipment, weather plotters, weather remote devices, and facsimile equipment. The FY 1974

program provides for funding tactical weather radars for six tactical weather systems. Page 155 (Data Sheet) provides additional information on the program.

Defense Support Program: Additional phased procurement of ground equipment for this classified program is programmed in Fiscal Year 1974. Page 156 (Data Sheet) provides detailed information on the program.

SAC Command and Control Networks (436-M): The FY 1974 program provides for procurement of world-wide military command and control system (WWMCCS) automatic data processing equipment, engineering and systems integration. Page 157 (Data Sheet) provides detailed information on the program.

Cheyenne Mountain Complex (427-M): This program provides the command control and communications to support HQ CONAD/NORAD and the Spacetrack Center at the Cheyenne Mountain Complex. Funds requested in FY 1974 continue the program to upgrade the command, control and communications facilities of NORAD. Page 158 (Data Sheet) provides additional information.

SLBM Phased Array Radar: This program provides radar systems to detect and provide early warning of an SLBM attack launched against the Continental U.S. The $26.2 million requested in FY 1974 are to provide new phased array radar to replace the existing 474N radar network. Page 159 (Data Sheet) provides detailed information on this program.

SAC Automated Total Information Network (SATIN): SATIN will upgrade and increase SAC record data communications capability. The $3.960 million requested in FY 1974 will be used for communications processors, associated software, and terminal equipment. Page 160 (Data Sheet) provides detailed information on this program.

Special Communications - Electronics Projects: This program is an aggregation of special projects which are not system-oriented. The $92.7 million requested in FY 1974 provides for support of COBRA DANE, Spanish AC&W Upgrade, LORAN-D, and Automatic Data Processing Equipment. Additional information on these items and other projects are in Pages 161 through 170 (Data Sheets).

Air Force Communications: This program provides for Air Force peculiar communications systems and facilities. Principal 1974 requirements provide for continued support of the Programs Communications Support Program (PCSP) - Air Force and Critical Communications (CRITICOMM). Also included are replacements of telephone exchange equipment. Details relating to mission and funding of the PCSP and CRITICOMM programs are covered in Page 171 (Data Sheet).

Defense Communications Agency Programs: This program provides support for elements of the Defense Communications System. The FY 1974 program provides for continued support of the National Military Command Center and Wideband Systems Upgrade. These and other efforts are discussed on Pages 172 and 173 (Data Sheets).

Organization and Base: This program provides for organization, base level communications and electronics mission training equipment for the regular forces, Air National Guard and Reserve Forces, and the spares and repair parts. Major line item details and funding requirements are on Pages 174 through 179 (Data Sheets).

Modifications: The major item in the FY 1974 program is the Traffic Control and Landing System (404-L) modification which is continuation of the program to modify the air traffic control radar beacon system as part of the Air Traffic Control Radar

Beacon System/Identification Friend or Foe/MARK XII System (AIMS) Program. This and other major modifications planned in FY 1974 are covered in Pages 180 and 181 (Data Sheets).

($ In Thousands of Dollars)

Direct Program Requirements - FY 1974 - $1,017,200
Direct Program Requirements - FY 1973 - $992,799
Direct Program Requirements - FY 1972 - $547,772

ACTIVITY: Other Base Maintenance and Support Equipment

PART I - PURPOSE AND SCOPE

This activity provides for the procurement of common test and calibration equipment, personal safety and rescue equipment, depot plant and materials handling equipment, electrical equipment, base support equipment. This activity also provides for special support projects, spares and repair parts, equipment modification, and First Destination Transportation costs of all items procured under this appropriation.

This equipment is used to support the operation of combat and logistic support and intelligence activities of Air Force units. Quantitative requirements are determined by a computerized computation considering world-wide authorizations and available assets, including reparable and on-order. Replacement is based on factors developed from condemnation experience in prior years.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds requested provide for (1) maintenance, calibration and checkout of ground support equipment and ground electronics and communications apparatus; (2) personal safety items to safeguard the lives of aircrewmen and other personnel of the Air Force; (3) repair and overhaul at maintenance shops and mechanization of materials handling equipment at Air Force bases and passenger and cargo terminals; (4) mobile electric power and area lighting; (5) base support, including procurement at base level of equipment with a unit cost of $1,000 or more for medical, food service, repair, and administrative activities; (6) special projects such as Air Force technical intelligence programs and Air Force elements of the atomic energy surveillance program, industrial facilities to support production of equipment funded in this appropriation, and first destination transportation charges for all items procured under this appropriation, and (7) modification kits required to assure effective and continuous operation of equipment.

The following table shows the major composition of the FY 1972, FY 1973 and FY 1974 program and provides a comparison of the dollar requirements for each of the major categories of equipment: .

	Direct Program Requirements ($ in Thousands)		
	1972	1973	1974
1. Test Equipment	$11,784	$13,604	$15,931
2. Personal Safety and Rescue Equipment	2,861	2,871	3,941
3. Depot Plant and Materials Handling Equipment	31,034	26,961	27,399
4. Electrical Equipment	5,306	5,627	5,613
5. Base Support Equipment	38,668	40,892	41,712
6. Special Support Projects	458,119	902,844	922,604
Total Direct Program Requirements	$547,772	$992,799	$1,017,200

Major procurements planned in FY 1974 include:

Test Equipment - Calibration packages for Air Force bases and Air Materiel Areas, Precision Measurement Equipment Laboratories, Air Force Measurements Standard Laboratories, Aerospace Guidance Laboratories and Metrology Center, oscilloscopes, electronic counters, motor vehicle engine analyzer dynamometers, and other items costing less than $500,000 each.

Personal Safety and Rescue Equipment - Life rafts, flying helmets and other protective equipment items costing less than $500,000 each.

Depot Plant and Materials Handling Equipment - Depot Plant Modernization Program and base mechanization equipment for the five Air Materiel Areas, air terminal mechanization for three air freight terminals and freight handling docks for various CONUS and overseas air freight terminals, and other maintenance and repair shop equipment costing less than $500,000 each.

Electrical Equipment - Static no-break power supply, mobile electrical generator sets, floodlights and minor items, all costing less than $500,000 each.

Base Support Equipment - Base support equipment, including investment equipment with a unit cost of $1,000 or more procured at base level, aircraft arresting barriers, cargo pallets and nets, aircraft fuel servicing units, photographic equipment, and spares and repair parts.

Special Support Projects - Intelligence equipment, industrial facilities, first destination transportation costs for all material and equipment procured under this appropriation, and other projects.

Modifications - Component kits for the modification of in-service equipment.

SUBCOMMITTEE RECESS

Chairman McCLELLAN. The subcommittee will recess until tomorrow morning at 10 o'clock.

[Whereupon, at 3:35 p.m., Tuesday, June 19, the subcommittee was recessed, to reconvene at 10 a.m. Wednesday, June 20.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1974

WEDNESDAY, JUNE 27, 1973

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: Senators McClellan, Young, and Hruska.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

MILITARY PERSONNEL, AIR FORCE

STATEMENT OF MAJ. GEN. OLIVER W. LEWIS, DIRECTOR OF PERSONNEL PROGRAMS, DEPUTY CHIEF OF STAFF, PERSONNEL, HEADQUARTERS

ACCOMPANIED BY—
MAJ. GEN. J. R. KERN, JR., DIRECTOR OF MANPOWER AND ORGANIZATION
MAJ. GEN. HOWARD M. FISH, DEPUTY DIRECTOR OF BUDGET

PROGRAM AND FINANCING

Senator YOUNG. The Chairman has been momentarily detained and has asked me to initiate the hearing. This morning the subcommittee will receive testimony in support oft he fiscal year 1974 budget request for Air Force personnel appropriations.

The first appropriation to be considered will be that for "Military personnel, Air Force."

At this point in the record there will appear certain program and financing information from the justifications.

[The justification follows:]

Justification

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3500-0-1-051	1972 ACT	1973 EST	1974 EST
PROGRAM BY ACTIVITIES:			
DIRECT PROGRAM:			
1. STRATEGIC FORCES	1,516,836	1,622,541	1,614,262
2. GENERAL PURPOSE FORCES	1,864,363	1,864,421	1,735,895
3. INTELLIGENCE AND COMMUNICATIONS	832,232	829,304	812,686
4. AIRLIFT AND SEALIFT	422,804	434,482	414,798
5. GUARD AND RESERVE	20,417	27,299	28,552
6. RESEARCH AND DEVELOPMENT	206,157	216,978	218,965
7. CENTRAL SUPPLY AND MAINTENANCE	101,952	120,666	120,653
8. TRAINING, MEDICAL, AND OTHER GENERAL PERSONNEL ACTIVITIES	1,807,200	1,984,769	2,043,007
9. ADMINISTRATION AND ASSOCIATED ACTIVITIES	251,713	230,591	213,753
10. SUPPORT OF OTHER NATIONS	16,672	42,195	61,029
TOTAL DIRECT PROGRAM	7,040,346	7,373,246	7,263,600
REIMBURSABLE (TOTAL)	62,571	48,265	48,504
10 TOTAL OBLIGATIONS	7,102,917	7,421,511	7,312,104
FINANCING:			
RECEIPTS AND REIMBURSEMENTS FROM:			
11 FEDERAL FUNDS	-20,024	-16,932	-17,171
13 TRUST FUNDS	-16,748	-9,228	-9,228
14 NON-FEDERAL SOURCES	-25,799	-22,105	-22,105
22 UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-39,700	-51,600	.....
25 UNOBLIGATED BALANCE LAPSING	26	.....	.....
BUDGET AUTHORITY	7,000,672	7,321,646	7,263,600
BUDGET AUTHORITY:			
40 APPROPRIATION	7,000,672	7,150,575	6,925,600
41 TRANSFERRED TO OTHER ACCOUNTS	.....	-5,729	.....
43 APPROPRIATION (ADJUSTED)	7,000,672	7,144,846	6,925,600
44,95 JAN 1973 PAY INCREASE SUPPLEMENTAL/AMENDMENT	.....	176,800	338,000

BIOGRAPHICAL SKETCH

Senator YOUNG. The first witness is Maj. Gen. Oliver W. Lewis, Director of Personnel Programs, Headquarters, U.S. Air Force. We are very happy to have you appear this morning, General. The people of North Dakota thought you were a great commanding officer at Grand Forks.

At this point in the record there will be included the biographical summary of Major General Lewis.

[The biography follows:]

MAJ. GEN. OLIVER W. LEWIS

Major General Oliver W. Lewis, is Director Personnel Programs, DCS Personnel, HQ USAF.

He was born August 12, 1923, in Knoxville, Alabama. He graduated from Greene County High School, Eutaw, Alabama, in 1941 and attended the University of Alabama. He entered military service in December 1942 and received his commission and pilot wings in 1944. During World War II, he trained in B–17, B–24, and B–29 aircraft.

In 1946, General Lewis served in the South Pacific as a B–17 and B–29 pilot, aircraft maintenance and staff officer. From 1948 to 1950 he was an instructor pilot.

In August 1950 he was assigned to Headquarters Far East Air Forces and flew 27 combat missions in the B–26 bomber aircraft during the Korean War.

General Lewis was assigned (1953 to 1957) in research and development to the Office of the Deputy Chief of Staff, Development, Headquarters USAF, Washington, D.C.

General Lewis attended George Washington University and graduated in 1958 with a BA degree in business administration and advanced management. He next was assigned to Altus AFB as a KC–135 aircrew commander and squadron commander. After serving as Chief of Operations in an Atlas–F strategic missile unit he was assigned, until July 1965, as Commander of the 26th Bombardment (B52E) Squadron. He then assumed duty as Deputy Base Commander and Commander of the 804th Combat Support Group, Grand Forks AFB, North Dakota.

He went to Southeast Asia (SEA) in April 1967 and assumed command of the 355th Combat Support Group at Takhli, Thailand. After his SEA tour, General Lewis was reassigned as Commander of Norton AFB, California, in July 1968.

In 1969, he was transferred to Scott AFB, Illinois, where he served as a wing commander. After promotion to Brigadier General in 1970, he became DCS, Personnel, Headquarters Military Airlift Command, Scott AFB, Illinois. In June 1972, General Lewis was assigned to HQ USAF.

His decorations and awards include the Legion of Merit, Air Medal, AF Commendation Medal with one oak leaf cluster, AF Outstanding Unit Award Ribbon, and the Republic of Korea Presidential Unit Citation Ribbon.

General Lewis is married to the former Catherine (Kay) Taggart of Salt Lake City, Utah. They have two children: Gregory and Kathy.

General Lewis was promoted to temporary grade of Major General effective September 20, 1972, with the date of rank July 1, 1969.

PERSONNEL REDUCTIONS

General LEWIS. Thank you, Senator Young.

Mr. Chairman and members of the committee, I welcome this opportunity to present the highlights of Air Force military manpower and personnel programs for fiscal year 1974. My statement will include a summary of manpower requirements followed by the supporting "Military Personnel" appropriation budget estimates.

Before discussing the current manpower picture, it is helpful to recall that the last 6 years have been characterized by large-scale personnel reductions. Air Force active duty strength reached its Vietnam conflict peak of 904,759 in fiscal year 1968. In the years since, we have seen a reduction of more than 238,000 military personnel,

or one-fourth of the 1968 high total. As Air Force personnel strength has decreased, forces and bases have been reduced, while the remaining weapons systems have been modernized and streamlined. For example, during the same period over 4,000 aircraft have been phased out of the active inventory, reducing the forces by 41 strategic, interceptor, reconnaissance, and refueling squadrons; 74 general purpose squadrons; and 18 strategic airlift squadrons for a total of 133 squadrons.

CURRENT MANPOWER COMPARED WITH PRE-VIETNAM PERIOD

Chairman McClellan [presiding]. You indicate substantial reductions in manpower, aircraft, and major installations between 1968 and the present time period. How do the manpower, aircraft, and installations today compare with those of the pre-Vietnam war period?

General Kern. Active military manpower will decrease from an end fiscal year 1964 strength of 856,890 to an end fiscal year 1974 strength of 666,357. Active force aircraft have decreased during the same period from 12,689 to 8,313 and major installations have decreased from 216 to 153.

Chairman McClellan. You may proceed, General Lewis.

General Lewis. The number of installations has been reduced by 431, a 10-percent reduction. This included 45 major installations, 20 in the CONUS and 25 overseas. Personnel reductions have been made while maintaining credibility with our personnel by minimizing involuntary actions that caused personal hardships.

In my capacity as Director of Personnel Programs, I am responsible for the management of funds appropriated for the pay, allowances, and related costs of maintaining an effective military personnel force. I also develop the military man-year program which forms the basis for these funding needs. The manpower requirements driving the man-year program are determined under the staff direction of Maj. Gen. John Kern, Air Force Director of Manpower and Organization, who is with me here today. The first part of this statement will be devoted to a discussion of these manpower requirements, since their projection represents the first step in formulation of our military personnel budget. I will then follow by highlighting some of the major personnel management considerations underlying our fiscal year 1974 appropriations request.

DETERMINING MANPOWER REQUIREMENTS

As in the past, fiscal year 1974 manpower needs have been based on the projected forces and activity rates required by the U.S. Air Force to carry out its assigned mission in support of national defense objectives.

AIR FORCE ASSIGNED MISSIONS

Chairman McClellan. What is the "assigned mission" of the Air Force "in support of national defense objectives"?

General Kern. The assigned mission of the Air Force in support of national defense objectives is to organize, train, and equip Air Force forces for the conduct of prompt and sustained combat operations in the air; specifically, forces to defend the United States against air attack, gain and maintain general air supremacy, defeat enemy air forces,

control vital air areas, and establish local air superiority; to organize, train, and equip Air Force forces for strategic air warfare; to organize and equip Air Force forces for joint amphibious and airborne operations; to furnish close combat and logistical air support to the Army, to include airlift, support, and resupply of airborne operations, aerial photography, tactical reconnaissance, and interdiction of enemy land power and communications; and to provide air transport for the Armed Forces. The assigned mission of the Air Force also includes the collateral functions of training Air Force forces to interdict enemy seapower through air operation, conduct antisubmarine warfare and protect shipping, and conduct aerial minelaying operations.

MANPOWER MIX

Chairman McClellan. Proceed, General.

General Lewis. The overall manpower mix, including military, inservice civilian, and contract services, has been considered in determining the manpower levels required to sustain our forces. For this reason, although this hearing is concerned with military personnel, I believe it appropriate to devote a few moments to the discussion of the determination of total manpower requirements. This process has as its first step the calculation of man-hours necessary to accomplish the various amounts and kinds of work generated by operation of the forces. These man-hours are then translated into numbers of people required in each function and unit. A decision is then made as to whether the nature of the activity involved dictates the use of military, inservice civilian, contract services, or a mix of all three. These steps are accomplished through the development and application of manpower standards or guides which constitute the basic building blocks from which fiscal year 1974 requirements have been formulated.

In general terms, a manpower standard or guide is an expression of the numbers and kinds of personnel required to produce a product or provide a service at varying levels of activity. Maintenance men per aircraft, food service personnel per thousands of rations served, and medical personnel per hundreds of patients treated are all typical examples of manpower standards.

In the Air Force, standards are normally developed in the field through the use of industrial engineering techniques, such as time study, work sampling, and various other forms of statistical analysis. A wide variety of validation techniques are used to establish guides. Every manpower standard or guide is the end product of careful study and analysis.

Nowhere are these requirements determination tools more important than in the manpower programing and budgeting process. Through the application of manpower standards, force structure levels can be translated into manpower requirements. By applying the workload associated with weapons and equipment inventories to their respective standards, we can relate numbers of aircraft to numbers of pilots, amounts and types of munitions to numbers of munitions handlers, flying hours to numbers of maintenance technicians, et cetera. Similarly, if a new base is to be opened or units repositioned to an existing base, our standards permit us to identify the associated manpower adjustments necessary in areas, such as hospitals, civil engineering, supply,

and transportation. The same standards are also used to identify reduced manpower requirements commensurate with reductions in the force structure or other workload adjustments.

The total program for which manpower authorizations are requested each year represents an aggregation of manpower standards and guides applied to projected workloads associated with programed forces, bases, units, and capabilities.

1973 MANPOWER PROGRAM

The fiscal year 1973 budget was based on a military manpower program that would decrease from 730,352 at the end of fiscal year 1972 to 717,210 at the end of fiscal year 1973. Table I shows the fiscal year 1972 and 1973 programs as contained in last year's budget submission. You will note from the last column that we had programed a reduction of over 13,000 military and 2,400 civilians. These decreases were chiefly attributable to: Reduced crew ratios and emergency utilization rates in tactical fighter, reconnaissance, airlift, and special operations aircraft; phaseout of air defense forces; reductions in SEA activity; and to reductions in headquarters, intelligence, and overseas base supporting structures.

TABLE I.—FISCAL YEAR 1973 MANPOWER PROGRAM PROJECTIONS PRESENTED DURING HEARINGS ON FISCAL YEAR 1973 BUDGET

	End fiscal year 1972 projection	End fiscal year 1973 projection	Net fiscal year 1973 change
Military:			
Officers	121,462	116,814	−4,648
Airmen	604,473	595,979	−8,494
Cadets	4,417	4,417	
Total	730,352	717,210	−13,142
Civilians:[1]			
Direct hire	279,138	279,138	
Indirect hire	22,824	20,328	−2,496
Total	301,962	299,466	−2,496
Aggregate	1,032,314	1,016,676	−15,638

[1] Direct hire includes both U.S. and non-U.S. citizens who are hired and paid by the United States directly. Indirect hire are non-U.S. personnel hired in accordance with agreements with foreign governments. Determination as to whether we will use direct or indirect hire is made by agreement with the host country.

General LEWIS. Table II depicts revisions to the fiscal year 1973 manpower program after initial submission. Column 1 shows what was planned last year, and column 2 shows the current projection for the end of fiscal year 1973 of 692,334 military and 294,320 civilians. These additional reductions of over 30,000 spaces can be attributed primarily to force structure changes, updated and revised manpower standards and man-hour availability factors, reduced pilot/recruit training output congressional reductions, and military to civilian conversions.

TABLE II.—MANPOWER PROGRAM PROJECTIONS FOR FISCAL YEAR 1973

	End fiscal year 1973 projected in fiscal year 1973 budget	Current end fiscal year 1973 projection	Net change to fiscal year 1973 program
Military:			
Officers	116,814	115,122	−1,692
Airmen	595,979	572,795	−23,184
Cadets	4,417	4,417	
Total military	717,210	692,334	−24,876
Civilian:			
Direct hire	279,138	273,621	−5,517
Indirect hire	20,328	20,699	+371
Total civilian	299,466	294,320	−5,146
Aggregate	1,016,676	986,654	−30,022

AIRMAN REDUCTION ATTRIBUTABLE TO VOLUNTEER POLICY

Chairman McClellan. Is any of the reduction in airmen attributable to inability to recruit airmen in a no-draft atmosphere?

General Lewis. No. Reductions in airman strength during fiscal year 1973 can be attributed primarily to force structure changes, updated and revised manpower standards and man-hour availability factors, reduced pilot/recruit training output, congressional reductions, and military to civilian conversions. Fiscal year 1973 recruiting objectives have been met.

Chairman McClellan. Proceed, General.

General Lewis. Military end fiscal year 1973 strength reductions taken in conformance with the intent of the fiscal year 1973 Defense Appropriations Act are as follows:

Military strength shortfall	−10,483
Senior NCO Academy (tradeoffs)	−76
Support to other nations	−5,872
Headquarters	−2,059
Medical doctors	−92
Total	−18,582

With the prior concurrence of the House and Senate Appropriations Committees, the Air Force elected to establish the senior NCO academy and identified tradeoffs within the training establishment to offset the directed reduction.

SENIOR NCO ACADEMY FUNCTIONS

Chairman McClellan. What is the function of the senior NCO academy? How were these functions supplied prior to the establishment of the academy?

General Lewis. The function of the senior NCO academy is to prepare selected senior noncommissioned officers for positions of greater responsibilities by broadening their leadership and managerial capabilities and by expanding their perspective of the military profession.

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This function was accomplished in the past. A few senior NCO's received training through major command NCO academies. However, command NCO academies are primarily for grades E–5, E–6, and E–7; therefore, the number of E–8 and E–9 personnel that could attend was limited and they did not receive maximum benefit from the schooling as much of the course material was oriented toward these lower grades. The senior NCO academy is designed for E–8 selectees, E–8's and E–9's only, and therefore, fills long standing void in NCO professional military education.

FISCAL YEAR 1974 MANPOWER PROGRAM

Chairman McClellan. Proceed, General.

General Lewis. The proposed Air Force manpower program for fiscal year 1974 is shown in table III. The programed military strength is 666,357 which is a 25,977 space reduction below the projected end fiscal year 1973 position. Programed civilian strength is 291,798 or a decrease of 2,522 spaces. These changes reflect further reductions in bases, training, intelligence, forces, Southeast Asia activities, and additional military to civilian conversions.

[Table III follows:]

TABLE III.—MANPOWER PROGRAM AND PROJECTIONS FOR FISCAL YEAR 1974

	Current end fiscal year 1973 projection	End fiscal year 1974 projection	End fiscal year 1974 change
Military:			
Officers	115,122	112,893	−2,229
Airmen	572,795	549,047	−23,748
Cadets	4,417	4,417	0
Total military	692,334	666,357	−25,977
Civilian:			
Direct hire	273,621	272,340	−1,281
Indirect hire	20,699	19,458	−1,241
Total civilian	294,320	291,798	−2,522
Aggregate	986,654	958,155	−28,499

CIVILIAN PERSONNEL TOTAL

Senator Young. Civilians are not included in this appropriation, I realize, but how many of them are included in operation and maintenance, Air Force?

General Lewis. While the civilian program is not included in the military personnel appropriations, I have this strength figure here for you. It is programed at 291,798, which is a decrease of 2,522 spaces over the fiscal year 1973 civilian program.

Table IV summarizes the net changes in military manpower between fiscal year 1973 and fiscal year 1974 by major force program.

[Table IV follows:]

TABLE IV.—ESTIMATED CHANGES IN THE MILITARY MANPOWER PROGRAM BETWEEN END OF FISCAL YEARS 1973 AND 1974

	Current end fiscal year 1973 projection	End fiscal year 1974 projection	Net change
Strategic forces	167,309	162,571	−4,738
General purpose forces	185,331	177,228	−8,103
Intelligence and communications	86,669	83,541	−3,128
Airlift and sealift	44,615	40,807	−3,808
Guard and Reserve forces	2,823	2,615	−208
Research and development	18,094	17,713	−381
Central supply and maintenance	10,680	10,368	−312
Training, medical, and other personnel support activities	150,518	148,261	−2,257
Administration and associated activities (reimbursables included)	19,964	17,691	−2,273
Support to other nations	6,331	5,561	−569
Total Air Force	692,334	666,357	−25,977

STRATEGIC FORCES

General LEWIS. I will now discuss the significant changes in military personnel authorizations for each of these programs.

There is a net decrease of 4,738 military spaces in strategic forces primarily as a result of reductions in B–52 forces and military to civilian conversions. These reductions are partially offset by increases in the number of SRAM equipped units and deployment to one additional satellite base.

USE OF MILITARY PERSONNEL IN SUPPORT OF OTHER NATIONS

Chairman MCCLELLAN. Describe the manpower utilization of military personnel assigned to the category "Support of Other Nations".

General KERN. Personnel in the "Support of Other Nations" category include those performing duties in International Military Headquarters such as the Supreme Headquarters Allied Powers Europe. These Air Force personnel, in coordination with the sister services, U.S. Army and U.S. Navy, participate with the armed forces representatives of the NATO countries in planning and programing for military forces relative to NATO objectives. Other personnel in this "Support to Other Nations" category are those who perform duties worldwide in military assistance and advisory groups or military missions and military groups. These personnel, likewise, work in close harmony with the U.S. sister service representatives and with counterparts in the armed forces of friendly foreign nations in matters concerning planning, programing, and related support of allied forces. Other personnel in the "Support of Other Nations" category are those assigned to foreign countries for comparatively short durations, who provide technical training on weapons systems and equipment purchased under the Foreign Military Sales Act of 1968. Instructor technicians in specialities such as aircraft, electronics, radar and radio

provide training to foreign national military members until a degree of self reliance is attained. The overall program represents our efforts to place the nations of the free world in a better position to support themselves; to increase their own combat capability rather than having to rely upon our combat forces.

B–52 REDUCTION

Senator YOUNG. I notice your reduction in the B–52 forces. Are you closing bases?

General LEWIS. No, sir. This is one reduction associated with this reduced activity in Southeast Asia, base support throughout the Strategic Air Command.

General KERN. Westover Air Force Base is being transferred from SAC to the Reserve, and the activity there is being reduced significantly.

Senator YOUNG. How much reduction, if any, has been made in the number of B–52's stationed in Guam?

General LEWIS. I would like to furnish that for the record, sir. I would like to say that everything I have in this statement is unclassified. So at the point in time that we would have anything classified to say, we will specify that it is classified. I do not know the total reduction on the number of personnel at Guam in the B–52 force. May we furnish that for you, sir?

Senator YOUNG. Yes.

[The statement follows:]

B–52 REDUCTIONS/GUAM

There has been no reduction in the number of B–52's stationed in Guam. You may recall that the majority of forces are deployed on a TDY basis. As a result of the aircraft/crew rotation cycle, there are periodic fluctuations of forces in place.

SOUTHEAST ASIA B–52 BOMBING

Senator YOUNG. Are we using B–52's for bombing in Southeast Asia now?

General LEWIS. Yes, sir. They fly out of Guam as well as U–Tapao.

Senator YOUNG. Are you also using F–111's?

General LEWIS. The F–111's are in Southeast Asia, yes, sir.

Senator YOUNG. And Cambodia?

General LEWIS. Yes, sir. they are used in Cambodia, but they are stationed in Southeast Asia.

Senator YOUNG. Just those two types of planes—the B–52 and the F–111's?

General LEWIS. No, sir. I think you will find F–4's participating also.

General FISH. And A–7's.

Senator YOUNG. Very well.

GENERAL PURPOSE FORCES

General LEWIS. A net decrease of 88,103 military spaces in General Purpose Forces is possible primarily because of reductions in Southeast Asia activity levels base closures. Reductions also occur as a result of continued drawdown of support facilities in Japan and the conversion of military positions to civilian.

INTELLIGENCE AND COMMUNICATIONS

The net reduction of 3,128 spaces in this program is a result of decreased intelligence activities, SEA phase down, conversions to civilians, and savings from reorganization of weather and base rescue activities.

AIRLIFT AND SEALIFT

The net 3,808 decrease in military authorizations for strategic airlift results from reductions in C–141 and C–5 crew ratios, aircraft maintenance savings, conversions to civilians, and closure of Ramey AFB, P.R.

A/C MAINTENANCE FOR AIRLIFT/ECONOMIES AFFECTED

Chairman McClellan. Describe the degree to which economies have been effected in aircraft maintenance in your "Airlift and Sealift" category and indicate whether these actions relate to safety of operation.

General Kern. Economies are the result of reducing the wartime daily utilization rate from [deleted] hours per airframe and increasing the wartime monthly man-hour availability factor from 218 to 242 man-hours per authorization. Economies in aircraft maintenance do not relate to safety of operation since there is no relaxation of safety requirements as the aircraft maintenance manpower resource is reduced.

AIR FORCE RESERVE AND AIR NATIONAL GUARD

Chairman McClellan. Proceed, General Lewis.

General Lewis. The 208 decrease in military spaces in this program is because of two actions. One is the transfer of nuclear weapons custody control from active duty forces to the Air National Guard.

NUCLEAR WEAPONS CUSTODY CONTROL/TRANSFER TO ANG

Chairman McClellan. Describe the duties performed in nuclear weapons custody control and indicate the reason for the transfer from the Active Forces to the Air National Guard.

General Kern. Custody control of nuclear weapons is the control of transfer and movement of, access to, and accountability for nuclear weapons and components. The transfer of custody control of nuclear weapons to the Air National Guard was made possible by a change in Department of Defense policy which allowed qualified ANG technicians to conduct operations involving nuclear weapons without monitoring by active duty military personnel. The security provided for nuclear weapons with ANG units will be comparable to that required for similar resources in the custody of Active Air Force units. The primary motivation behind the change was a potential savings in excess of $500,000 annually. The savings consider the deletion of 143 active duty military spaces and the added requirement of 90 ANG technicians to accomplish security police functions.

Chairman McClellan. Proceed, General Lewis.

General Lewis. The other action is the withdrawal of active duty adviser augmentation from Air Reserve Forces units as the units achieve combat ready status.

RESEARCH AND DEVELOPMENT

The decrease of 381 military spaces in research and development is almost entirely the result of military to civilian conversions.

CENTRAL SUPPLY AND MAINTENANCE

Included in the 312 space reduction in central supply and maintenance are military to civilian conversions and withdrawal of military spaces due to equipment changes and various other management actions.

TRAINING, MEDICAL, AND OTHER PERSONNEL ACTIVITIES

The program VIII budget request includes 19,200 authorizations for the transient account, an increase of 8,872 spaces over last year's request. These spaces account for the personnel en route to active duty stations on PCS moves.

EFFECT OF TRANSIENT A/C INCREASE ON PCS

Chairman McClellan. Does an increase in the transient account imply a similar increase in the number of permanent change-of-station moves?

General Kern. Total transient requirements are based upon the programed number of training, operational, and rotational PCS moves in a given year. Therefore, an increase in the PCS program would normally imply an increase in the number of transients. For example, based on the PCS move programs submitted with the fiscal year 1974 budget, these categories of moves increase from 496,291 to 511,212, causing total transient requirements to increase from 30,634 to 31,555. Because the 19,200 transient authorizations programed for fiscal year 1974 are less than the requirement of 31,555 and support only about 311,000 moves, they will not vary with a change in the PCS program.

Chairman McClellan. Proceed, General Lewis.

General Lewis. To fully provide for personnel absent from their units during PCS moves in fiscal year 1974, 31,555 authorizations would be necessary. The fiscal year 1974 budget request is a step in a phased approach to full recognition of transient requirements. This becomes increasingly important as strength declines, since the transient account contributes directly to the readiness of remaining forces. It should be noted that until the transient account approaches the total requirement, it will not vary with the PCS move program. Offsetting this increase is an 11,129 decrease in military spaces because of reduced non-prior-service procurement and undergraduate pilot/navigator training. The net reduction is 2,257 spaces.

ADMINISTRATION AND ASSOCIATED ACTIVITIES

The 2,273 military decrease in this program is the result of several actions, including a bookkeeping transfer of 1,667 authorizations supporting the SHAPE staff and subordinate elements to support to other nations, the withdrawal of postal and courier authorizations support-

ing SEA activities, military to civilian conversions, and various other management actions.

SUPPORT TO OTHER NATIONS

In fiscal year 1974, programed actions will result in a net decrease of 769 military spaces in the support to other nations program. Included is a phasedown of manpower for SEA activities offset by a transfer of authorizations supporting the SHAPE staff and subordinate elements from administration and associated activities.

MANAGEMENT OF HEADQUARTERS MANPOWER

We are continuing to pursue the comprehensive effort initiated in fiscal year 1971 to attain maximum organizational and manpower efficiency in headquarters staffing. The scope, breadth, and importance of these broad initiatives generated significant congressional interest last year, and warrant expanded treatment in the interest of accuracy and full understanding.

Last year we provided considerable testimony relative to a major effort which was designed to accurately define and significantly reduce the manpower and dollar cost of headquarters activities. The objective of this effort was, first, to standardize and accurately define on a function-by-function basis those headquarters staff and direct headquarters support activities which are a part of the Air Force top management structure, and to concurrently realine operating functions to appropriate subordinate echelons in the field, thus permitting an accurate assessment of true headquarters costs. A second key objective was to reduce these costs through functional consolidation where feasible and economical, through streamlining and elimination of duplicative functions at successively lower headquarters echelons, and through the outright elimination of marginally productive activities at all echelons. Initial forecast of savings from these streamlining efforts was approximately 1,800 spaces in the fiscal year 1973 budget; however, follow-on actions have yielded additional reductions to the headquarters structure. The difference between actual strengths attained at end fiscal year 1971 and those projected for end fiscal year 1974 represents a decrease of 4,651 military and 2,250 civilians for a total of 6,901. Despite this high degree of success, thorough on-going assessment of the headquarters structure is continuing.

EFFECT OF 6,901 PERSONNEL REDUCTION IN HEADQUARTERS ACTIVITIES

Chairman McClellan. Will these 6,901 military and civilian personnel employed in headquarters activities actually be removed from the payroll, or will they be transferred elsewhere?

General Kern. Of the 6,901 manpower authorizations projected for reduction from the Air Force headquarters structure between the end fiscal year 1971 and end fiscal year 1974, 1,240 authorizations represent net realinements in and out of headquarters organizations resulting from the function-by-function standardization of headquarters definitions just described. In these cases, incumbents would normally be transferred with their authorizations. The remaining 5,661

positions were or will be eliminated from total Air Force strength. The incumbents of these positions would normally be transferred to fill existing or projected vacancies in other organizations. After exhausting all reassignment alternatives, civilian employees who could not be placed in other positions would be removed from the payroll.

Chairman McClellan. Proceed General Lewis.

General Lewis. These major headquarters efforts have also addressed the physical relocation of certain principal headquarters elements, now sited in major metropolitan areas, to existing active Air Force bases. Our continuing objective in making these moves is to reduce the costly support tail associated with metropolitan area headquarters locations by sharing existing support capabilities and facilities at nearby active air bases. A prime example of this type action is the move of headquarters 3d Air Force from the London area to Mildenhall Air Base, United Kingdom. In addition, the move of headquarters USAFE from Lindsey Air Station in Wiesbaden, Germany, to Ramstein Air Base is in line with this objective, but more important, it will improve the wartime command and control of NATO Central Region Tactical Air Forces.

Through these concerted efforts, we have been successful in implementing reductions in the headquarters management structure which far exceed those directed by the Appropriations Committees last year. Of particular note is that we have accomplished these actions in an orderly and systematic fashion without resorting to arbitrary across-the-board percentage reductions.

MILITARY/CIVILIAN CONVERSIONS

Regarding our military/civilian mix, we are in the process of converting 10,000 military positions to civilian by the end of fiscal year 1974. These conversions are in line with the Air Force policy of maintaining the optimum military/civilian mix through a process of continual evaluation of military requirements and adjustments to the mix as required. They are also in concert with the position expressed by the House Appropriations Committee in its report on the Department of Defense appropriation bill, 1973.

In summary, Mr. Chairman, we are continuing to strive to provide a manpower structure which will permit maximum efficiency in accomplishment of the Air Force mission. In this regard, we solicit your support for the manpower program we have presented here today.

MILITARY PERSONNEL BUDGET REQUEST

The fiscal year 1974 request for $7.26 billion is for the military end strength level of 666,357 officers, enlisted, and cadets previously discussed. This estimate is a decrease of $109,646,000 from the 1973 level. The reduction is a result of declining strength levels, and the follow-on savings caused by reductions in related promotions, accessions, and losses.

In achieving these reductions, and in accomplishing other necessary personnel actions, the U.S. Air Force personnel plan continues as the basic guide. It provides the means to project personnel requirements, develop policies, and determine the impact of management decisions on the force.

Through a series of established objectives for the total personnel force—officers, enlisted, civilians, and Reserves—the plan provides a blueprint for management of the structure for each of the personnel inventories from recruitment through retirement.

I might add here, sir, as a matter of interest: Of the entire budget for military personnel, 93 percent covers pay and allowances that are authorized. The other 7 percent covers the cost of moving people or permanent change of stations only.

CHANGE OF STATIONS

Senator YOUNG. Have you reduced the permanent change of stations for Air Force personnel, or do you still have a large-scale program left?

General LEWIS. Sir, I will talk about that as a portion of the major budget. While the numbers of our moves have gone down, the cost is slightly up over 1973. I will talk about the various reasons for that further on if that pleases the committee.

PERSONNEL PLAN

Chairman MCCLELLAN. Proceed.

General LEWIS. Our personnel plan provides for a series of specific career force sizes to support the various foreseeable ranges of military strengths. The plan establishes minimum procurement levels, annual career force entry requirements, stabilized promotion patterns and a cross-feed between the Active Force and the Air Reserve Forces.

Through the use of the plan it is our intention to provide and maintain credible, viable, and visible career progression for all Air Force personnel, which is essential if we are to attract and retain quality people in an all-volunteer environment. At the same time, we will have a cost-effective force which can react to any contingency.

Personnel management in this manner has resulted in a highly motivated force built around a core of combat-ready professionals who are capable of responding effectively to a broad range of contingencies.

CURRENT COMBAT READINESS OF AF PERSONNEL

Chairman MCCLELLAN. You speak of a "core of combat-ready professionals." To what degree would you say the Air Force today is combat ready from the standpoint of personnel?

General LEWIS. The Air Force is fully capable of performing its assigned mission as has been demonstrated during the past year by the deployment and continuing response under combat conditions in Southeast Asia. Our units currently have on board approximately 100 percent of their authorized strength. Requirements for skilled technicians and specialists are being met, although within the total of 334 skills, 8 have shortages. In three cases, these shortages currently warrant the distribution of available personnel to operational units on a priority basis so as to insure maximum combat mission capability. Where shortages exist within a particular skill, training is increased to offset the temporary shortages and restore the skill balance of the force.

Chairman MCCLELLAN. Proceed, General.

General LEWIS. This capability has been demonstrated during the last year by the deployment and continuing response under combat conditions in Vietnam through the cease-fire.

I will discuss details of each of the six personnel programs in the military personnel appropriation, concluding with special subjects of interest to this committee.

OFFICER PROGRAM

Before discussing some of the details pertaining to the officer program and the required funding, I would like to present in table V some specific facts about the officer force.

[Table V follows:]

Table V.—Officer force characteristics

	Percent
Captains or below	63
Under 30 years of age	49
Under 5 years of service	42
College graduates	88
Regular officers	53
Pilot/navigator	45
Women	4
Minorities	2.4
With dependents	81

STRENGTH AND FUNDING

General LEWIS. The fiscal year 1974 budget request is based on an officer strength of 112,893 which is a decrease of 2,229 from fiscal year 1973 .This is a 2-percent change from the previous year and a 20-percent reduction since fiscal year 1968.

We estimate $2,110,760,000 will be required for the fiscal year 1974 officer program. This decrease of $35,501,000 from the current year's funding level is primarily the result of reduced strengths.

The first breakout is in the officer program. Before discussing some of the details pertaining to the officer program and the required funding, I would like to specify some facts about the officer force as depicted in table V.

Sixty-three percent are captains or below; 49 percent are under 30 years of age; 42 percent are under 5 years of service; 88 percent are college graduates; 53 percent are regular officers; 43 percent are pilots the required funding, I would like to specify some facts about the minorities; 81 percent have dependents.

MINORITY PERSONNEL

Senator YOUNG. Has the number of minority personnel gone up percentagewise?

General LEWIS. That is up slightly over fiscal year 1973, sir. I believe the figure was 1.8 for fiscal year 1973.

ACCESSIONS

The long leadtime associated with the training of officers through the Air Force Academy and the Reserve Officer Training Corps (ROTC) must be considered when accessions are being revised to help meet strength reductions.

AF ACADEMY/COST OF TRAINING/COMPARISON WITH OTHER SERVICE ACADEMIES

Chairman McClellan. What is the estimated 1974 annual cost of training a cadet at the Air Force Academy? Will you provide a table for the record indicating the cost for fiscal years 1972, 1973, and 1974 and coordinate it with the other services so that their figures will also appear in the same tabulation?

General Lewis. The fiscal year 1974 annual cost to train a cadet at the Air Force Academy is estimated at $17,453. The table below displays costs comparison of the three service academies:

SERVICE COMPARISON

[Dollar amounts in thousands except as indicated by an asterisk (*)]

	Fiscal year—		
	1972	1973	1974
Army:			
Operation and maintenance, Army	$33,090	$35,342	$36,888
Military pay, Army	19,621	19,192	17,725
Pay and allowances of cadets	15,117	16,276	17,372
Total	67,828	70,810	71,985
Average number of cadets	4,005	3,958	4,091
Average cost per cadet*	16,936	17,890	17,596
Navy:			
Operation and maintenance, Navy	27,641	28,476	29,946
Military pay, Navy	14,181	15,215	15,746
Pay and allowances of midshipmen	15,667	17,441	18,012
Total	57,489	61,132	63,704
Average number of midshipmen	4,202	4,243	4,243
Average cost per midshipman*	13,681	14,407	15,013
Air Force:			
Operation and maintenance, Air Force	26,199	27,038	28,195
Military pay, Air Force	23,888	26,352	27,059
Pay and allowances of cadets	14,640	17,205	17,768
Total	64,727	70,595	73,022
Average number of cadets	3,915	4,184	4,184
Average cost per cadet*	16,533	16,873	17,453

SCHOOL OF MILITARY SCIENCES OFFICER (SMS–O)

Chairman McClellan. You may proceed, General.

General Lewis. The School of Military Sciences, Officer (SMS–O), formerly the Officer Training School, is our short leadtime source for obtaining Air Force officers and can be regulated in the short term. SMS–O has been reduced approximately 1,200 during the last 2 years. The 2,558 officer accessions currently programed from SMS–O for fiscal year 1974 are needed to meet flying training requirements for pilots and navigators, and to provide commissioning opportunities for women and the more capable young enlisted members.

COST/SCHOOL OF MILITARY SCIENCES

Chairman McClellan. What is the total cost of maintaining and operating the School of Military Sciences from which you estimate there will be 2,558 officer accessions in fiscal year 1974?

General Lewis. The cost of operating and maintaining the School of Military Sciences, Officer, is $4.8 million per year. This does not

include student pay costs which, of course, depend on student loads each year. For fiscal year 1974, the student pay costs are estimated at $4.3 million.

Chairman McClellan. You may proceed General.

General Lewis. Table VI shows the officer accessions by source for the 3-year period, fiscal year 1972-fiscal year 1974.

[Table VI follows:]

TABLE VI.—OFFICER ACCESSIONS FISCAL YEARS 1972-74

Source	Fiscal year— 1972 actual	1973 estimate	1974 estimate
Academy	763	850	825
AFROTC	4,040	4,092	4,269
SMS-O (formerly OTS)	3,779	3,274	2,558
Direct appointment	3,058	2,683	2,712
Total	11,640	10,899	10,364

LOSS MANAGEMENT

General Lewis. During the current fiscal year we are reducing the officer force by 6,349. To achieve the planned end strength we are relaxing active duty service commitment policies and approving voluntary early releases. These actions, while successful, still required us to invoke some involuntary actions, such as the separation of flying training eliminees, early separation of some officers scheduled for release in first half of fiscal year 1974, and the retirement of reserve officers with retirement eligibility.

INVOLUNTARY LOSSES/BREACH OF CONTRACT

Chairman McClellan. In regard to the involuntary actions you refer to on page 24, can any of these be considered a breach of contract?

General Lewis. None of the involuntary actions were considered a breach of contract since officers affected were not guaranteed specified tenure. Those affected were noncareer officers whose normal separation dates were accelerated, career Reserve officers who were already in the retirement zone, and flight training eliminees who were procured specifically against rated officer requirements. I wish to point out that although the actions taken were involuntary, provision was made for individual reclama where bonafide humanitarian reasons justified exemption.

Chairman McClellan. You may proceed, General.

General Lewis. The end fiscal year 1974 strength will be achieved by continuing the voluntary release programs, reducing accessions and by implementing involuntary separations when required. Any end strength reductions beyond those now programed will have to be met through an involuntary reduction in force—RIF. A summary of officer loss management actions for fiscal years 1972 through 1974 is provided in table VII.

[Table VII follows:]

TABLE VII.—OFFICER LOSSES, FISCAL YEARS 1972-74

	Fiscal year—		
	1972 actual	1973 estimate	1974 estimate
End of obligation	4,247	3,482	3,402
Early release (voluntary)	2,035	3,392	[1] 200
Involuntary reduction in force		1,442	1,000
Career separation	464	618	956
Retirements (20 years plus)	4,617	4,381	3,129
Attrition	1,007	1,050	800
Medical service officer	2,961	2,563	2,781
Promotion passovers/other	564	320	325
Total	15,895	17,248	12,593

[1] The reduced end strengths for fiscal years 1972 and 1973 were reached primarily through voluntary early release programs. These actions have depleted the resource eligible for early release in fiscal year 1974. Consequently, it will be necessary to resort to involuntary actions to meet the reduced end strength as indicated in the line below.

RETIREMENTS

General LEWIS. The budget is based on an estimate of 3,129 officer retirements for fiscal year 1974. Although some of these are mandatory as a result of statutes and policy, the greater portion are voluntary. The task of forecasting the numbers of these voluntary retirements is accomplished by a computer simulation program using historical loss patterns adjusted by current experience. The estimates derived from this computer technique have proven to be 98 percent accurate for the first 6 months of the current year [2,405 predicted; 2,453 actual].

Table VII shows the officer losses for fiscal year 1974. The total of 12,593 is more than the accessions that we presented in the other table by the amount of 2,000-plus reductions that I talked about that the officer force will be reduced. The end-of-obligations will be 3,402; the retirements, 3,129; and departure from service of medical service officers, 2,781.

MEDICAL PERSONNEL SHORTAGE

Senator YOUNG. Do you anticipate a shortage of medical personnel?

General LEWIS. We will have a shortage by current projections in the medical personnel, doctor positions, in 1974.

Senator YOUNG. Can your objection be met without the use of selective service?

General LEWIS. Our plan, of course, sir, under the legislation that has already been presented to the Congress, is to pay additional bonuses and so forth, and certainly we in the Air Force are working very hard at the recruiting end through our scholarship programs to meet our deficits. I think that our current projections still show that we will have a tough time in this intial portion of an all-volunteer environment.

Senator YOUNG. Do you have more competition in the rural areas?

General LEWIS. Yes, sir; I think our studies show a shortage of physicians in all segments of the United States.

RETIREMENTS

As indicated in table VIII, actual officer retirements are showing a downward trend. This projection is a 28-percent decrease from fiscal

year 1973 and is the lowest since 1962. This trend reflects the exit of the peak entries during World War II and the Korean conflict.

[Table VIII follows:]

Table VIII.—Officer retirements

Fiscal year:	
1962	2,626
1972	4,617
1973	4,381
1974 (projected)	3,129

OFFICER PROMOTIONS

General LEWIS. Providing a viable promotion program for officers continues to be a major objective in the management of the officer force. During fiscal year 1973 the Congress approved an extension of the temporary grade authority for the Air Force until September 1974. This extension permits us to continue the same field grade promotion opportunity and phase points through fiscal year 1974 as provided in previous years, keeping the Air Force comparable to the other services. Table IX portrays promotion opportunity and phase points for Air Force field grade officers.

[Table IX follows:]

TABLE IX.—PROMOTION OPPORTUNITY/PHASE POINTS

Rank	Percent opportunity	Phase points (years)
Colonel	50	21
Lieutenant colonel	75	17
Major	90	11

General LEWIS. The Department of Defense will present to Congress, in the very near future, a proposal for a defense officer personnel management system (DOPMS). The proposal, if adopted, will provide permanent grade authorizations for the Air Force. We are hopeful that the proposed legislation will be enacted before expiration of current temporary authority September 1974. Otherwise temporary grade authority will again be necessary in order for the Air Force to continue promotions to maintain grade strength requirements. Table X depicts a breakout of Air Force officer grades since 1964. The total number of field grade officers has been reduced by 20 percent since 1968, as indicated in the table.

[Table X follows:]

TABLE X.—OFFICER GRADE STRUCTURE, BUDGET CHARGEABLE END STRENGTHS

Grades	Fiscal year—				Net change	
	1964	1968	1973	1974	1968–74	1973–74
General	426	440	405	402	−38	−3
Colonel	5,352	6,611	6,128	6,052	−559	−76
Lieutenant colonel	14,537	16,920	14,336	14,013	−2,907	−323
Major	23,471	29,920	22,152	21,763	−8,157	−389
Captain	50,694	47,725	44,708	40,635	−7,090	+4,073
1st lieutenant	21,737	15,382	15,764	14,000	−1,382	−1,764
2d lieutenant	14,401	21,235	11,509	15,958	−5,277	[1] +4,449
Warrant	2,771	1,367	120	70	−1,297	−50
Total	133,389	139,600	115,122	112,893	26,707	−2,229

[1] Increase in number of 2d lieutenants caused by changing the promotion phase point to 1st lieutenant from 18 to 24 months, effective July 1, 1973.

COMPARISON OF OFFICER GRADE STRUCTURE

Senator YOUNG. How does the present officer grade structure compare with the proposed defense officer personnel management officer grade structure?

General LEWIS. As you know, the distribution of grades varies with the size of the force. However, at our programed strength for fiscal year 1974, the defense officer personnel management study grades would be slightly lower at colonel and lieutenant colonel and slightly higher at major than our current authorizations provide. Overall, there will be a small reduction in total field grades with a slightly higher percentage in the grade of major and slightly lower percentage for colonels.

RATED REQUIREMENTS AND INVENTORIES

Chairman MCCLELLAN. You may proceed, General.

General LEWIS. During the next 5 years the Air Force will lose 50 percent of today's pilot and navigator inventory. These high losses are due to young officers completing their active duty service commitments and the retirement of veterans of World War II and the Korean conflict. In fiscal year 1974 alone, we estimate that 4,100 pilots and 1,300 navigators will leave the Air Force. Table XI depicts the historical and projected gains and losses to the pilot and navigator force.

[Table XI follows:]

TABLE XI.—PILOT/NAVIGATOR INPUTS AND LOSSES, FISCAL YEARS 1968–74

	Fiscal year—						
	1968	1969	1970	1971	1972	1973	1974
Pilots:							
Production	3,092	3,216	3,521	3,895	4,032	3,100	2,715
Losses	3,996	3,978	5,537	3,982	3,398	3,722	4,109
Navigators:							
Production	805	818	956	1,036	1,324	1,300	1,300
Losses	1,339	1,470	2,079	1,535	1,309	1,398	1,320

General LEWIS. As you will note, the losses from the rated inventory have exceeded trained accessions practically every year. The downward trend in force structure changes and reduced requirements have enabled us to absorb this net loss to the flying force and still carry out the mission.

Table XII compares the pilot/navigator inventory and requirements for fiscal years 1972 through 1974.

[Table XII follows:]

TABLE XII.—RATED INVENTORY VERSUS REQUIREMENTS, FISCAL YEARS 1972–74

	Fiscal year—		
	1972	1973	1974
Pilots:			
Requirements	32,341	32,119	29,488
Inventory	35,194	33,284	32,173
Difference	+2,853	+1,165	+2,685
Navigators:			
Requirements	14,496	14,791	14,127
Inventory	14,235	13,763	13,732
Difference	−261	−1,028	−395

General LEWIS. The apparent pilot overages are the result of unprogramed reductions in crew ratios and an accelerated program to reduce forces now that the activity level in Southeast Asia has decreased. The pilot overage will be reduced through normal attrition and reductions in pilot training rate in fiscal years 1975 through 1979. During the interim, we plan to provide our able young pilots increased opportunities for career broadening assignments in support areas.

RETENTION

As indicated above, the Air Force loses a large number of officers at the end of their active duty service commitment. Currently we are retaining approximately 47 percent of line officers to meet career force requirements. Specifically, we have been successful in retaining the number of nonrated officers needed to enter the career force. We have not been successful in retaining the number of navigators needed and it was necessary to increase training production to meet manning requirements. We are hopeful that this added resource of young navigators will enable us to meet career force requirements. Conversely, our pilot production rate has decreased and we will need to improve the pilot retention rate during the next few years in order to meet career force requirements.

PILOT RETENTION

Senator YOUNG. Are you having a problem retaining pilots now?

General LEWIS. The retention of flying officers has been on a downward trend since 1966. We have been able to live with this trend up to this point due to a decrease in aircraft inventory, such as combat losses, minimal aircraft procurement, transfer of assets to the Guard and Reserve; and, reduced crew ratios. With the aircraft inventory in a reasonably stable condition and possibly going up with the introduction of new weapons systems, our forecasts show that our supply of pilots will not meet the demand. Therefore, in order to satisfy our long-range requirements we must improve our retention rate for flying officers. I will provide additional details for the record.

[The information follows:]

[In percent]

	Flying officer retention rates						
	1966	1967	1968	1969	1970	1971	1972
Pilots	74	68	70	61	57	53	55
Navigators	72	65	56	53	51	49	50

RECRUIT PROCUREMENT

Senator YOUNG. Are you getting any recruits?

General LEWIS. Yes, sir; we are able to maintain, through our ROTC program and through the School for Military Science for Officers, those candidates who go to pilot school, and we are able to meet our force goal satisfactorily.

Senator YOUNG. Are Air Force pilots going to the commercial airlines, as was the case a few years ago?

General LEWIS. Yes, sir. I think I can answer that by saying this is somewhat cyclical. The airlines go through a hiring process for a period, you might say, and we will have people who are losses to the force and go to work with the airlines. The airlines will reach a peak in manning which causes reduced interest in Air Force pilots. Another low cycle will come up generating increased Air Force pilot interest. We do lose them to the airlines, I would say, almost on a continuous basis. It is just more when they have a peak cycle for procurement. It is not an urgent loss.

Senator YOUNG. It would be impossible for you to compete in salaries for the pilots of the 747's?

General LEWIS. Yes, sir. We could not compete on a salary basis. But we are able to maintain an interest in flying up to this point. We are optimistic that the youth of America will continue to want to fly and learn to fly. Of course, that is what we do—we bring in the youth and teach them to fly. So far, so good, in that area.

PILOT RETENTION RATE/MEETING REQUIREMENTS

Chairman MCCLELLAN. Do you anticipate the capability to improve the pilot retention rate in order to meet your requirements?

General LEWIS. The answer to this question depends on congressional actions on the revised flight pay proposal. As is noted in the OSD proposed flight pay legislation, flight pay is viewed by pilots at all levels as a career incentive to undertake a hazardous career. For that reason, our success in not only increasing pilot retention but in maintaining it at current levels rests with the passage of the new proposal. In this regard, we have already reduced our undergraduate pilot training by 100 in anticipation of the increased retention that we expect from the new proposal. If it is not passed, we will be forced to ask not only for a reinstatement of that 100 pilot production, but additional increases to offset the higher losses we expect without its passage. I would like to point out that there is also the possibility that the continuation bonus provisions of the Uniformed Services Special Pay Act may help to offset this problem. Due to our lack of experience in measuring bonus impacts on officer retention, we strongly prefer the career motivation incentive provided by the revised flight pay schedule. Without it, we seriously doubt our ability to meet our retention requirements.

HEALTH PROFESSIONALS

Chairman MCCLELLAN. You may proceed, general.

General LEWIS. A major problem is attracting and retaining sufficient health professionals in an all-volunteer environment. Serious shortages of physicians and dentists are expected if certain actions are not taken to make military service more attractive. For example, a special bonus for commissioned health professionals and a 5-year facility modernization program are needed and require legislative action. In this regard, the passage of DOD proposal 93–03, Uniformed Services Special Pay Act, which has been submitted to Congress, would assist us in these endeavors. We request your support of the proposal.

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NURSES AND MEDICAL TECHNICIANS

Other actions must be developed by the services. Accordingly, the Air Force has implemented several programs to train nurses and enlisted medical technicians in paramedical tasks presently performed by physicians and dentists. It will take 5–6 years to train the number needed. We are also increasing the number of clerical personnel to relieve commissioned health professionals of administrative duties, and developing a medical recruiting capability in the Air Force recruiting service. Along this line, the Air Force has implemented the Armed Forces health professions scholarship program which will provide 1,575 scholarships to students of various health professions. In addition, we have expanded our in-house in-resident programs. Successful implementation of these programs should help toward achievement of our recruitment objectives.

AIR GUARD RECRUITING

Senator YOUNG. Will the Air Guard have difficulty recruiting the programed 10,000 recruits for fiscal year 1974 in the all-volunteer environment?

General GREENLIEF. Sir, the ANG does not anticipate problems in achieving its nonprior service program provided adequate incentives and continued recruiting support are furnished. Incentives such as bonuses, education assistance, and shorter initial enlistments are prime examples. In addition, full-time recruiters, recruiter training, and advertising are necessary recruiter support.

REASON FOR REVISION IN FISCAL YEAR 1973 ANG RECRUITING ESTIMATE

Senator YOUNG. The fiscal year 1973 recruiting estimate was revised from 9,450 to 7,300. Was this revision because of the lack of recruits or funds or both?

General GREENLIEF. Sir, the reduction of recruits from 9,450 to 7,300 can be attributed to a lack of recruits available due to the zero draft condition, and to the absence of an incentive program as previously discussed.

ENLISTED PROGRAMS

Chairman MCCLELLAN. Proceed, General.

General LEWIS. Before discussing enlisted programs and funding, I would like to present some characteristics of the enlisted force as shown in table XIII.

[Table XIII follows:]

Table XIII.—Enlisted force characteristics

	Percent
Sergeants or below (E–4)	53
Under 30 years of age	69
Under 21 years of age	30
With dependents	63
High school graduates	86
College graduates	3
Women	2
Minorities	14

ENLISTED COLLEGE GRADUATES

Senator YOUNG. That seems to be a rather low percentage of college graduates—only 3 percent.

General LEWIS. That is correct, sir. I think that is really up over previous years. As a general rule, you will not find many of the enlisted force who have college degrees. Only in recent years has this figure climbed to be that high.

Senator YOUNG. Of course, this covers all branches of the service?

General LEWIS. Yes, sir, it covers the entire force. Many young people come aboard after completion of high school, sir, and continue their education and become eligible, of course, for veterans' benefits. Then they go back into civilian life and do complete their college. This is not to say that these numbers of people would not obtain a college degree either while in the service on an off-time duty basis or after they leave the service and go back to college.

Senator YOUNG. Is a college degree a requirement for pilots?

General LEWIS. Yes, sir. We require all of the officer force to have a degree prior to being commissioned, and all the pilots, of course, and flying officers are commissioned. Therefore, all of them do have a degree.

STRENGTHS AND FUNDING

As we discussed in the manpower portion, the fiscal year 1974 enlisted end strength of 549,047 is a decrease of 23,748 from the fiscal year 1973 strength of 572,795. This reflects a continuation of the reduction trend which has prevailed since 1968 when the strength was 761,507.

A total of $4,296,009,000 is required for the fiscal year 1974 enlisted program. This is a decrease of $114,757,000 from fiscal year 1973, due primarily to reduced strengths.

LOSS MANAGEMENT

The Congress was advised last year that the Air Force did not plan an early release of enlisted personnel during fiscal year 1973. It became necessary, however, to voluntarily release several thousand enlisted personnel prior to their normal separation dates. This was done as a part of the overall action to reduce the fiscal year 1973 military personnel appropriation by $125 million. Involuntary actions have not been required in fiscal year 1973. The enlisted strengths projected for fiscal year 1974 can be attained through accession management without resorting to either voluntary or involuntary early release programs. Accession management and recruiting will be discussed in more detail later.

PROMOTIONS

In the area of enlisted promotions, as we stated to the committee last year, the long-range plan calls for 65.2 percent of the force to be in the top six grades. The peak top six grade structure, developed from high input and retention during and after the Korean conflict, is being attrited through retirement. Starting from a high of 73.15 percent in 1972, we will gradually phase down to the 65.2 percent level in fiscal year 1977. During fiscal year 1973, we made substantial

progress toward that goal—lowering the percentage from 73.1 percent at the end of fiscal year 1972 to 70.8 percent by the end of fiscal year 1973. The budget before you includes a further reduction to 69.9 percent. A gradual reduction to the projected 65.2 percent will permit the Air Force to continue to furnish reasonable promotion opportunity during the transition period. From that point on, stability in the promotion program should develop, as is provided for in the personnel plan.

As the top six grade structure is being reduced and the experienced force is attriting, the enlisted force is becoming younger. This trend is an integral part of the plan and will reduce costs. These trends are portrayed in table XIV.

[Table XIV follows:]

TABLE XIV.—ENLISTED GRADE STRUCTURE/TOP 6 PROMOTIONS, FISCAL YEARS 1970–74

Fiscal year	Total force	Number in grades E–1, E–2, E–3,	Number in top six	Percent top 6	Top 6 promotions
1970 (actual)	657, 402	179, 551	477, 851	72. 69	173, 140
1971 (actual)	624, 980	170, 216	454, 764	72. 77	165, 773
1972 (actual)	599, 774	161, 058	438, 716	73. 15	137, 889
1973 (program)	572, 795	166, 970	405, 825	70. 85	131, 811
1974 (program)	549, 047	165, 264	383, 783	69. 90	110, 667

General Lewis. Further discussion of this subject, in more detail, will be provided at a later point in this testimony.

DECREASE IN "TOP SIX"

Chairman McClellan. The figure of 69.9 percent compared with 70.8 percent is only nine-tenths of 1 percent.

General Lewis. Yes, sir. The plan was developed from many studies, and will provide equitable promotion opportunity, for the grades at 65 percent. We got above that. That was occasioned by retention of large numbers of people who came in all at the same time during the Korean conflict. So we have a hump there. As we go forward to 1977, this will all come back to 65 percent.

Chairman McClellan. The high was 73.15 percent?

General Lewis. Yes, sir.

Chairman McClellan. You hope to get it down to 69.9 percent?

General Lewis. Yes, sir. We will take it right down to 65 percent.

Chairman McClellan. You are going to lower it to 65 percent?

General Lewis. Yes, sir, we have to keep it in a phased and gradual program in order to keep a viable promotion program, otherwise there would be a freeze on the people at the lower levels.

Senator Young. What procedure does an enlisted man have to go through to become an officer?

General Lewis. Sir, we have an enlisted commissioning program that is based on the number of 1,000 per year. These are people who want to be officers. They can go to school and complete their education so that they qualify with a degree. As a matter of fact, most of the people or a lot of the people coming into our School of Military Science for Officers are those individuals who have so elected and completed their education and they want to be pilots and they go through school and get commissions.

Senator Young. Which schools are you speaking of?

General LEWIS. The school that they would go through, sir, to complete their college would be a civilian institution. The major colleges are eligible for many to attend if they decide to take this program. They would go to the civilian college and complete their degrees.

Senator YOUNG. The Air Force pays the cost?

General LEWIS. Yes, sir. About 1,000 a year are programed. This year, 1974, we will have about 700 to complete that program.

Senator YOUNG. Is that based on competitive examinations?

General LEWIS. Yes, sir. The individual makes application. He competes with others who make application and is selected for this training. That is our channel whereby an NCO or an airman can compete for a commission.

ACCESSIONS

Chairman MCCLELLAN. Proceed.

General LEWIS. Enlisted accessions for fiscal year 1974 are programed to be significantly below the fiscal year 1973 level. Plans call for recruitment of 73,361 non-prior-service men and women compared to 96,529 in fiscal year 1973. We also plan to enlist 9,550 former servicemen, and 2,607 other individuals who will enter officer commissioning programs.

Accessions are a function of losses and strength ceilings as shown in table XV.

[Table XV follows:]

Table XV.—Programed accessions

Fiscal year 1973		*Fiscal year 1974*	
Beginning strength	599, 774	Beginning strength	572, 795
Minus losses	136, 865	Minus losses	109, 266
Remainder	462, 909	Remainder	463, 529
End strength	572, 795	End strength	549, 047
Minus remainder	462, 909	Minus remainder	463, 529
Accessions	109, 886	Accessions	85, 518

General LEWIS. It is important to note that the fiscal year 1974 nonprior service accession program of 73,361 represents the minimum number required to sustain career entry requirements in 1978, the year in which fiscal year 1974 enlistees will become eligible for career status. If the end strength for 549,047 enlisted personnel in fiscal year 1974 is reduced, losses will be increased through voluntary early release programs.

The recruitment of the required number of quality men and women in an all-volunteer environment is a challenge we are approaching with cautious optimism: The recruiting program will be discussed in more detail later in my statement.

TRAINING

Enlistees undergo 6 weeks of recruit training at the Basic Military Training Center, at Lackland AFB, Tex. This training is designed to meet military requirements but also includes instruction on human relations, drug education, career development, customs and courtesies of the Air Force, and military law. Each trainee is provided a personal counseling session with a professionally trained counselor. The program stresses self-discipline, respect for authority,

teamwork, and the trainee's responsibilities and obligations to the Air Force. His rights and freedoms are also emphasized. We believe we are providing these young people with a fundamental groundwork for success not only in the Air Force, but also to better prepare them as citizens.

The role of the enlisted force is technically oriented and a considerable part of their first year of service is often spent in specialized training after graduation from recruit training. Approximately 95 percent of the recruits go on from Lackland AFB to technical training centers to learn the specific skills needed to perform jobs at the semiskilled level. On-the-job training at their permanent units of assignment is then employed to fully qualify them in their specialty.

Training loads in recruit and specialized training will average about 44,000.

EXPENSIVE TRAINING PROGRAMS

Chairman McClellan. Would you supply for the record a few examples of the more expensive training programs, indicating the cost, length of training period, and numbers involved?

General Lewis. Yes, sir.

[The information follows:]

The following information on airman technical training courses is provided. Cost data is the estimated cost per graduate for FY 1973. It includes the direct cost of operating the schools as well as all associated support costs including instructor and student pay.

Course title/airman courses	Fiscal year 1973 cost per graduate	Course length (weeks)	Fiscal year 1973 programed graduates
Physician assistant	20,800	49	87
Avionics aerospace ground equipment specialist	19,100	32	47
Electronic computer systems repairman (BUIC-51A)	15,100	40	105
Electronic switching systems repairman	14,600	38	95
Precision measuring equipment specialist	11,600	32	686

EVALUATION PROGRAM

Chairman McClellan. You may proceed, General.

General Lewis. With the myriad tasks which must be taught in 334 different specialties, our training program is a formidable enterprise. To improve the quality and to generate savings in a program of this magnitude, we have a continuing program to evaluate each training course to insure that only those skills required on the job are taught. The program calls for the application of systems logic to curriculum design. By this process of instructional system development (ISD), training and education programs focus on the skill and knowledge required for job performance, using the most cost-effective method for achievement. The results are increased efficiency with subsequent savings in time, people, and money. The instructional system development process is being applied to all newly developed personnel training programs and selectively to existing training courses with the major effort focusing on high-cost technical and flying training programs.

Thus far about 90 specialized training courses and several flying training programs, including navigator-bombardier training and A–7D crew training have been restructured through the ISD process, resulting in significant cost savings. Computer-assisted and automated training systems are also under development and promise significant reductions in average training times.

RETENTION

Retention of the personnel necessary to meet career force requirements is a major objective of the Air Force personnel plan. Efforts are keyed toward keeping the right people to give a balanced structure within each individual specialty.

By attaining a flow of the right numbers of first-term enlisted personnel into the career force each year, the need for an experienced enlisted supervisory force in future years is assured and reasonable career progression is provided as these enlisted personnel progress into increasingly responsible jobs and supervisory positions. Success in attaining this flow provides each individual enlisted member with a clear roadmap to the career goals he or she can achieve. This visibility is a key factor in the retention of personnel as well as the enlistment of recruits in a volunteer environment.

Computer models provide the capability to determine the number of enlisted personnel who must enter the career force at the 5-year point of service. At current and future projected strength levels, the requirement for enlisted personnel to enter the career force is 20,100 in fiscal year 1973 and will be 19,300 in fiscal year 1974. We are meeting overall objectives in the current fiscal year and anticipate similar success in 1974.

We rely heavily upon career counselors and senior noncommissioned officers on each Air Force installation to achieve these goals. Unit commanders are also active in encouraging the right first-term enlisted personnel whose performance and conduct meet Air Force standards to become members of the career force. The personnel retention efforts of supervisors and commanders are complemented by monetary retention incentives which have been successfully applied. These include the variable reenlistment bonus (VRB), shortage specialty proficiency pay, superior performance proficiency pay, and special duty assignment proficiency pay.

Chairman McClellan. May an enlisted man receive more than one of the incentives indicated at the bottom of page 41?

General Lewis. A member may not be paid more than one of the three types of proficiency pay: (1) shortage specialty proficiency pay; (2) superior performance proficiency pay; (3) special duty assignment proficiency pay. However, a very small percent of airmen could qualify for one of the three types of proficiency pay and also for the variable reenlistment bonus (VRB). The maximum amount of incentive pay an enlisted member might be paid in a single year is $10,600. This amount includes payment of a regular reenlistment bonus, variable reenlistment bonus, and proficiency pay. Entitlement to this maximum amount could accrue to an enlisted member only once during his entire Air Force career. In fiscal year 1973, the average regular reenlistment bonus paid to all airmen who reenlisted for the first time was $1,632. The average variable reenlistment bonus payment was $3,839,

but was paid to only 38 percent of these men. A total of 3,679 airmen received special duty assignment proficiency pay of $50 per month during fiscal year 1973, of whom only a very few also received a reenlistment bonus.

Chairman McClellan. You may proceed, General.

General Lewis. These monetary incentives have been extremely helpful in meeting retention objectives and the VRB has become the principal vehicle to achieve the required number of reenlistments in critical skills. In those skills designated for VRB, we have been getting approximately one-third more first-term reenlistments. Special duty assignment proficiency pay has also been particularly useful. This pay is for recruiters and military training instructors who are highly motivated volunteers and who create the first impression that enlistees form of the Air Force.

We are confident that efforts to make Air Force life more attractive, combined with intensified retention efforts and the required monetary incentives, will result in achievement of retention goals.

RETIREMENTS

The budget provides for an estimated 23,348 enlisted men and women to retire in fiscal year 1974. This is 2,572 fewer than fiscal year 1973 but still much higher than we experienced as recently as 3 years ago. Because most retirements are voluntary, they are affected by changes in economic conditions, promotion opportunities, and military pay rates. Computer modeling routines similar to those described for the officer force have been developed and forecasting accuracy has improved as reflected in Table XVI.

[Table XVI follows:]

TABLE XVI.—ENLISTED RETIREMENTS, FISCAL YEARS 1970–1974

	1970	1971	1972	1973	1974
Estimate	16,130	19,692	26,727	25,920	23,348
Actual	19,096	24,155	26,489	[1] 14,088	
Difference	+2,966	+4,463	−238		

[1] Actual retirements through Dec. 31, 1972, estimate for same period was 14,159.

KOREAN WAR VETERANS

General Lewis. The Air Force has on board a large number of enlisted personnel who were recruited and trained during the Korean war. These men and women are now entering the retirement eligibility zone in peak numbers. Retirements will remain high through fiscal year 1976 and will then decrease and level off. Table VII shows the numbers of enlisted personnel who will be eligible to retire during fiscal year 1974 through fiscal year 1978. The large number of retirements expected during the next few years will greatly facilitate movement toward a reduced top six-grade structure as previously discussed.

Chairman McClellan. What percentage of those eligible to retire do retire?

General Lewis. About a third, sir.

We estimate, for 1974, 23,348 retirements, and eligibility for 1974 will be 60,077. That is roughly a third.

TABLE XVII.—*Forecast retirement eligible enlisted personnel, fiscal years 1974–78*

Fiscal year:	
1974	60,077
1975	64,763
1976	51,429
1977	41,205
1978	32,953

CADET PROGRAM

General LEWIS. I will now discuss the cadet program.

The final category of pay and allowances I will discuss is that of the Air Force Academy cadets. The cadet strength objective has been 4,417 since fiscal year 1971. The funds requested for fiscal year 1974 total $17,768,000. This is an increase of $563,000 over fiscal year 1973. The reason for the increase is a full year's effect of the January 1, 1973, pay raise. In July 1973, the Air Force Academy will enter about 1,500 cadets for the class of 1977. This will be the approximate size of future classes. From these entries we forecast about 900 graduates per year. The pool of nominees for cadet selection continues to be high.

QUALITY OF ENTERING CADETS

Chairman MCCLELLAN. Has there been any marked change in the quality of entering cadets in the past few years?

General LEWIS. Although statistics for the class entering the U.S. Air Force Academy on July 2, 1973, are not complete; preliminary medical, academic, and leadership data indicate that the quality of this class is comparable to past Academy classes. The Air Force is especially pleased that a record number of congressional nominations (7,178) were made for this class compared to 6,415 nominations for the class of 1976. I will provide for the record a comparison of specific characteristics of the classes of 1974, 1975, and 1976.

[The information follows:]

Characteristics	Class		
	1974	1975	1976
Percent pilot qualified	65.8	67.4	70.6
Percent navigator qualified	13.1	15.0	10.6
College board aptitude (mean) scores:			
Verbal aptitude	583	578	576
Math aptitude	660	658	662
Percent who graduated in top 25 of high school class	86.4	86.6	87.8
Percent who were class president	14.0	11.0	12.0
Percent who lettered in high school:			
Football	36.0	32.0	36.0
Basketball	18.0	17.0	15.0
Baseball	14.0	12.0	13.0
Track	27.0	29.0	30.0

General LEWIS. The class that entered in July 1972 was selected from approximately 7,500 nominees, and selections for the class entering July 1973 were made from aproximately 8,000 nominees. We view this increase as a healthy indicator in an all volunteer environment.

Chairman McClellan. You have an input of about 1,500 cadets?

General Lewis. Yes, sir.

Chairman McClellan. And only about 900 finish and become officers?

General Lewis. Yes, sir.

Chairman McClellan. That is about 60 or 65 percent.

General Lewis. The average attrition rate is 35 percent. Of course, sir, that varies by class and by year. We have the class of 1974 at the present time, who will graduate next year; that is around 40 percent.

Chairman McClellan. Only 60 percent will graduate?

General Lewis. Yes, sir.

Chairman McClellan. That is rather rigid, is it not?

General Lewis. Yes, sir. It is a tough school designed to produce quality leadership for the future. I am pleased to tell you that our young men accept it and they do well in that environment, those that complete it.

Chairman McClellan. Off the record for a moment.

[Discussion off the record.]

Chairman McClellan. On the record.

MILITARY ACADEMIES' ATTRITION AND RETENTION DATA

Chairman McClellan. The subcommittee has requested certain information in connection with the attrition and retention of cadets at the academies of the three services, and the ROTC scholarship and nonscholarship programs. The data is also broken down into the precommissioning phase and the postcommissioning phase. The information will appear in the record at this point.

[The information follows:]

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

July 11, 1973

MEMORANDUM FOR MISS MC MULLAN

SUBJECT: Service Academies

Pursuant to your request, attached are two copies of the following information:

Attrition and retention for ROTC and academy cadets in school.

Attrition and retention for ROTC graduates and academy graduates after they have left school.

The average length of time served by ROTC and academy graduates.

As will be noted, some of the information for prior years was not available. The information attached is broken down into two phases -- a precommissioning phase and a post-commissioning phase. The precommissioning phase contains attrition and retention information for the Service Academies, ROTC scholarship and ROTC non-scholarship students. Air Force data concerning non-scholarship students is included but could not be separated from the scholarship students and does not include two-year program students. Postcommissioning information is included for commissionees of the Service Academies, but only partial data was available for the ROTC scholarship commissionees. This is partially due to the fact that Army and Air Force did not activate their scholarship programs until the class of 1967; additionally, Air Force has been unable to separate scholarship from non-scholarship commissionees.

We regret the delay in furnishing this information which was caused by our efforts to obtain the best data available.

D. G. Sinclair

ATTRITION/RETENTION DATA
PRECOMMISSIONING PHASE

SERVICE ACADEMIES

(Percentages)

Class	USMA		USNA		USAFA	
	Attrition	Retention	Attrition	Retention	Attrition	Retention
1960	31.5	68.5	28.0	72.0	26.5	73.5
1961	31.8	68.2	32.0	68.0	29.1	71.9
1962	28.8	71.2	28.0	72.0	34.9	65.1
1963	33.9	66.1	29.0	71.0	31.4	68.6
1964	31.8	68.2	29.0	71.0	36.0	64.0
1965	32.1	67.9	35.0	65.0	35.5	64.5
1966	30.6	69.4	34.0	66.0	38.4	61.6
1967	29.5	70.5	31.0	69.0	38.8	61.2
1968	29.2	70.8	38.0	62.0	39.4	60.6
1969	29.7	70.3	32.0	68.0	35.4	64.6
1970	27.6	72.4	37.0	63.0	23.0	77.0
1971	31.8	68.2	37.0	63.0	33.3	66.7
1972	34.7	65.3	34.0	66.0	39.5	60.5
1973	34.9	65.1	36.0	64.0	39.9	60.1

Attrition includes all sources (voluntary and involuntary).
Retention means commissioned.

ROTC SCHOLARSHIP*

(Percentages)

Class	ARMY ROTC		NAVY ROTC		AIR FORCE ROTC	
	Attrition	Retention	Attrition	Retention	Attrition	Retention
1960			46.7	53.3		
1961			51.1	48.9		
1962			46.4	53.6		
1963			45.0	55.0		
1964			29.6	60.4		
1965			44.6	55.4		
1966			50.4	49.6		
1967			35.8	64.2	35.9	64.0
1968			41.8	58.2	28.6	71.4
1969	16.1	83.9	42.6	57.4	15.2	84.8
1970	19.1	80.9	45.0	55.0	12.9	87.1
1971	26.6	73.4	45.3	54.7	10.7	79.3
1972	26.8	73.2	51.0	49.0	17.5	72.5

* Scholarships of 2-4 years' duration included.

Attrition includes all sources (voluntary and involuntary).
Retention means commissioned.

ROTC NON-SCHOLARSHIP

(Percentages)

Class	ARMY ROTC		NAVY ROTC		AIR FORCE ROTC	
	Attrition	Retention	Attrition	Retention	Attrition	Retention
1960	82.4	17.6	54.3	45.7	93.6	6.3
1961	83.1	16.9	65.8	34.2	93.9	6.1
1962	76.1	23.9	74.3	25.7	94.0	6.0
1963	84.5	15.5	70.8	29.2	94.4	5.6
1964	85.7	14.3	77.0	23.0	93.8	6.2
1965	88.1	11.9	80.4	19.6	92.8	7.2
1966	86.9	13.1	80.3	19.7	91.8	8.2
1967	84.5	15.5	86.5	13.5	90.0	10.0 1/
1968	79.3	20.7	76.0	24.0	91.3	8.7 1/
1969	82.1	17.9	68.1	31.9	90.3	9.7 1/
1970	82.9	17.1	70.5	29.5	89.9	10.1 1/
1971	85.1	14.9	76.4	23.6	87.5	12.5 1/
1972	88.9	11.1	82.2	17.8	87.7	12.3 1/

1/ AFROTC includes both scholarship and non-scholarship data and does not include 2-year program students.

Attrition includes all sources (voluntary and involuntary).
Retention means commissioned.

ATTRITION/RETENTION/YEARS SERVED
POSTCOMMISSIONING PHASE

COMMISSIONEES OF SERVICE ACADEMIES

		ARMY			NAVY			AIR FORCE			MARINE CORPS		
Class	Max* Years	Attrition %	Retention %	Avg Years Served	Attrition %	Retention %	Avg Years Served	Attrition %	Retention %	Avg Years Served	Attrition %	Retention %	Avg Years Served
1960	13	38.6	61.4	10.2	41.7	58.3	10.6	39.9	60.1	9.5			
1961	12	37.8	62.2	9.7	48.3	51.7	9.2	43.7	56.3	8.9			
1962	11	37.8	62.2	9.3	47.8	52.2	8.6	41.7	58.3	8.8	44.7	55.3	8.2
1963	10	39.4	60.6	8.6	58.4	41.6	7.3	43.4	56.6	7.9	61.5	38.5	7.9
1964	9	43.9	56.1	7.5	52.7	47.3	7.0	35.4	64.6	7.5	67.2	32.8	6.5
1965	8	44.7	55.3	6.7	46.1	53.9	6.6	31.5	68.5	7.8	52.6	47.4	6.3
1966	7	40.7	59.3	5.9	42.8	57.2	5.8	26.7	73.3	6.3	54.2	45.8	5.9
1967	6	36.2	63.8	5.3	30.5	69.5	5.6	26.9	73.1	5.4	24.0	76.0	5.3

*Data thru 1972

Obligated period: Army and Air Force - 3 years for classes 1960-1961
4 years for classes 1962-1967
(Air Force flying training adds 1 year from completion of training)
Navy and Marine Corps - 4 years for classes 1960-1967
In each Service officers may have made special commitments (e.g. schooling) that could have resulted in lengthening of obligated tour.

ATTRITION/RETENTION/YEARS SERVED
POSTCOMMISSIONING PHASE

COMMISSIONEES OF ROTC SCHOLARSHIP PROGRAM

		ARMY			NAVY			AIR FORCE 2/			MARINE CORPS		
Class	Max Years 1/	Attrition %	Retention %	Avg Years Served	Attrition %	Retention %	Avg Years Served	Attrition %	Retention %	Avg Years Served	Attrition %	Retention %	Avg Years Served
1960	13				82.9	17.1	5.9						
1961	12				81.2	18.8	5.2						
1962	11				79.1	20.9	5.6				82.8	17.2	7.0
1963	10				82.9	17.1	5.4				70.0	30.0	6.3
1964	9				73.5	26.5	5.4				79.2	20.8	8.2
1965	8				70.1	29.9	5.3				69.0	31.0	6.5
1966	7				63.2	36.8	4.8				60.7	39.3	5.4
1967	6	47.1	52.9	4.8	53.3	46.7	5.0				52.3	47.7	5.9
1968	5	28.9	71.1	4.6	42.9	57.1	4.5				23.2	76.8	4.7

1/ Data thru May 1973
2/ Air Force data not available

Obligated period: 1960 graduates incurred a 3-year obligation.
1961 and subsequent years incurred an obligation of 4 years.
ROTC scholarships for Army and Air Force began with class of 1967.

SUBSISTENCE PROGRAM

General LEWIS. We have requested a total of $307,043,000 for the fiscal year 1974 subsistence program.

This is an increase of $1,030,000 over the estimate for fiscal year 1973. After appropriate adjustments for reduced strengths, the net increase is a full year's impact on the basic allowance rate change for subsistence which was effective January 1, 1973. This allowance is paid primarily to married enlisted members who are residing with their families. In effect, this permits them to subsist independently rather than requiring them to eat at available dining facilities. The rate changed from $1.46 to $1.65 per day, increasing subsistence costs approximately $15 million in fiscal year 1973 and $30 million in 1974.

This rate change, which paralleled cost increases in dining halls, was promulgated by DOD directive pursuant to the authority contained in section 402, title 37, United States Code.

The actual feeding of enlisted personnel is a complex management task which includes providing meals for personnel in dining halls at all bases and hospitals in the CONUS and overseas. We must also provide special, operational, and augmentation rations for passengers and crewmembers in military aircraft, alert crews, and those in the field under combat conditions who cannot subsist in dining halls. The requirement for this type of rations declines in the fiscal year 1974 request from the current year due to the reduced SEA activity. To obtain the best possible feeding for personnel, with maximum efficiency and economy, the Air Force continues to innovate, experiment, and modernize in the Air Force food service program.

COST OF FEEDING: DAILY MESS

Chairman MCCLELLAN. How much does it cost to feed an individual in the daily mess?

General LEWIS. The cost of the food served in the daily mess at our Air Force dining halls depends upon the costs quoted by our suppliers and will fluctuate with the general cost of food in our economy. For the month of April 1973 the cost of food served in our dining halls within the continental United States was $2 per day per member on the average. This cost for the same period in our dining halls overseas averaged $2.10 per day per member. These average costs compare with $1.77 for the continental United States and $1.88 overseas for the month of January 1973.

Chairman MCCLELLAN. You may proceed, General.

General LEWIS. To maintain the highest possible standards, installations compete annually for the Hennessy Trophy. This coveted award stimulates competition among food service managers at each base. This competitive spirit has significantly contributed to the efficiency of food service operations. The Air Force is also continually seeking ways to reduce food costs and still maintain quality. For example, action has been taken in fiscal year 1973 to reduce the cost of feeding by 3 to 5 percent, with particular emphasis on portion control, reduction in high cost foods, reduction in prepared convenience type items, substitution of lower cost foods for similar high cost items, and reduction in the number of meals sold for cash (dependents, relatives, and guests).

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PERMANENT CHANGE OF STATION TRAVEL

The Air Force is requesting $515,720,000 for PCS travel requirements in fiscal year 1974. While this is approximately an 8-percent increase over estimates for fiscal year 1973, there will be a decrease in the number of moves. This apparent contradiction is attributed to a combination of factors. There has been a continuation of the trend toward more household goods per family. Since fiscal year 1970, the average weight of household goods shipment has increased 18 percent. This reflects the better living standards of our nation which permits families of average income to purchase such items as, more furniture, recreational and hobby equipment, deep freezes, and dishwashers. Finally, a significant reduction is projected for training and accession moves which normally involved lower ranking single personnel. The reduced requirement for these low-cost moves contribute significantly toward the lower number of moves required, but make a less dramatic impact in total funding requirements.

The reduction in the number of moves is related, in part, to the significantly smaller number of accessions expected in fiscal year 1974 and the follow-on training activity for recruits. We must move almost 90 percent of the recruits three times during their first few months of service. Each recruit moves from his home to Lackland Air Force Base for Basic Military Training, from there to a technical training school when appropriate, and then to his initial duty assignment. Each of these is counted as a PCS movement in the Air Force program, even though they are a low-cost type of move. A total of only 238,400 such moves are projected for fiscal year 1974 compared to about 295,000 in fiscal year 1973.

The Air Force PCS program is almost totally the product of the number of accession-related training requirements, the number of separations, and the requirements imposed by overseas and stabilized tour lengths. We have continually emphasized the effective management of the PCS program to insure that the number of PCS moves is held to an absolute minimum. A positive effort is made to insure that each PCS move fills a valid requirement for an assigned officer or enlisted man. Further, each of these valid requirements is fulfilled, to the maximum extent possible, by personnel who otherwise will be experiencing a PCS move because of training or required rotation. The computerized assignment procedures at the Air Force Military Personnel Center include specific instructions to accord maximum priority to the selection of these individuals who will be moving as a result of training and rotation. In cooperation with commanders, the number of PCS moves within the major air commands was reduced by nearly 10,000 in fiscal year 1973.

WEIGHT LIMITATION

Senator YOUNG. Do you have a maximum amount of household effects they are permitted to move?

General LEWIS. Yes, sir. Every grade has a weight allowance limit. I do not mean that they exceed that. I just simply mean that the average, in years before, did not quite come to the maximum. Now more people are up near the maximum. Of course, when you pay by the hundred or ton, that does increase your cost.

Senator YOUNG. How long has the present maximum been in effect?

General LEWIS. It has been in effect for several years.

Senator YOUNG. Will you furnish that for the record?

General LEWIS. I will furnish that for the record, sir. I know it has been a number of years.

[The information follows:]

PCS LENGTH OF THE PRESENT MAXIMUM WEIGHT IN EFFECT

The current maximum weight allowances applicable to the shipment of household goods by Air Force members in connection with permanent change of station travel have been in effect since October 14, 1966.

48-MONTH TOURS

Chairman MCCLELLAN. Proceed.

General LEWIS. The Air Force has carefully examined the effects of its 2-year-old policy of mandatory 48-month tours in certain overseas areas. While the implementation of this policy 2 years ago resulted in a substantial near-term savings, the long-range effect of that decision has sapped much of the enthusiasm with which we greeted those savings back in 1972. Our experience is that these extended tour lengths are adversely affecting the morale of personnel. For many personnel, being subjected to an unfamiliar life style and standard of living for this extra period outweighed the attractiveness of travel and living abroad. Children, especially those in their teens, have been deprived of many of the normal school associations common to life in this country and, in some cases, families with college-age children experienced added problems due to prolonged separation. Extending the period during which Air Force members and their dependents, located in these long-tour areas, are separated from parents, grandparents, and close relatives causes hardships on both sides.

36-MONTH TOURS

Therefore, based upon the unanimous request of theater commanders, the Air Force has made plans to revert to a 36-month oversea tour. The fiscal year 1974 PCS program includes the costs associated with a gradual return to the shorter tour if the individual service member so elects.

Chairman MCCLELLAN. You can require them to remain overseas on a tour for 36 months?

General LEWIS. Sir, it was 36 months. Two years ago, we moved it to 48 months. During these 2 years, the experience has been that this causes hardships for people who have to stay that additional year.

Chairman MCCLELLAN. So you have gone back to 36 months?

General LEWIS. We are going back to the 36 months on a gradual basis.

Chairman MCCLELLAN. This is on the basis of those in the regular service?

General LEWIS. Yes, sir.

Chairman MCCLELLAN. As I understand, at the end of the 36 months, an individual does not have to rotate unless he wants to.

General LEWIS. That is correct.

Chairman MCCLELLAN. Unless you have other need for him?

General LEWIS. To get into it and to get back on a 36-month basis, we will let those people who desire to complete the 4th year go ahead and complete the 4th year. In other words, we would not want to

cause a hardship for anybody who had made plans at this particular point. But there are vast numbers who don't want to do that, and we will start to phase those people in to come back at the end of 36 months.

Chairman McClellan. Do you maintain them at one base for that length of time, or do you transfer the individual to another overseas base during that 36 months?

General Lewis. As a general rule, sir, when a member leaves CONUS and goes to an overseas assignment, he goes to a specific job at a specific base—now, it may be that the commander in that area, if he has a requirement for that particular individual or skill, he could be moved in an intertheater operation——

Chairman McClellan. Somewhere else within that command?

General Lewis [continuing]. But, as a general rule, normally our people complete the tour at the base they go to.

Chairman McClellan. If they remove him from that command, there would be a special request for him and it would have to be processed?

General Lewis. Yes, sir.

Chairman McClellan. He could not, himself, request that he be sent to another command?

General Lewis. He could request it. It would not necessarily be approved unless there was a requirement.

Chairman McClellan. It would not be done just for his convenience?

General Lewis. No, sir; definitely not.

Chairman McClellan. Proceed.

OTHER MILITARY PERSONNEL COSTS

General Lewis. This portion of the budget is the smallest of the six programs in the Military Personnel Appropriation. The requirement for $16.3 million is a decrease of $1.3 million from fiscal year 1973. Eighty percent of the funds is for interest on Uniformed Service Savings Deposits ($13.1 million).

The remaining 20 percent is for the payment of death gratuities and the costs asociated with apprehending absentees, deserters, and escapees.

DESERTION RATE

Chairman McClellan. How does the current desertion rate compare with that experienced during the last several years?

General Lewis. Rates vary from .39 per 1,000 in 1965 to 2.8 per 1,000 in 1972. I will provide a yearly breakout for the record.

[The information follows:]

Fiscal year:	Rate
1965	0.39
1966	.35
1967	.42
1968	.44
1969	.63
1970	.81
1971	1.5
1972	2.8
1973 (1st half)	[1]1.1

[1] We are forecasting 2.1 rate for fiscal year 1973.

AIR FORCE PERSONNEL TESTED FOR DRUGS

Senator YOUNG. How many Air Force personnel are tested for drugs annually? How are they tested and is the Air Force satisfied that the extent of drug abuse is known and being properly evaluated?

General LEWIS. In calendar year 1972 we tested 441,143 personnel. About the same number will be tested this year.

An individual ordered to report for urinalysis is expected to obey the command as any legitimate order, or be subject to disciplinary action. The frequency of testing in the random urinalysis program varies with geographic area. Southeast Asia is considered a high risk area, thus the total number of tests per year per individual will be higher than in the United States.

When urine samples are determined to be positive for certain drugs by the lab, the individual is then evaluated by trained medical personnel. If the individual admits drug abuse, he is entered in a rehabilitation program. If he denies using drugs and the physician cannot confirm him as a positive from other factors, the individual is automatically placed in a 2-month surveillance program.

The number of people denying drug abuse after receiving a laboratory positive is very high. In order to offset this difficulty, individuals with unexplained positives in their initial screening undergo an 8-week program of three tests per week. If the individual is a heavy user, he will likely be detected again in the 8-week period. If the individual is a moderate user, past experience has indicated that the surveillance program serves as an effective deterrent to further drug abuse. To avoid detection, the moderate user must stay drug free for 2 months. The individual who does not use drugs may be inconvenienced by the testing, but he has nothing to worry about during the surveillance. No records of any type are kept on individuals who receive unconfirmed laboratory positives. Only when the positive is confirmed by self-admission or by a physician is any data concerning drug abuse maintained in the medical record of the individual involved.

The urinalysis program is conducted under tight supervision which includes monitors who watch individuals submitting samples to make sure that all samples are legitimate. In the past, drug abusers have gone to great lengths to avoid detection. Switching samples, paying others to take the test, or carrying "clean" samples into the testing lab have all been attempted. Thus, the Air Force has taken these precautions to insure the validity of the test.

In 1972, 1,730 tests or .40 percent of the total tested were confirmed positives. Based on current statistics, we expect lowering of confirmed positives this year to about .37 percent.

We are satisfied that the extent of drug abuse is known and is being properly evaluated.

Chairman MCCLELLAN. Proceed General.

General LEWIS. In previous years, funds have been requested to support the servicemen's group life insurance plan but are not required for fiscal year 1974. This insurance plan can be supported from funds on hand and the monthly contributions received from the individual service members.

MILITARY PERSONNEL APPROPRIATIONS

As shown in table XVIII, the military personnel appropriations program has decreased. This is consistent with the force structure changes and declining strengths. The requirements we have presented have been subjected to the closest scrutiny and revision through Air Force, OSD and OMB planning, programing 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 XVIII is a summary of the Air Force military personnel appropriations request.

[Table XVIII follows:]

TABLE XVIII.—MILITARY PERSONNEL APPROPRIATIONS REQUEST SUMMARY

[In thousands of dollars]

	Fiscal year—			
	1972 actual	1973 estimate	1974 estimate	1973–74 difference
Pay and allowance of officers	2,046,781	2,146,261	2,110,760	(35,501)
Pay and allowance of enlisted personnel	4,220,527	4,410,766	4,296,009	(114,757)
Pay and allowance of cadets	14,640	17,205	17,768	563
Subsistence of enlisted personnel	317,662	306,013	307,043	1,030
Permanent change of station	423,467	475,400	515,720	40,320
Other military personnel costs	17,269	17,601	16,300	(1,301)
Total	7,040,346	7,373,246	7,263,600	(109,646)

SPECIAL INTEREST ITEMS

General Lewis. I will now follow with some selected subjects which have been of special interest to this committee.

The Air Force military personnel appropriation for fiscal year 1973 was reduced by $125 million and we were directed to allocate the reduction to specific areas. That portion associated with strength reductions was addressed in the Manpower Requirement section of this statement. I will now outline the other actions that were taken to insure compliance with your guidance. I will also discuss other items of special interest.

GRADE CONTROL

The Congress has repeatedly expressed concern about the general upward trend in grade levels from 1964 to 1972. Actions have been taken that will reduce expenditures by $10 million as directed by the Congress in the fiscal year 1973 budget.

In the officer area, as directed, the average strength for the last quarter of fiscal year 1973 in the grades of lieutenant colonel and above will be at or below the authorized end strength for fiscal year 1972. Additionally, actions have been implemented to change promotion phase points to first lieutenant from 18 to 24 months and to captain from 36 to 48 months. In fiscal year 1974 these actions will delay the promotion of 4,400 officers to first lieutenant and 2,500 to captain.

COMPARABILITY OF DEFENSE OFFICER PERSONNEL MANAGEMENT SYSTEM

Senator YOUNG. Does the officer grade structure contained in the defense officer personnel management system reflect realistic Air Force requirements or does it lean heavily on keeping the Air Force comparable to the other services?

General LEWIS. The grades in the defense officer personnel management system basically reflect Air Force requirements. While there has been an attempt to gain greater commonality in the promotion flow of officers in each of the services, the close relationship to requirements was maintained. This is apparent in the differences in grade distribution of each of the services at their design strengths. The result, within the Air Force, is a distribution of grades that is somewhat less than the total requirements that we have identified, but which does provide minimum essential numbers in each grade for us to continue to perform our mission effectively.

Chairman MCCLELLAN. Proceed.

General LEWIS. With regard to the enlisted force, the reduced top six enlisted strengths, as shown in table XIV, comply with congressional direction to show accelerated progress toward achieving the 65.2-percent objective. The reduction to this level by fiscal year 1977 will provide the Air Force with an active, effective airman promotion program which is essential to retention efforts. Achieving this objective earlier would require harsh restrictions on advancement opportunities and result in injustice to career men and women who have served their country honorably over the years.

COLONELS AND GENERALS FLYING PAY

The 1973 Appropriations Act (sec. 715) contained provisions denying flight pay to rated colonels and generals in nonflying noncombat assignments, effective June 1, 1973. As recommended by the Congress, the Department of Defense has prepared a legislative proposal which addresses congressional concern, meets service requirements, and is acceptable to the individual flyer. The proposal would provide an additional monetary incentive for flyers with less than 18 years active commissioned service, and terminate flight pay for flyers with more than 25 years active commissioned service. The Air Force supports the DOD proposal, believes it would improve the effectiveness of flight pay and urges early favorable consideration.

MORALE PROBLEMS IF FLIGHT PAY CURTAILED

Senator YOUNG. Does the Air Force anticipate morale and retention problems if flight pay for colonels and generals is not restored? If so, how severe is the situation?

General LEWIS. To date, we have not had mass resignations or retirements. However, it is much too early to accurately assess the immediate or long-term effect since many of our people believed that flight pay would be restored while the Congress considered the revised program proposed by the Department of Defense. Too, our rated officers are mature men who are not easily stampeded into rash action. They are accustomed to open discussion and logical deliberation in decisions affecting their military career. Most probably, they are waiting for

final action on extension legislation and their own alternate employment efforts before deciding to leave.

If the extension is not granted by the Congress, we estimate resignations of young flying officers will increase by some 4 percent. Early retirements by lieutenant colonels are expected to increase from 13 to 58 percent. If our estimates are correct, we are in serious difficulty. Of equal concern is who we expect to lose. Our surveys indicate it will be our more promising young officers who have excellent employment prospects in the general economy. We will continue to use all means at our disposal to minimize the effects of the congressional action. Our people are looking for assurance from the Congress that the terms of employment under which they were recruited will not be changed without explanation or deliberation. I cannot overemphasize the importance of this factor in reducing the morale impact of a pay reduction.

SHIPMENT OF FOREIGN-MADE PRIVATELY OWNED VEHICLES

Chairman McClellan. Proceed.

General Lewis. In compliance with the intent of Congress, the Air Force implemented revised policies, effective on January 1, 1973, to prohibit the acceptance and shipment at Government expense of those foreign made privately owned vehicles authorized under relaxed policies that had been in effect since July 1, 1972. With the implementation of these revised procedures, appropriate reductions were made in the funds requested for this purpose in both the fiscal year 1973 and the fiscal year 1974 programs.

INCREASED ALLOWANCE FOR SHIPMENT OF HOUSEHOLD GOODS

Also, as specified by the Congress, revised policies were implemented on January 1, 1973, which restricted the shipment of households goods to administrative weight limitations that had been in effect prior to July 1, 1972. Appropriate reductions have been made in fiscal year 1973 and fiscal year 1974 programs to reflect this reversion to the previous policy.

MOVEMENT OF HOUSEHOLD GOODS BY AIR

An embargo has been placed on the shipment of household goods by air in response to congressional stipulation to reduce fiscal year 1973 estimate of cost by $2 million. Exceptions are allowed only for shipments to and from locations where surface transportation is unavailable or inadequate.

Senator Young. Would the Air Force favor revised policies which would authorize the shipment of household goods to and from Hawaii, Alaska, and other U.S. possessions on the same basis as within continental United States?

General Lewis. The Air Force would have no objection to authorizing the shipment of household goods to and from the areas you have mentioned on the same basis as within the continental United States, provided it would be cost effective to do so. In this regard, the Alaskan Air Command is in process of finalizing a review of this matter as it

relates to that command. The results of this review should provide a basis for evaluating the restriction in the other areas.

ENLISTED PARACHUTE JUMPING PAY

Chairman McClellan. You may proceed, General.

General Lewis. In accordance with congressional direction, we have taken action to reduce enlisted parachute jump payments by $106,000 in fiscal year 1973. This results in a reduction of 160 man-years from the original program a year ago. The Air Force has had to limit payment to only 337 members for the last 6 months of fiscal year 1973. This will enable us to man only 63 percent of our requirements. For fiscal years 1974, 535 positions involving parachute pumping have been validated. These include 375 Tactical Air Control team members; 20 for personnel who are teaching survival skills to aircrew members; 13 for the research and development of new equipment; 83 associated with aerial port and weather operations; and 44 others for point communications support and intelligence gathering functions. The budget submission for fiscal year 1974 contains a request for sufficient funds to support 535 man-years to man 100 percent of validated requirements.

HOUSEHOLD GOODS SHIPMENTS WEIGHT LIMITATIONS

Chairman McClellan. How does the increase in the average weight of household goods shipments affect the appropriation in view of the limitation imposed by section 716 of the act, limiting single shipments to 13,500 pounds?

General Lewis. On the average, our members are transporting more household goods than they have in the past although, in no case, are they shipping more household goods at Government expense than they are permitted under the provisions of section 716 of the act. This increase in household goods shipped within the limits established by section 716 will result in increased PCS travel costs as we have indicated. If a member ships in excess of his weight limitation, the additional costs incurred must be handled at his personal expense.

PARACHUTE JUMPING PAY: FISCAL YEARS 1973 AND 1974 AMOUNTS

Chairman McClellan. How much are you requesting for fiscal year 1974 for enlisted parachute jumping pay? How much was provided for fiscal year 1973?

General Lewis. For fiscal year 1974, $353,000 has been requested for enlisted parachute jumping pay. In fiscal year 1973, $264,000 was approved for this purpose. This was a reduction of $106,000 from our budget request and resulted in the elimination of 160 man-years from our original program. Numerous personnel had to be removed from valid jump status positions for the last half of fiscal year 1973 and we were able to man only 63 percent of our requirements. This caused a detrimental impact on morale and on the effectiveness of our combat and training missions. During January 1973, Air Force manpower officials conducted a position-by-position revalidation of enlisted posi-

tions requiring parachute jumping qualifications. Each position validated was required on a mission essential basis. As a result of this detailed review, 54 positions were eliminated. We will continue our close scrutiny in this area and make further reductions when operational requirements permit. We cannot fulfill our fiscal year 1974 requirements at the fiscal year 1973 funded level, however, and consequently the budget submission contains a request for sufficient funds to support 535 man-years to meet 100 percent of our recently revalidated requirements.

RECRUITING

Chairman McCLELLAN. You may proceed, General.

General LEWIS. As was discussed with the committee last year, the Air Force has historically attracted a significant number of true volunteers. DOD surveys indicate that the percentage of true volunteers has increased from 53 percent in fiscal year 1971 to about 84 percent in fiscal year 1973. Currently all recruits for the Air Force are considered to be true volunteers.

Although we are meeting recruiting objectives, the first real test lies ahead of us as we move into the all-volunteer environment. In the absence of a draft law we must intensify recruiting efforts and make entry into the Air Force more attractive to the youth of the Nation, if we are to continue to recruit the personnel needed to meet Air Force requirements.

TELEVISION OR RADIO ADVERTISING: AMOUNTS IN FISCAL YEAR 1974

Chairman McCLELLAN. Are any funds requested for fiscal year 1974 for television or radio advertising?

General LEWIS. We do not pay for television or radio advertising. However, a part of our advertising budget is devoted to the preparation of spot announcements which the radio and television stations broadcast at no charge, as a public service.

Chairman McCLELLAN. You may proceed, General.

General LEWIS. In this respect we are expanding the guaranteed training and job assignment programs, permitting enlistees to select entry dates of their choosing, allowing enlistees a choice of a 4- or 6-year-enlistment contract, and promoting 6-year enlistees to E–3 upon completion of recruit training. Additionally, we have provided more opportunity for reenlistment to those who elected to return to civilian life and, within 90 days after discharge, once again choose to pursue an Air Force career.

We believe considerable progress is being made in the transition to a true all-volunteer force and to improve the quality of our recruits. The percentage of high school graduate enlistees has risen from 83 percent in fiscal year 1972 to a level of 88 percent for the first half of fiscal year 1973. Enlistments in the higher mental categories have similarly improved. Tables XIX and XX reflect the progress we have made.

[Tables XIX and XX follow:]

TABLE XIX.—RECRUITING PROGRESS, FISCAL YEARS 1971–73

	Fiscal year 1971		Fiscal year 1972		Fiscal year 1973 (1st half)	
	OBJ	Actual	OBJ	Actual	OBJ	Actual
NPS (male)	93, 877	91, 874	80, 855	81, 464	48, 657	48, 656
Prior service	4, 707	5, 151	6, 773	6, 816	3, 557	3, 593
NPS (women)	4, 296	4, 289	4, 500	4, 584	2, 592	2, 475
SMS–O (male)	4, 446	4, 363	2, 735	2, 756	1, 562	1, 375
SMS–O (women)	284	285	275	249	159	157

TABLE XX.—MENTAL CATEGORY COMPARISON, FISCAL YEARS 1971–73

[In percent]

	Fiscal year—		
	1971	1972	1973 (1st half)
Mental groups I and II	38.9	42.7	44.2
Mental group III	42.2	48.7	51.3
Mental group IV	17.9	8.6	4.5

SUPPORT FOR ALL-VOLUNTEER FORCE

General Lewis. As Secretary Richardson has previously pointed out, the success of recruiting programs in an all-volunteer environment will require the support of the American people. Their support is absolutely essential to assist us in getting the word to today's youth that the Air Force offers unlimited opportunities for challenging, worthwhile, and highly respected professional careers. As I previously stated, we are approaching this environment with cautious optimism.

WOMEN IN THE AIR FORCE

The Air Force continues to provide increased opportunities for women to serve throughout the officer and enlisted forces. We are determined to break with the past to insure that the utilization of women is not dictated by tradition. In this context, jobs in all career fields, except those which are combat-oriented, are now open to women. They are currently assigned to installations worldwide—from Europe to Southeast Asia.

We have refined personnel policies and procedures to assure that women are given the opportunity for a productive career and are utilized on the same basis as their male counterparts. Where existing laws discriminate, as they currently do for certain dependency entitlements, we are seeking remedial legislation.

We plan to triple the number of women by the end of fiscal year 1978 and have established accession objectives for each year. Tables XXI and XXII delineate revised strength and accession programs for the line of the Air Force. We are confident that with continued favorable trends in recruiting and retention, we will reach these goals.

[Tables XXI and XXII follow:]

TABLE XXI.—STRENGTHS, FISCAL YEARS 1973–78

	Fiscal year—					
	1973	1974	1975	1976	1977	1978
Officers	1,321	1,562	1,837	2,308	2,799	3,284
Enlisted	14,741	18,776	23,617	29,229	35,298	41,554
Total	16,062	20,338	25,454	31,537	38,097	44,828

TABLE XXII.—WOMEN ACCESSIONS, FISCAL YEARS 1973–78

	Fiscal year—					
	1973	1974	1975	1976	1977	1978
Officers	260	400	485	676	740	781
Enlisted	6,172	8,000	10,000	12,000	14,000	16,000
Total	6,432	8,400	10,485	12,676	14,740	16,781

RETENTION BONUSES: WOMEN VERSUS MEN

Chairman McClellan. Are women in the Air Force offered the same or similar retention bonuses as men?

General Lewis. Women in the Air Force are offered, and entitled by statute, to the same retention bonuses as men.

Chairman McClellan. You may proceed, General.

General Lewis. As previously discussed, the Air Force is experiencing recruiting difficulties in certain specialist areas, such as medical services. In these specialties (physicians, dentists, clinical psychologists, et cetera) precise female procurement objectives have not been established. Our goal is to achieve accession needs in these specialities, and in the process, maintain the same male/female ratios that exist in the national resource. We are currently attracting adequate numbers of nurse applicants. Programed nurse accessions are as depicted in table XXIII.

[Table XXIII follow:]

TABLE XXIII.—NURSE ACCESSIONS, FISCAL YEARS 1973–78

	Fiscal year—					
	1973	1974	1975	1976	1977	1978
Nurses	558	722	566	715	642	729

SUMMARY

General Lewis. Mr. Chairman, members of the committee, the Air Force is requesting $7.26 billion to support a force of 666,357 people at end fiscal year 1974.

We believe that based on current mission requirements, the manpower and personnel programs, as outlined here today, are the optimum balance necessary to satisfy our global commitments within budgetary limitations. We solicit your support in funding these programs.

Chairman McClellan. Thank you, General Lewis.

Do you have any questions, Senator?

Senator Young. No.

QUESTIONS BY SENATOR THURMOND

Chairman McCLELLAN. Senator Thurmond was unable to be present at this meeting but has asked that questions he has prepared be answered for the record. They will be included at this point.

[The questions and answers follow:]

FLIGHT PAY CONTINUED TO AF GENERALS/NONFLYING

Senator THURMOND. General Lewis, what is the basis for continuing payment of flight pay to 65 Air Force generals in nonflying jobs despite the expiration of the program May 31st?

General LEWIS. The 65 general officers to whom you refer are neither in nonflying jobs nor are they receiving flight pay in violation of Public Law. These officers are, in fact, required to perform duty as air crew members because of their jobs. Any limitation of their requirement to fly would very seriously degrade the ability of the Air Force to do its job.

More specifically, there are 132 general officer positions identified by the Air Force as requiring the incumbents to fly. Though only 65 of these positions are filled by generals at the present time you should be aware that this number could, and probably will, change as colonel incumbents in the other 67 positions achieve general officer rank. All of these officers qualify for flight pay under the provisions of Title 37, USC 301, which the basic authority covering hazardous duty incentive pay.

The confusion that appears to exist concerning this matter relates to Section 715 of the 1973 Defense Appropriation Act. The point here is that this Act (715/73) affects only those personnel serving in positions with current duties that do *not* require them to fly. On the other hand, operational flyers, those serving in positions with current duties requiring them to fly, are unaffected by this provision regardless of rank. We are neither aware of any intent by the Congress to deny these personnel flight pay, nor is there any associated prohibition in Public Law.

A more detailed discussion of the legalities involved in this matter is contained in a Fact Sheet prepared by the Office of the Secretary of Defense, excerpts from which are quoted here for the record.

"Section 715, Department of Defense Appropriations Act, 1973 (Public Law 92-570), approved October 26, 1972, states in pertinent part:

" 'When any rated member is assigned to duties, the performance of which does not require the maintenance of basic flying skills, all such members, while so assigned, *except, after May 31, 1973, those of the rank of colonel or equivalent or above (O-6) in noncombat assignments*, are entitled to flight pay prescribed under section 301 of title 37, United States Code, if otherwise entitled to flight pay at the time of such assignment.' (The words underscored above were added in the 1973 Act; the rest of the language was in the counterpart 1972 Act.)

"This sentence in the 1973 Act affects *only* aeronautically rated personnel serving in positions with current duties which do not require them to fly. Operational flyers, those serving in positions with current duties which normally require that they fly, are unaffected by this sentence. That is, flyers, including senior officers, who are operational flyers by virtue of the duties of their current assignments are entitled to flight pay without regard for the phrase 'in noncombat assignments,' if otherwise entitled.

"Aeronautically rated officers each fall into one of three categories: *Excused from flying*, and subject to the provisions quoted above. (In this category, senior officers—O-6 and above—are entitled to no flight pay unless in a combat assignment; O-5 and below in this category are entitled to flight pay regardless of assignment, combat or not.)

"*Proficiency flyers* (that is, assigned to positions with duties which do not require the maintenance of basic flying skills), also subject to the provisions quoted above; however, Department of Defense policy does not permit senior officers, O-6 and above, to be proficiency flyers, but restricts such flying to that necessary as a means of maintaining the basic flying skills of rated personnel needed to support approved contingency scenarios. Proficiency flying is defined and governed by DOD Directive 1340.4, 'proficiency Flying Programs.' July 17, 1972, which implements this section of the law regarding such flying and flying excusal.

"*Operational flyers* (that is, assigned to positions with duties which require the maintenance of basic flying skills) whose flight performance requirements for pay entitlement are set forth in Executive Order 11157, as amended, as well as by Section 301, Title 37, United States Code, cited above. Guidance on pay entitlement, including flight pay, is promulgated in the DOD Military Pay and Allowances Entitlement Manual, under authority of the Secretary of Defense.

"The general/flag officer positions which have been reported as 'flying' positions are all positions which have been determined by the Military Services to meet the legal criterion of having duties, the performance of which requires the maintenance of basic flying skills—that is, they have been identified by the Military Services as 'operational flying' positions."

Basis/132 Generals—Qualified Flight Pay

Senator Thurmond. What is the basis for the 132 authorized general officer slots which still qualify for flight pay under the new setup?

General Lewis. The 132 authorized general officer positions to which you refer have been identified as positions which require the incumbent to be an "operational flyer." The criteria used to isolate these positions were approved by the Office of the Secretary of Defense and are as follows:

Commanders and Vice Commanders and equivalent positions exercising command and control or direct support of aircraft.

Directly supervises aircraft operations or aircrew training/evaluation programs.

Responsible for flight safety/operational readiness/maintenance programs.

Performs or directly supervises test evaluation of existing/proposed weapon systems.

Operational or training responsibilities in special agencies, e.g., NASA, MAP, Exchange duty, Attaches, Airborne Command Posts.

SPECIAL REQUIREMENTS

Individuals undergoing aircrew training.

Repatriated POWS assigned to special operational duties.

Occupants of designated flight surgeon positions.

The incumbents of these positions are entitled to flight pay for the reasons provided in response to the previous question.

Colonels Qualified Under Special Category for Flight Pay

Senator Thurmond. How many colonels fall into this special category and what is the basis for their retention of this pay?

General Lewis. By using the term "special category," I assume you are asking how many colonels must fly because of their assigned duties and therefore, qualify for flight pay under Title 37, USC 301.

The Air Force has identified approximately 1500 colonel positions that require flying as an essential part of the assigned duties. They were identified by a position-by-position review of all colonel requirements and application of the criteria described in response to the previous question.

At the present time only about 1000 of the colonels assigned to these positions are participating in regular and frequent flying because of budgetary limitations associated with the availability of flying hours and aircraft. We want to fly all 1500 of the colonels assigned against these validated positions, but we only have resources enough to fly about 1000 of them. These colonels receive flight pay under Title 37, USC 301.

It should be pointed out that prior to the 1973 Defense Appropriation Act, Section 715 has specifically protected the flight pay of officers who were in an excused or proficiency status regardless of their rank. This had been done so that officers temporarily assigned to nonflying duties would not suffer a pay inversion or otherwise be penalized. Section 715 of the Defense Appropriations Act as it now reads no longer permits the Air Force to pay its total flying officer requirement. It is for this reason that early consideration of the DOD Flight Pay Proposal currently before the Congress is needed.

AF Baseline Manpower Level

Senator Thurmond. General Kern, what do you consider the baseline Air Force manpower level and how do you justify this particular number?

General KERN. The term "baseline" force has frequently been used by the Office of the Secretary of Defense to describe the total Defense force or manpower level required in a post-Southeast Asia environment. Within the Air Force, the total manpower levels for any given year represent the aggregation of manpower required for operation of the individual units making up the forces and sustaining activities planned for that year. We do not refer to any particular manpower level as the "baseline level" since total manpower requirements will increase or decrease as forces and missions are added or deleted. It is significant to note, however, that the 666,357 military strength required for end fiscal year 1974 is 190,533 below the end fiscal year 1964 position which marked the start of the Southeast Asia buildup.

IMPACT ON MANPOWER LEVELS

Senator THURMOND. Will the integration of the F–15 later in the 1970's significantly affect the manpower levels?

General KERN. When the F–15 replaces the F–4, there are manpower savings. Current projections are that a 24 UE F–15 squadron will require 101 fewer spaces than a 24 UE F–4 squadron. Base operating support requirements will also decrease about 18 spaces per squadron, so the total saving is about 119 spaces per squadron converted.

EFFECT ON MANPOWER LEVELS

Senator THURMOND. Will the A–X significantly affect manpower levels when it comes into the tactical air wing structure in the late 1970's?

General KERN. When the A–10 replaces the A–7, there are manpower savings. The current estimate is that a 24 UE A–10 squadron will require 151 spaces less than a 24 UE A–7 squadron. Another 28 spaces are saved in base operating support, making total savings 179 spaces per squadron converted.

EFFECT OF B–52D MOD DENIAL OF MANPOWER REQUIREMENTS

Senator THURMOND. If the B–52D's are not approved for modification and have to be grounded, how will this action reduce manpower requirements?

General KERN. In the event that the 80 B–52D aircraft are not modified as programmed and have to be permanently grounded, the manpower requirements would be reduced by approximately 4430 military and 1880 civilian authorizations. The manpower would be phased out to correspond to the phase-out of the remaining five B–52D squadrons.

AF RATIO: DOCTORS AND DENTISTS TO MANPOWER LEVELS

Senator THURMOND. What is the Air Force ratio of doctors and dentists to manpower levels?

General LEWIS. I will be glad to provide that information for the five fiscal year period 1970–1974.

[The information follows:]

RATIO OF PHYSICIANS AND DENTISTS PER ACTIVE DUTY STRENGTH AND TOTAL BENEFICIARIES

Fiscal year	Active duty strength		All beneficiaries, physicians
	Physicians	Dentists	
1970	1:237	1:510	1:833
1971	1:235	1:485	1:901
1972	1:232	1:476	1:926
1973	1:217	1:454	1:909
1974	1:242	1:446	1:1,035

AF RETENTION RATE—DOCTORS AND DENTISTS

Senator THURMOND. What is the Air Force retention rate for doctors and dentists who are first-term obligators?

General LEWIS. The retention rate for the physicians is 7.4%, and for the dentists is 5.0%.

RECOMMENDATION: PHYSICIAN PROBLEM

Senator THURMOND. Would you recommend any steps to meet the physician problem other than proposed by the Defense Department?

General LEWIS. We would not at this point. The programs outlined by Assistant Secretary of Defense (Health and Environment) should be implemented. After implementation, an evaluation and reassessment should be made. If other alternatives seem appropriate at that time, then we will try new avenues.

QUESTIONS BY SENATOR BAYH

Chairman MCCLELLAN. Senator Bayh has asked that the Department of the Air Force provide replies to a series of questions he has submitted to the subcommittee. I believe that they are related to personnel. Would you provide the responses for the record, General?

General LEWIS. I would be happy to.

[The questions and answers follow:]

EARLY VESTING OF THE RETIREMENT FUND

We would like to ask you about certain incentives built into the present Air Force personnel management system which tend to be inefficient in terms of both the force profile and a wise allocation of funds. We are concerned about the facts that the Air Force is overstocked with middle-aged officers, that those officers that volunteer to leave before retirement are often the most productive men, that pilots and other officers are encouraged to spend years in counter-productive jobs and training, and that the Air Force management closest to the force is inhibited from either rewarding productivity or receiving effective feedback on the allocation of personnel.

We feel that the "hump" of majors, lt. colonels, and colonels is encouraged by adjusted salaries that are more than competitive with civilian jobs available for comparable training and experience as well as by a retirement system that permanently vests only after 20 years of service. We would like you to respond to the suggestion that some sort of early vesting of the retirement fund would allow Air Force management to dismiss a number of such officers without betraying the promise of a retirement "right" implied at recruitment and reenlistment. Specifically:

Would early vesting free Air Force management to adjust the force profile on the downward side in a manner similar to business management? If not, why? Please document any analysis with all available facts and figures.

A. Before answering this and the following questions, there are some basic principles of personnel management which are germane to this whole line of questioning. They need to be reiterated. Major personnel policy decisions must be made in a total system perspective and designed to support the total Air Force worldwide mission in peace and war. A more narrow or piecemeal approach to personnel management leads to serious distortions in career force structures or profiles with resultant instability in training rates, promotions, and ultimately, retention. An incentive, monetary or otherwise, which appears to be an attractive option for solving one personnel shortfall, can in fact have a detrimental impact on other parts of the personnel system which greatly outweight its apparent value. We have learned, through development and implementation of the Air Force Personnel Plan, that all of our decisions must consider long-range as well as short-range impacts on the total personnel force. This systems approach to personnel management is very definitely a part of the coordinated development of the Defense Officer Personnel Management Study (DOPMS), the Uniformed Services Retirement Modernization Act, the Uniformed Services Special Pay Act and the proposal for revised hazardous duty pay. These proposals are now before the Congress. Early enactment will materially aid the Air Force in providing more efficient personnel management, while meeting worldwide mission requirements, as well as resolving many of the issues raised in this series of questions.

In the management of an organization as large and complex as the Air Force, decisions based solely on isolated examination of small parts of the personnel system can be disastrous. Accordingly, due regard must be given to the

interactions and effects of change on the total management system and the environment that it serves. The following questions are narrow in scope, therefore, comments will focus only on the specific point at issue rather than the broad management concepts involved in managing a force of 700,000 people.

Turning specifically to the question of early vesting and its impact on force adjustment, the following is submitted.

Early vesting would free the Air Force to adjust the force profile downward only to the extent that we are now kept from doing so by a sense of moral obligation to retain the member until full retirement eligibility. The number of officers retained for such a reason is very limited, since we already have authority to make separation payments up to $15,000.

However, we have no such authority for enlisted members. Obtaining such authority is one reason the Air Force supports the early vesting procedures of the proposed Uniformed Services Retirement Modernization Act.

EFFECT EARLY VESTING WILL HAVE ON MAKING CIVILIAN OPPORTUNITIES MORE DESIRABLE

Q. As the system stands now, the middle-aged officer contemplating departure would have to earn an amount well above his military salary in order to provide for a retirement plan that would equate his civilian opportunities with military opportunities. Would not early vesting of the Retirement Fund remove the problem of men turning down civilian opportunities merely to add to the burden of our already out of control retirement bill?

A. Early vesting of the retirement system would reduce, to a limited degree, the level of civilian salary necessary to equate civilian opportunities for military officers if they leave the service before twenty years of service. However, although early vesting may reduce the numbers of officers reaching twenty years of service, we expect the decrease to be limited.

EFFECT EARLY VESTING WILL HAVE ON EARLY OR LATE RETIREMENT

Q. Would early vesting of the Retirement Fund at least reduce the current incentive to leave early or stay forever?

A. Early vesting could decrease the incentive to leave the service early. However, we have no data which indicate the degree of response by Air Force personnel to this change in incentives. Unless the early vesting benefits are substantial, it might be that very few people would actually stay beyond their initial obligation and subsequently leave for the early vesting benefits short of retirement eligibility provided under the current laws. In any event, much more than early vesting is involved in whether people "leave early or stay forever."

RECOMMENDATIONS IN EVENT EARLY VESTING IS ADOPTED

Q. If an early vesting of the retirement fund system were to be adopted, would you recommend a lump sum payment on departure, a delayed retirement plan starting at age 65, or some other alternative? Why?

A. We would not recommend a lump sum payment on departure to voluntary separatees because it would tend to induce losses from some skills already in short supply. We would not recommend a delayed plan starting at age 65 because it would provide comparatively little compensation to the member and because it would be incompatible with the Reserve retirement eligibility age of 60.

We would recommend the alternative suggested in the proposed Uniformed Services Retirement Modernization Act. This alternative includes a deferred annuity at age 60 for voluntary separatees, and the option of either a lump sum or the same deferred annuity for involuntary separatees.

EFFECT OF EARLY VESTING ON COSTS

Q. In terms of cost, assuming positive answers to the previous 3 questions, would not early vesting of the retirement fund allow us to save:

(a) the salaries paid to unnecessary middle grade officers

(b) the full retirement benefits payable to such officers from the day of retirement for the duration of their life expectancy.

A. The question makes the erroneous assumption that there are "unnecessary" officers on active duty. See the response to the previous question as to possible impact of early vesting.

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FLIGHT PAY/WHY NOT PAY FOR ACTUAL FLYING ONLY

Q. We are all aware of the astronomical costs of training pilots, yet the present incentives in the Air Force management system lure a pilot out of the cockpit almost as soon as he has graduated from flight training. It is bad enough that monetary bonuses are paid to all flight training graduates virtually independent of their proximity to a job involving flying an airplane. Senior promotion policies encourage our pilots to leave the cockpit and seek a diversity of jobs and training programs. While presumably this prepares all our senior officers to be chief of staff, it results in an unconscionable increase in our flight training costs.

Why shouldn't flight pay be paid only to those in an actual flying cockpit position?

A. Flight pay is an incentive to man the pilot force with career officers. Force requirements include pilots assigned to operational units, staff and management positions. If we paid flight pay only to those in cockpit positions we would only have an incentive to man a portion of our force requirements. For many years, flight pay has been paid to fliers without regard to position. Under this policy, the flight pay has induced enough volunteers to enter flying training but has not been an adequate inducement to retain an adequate proportion of trained pilots for full flying careers. Recent analyses clearly show that our pilots consider a continuous career incentive pay more attractive than a cockpit incentive even if the total expected cockpit incentive pay is higher. If flight pay is to be an effective career incentive it must be paid to pilots throughout their flying careers.

JUSTIFY NON-FLYING DUTY PILOTS RECEIVING FLIGHT PAY

Q. Why should pilots whose basic duties are non-flying in nature be given flight pay?

A. See response to preceding question.

INCENTIVES FOR PILOTS

Q. Independent of the policy regarding other pilots, shouldn't those in cockpit positions be given some sort of bonus?

A. Fliers do not consider flight pay to be a bonus—to them it is an incentive to engage and remain in a high skill, high risk career. If flight pay is insufficient to man our pilot requirements in the all-volunteer environment, we would consider a bonus in addition to flight pay. It would depend on the force requirements whether the bonus would be restricted to cockpit positions.

NEED FOR PILOT QUALIFICATION IN MORE THAN ONE TYPE AIRCRAFT

Q. What available data is there that indicates a military need for our pilots to qualify in more than one type of aircraft?

A. Air Force pilots maintain qualification in the aircraft of assignment only. Exceptions are necessary, however, for pilots in jobs, such as flight test, where multiple qualification is essential. Less than 2% of Air Force pilots are qualified in more than one aircraft.

DEGRADATION OF SENIOR OFFICERS/PILOTS REMAIN IN FLYING POSITIONS

Q. Would the quality of our senior officers be greatly reduced if we encouraged our pilots to remain in flying positions throughout most of their careers?

A. The quality of our senior officers depends, in large part, on the quality of individuals attracted to a flying career. Assuming that the term flying position encompasses all jobs requiring pilots, the quality would not be greatly reduced if pilots remained in flying positions throughout most of their careers. There is no evidence that tenure in flying positions is related to the quality of those selected to be senior officers. In our closed system, management abilities of potential senior officers are developed through on-the-job training. It should be noted that the majority of senior officers have remained in flying positions throughout most of their careers and that one of each three colonels has completed two or more combat tours. If we equate *cockpit position* with flying position, the quality of our senior officers might be greatly reduced, but more importantly the capability of the force would suffer from lack of flying experience in critical support areas. It is difficult to imagine a combat organization with commanders and supervisors who do not have primary mission experience.

JUSTIFICATION OF DIVERSELY TRAINING OFFICER CORPS

Q. What justification, in terms of efficient use of manpower, is there for present senior promotion policies which encourage an individual, well-trained in one area, to seek diversity of jobs? Remember we are talking about recouping our training costs, not about producing an officer corps of renaissance men.

A. The justification for executive development which encourages a diversity of background experience is essential to and reinforces the fullest and most efficient use of manpower. In the closed personnel system which we and other military organizations have, our managers must be developed from within the personnel force we have. Our executives are charged with the management of millions of dollars worth of resources. We have the responsibility to assure that the managers we provide are competent. That is the justification for an effective management development program. Our challenge is to develop these managers while maintaining the efficient use of our manpower. Central to this point, as you have noted, is the recoupment of training costs. We do that through a system of Active Duty Service Commitments (ADSC's) which imposes a minimum period of service on the officer for the training we give him and Directed Duty Assignments (DDA's) which assure us that the officer serves at least a reasonable period of time in an assignment which pertains to the training he has just received. It is our central purpose to provide efficient and effective managers in the determination, allocation, and utilization of resources as provided for Air Force missions and programs.

JUSTIFICATION FOR DIVERSE TRAINING PROG FOR SPECIALIZING OFFICER

Q. In the same terms, what justification is there for a senior promotion policy which encourages the individual to attend a wide variety of training programs when we have trained him or her in a specialized area at considerable expense?

A. Our promotion policies are a reflection of service needs. Our senior promotions are directed toward our potential managers and executives, as they are within other military and civilian organizations. The higher the level, the more often the need for broad, rather than specialized management experience. The encouragment for officers to have training and experience outside their originally trained specialty, is a function of this demand for broader management rather than some prescribed "promotion policy".

REASON FOR SPEC. AF OFFICER/STAFF COLLEGE ATTENDANCE

Q. What reason is there for encouraging the highly specialized Air Force officer to "waste a year" in some staff college lest he be passed over for a senior promotion?

A. The Air Force does not encourage officers to "waste a year." It believes that professional education is a most important factor in the development of its senior officers. Officers selected to attend staff colleges are the best qualified among those selected for promotion. Promotions are based on an officer's demonstrated potential to assume the responsibilities of the higher grade. An individual's promotability is enhanced by attendance at a professional school only to the extent that the education and training has aided him in increasing his management and leadership skills. Attendance does not guarantee promotion. Encouragement to complete staff colleges in residence or by correspondence is manifestation of the worth to be gained from such education, and not for the purpose of obtaining senior promotions.

MAKING CURRENT USE OF OFFICERS VS. TRAINING FOR FUTURE POSITIONS

Q. Wouldn't we be better off allowing our bright young officers to do their jobs rather than spend most of their careers preparing for a strategic position they may never hold?

A. Our bright young officers are being well utilized. They are doing their jobs and at the same time preparing themselves for positions of greater responsibility. When a bright young officer is identified, his "career broadening" usually consists of his being placed in positions of higher responsibility in a more demanding environment. He is moved to the front burner and the heat is turned up so we can see whether his potential is real or imagined. Those officers who are truly

bright are much more productive than the due-course officer. The demands placed upon them are greater. They gain more experience in shorter period of time. They ultimately do reach "strategic positions" if they are bright and motivated young officers. It must be added that bright young officers have high personal aspirations and they demand this opportunity to progress. They are not satisfied with merely doing their assigned job, and we have found historically that bright young officers will quickly leave the service if they are not allowed to develop and test their capabilities.

Rigid Requirements To Attend Certain Schools

Q. Do we have to rigidly require certain schools for certain promotions? Can we not assume that non-attendance meant the individual did not need the training involved?

A. We do not require attendance or completion of certain schools for any active duty promotions. Promotions are based on an officer's demonstrated potential to assume the responsibilities of the higher grade. An individual's promotability is enhanced by attendance at a professional military school only to the extent that the education and training has aided him in increasing his management and leadership skills. We believe that all officers, would benefit from attendance at certain schools. However, the number of officers that can attend is limited by the size of the physical facilities and budget considerations. In fact, in FY 74 seventeen percent of our eligible officers will be selected to attend Senior Service schools and twenty-three percent of the eligible will attend Intermediate Service schools. As a result, only the best qualified officers are selected to attend. Non-selection does not mean that the officer does not need the training.

Justification or Rationale for Training in a Senior Staff College

Q. If you cannot justify the need for the training in a senior staff college, can you justify attendance on other grounds—say socialization or group cohesion?

A. The Air Force justifies its need for training in a senior staff college based upon validated requirements. 4855 line officer positions have been validated as requiring senior staff college training. However, due to the limited size of physical facilities and budget considerations, the Air Force annual input is only 61% of that needed to fill the validated requirements. Additional justification for sending selected officers to a senior staff college lies in the educational philosophy of the Air Force's service schools. That philosophy is to provide the nation with strong and capable military forces led by officers thoroughly educated and trained in the profession of arms. The Air War College, as do the other senior service schools, prepares the best qualified senior officers for assignment to positions at the highest levels in the Air Force and other Department of Defense agencies.

Need for Reform and Incentives To Retain Capable Officers

Q. While we are concerned with pruning the force of the unproductive individuals who are merely drinking their coffee until retirement time, we also are concerned with retaining our more capable officers. Reform of the retirement system may help us weed out the bad, but we must also have incentives to keep in the good. Please document your responses to the following questions:

There are indications that officers who leave the Air Force early earn above average salaries. This could indicate the value of an Air Force background or that our above average people leave us first. Which do you opt for and why. What data is available on these people?

A. If it is true that Air Force officers earn above average salaries upon leaving the service, it would probably be due in part to both factors: an Air Force background provides extremely valuable management training, and some of our above average people leave us first. However, since our above average people also have above average opportunities inside the Air Force, we believe most of any additional salary received would probably be due to the separatees' Air Force background.

We know of no definitive study comparing salaries before and after leaving the service. Some data are available from Dr. Eli Flier of the OSD Human Resources Research Organization. Additional information is also available from the Retirement Studies Branch of OASD (Manpower and Reserve Affairs).

Officer Awareness/Civilian Equivalent of His Salary

Q. Is the Air Force officer aware of the civilian equivalent of his salary when the nontaxable element and the provisions of in-kind benefits are taken into account? Have any surveys been conducted to indicate the level of awareness here?

A. Air Force officers are aware of the civilian equivalent of their salary when the nontaxable element and the provision of the in-kind benefits are taken into account. Surveys have documented this awareness. For example, in a May 1972 Air Force career survey, we asked the question, "How do you think military pay (including allowances and fringe benefits) compares with pay in civilian employment for similar work?" More than 82% of the approximately 9,000 officers responding, indicated that their military pay, allowances and fringe benefits were comparable to that in civilian life. 85% of the officers surveyed recognized the Federal income tax advantage when comparing their pay to civilians; 67% went beyond this and also included special pays, supplemental benefits and military retirement in the comparison.

Officer Salary Awareness Familiarization

Q. What steps are being taken to make the officer more aware of the value his salary?

A. Information on pay and military benefits is furnished to all members of the Air Force through special pamphlets, articles, speeches and motion pictures. For example, the *Offic'r's Pay Guide* and *Officer Career Information* are two pamphlets containing specific information on pay, allowances and benefits. Articles also appear in the *Airman* magazine, the official magazine of the Air Force, as well as articles in the *Air Force Times* and local publications. Commander's Call formations, in which the Commander meets with all members of his unit each month, are used as a forum for discussion of military pay and benefits. Survey data showing tangible savings derived from commissary use, for example, are also published in a wide variety of publications.

Pamphlet Availability on Salary Worth

Q. Does there exist a service-wide pamphlet indicating in easy to read terms "This is what your salary is worth on the outside"? If not, why?

A. As indicated in a previous answer, surveys reveal that such a pamphlet is not required. (More than 85% of those surveyed use Regular Military Compensation (RMC) [1] in comparing their incomes to civilians).

All Air Force members currently receive a monthly Leave and Earnings statement which lists in detail, basic pay and all allowances. This Earnings statement in conjunction with our Air Force-wide information program provides an excellent basis for the member to determine the value of his salary.

Justification to Continue Providing In-Kind Benefits vs. Increased Income

Q. Providing services rather than income is generally regarded as inefficient by economists. List and document in detail the justification for the Air Force to continue providing in-kind benefits rather than increased income.

A. In combat zones as well as some remote overseas and CONUS areas such essentials as medical care, food and housing are either not available or not existent on the civilian economy. Consequently, there is a compelling requirement to maintain these services in those areas.

The vast majority of our CONUS medical facilities are located in areas where the civilian sector has fewer physicians or fewer hospital beds than the national average. In this regard, even the national average reflects the current crisis in medicine.

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[1] RMC is defined by Congress as basic pay, quarters and subsistence allowances and the tax advantage which accrues because the allowances are not subject to Federal income tax. The Congress used RMC comparisons to civilian incomes to form the basis for the reasonably competitive pay levels provided by PL 92-129 in 1971 as well as the six successive increases (matching those received by Federal civilians) the military has received under the provisions of PL 90-207.

There are many instances (combat zonet, in flight, isolated locations, missile sites, etc) where military food support is the only food available. Likewise, commissary sales stores and base exchanges fill a recognized need since many Air Force bases are located some distance from major shopping centers. The commissary has the dual mission of providing subsistence items for the Air Force food service activities and to operate the commissary sales store. Outside the U.S., the commissary is normally the only source of food considered appropriate and necessary for the health and welfare of our personnel.

It is Air Force policy to rely primarily upon private community housing resources to accommodate military families—only about one third of the married force occupies government quarters. Military family housing is programmed and constructed only where the private sector cannot or does not provide sufficient adequate housing. Recent surveys indicate a housing deficit of some 20,000 units. For bachelors, it is our policy to rely on community housing to support E–5 and above. Thus, we do not build government quarters for these members unless military necessity dictates on-base occupancy or when suitable housing is not available in the local community (as occurs most often in overseas areas).

To provide income rather than services would (1) not solve the problem of nonexistent services and (2) even if the services were available, the increased income would be considerably more expensive than the in-kind benefits.

STEPS/IMPROVE IN-KIND BENEFITS/PRODUCE SUCH BENEFITS—INCREASE PAY

Q. What steps are being taken to
(a) improve the efficiency of the in-kind benefits that continue to be offered?
(b) reduce the number of in-kind benefits with corresponding increased pay?

A. (a) The Air Force has many on-going programs to improve the efficiency of in-kind benefits. Some of these are discussed in the following paragraphs.

To improve our medical service, we have (1) A five year facility modernization program, (2) A Professional Assistant Program (physicians helper, dental clerical assistant, etc.), (3) Professional Extender Programs (nurses, midwives, dental assistants, OB/Gyn nurse practitioners, etc.)

In the food service area, a test is currently being conducted at Shaw AFB, wherein all enlisted personnel are paid the Basic Allowance for Subsistence (BAS) and they, in turn, pay for the food they eat on an item basis. The results of this test are expected to provide a basis for determining BAS and food service policies in the future. In addition to the food service test, the Air Force has a continuing program to upgrade the qualifications of food service personnel, improve the food service facilities, obtain more efficient equipment and adopt new and innovative procedures in the food service operations in order to improve the efficiency of these essential morale and welfare activities.

In the area of commissaries and exchanges, the Air Force has a continuing program to upgrade the qualifications of personnel, improve facilities, obtain more efficient equipment and adopt new and innovative procedures in the commissary and exchange operations.

As discussed in the preceding question, family housing construction is programmed only where and to the extent that a deficiency in community support is demonstrated.

(b) Pay study groups have attempted to quantify the monetary value of all benefits by replacing them with increases in income. However, these groups have not developed a policy which would be less expensive than the current system overall. This notwithstanding, we are examining individual in-kind benefits to determine the feasibility of providing income as opposed to benefits. For example, if funds are available in FY 1974, new bachelor housing adequacy criteria will be implemented to upgrade living accommodations for all bachelors. In cases where standards are not met, the member will be provided BAQ to secure off-base housing. In addition, a major objective of the food service test at Shaw AFB is to determine the feasibility of providing all enlisted members the BAS at all times instead of meals in a government dining facility.

NEGOTIATED PAY AGREEMENTS BASED ON VALUE RECEIVED

Q. We are currently locked into a one-way contract system where pay is related to rank and rank, with few exceptions, is dependent on age. Have any studies been conducted on the feasibility of differentiated two-way contracts wherein the Air Force would be able to negotiate to pay for exactly what it was getting from the individual? If not, why?

A. To our knowledge no studies have been conducted on a two-way contract system per se. However, the DOD is currently in the final stages of completing an exhaustive examination of the personnel management system. Unlike the present officer force profile which contains many humps and valleys the desired pattern would more ideally carry people into mid-career service and then separate them or allow them to leave, thereby retaining a smaller and more stable career force. The Defense Officer Personnel Management System (DOPMS) which has as its foundation a competitive active duty pay system, envisions such a pattern for the force profile.

In order to obtain the retention desired to mid-career points and beyond, the services presently provide special pay for physicians, dentists, veterinarians, and optometrists; continuation pay for physicians, dentists, and nuclear qualified submarine officers; and incentive/hazardous duty pay. In addition, the Uniformed Services Special Pay Act of 1973 (DOD 93–3) contains provisions for an officer variable incentive pay. This proposal which provides incentive payments of up to $4,000 for each year an officer extends his initial active duty service obligation is an integral part of DOPMS. To the extent that the proposed officer variable incentive pay represents a contract between the service and the member, it may be considered a first-generation, two-way contract.

FEASIBILITY OF NEGOTIATED PAY CONTRACT SYSTEM

Q. On the basis of all available data, what is the feasibility of such a contract system?

A. We do not consider feasible a negotiated pay contract system which exceeds the parameters of the officer variable incentive pay proposal contained in the Uniformed Services Special Pay Act of 1973.

A NEGOTIATED PAY SYSTEM/NON-SPECIALIST PAY IN ISOLATED LOCATIONS

Q. Would not such a system allow us to pay the non-specialist in a convenient location less and the specialist in an inconvenient location more? While there are bonuses conferred on those who go to Greenland now, in order to attract the Pentagon clerk we have to pay him for our option to send him to Greenland. If we removed that option from his contract, we might be able to get him working in Washington for less. What data is available on this theory?

A. Currently there are no bonuses designed to induce members to serve in Greenland or any other remote tours. Although it may be desirable to pay extra to those incurring adverse tours, we consider it contrary to all-volunteer force objectives to pay any individual less than the reasonably competitive levels of pay achieved by PL 92–129 in 1971.

DISCRETION OF AF MANAGEMENT TO RENEGOTIATE CONTRACTS/BASIS OF PERFORMANCE

Q. Would not a differentiated contract system allow Air Force management the discretion to renegotiate contracts in terms of their evaluation of individual productivity?

A. Although a contract system would allow us to pay persons in different specialties different amounts, any advantages gained would be greatly offset by losses in assignment flexibility and force management. The adverse effects on contingency operations and national security militate against a negotiated contract system.

Any system which uses productivity as foundation for its policies must strike a delicate balance between the personnel management and compensation systems. The most efficient interrelationship between these systems will be achieved through implementation of the proposals in the Uniformed Services Special Pay Act of 1973, the Uniformed Services Retirement Modernization Act and the Defense Officer Personnel Management System.

PRODUCTIVITY REWARDS ADVANTAGE OVER CURRENT SYSTEM

Q. Wouldn't rewarding productivity in such a manner be a more efficient method of retaining quality personnel than the current pay/contract system which presumes productivity on the basis of good health and advancement in age?

A. As indicated in the previous question, the disadvantages of such a system far outweigh the advantages. We support the existing proposals to modify our personnel and compensation systems. They will provide the basis for selective retention of quality personnel.

CURRENT OPPORTUNITIES/INFORMATION LEADING TO MOST EFFECTIVE USE OF TIME AND SKILLS

Q. What current opportunities are there for the individual to provide information about his desires and abilities in order to allow effective utilization of his time and skills?

A. Newly commissioned officers are considered for specialties based on their education, training, experience, interest, physical qualifications, and aptitude scores. Such information is provided by the officer on forms required for application for commission.

Each officer below the grade of general, with the exception of Air Force Institute of Technology medical students, is required to complete a Career Objective Statement which reflects the individual's career goals. The information provides personnel officers with the complete desires, including assignment, long-range, professional development objectives, and career broadening preferences and may be changed at any time deemed necessary by the individual officer. Prior to completing his Career Objective Statement, the officer reads the Career Management directive which provides guidance in the planning for logical career progression with emphasis on the individual's aspirations. When the individual officer is being considered for assignment, this information is used in the final assignment determination.

OPPORTUNITIES UNDER A NEGOTIATED CONTRACT SYSTEM

Q. Would not such oportunities be enhanced by a negotiated contract system?

A. Individual opportunities would be enhanced only to the extent that contract negotiations permitted individuals to select the training and positions which they desired. However, the opportunities gained for the individual might well be lost by the uncertainty of contract renewal. Such a system would greatly complicate assignment policy and the cost to the Air Force might well be jobs which go unfilled because no one with the requisite abilities desires them.

JUSTIFICATION

Chairman MCCLELLAN. At this point in the record there will be included additional information from the justifications.

[The justification follows:]

Justification

INTRODUCTION

This appropriation finances the cost of active duty military personnel of the Air Force.

Cost and strength data by major force program is provided on pages 15 through 22. The costs were computed by developing single dollar factors for officers and for enlisted personnel from total Air Force costs for each fiscal year. Total Air Force manyears for any fiscal year tend to approximate the midpoint between the beginning and end strengths and this principle has been applied to the costing of each major force program. These manyear and dollar factors were also used to price military personnel data presented in other appropriation justification books.

The total cost of permanent change of station travel as well as academy cadets has been included in the "Training, Medical and Other General Personnel Activities" program.

The detailed estimate on pages 27 through 109 is presented in conventional budget activity terms such as pay and allowances of officers, enlisted and cadets, subsistence of enlisted personnel, permanent change of station travel, and other costs of the military personnel program. The associated budget activity structure and detailed justification demonstrate how the military personnel program is managed and controlled in terms of numbers of officers, enlisted personnel and cadets, promotion and assignment policies and characteristics. This management responsibility encompasses a wide range of personnel actions which involve requirements dealing with grade structure, promotions, gains and losses, flight status, subsistence, permanent change of station travel and other related requirements.

SUMMARY OF MILITARY PERSONNEL STRENGTH

	FY 1972 Actual		FY 1973 Planned		FY 1974 Planned	
	Man-Years	End Strength 30 June 1972	Man-Years	End Strength 30 June 1973	Man-Years	End Strength 30 June 1974
DIRECT PROGRAM						
Officers	124,251	121,161	119,558	114,845	115,508	112,617
Enlisted	621,342	599,335	584,228	572,366	562,368	548,618
Academy Cadets	3,915	4,390	4,184	4,417	4,184	4,417
Subtotal	749,508	724,886	707,970	691,628	682,060	665,652
REIMBURSABLE PROGRAM 1/						
Officers	397	310	296	277	277	276
Enlisted	533	439	434	429	429	429
Subtotal	930	749	730	706	706	705
TOTAL PROGRAM						
Officers	124,648	121,471	119,854	115,122	115,785	112,893
Enlisted	621,875	599,774	584,662	572,795	562,797	549,047
Academy Cadets	3,915	4,390	4,184	4,417	4,184	4,417
Total	750,438	725,635	708,700	692,334	682,766	666,357

1/ Military personnel assigned to agencies outside of Department of Defense on a reimbursable basis under the provisions of 10 USC 8230 (Air Force).

SCHEDULE OF INCREASES AND DECREASES
(In Thousands of Dollars)

		Amount
1. Pay and Allowances of Officers		
FY 1973 Program		$2,146,261
Increases:		
Full year effect of 1 January 1973 Pay Raise	+47,062	
Longevity	+10,994	
Continuation Pay	+ 671	
FICA Rate and Base	+10,396	
Promotion Passovers	+ 1,950	
Total Increases		+71,073
Decreases:		
Reduction of 4,050 Man-Years	-65,474	
Grade Structure Change	-16,481	
Reduced Overseas Strengths	- 4,878	
Reduced Losses	-11,201	
Colonels and Generals on Flight Pay	- 8,540	
Total Decreases		-106,574
FY 1974 Program		$2,110,760
2. Pay and Allowances of Enlisted		
FY 1973 Program		$4,410,766
Increases:		
Full year effect of 1 January 1973 Pay Raise	+111,501	
Longevity	+ 386	
Six Year Reenlistments	+ 14,008	
FICA Rate and Base	+ 9,579	
Total Increases		+135,474
Decreases:		
Reduction of 21,860 Man-Years	-152,626	
Grade Structure Change	- 40,503	
Reduced Overseas Strengths	- 16,122	
Reduced Gains	- 4,940	
Reduced Reenlistments and VRB	- 9,249	
Reduced Losses	- 15,433	
14,609 Fewer Man-years on Pro-Pay	- 11,358	
Total Decreases		-250,231
FY 1974 Program		$4,296,009
3. Pay and Allowances of Cadets		
FY 1973 Program		$ 17,205
Increases:		
Full year effect of 1 January 1973 Pay Raise	+ 473	
Commuted Ration Rate Change	+ 47	
FICA Rate	+ 43	
Total Increases		+ 563
FY 1974 Program		$ 17,768

Schedule of Increases and Decreases
(Dollars in Thousands)

4. Subsistence of Enlisted Personnel — Amount

FY 1973 Program---------- $ 306,013

Increases:

	Amount 1973	1974	Change
Basic Allowance for Subsistence	$260,174	$264,712	$+4,538

Total Increases---------- +4,538

Decreases:

Subsistence-In-Kind	$ 45,839	$ 42,331	$-3,508

Total Decreases---------- -3,508

FY 1974 Program---------- $ 307,043

The major reason for the increased cost in FY 1974 is related to the increase in the cost of food in both the basic allowance for subsistence and subsistence-in-kind categories. Man-year reductions were more than offset by the increased cost of food as both the commuted ration rate and dining hall rate are higher in FY 1974 than in FY 1973.

5. Permanent Change of Station Travel

FY 1973 Program---------- $475,400

Increases:

Type Moves	Number of Moves 1973	1974	Change	Amount 1973	1974	Change
Operational	61,463	72,868	+11,405	$ 57,495	$ 69,026	$+11,531
Rotational	259,217	295,556	+36,339	310,241	353,110	+42,869
Organized Unit	9,258	12,465	+ 3,207	5,822	8,089	+ 2,267
	329,938	380,889	+50,951	$373,558	$430,225	$+56,667

Total Increases---------- $+56,667

Schedule of Increases and Decreases
(Dollars in Thousands)

Decreases:

						Amount
Accession	119,768	95,630	-24,138	$ 18,934	$ 15,854	$- 3,080
Training	175,611	142,788	-32,823	24,026	20,711	- 3,315
Separation	149,578	118,562	-31,016	58,882	48,930	- 9,952
	444,957	356,980	-87,977	$101,842	$ 85,495	$-16,347

Total Decreases---------- -16,347

FY 1974 Program---------- $515,720

The major reasons for the additional dollar requirement in FY 1974 over FY 1973 is related to the change in the number of high cost operational, rotational and organized unit moves displayed above. Factors which contributed to the increased cost are (1) granting travel and transportation allowances to enlisted personnel in the grade of E-4 who were not previously entitled and (2) during FY 1974 the Air Force will begin converting mandatory 48 month long overseas tours back to 36 months.

6. Other Military Personnel Costs

FY 1973 Program		$17,601
Increases:		
Enlisted Deaths	+10	
-5,000 participants in USSD Program offset by higher interest payments	+95	
Total Increases		+ 105
Decreases:		
-450 Apprehensions	-105	
Zero requirements for SGLI	-1,301	
Total Decreases		- 1,406
FY 1974 Program		$16,300

ACTIVE DUTY MILITARY PERSONNEL MANPOWER
BY BUDGET ACTIVITY (FYDP) AND BY OPERATING PROGRAM
(Dollars in Thousands; End Strengths in Whole Numbers)

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
1. Strategic Forces			
Operation of the Air Force			
Costs	$1,516,836	$1,622,541	$1,614,262
End Strengths:			
Officer	25,830	25,354	24,797
Enlisted	144,716	141,955	137,774
Total	170,546	167,309	162,571
2. General Purpose Forces			
Operation of the Air Force			
Costs	$1,864,363	$1,864,421	$1,735,895
End Strengths:			
Officer	27,399	23,097	22,239
Enlisted	185,155	162,234	154,989
Total	212,554	185,331	177,228

Budget Activity/ Operating Program Direct Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
3. Intelligence and Communications			
Operation of the Air Force			
Costs	$ 799,192	$ 786,125	$ 759,837
End Strengths:			
Officer	10,694	9,482	9,046
Enlisted	76,445	72,463	69,737
Total	87,139	81,945	78,783
Operation of Defense Agencies			
Costs	$ 31,206	$ 40,914	$ 50,138
End Strengths:			
Officer	915	1,239	1,254
Enlisted	2,005	3,312	3,331
Total	2,920	4,551	4,585
Research and Development, Defense Agencies			
Costs	$ 1,834	$ 2,265	$ 2,711
End Strengths:			
Officer	85	127	127
Enlisted	41	46	46
Total	126	173	173

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
Total, Intelligence and Communications			
Costs	$ 832,232	$ 829,304	$ 812,686
End Strengths:			
Officer	11,694	10,848	10,427
Enlisted	78,491	75,821	73,114
Total	90,185	86,669	83,541
4. Airlift and Sealift			
Operation of the Air Force			
Costs	$ 422,804	$ 434,482	$ 414,798
End Strengths:			
Officer	6,889	6,212	5,816
Enlisted	39,614	38,403	34,991
Total	46,503	44,615	40,807
5. Guard and Reserve			
Operation of the Air Force			
Costs	$ 20,417	$ 27,299	$ 28,552
End Strengths:			
Officer	622	640	631
Enlisted	1,773	2,183	1,984
Total	2,395	2,823	2,615

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
6. Research and Development			
Research and Development, Air Force			
Costs	$ 206,157	$ 216,978	$ 218,965
End Strengths:			
Officer	6,907	6,903	6,954
Enlisted	11,378	11,191	10,759
Total	18,285	18,094	17,713
7. Central Supply and Maintenance			
Operation of the Air Force			
Costs	$ 95,994	$ 113,928	$ 113,740
End Strengths:			
Officer	3,108	3,027	2,976
Enlisted	7,181	7,261	6,986
Total	10,289	10,288	9,962
Operation of Defense Agencies			
Costs	$ 5,942	$ 6,720	$ 6,895
End Strengths:			
Officer	362	350	361
Enlisted	35	41	44
Total	397	391	405

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Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
Research and Development, Defense Agencies			
Costs	$ 16	$ 18	$ 18
End Strengths:			
Officer	-	1	1
Enlisted	-	-	-
Total	-	1	1
Total, Central Supply and Maintenance			
Costs	$ 101,952	$ 120,666	$ 120,653
End Strengths:			
Officer	3,470	3,378	3,338
Enlisted	7,216	7,302	7,030
Total	10,686	10,680	10,368
8. Training, Medical and Other General Personnel Activities			
Operation of the Air Force			
Costs*	$1,807,200	$1,984,769	$2,043,007
End Strengths:			
Officer	31,099	30,690	31,380
Enlisted	115,148	115,411	112,464
Cadets	4,390	4,417	4,417
Total	150,637	150,518	148,261

* Cost include Permanent Change of Station Travel: FY 1972 - $423,467 FY 1973 - $475,400
FY 1974 - $515,720

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
9. Administration and Associated Activities			
Operation of the Air Force			
Costs	$ 241,476	$ 219,777	$ 202,902
End Strengths:			
Officer	6,236	5,754	5,302
Enlisted	14,377	12,753	10,948
Total	20,613	18,507	16,250
Operation of Defense Agencies			
Costs	$ 9,698	$ 10,059	$ 10,160
End Strengths:			
Officer	432	436	426
Enlisted	284	270	272
Total	716	706	698
Research and Development, Defense Agencies			
Costs	$ 539	$ 755	$ 691
End Strengths:			
Officer	38	35	33
Enlisted	12	10	5
Total	50	45	38

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program			
Total, Administration and Associated Activities			
Costs	$ 251,713	$ 230,591	$ 213,753
End Strengths:			
Officer	6,706	6,225	5,761
Enlisted	14,673	13,033	11,225
Total	21,379	19,258	16,986
10. Support of Other Nations			
Operation of the Air Force			
Costs	$ 16,672	$ 42,195	$ 61,029
End Strengths:			
Officer	545	1,498	1,274
Enlisted	1,171	4,833	4,288
Total	1,716	6,331	5,562
Direct Program Summary			
Operation of the Air Force			
Costs	$6,784,954	$7,095,537	$6,974,022
End Strengths:			
Officer	112,422	105,754	103,461
Enlisted	585,580	557,496	534,161
Cadets	4,390	4,417	4,417
Total	702,392	667,667	642,039

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program Summary (Continued)			
Operation of Defense Agencies			
Costs	$ 46,846	$ 57,693	$ 67,193
End Strengths:			
Officer	1,709	2,025	2,041
Enlisted	2,324	3,623	3,647
Total	4,033	5,648	5,688
Research and Development, Air Force			
Costs	$ 206,157	$ 216,978	$ 218,965
End Strengths:			
Officer	6,907	6,903	6,954
Enlisted	11,378	11,191	10,759
Total	18,285	18,094	17,713
Research and Development, Defense Agencies			
Costs	$ 2,389	$ 3,038	$ 3,420
End Strengths:			
Officer	123	163	161
Enlisted	53	56	51
Total	176	219	212

Budget Activity/ Operating Program	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Direct Program Summary (Continued)			
Total, Direct Program			
Costs	$7,040,346	$7,373,246	$7,263,600
End Strengths:			
Officer	121,161	114,845	112,617
Enlisted	599,335	572,366	548,618
Cadets	4,390	4,417	4,417
Total	724,886	691,628	665,652
Reimbursable Program			
Costs	$ 62,571	$ 48,265	$ 48,504
End Strengths:			
Officer	310	277	276
Enlisted	439	429	429
Total	749	706	705
Total, Air Force			
Costs	$7,102,917	$7,421,511	$7,312,104
End Strengths:			
Officer	121,471	115,122	112,893
Enlisted	599,774	572,795	549,047
Cadets	4,390	4,417	4,417
Total	725,635	692,334	666,357

Gains and Losses by Type of Officer, Enlisted and Cadets

	FY 1972	FY 1973	FY 1974
Officers:			
Beginning Strength	125,726	121,471	115,122
Gains:			
Regulars from Academies	763	850	825
School of Military Sciences, Officer	3,779	3,274	2,558
Call to Active Duty	4,351	4,252	4,397
Physicians	1,252	1,052	1,198
Dentists	442	363	391
Nurses	784	558	722
Optometrists	52	62	52
Veterinarians	61	55	51
Legal (JAG)	101	209	120
Chaplains	30	36	50
Gain Adjustment	25	188	-
Total Gains	11,640	10,899	10,364
Losses:			
Separation of Medical Officers (other than below)	436	536	246
Contract and obligation termination	3,784	2,867	3,655
Reduction-in-Force	-	1,442	1,000
Early Release	2,035	3,392	200
Separation of Career Reservists	464	618	956
Retirements (over 20 years)	4,617	4,381	3,129
Normal Attrition	1,007	1,050	800
Promotion Passovers	564	320	325
Physicians	1,330	932	810
Dentists	415	388	469
Nurses	644	592	682
Optometrists	54	62	52
Veterinarians	82	53	54
Legal (JAG)	235	172	125
Chaplains	56	65	90
Loss Adjustment	172	378	-
Total Losses	15,895	17,248	12,593
End Year Strength	121,471	115,122	112,893

	FY 1972	FY 1973	FY 1974
Airmen:			
Beginning Strength	624,980	599,774	572,795
Gains:			
Enlistments:			
Prior Service	6,816	7,141	7,500
Non-Prior Service - Male	81,464	90,357	65,361
WAF	4,584	6,172	8,000
School of Military Sciences, Officer Program	3,005	3,361	2,404
Recall-Reserves	297	315	250
Reserves-USAFA Prep School	134	206	203
Returned from Dropped From Roles	223	245	300
0-90 Days Reenlistment	1,465	1,526	1,500
Gain Adjustment	937	563	-
Total Gains	98,925	109,886	85,518
Losses:			
Separation or Expiration of Term of Service or Normal Early Release	62,537	76,579	56,876
Reserve Separation	980	-	-
To Commissioned Officers	3,779	3,274	2,558
Retirements (over 20 years)	26,489	25,920	23,348
Attrition	30,342	31,010	26,484
Deserters	4	1	-
Loss Adjustment	-	81	-
Total Losses	124,131	136,865	109,266
End Year Strength	599,774	572,795	549,047
Academy Cadets:			
Beginning Strength	4,401	4,390	4,417
Gains:			
Input	1,505	1,548	1,500
Losses:			
Graduates	754	850	825
Attrition	762	671	675
Total Losses	1,516	1,521	1,500
End Year Strength	4,390	4,417	4,417
Grand Total - End Strength	725,635	692,334	666,357

Distribution of Military Personnel by Geographical Area [1/]

Region and Country	Number of Personnel (End Strength) FY 1972	FY 1973	FY 1974
Europe and Related Areas:			
United Kingdom	[Deleted]	[Deleted]	[Deleted]
Spain			
Turkey			
West Germany			
Other Europe & Related Areas			
Total Europe and Related Areas	72,356	75,601	75,501
Western Pacific:			
Japan	[Deleted]	[Deleted]	[Deleted]
South Korea			
Philippines			
Ryukyu Islands			
Taiwan			
Total Western Pacific	46,545	42,425	39,454
Near East and South Asia	503	571	733
Other Pacific	406	417	417
Western Hemisphere	1,503	1,479	653
USSR and East Europe	26	14	14
United States, Territories, and SEA	604,296	571,827	549,585
Total	725,635	692,334	666,357

1/ Number of personnel distributed by region, and by country if the end strength for a country exceeds 5,000

SCHEDULE OF COMBAT AND NON-COMBAT FORCES
End Strength

Type of Unit	FY 1972	FY 1973	FY 1974
1. Combat Forces (Strategic and General Purpose)			
a. Europe and Related Areas	24,673	26,158	27,652
b. Western Pacific	15,127	13,424	12,901
c. Other Foreign Countries	690	697	597
d. United States, Territories & SEA	195,992	179,903	175,169
2. Mission Support & Auxiliary Forces			
a. Europe and Related Areas	42,618	43,924	42,337
b. Western Pacific	28,067	25,819	24,107
c. Other Foreign Countries	1,487	1,579	1,115
d. United States, Territories & SEA	232,124	218,574	203,455
3. Central Support			
a. Europe and Related Areas	5,065	5,519	5,512
b. Western Pacific	3,351	3,182	2,446
c. Other Foreign Countries	261	205	105
d. United States, Territories & SEA	110,956	106,563	103,033
4. Individuals			
a. Europe and Related Areas	-	-	-
b. Western Pacific	-	-	-
c. Other Foreign Countries	-	-	-
d. United States, Territories & SEA	65,224	66,787	67,928
5. TOTAL	725,635	692,334	666,357

SUMMARY OF REQUIREMENTS BY BUDGET PROGRAM
(In Thousands of Dollars)

Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
(1)	(2)	(3)	(4)
DIRECT PROGRAM			
Pay and Allowances of Officers	$2,046,781	$2,146,261	$2,110,760
Pay and Allowances of Enlisted	4,220,527	4,410,766	4,296,009
Pay and Allowances of Cadets	14,640	17,205	17,768
Subsistence of Enlisted Personnel	317,662	306,013	307,043
Permanent Change of Station Travel	423,467	475,400	515,720
Other Military Personnel Costs	17,269	17,601	16,300
Total Direct Program	7,040,346	7,373,246	7,263,600
REIMBURSABLE PROGRAM			
Pay and Allowances of Officers	12,115	9,234	9,378
Pay and Allowances of Enlisted	21,377	13,931	14,026
Subsistence of Enlisted Personnel	28,812	24,900	24,900
Permanent Change of Station Travel	267	200	200
Total Reimbursable Program	62,571	48,265	48,504
TOTAL PROGRAM			
Pay and Allowances of Officers	2,058,896	2,155,495	2,120,138
Pay and Allowances of Enlisted	4,241,904	4,424,697	4,310,035
Pay and Allowances of Cadets	14,640	17,205	17,768
Subsistence of Enlisted Personnel	346,474	330,913	331,943
Permanent Change of Station Travel	423,734	475,600	515,920
Other Military Personnel Costs	17,269	17,601	16,300
Total Obligations	$7,102,917	$7,421,511	$7,312,104

PROGRAM: Pay and Allowances of Officers

SUMMARY OF REQUIREMENTS BY PROJECT
(In Thousands of Dollars)

Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
(1)	(2)	(3)	(4)
Basic Pay	$1,524,944	$1,588,024	$1,579,212
Incentive Pay for Hazardous Duty	143,423	135,718	121,679
Special Pay	26,039	29,245	27,299
Basic Allowance for Quarters	160,603	176,623	169,923
Basic Allowance for Subsistence	71,618	68,863	66,525
Station Allowances, Overseas	11,408	12,469	11,223
Uniform Allowances	2,826	2,619	2,554
Family Separation Allowances	4,200	3,921	3,253
Separation Payments	42,646	56,119	47,430
Social Security Tax-Employer's Contribution	55,546	62,441	69,321
Missing-in-Action & Prisoner of War (80 Stat.625)	15,643	19,453	21,719
Total Obligations	2,058,896	2,155,495	2,120,138
Less Reimbursements	12,115	9,234	9,378
Total Direct Obligations	$2,046,781	$2,146,261	$2,110,760

(In Thousands of Dollars)

PROJECT: Basic Pay of Officers

Estimate - FY 1974....$1,579,212
Estimate - FY 1973.... 1,588,024
Actual - FY 1972.... 1,524,944

PART I - PURPOSE AND SCOPE

The funds requested will provide for basic compensation of officers on active duty, including length of service increments, under provision of 37 U.S.C. 201, 203, and 205. Included in the estimates is the basic compensation (including length of service increments) of the Reserve components on active duty for purposes other than training (including persons serving under the provisions of Sections 175, 265, 8019, 8033 and 8496 of title 10 U.S.C., and Section 708 of title 32, U.S.C.)

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 program is based on a beginning strength of 115,122 officers, an end strength of 112,893 and 115,785 manyears. Costs are determined on the basis of a grade distribution by longevity for each fiscal year. The average rates utilized are derived from a consideration of the latest experienced longevity adjusted by planned gains and losses for respective years.

(In Thousands of Dollars)

PROJECT: Incentive Pay for Hazardous Duty

Estimate - FY 1974....$121,679
Estimate - FY 1973.... 135,718
Actual - FY 1972.... 143,423

PART I - PURPOSE AND SCOPE

The funds requested will provide for pay to officers under provisions of 37 U.S.C. 301 for these types of duty:

(1) Crew members involving frequent and regular participation in aerial flight;
(2) Non-crew duty involving frequent and regular participation in aerial flights not as a crew member;
(3) Parachute jumping as an essential part of military duty;
(4) Demolition of explosives as a primary duty including training for such duty;
(5) High or low-pressure chamber inside observer;
(6) Duty - Acceleration or deceleration experimental subject including assignment of "tilt table";
(7) Duty - Subject in thermal stress experiments; and
(8) Other hazardous duty required by order and authorized under the provisions of 37 U.S.C. 301.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Hazardous duty pay is computed on the basis of the average number of officers in each pay grade who are eligible for payment. Average pay rates for flying-duty crew members are based on statutory rates to which longevity factors have been applied. All other hazardous duty pay is computed at the statutory rate per manyear.

In accordance with Section 715 of the FY 1973 DoD Appropriations Act, Flight Pay for officers in the rank of Colonel or above in non-combat assignments will terminate June 1, 1973.

(In Thousands of Dollars)

PROJECT: Special Pay of Officers

Estimate - FY 1974....$27,299
Estimate - FY 1973.... 29,245
Actual - FY 1972.... 26,039

PART I - PURPOSE AND SCOPE

The funds requested will provide for Special Pay:

(1) To officers on active duty as physicians, dentists, veterinarians, and optometrists under provisions of 37 U.S.C. 301, 302, 302(a) and 303.

(2) Continuation Pay for physicians (implemented March 1, 1968) and Dentists (implemented September 1, 1972) is authorized under the provisions of 37 U.S.C. 311.

(3) For personal money allowances for certain general officers under provisions of 37 U.S.C. 414(a); and

(4) Officers on duty subject to hostile fire under provisions of 37 U.S.C. 310.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Special pay of physicians, dentists, veterinarians and optometrists is computed by multiplying the statutory rates by the average numbers programmed to occupy each longevity pay step within each grade. Continuation Pay is computed using cost factors based on past experience with projected numbers of physicians and dentists programmed to qualify and agree to remain on active duty for an additional year. Other special pay items are computed by extending the average numbers programmed to be entitled by the statutory rates.

(In Thousands of Dollars)

PROJECT: Basic Allowance for Quarters - Officers

Estimate - FY 1974....$169,923
Estimate - FY 1973.... 176,623
Actual - FY 1972.... 160,603

PART I - PURPOSE AND SCOPE

The funds required are to provide for payment of basic allowance for quarters authorized under provisions of 37 U.S.C. 403 to officers with or without dependents; and to officers occupying inadequate family housing under the provisions of Section 508 of the FY 1973 Military Construction Authorization Act.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Basic allowance for quarters is determined by multiplying the number of eligible personnel by the statutory rates to which each grade is entitled.

(In Thousands of Dollars)

PROJECT: Basic Allowance for Subsistence

Estimate - FY 1974....$66,525
Estimate - FY 1973.... 68,863
Actual - FY 1972.... 71,618

PART I - PURPOSE AND SCOPE

The funds requested will provide for subsistence allowances on a monthly basis as authorized by 37 U.S.C. 402.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Basic Allowance for Subsistence costs are computed by multiplying the statutory rate of $574.56 by the average number of officers programmed for the year.

(In Thousands of Dollars)

PROJECT: Station Allowances, Overseas

Estimate - FY 1974....$11,223
Estimate - FY 1973.... 12,469
Actual - FY 1972.... 11,408

PART I - PURPOSE AND SCOPE

The funds requested will provide payments of a per diem allowance to officers and their dependents on duty outside the United States, considering all elements of the cost of living, including quarters, subsistence and other necessary incidental expenses as prescribed by Joint Travel Regulations and authorized under the provisions of 37 U.S.C. 405.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Overseas station allowances are computed using cost factors based on past experience for each rank with the average numbers programmed to draw each of the three types of overseas station allowances; Cost of Living, Housing and Temporary Lodging.

(Amount in Thousands of Dollars)

PROJECT: Uniform Allowances - Officers

Estimate - FY 1974....$2,554
Estimate - FY 1973.... 2,619
Actual - FY 1972.... 2,826

PART I - PURPOSE AND SCOPE

These funds will provide for the initial payment and supplemental allowances under provisions of 37 U.S.C 415 and 416 to officers for purchase of required uniforms.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Uniform allowances are determined by applying statutory rates to the number of eligibles programmed.

(In Thousands of Dollars)

PROJECT: Family Separation Allowances - Officers

Estimate - FY 1974....$ 3,253
Estimate - FY 1973.... 3,921
Actual - FY 1972.... 4,200

PART I - PURPOSE AND SCOPE

The funds requested are to provide for Family Separation Allowance payments to officers with dependents for added separation expenses under the provisions of 37 U.S.C. 427 when:

(a) Travel of dependents to overseas duty station is not authorized and the member maintains two homes, one in CONUS for his family and one overseas for himself; and/or

(b) When a member with dependents makes a permanent change of station or is on temporary duty travel for thirty days or more either in CONUS or overseas and the travel of dependents to his duty station is not authorized and dependents do not reside at or near duty station.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Allowances for family separation payments are determined by multiplying the number of personnel eligible for each type of family separation allowance by the statutory rate applicable.

(In Thousands of Dollars)

PROJECT: Separation Payments

Estimate - FY 1974....$ 47,430
Estimate - FY 1973.... 56,119
Actual - FY 1972.... 42,646

PART I - PURPOSE AND SCOPE

The funds requested will provide:

(1) For lump sum terminal leave payments to officers under provisions of 37 U.S.C. 501.

(2) For severance pay to officers, including elimination severance pay to officers not eligible for retirement under any provision of law on the date of elimination by promotion list passover, under provisions of 10 U.S.C. 1167, 6382-84, and 8303; elimination severance pay for cause under provisions of 10 U.S.C. 8786; disability severance pay under provisions of 37 U.S.C. 272 and 273; and lump sum readjustment payments to Reserve Officers under provisions of 10 U.S.C. 680 and 687 and P.L. 87-509, approved June 28, 1962.

(3) For lump sum payment to Air Force Reserve Officers under provisions of Act of June 16, 1936.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Separation payments are arrived at by using cost factors, which are based on past experience, and programmed separations by type and by rank.

(Amount in Thousands of Dollars)

PROJECT: Social Security Tax - Employer's Contribution

Estimate - FY 1974....	$ 69,321
Estimate - FY 1973....	62,441
Actual - FY 1972....	55,546

PART I - PURPOSE AND SCOPE

The funds requested provide for the employer's tax to the Social Security Administration as required by the Federal Insurance Contribution Act (FICA).

PART II - JUSTIFICATION OF FUNDS REQUESTED

Social Security costs are computed by determining the average numbers of personnel paid by grade and longevity pay step, computing the total amount paid in each pay step and applying the proper FICA rate within the total annual limit on taxable income. Public Law 92-336 increased annual taxable income from $9,000 to $10,800 1 January 1973 to $12,000 1 January 1974. P.L. 92-603 revised tax rate 1 January 1973 to 5.85% of taxable income.

SUMMARY OF REQUIREMENTS BY PROJECT
(In Thousands of Dollars)

Title (1)	FY 1972 Actual (2)	FY 1973 Estimate (3)	FY 1974 Estimate (4)
Basic Pay	$ 3,173,425	$ 3,315,033	$ 3,266,573
Incentive Pay for Hazardous Duty	25,622	24,626	25,551
Special Pay	47,403	38,367	27,634
Proficiency Pay	51,313	39,743	28,385
Reenlistment Bonus	122,760	112,294	117,397
Basic Allowance for Quarters	439,896	465,980	432,057
Station Allowances, Overseas	37,832	37,980	36,095
Clothing Allowances	61,538	63,641	56,554
Family Separation Allowances	15,178	13,336	9,832
Separation Payments	101,860	130,859	118,386
Social Security Tax - Employer's Contribution	164,343	181,833	190,412
Missing-in-Action & Prisoners of War (80 Stat 625)	734	1,005	1,159
Total Obligations	4,241,904	4,424,697	4,310,035
Less Reimbursements	21,377	13,931	14,026
Direct Obligations	$ 4,220,527	$ 4,410,766	$ 4,296,009

(In Thousands of Dollars)

PROJECT: Basic Pay of Enlisted

Estimate - FY 1974....$3,266,573
Estimate - FY 1973.... 3,315,033
Actual - FY 1972.... 3,173,425

PART I - PURPOSE AND SCOPE

The funds requested will provide for basic compensation of enlisted personnel on active duty, including length of service increments, under provision of 37 U.S.C. 201, 203 and 205. Included in the estimates is the basic compensation (including length of service increments) of the Reserve components on active duty for purposes other than training (including persons serving under the provisions of Sections 175, 265, 8019, 8033 and 8496 of title 10 U.S.C., and Section 708 of title 32, U.S.C.)

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 program is based on a beginning strength of 572,795 enlisted personnel, an end strength of 549,047 and 562,797 manyears. Costs are determined on the basis of a grade distribution by longevity for each fiscal year. The average rates utilized are derived from a consideration of the latest experienced longevity adjusted by planned gains and losses for respective years.

(In Thousands of Dollars)

PROJECT: Incentive Pay - Hazardous Duty

Estimate - FY 1974....$ 25,551
Estimate - FY 1973.... 24,626
Actual - FY 1972.... 25,622

PART I - PURPOSE AND SCOPE

The funds requested will provide for pay to enlisted personnel under provisions of 37 U.S.C. 301 for these types of duty:

(1) Crew member involving frequent and regular participation in aerial flights;
(2) Non-crew duty involving frequent and regular participation in aerial flights not as a crew member;
(3) Parachute jumping as an essential part of military duty;
(4) Demolition of explosives as a primary duty including training for such duty;
(5) Duty - acceleration or deceleration experimental subject including assignment of "tilt table";
(6) High or low-pressure chamber inside observer;
(7) Duty - subject in thermal stress experiments;
(8) Other hazardous duty required by order and authorized under the provisions of 37 U.S.C. 301.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Hazardous duty pay is computed on the basis of the average number of enlisted personnel in each pay grade who are eligible for payment. Average pay rates for flying duty crew members are based on statutory rates to which longevity factors have been applied. All other hazardous duty pay is computed at the statutory rate per manyear.

(In Thousands of Dollars)

PROJECT: Special Pay of Enlisted

Estimate - FY 1974....	$ 27,634
Estimate - FY 1973....	38,367
Actual - FY 1972....	47,403

PART I - PURPOSE AND SCOPE

The funds requested will provide for the special pay to enlisted personnel while on sea duty or duty outside the contiguous 48 states and the District of Columbia at places designated by the Secretary of Defense under the provisions of 37 U.S.C. 305; and for duty subject to hostile fire under the provisions of 37 U.S.C. 310.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Duty at certain places is computed by applying statutory rates to the average numbers of personnel programmed to be overseas. Personnel programmed to be overseas are based on actual inventories and programmed transfers.

(Amount in Thousands of Dollars)

PROJECT: Proficiency Pay

Estimate - FY 1974....	$28,385
Estimate - FY 1973....	39,743
Actual - FY 1972....	51,313

PART I - PURPOSE AND SCOPE

These funds will provide for proficiency pay for enlisted members who are qualified and serving in a designated military specialty or designated as having demonstrated superior performance in a military skill. This special pay is in accordance with provisions of 37 U.S.C. 307.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The estimate is based on the number of individuals programmed to occupy skills for which proficiency pay is authorized and those anticipated to demonstrate superior performance on their job.

(In Thousands of Dollars)

PROJECT: Reenlistment Bonus

Estimate - FY 1974....$117,397
Estimate - FY 1973.... 112,294
Actual - FY 1972.... 122,760

PART I - PURPOSE AND SCOPE

The funds requested are to provide:

(a) Bonus to enlisted personnel reenlisting in the regular Air Force within three months after the date of discharge or release from compulsory or voluntary active duty (other than for training) or for those personnel extending their enlistments for at least two years and who are not covered by Section 207 of the Career Compensation Act of 1949, as amended. This special pay is in accordance with provisions of 37 U.S.C. 308 as amended.

(b) Variable reenlistment bonus authorized under Public Law 89-132, August 21, 1965, to enlisted member designated as having a critical military skill and who is entitled to a bonus upon his first reenlistment may be paid an additional amount of not more than four times the amount of that bonus.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The average numbers programmed to receive reenlistment bonuses are adjusted to remove or reduce those with sixteen or more years of service. The remaining numbers are multiplied by past experience cost factors for each grade to establish the total cost.

Effective with FY 1973, 6-year reenlistments were programmed in the Air Force for the first time.

Variable reenlistment bonus requirements are based on latest reenlistment experience of those members possessing critical skills. The bonus for each skill is based on the average first reenlistment cost times a multiple of from 1 to 4 depending on the need for the skill. This bonus is then divided by four to arrive at the incremental rate, or used in its entirety for the lump sum rate.

(In Thousands of Dollars)

PROJECT: Basic Allowance for Quarters - Enlisted

Estimate - FY 1974....$432,057
Estimate - FY 1973.... 465,980
Actual - FY 1972.... 439,896

PART I - PURPOSE AND SCOPE

The funds requested are to provide for payment of basic allowances for quarters authorized under provisions of 37 U.S.C. 403 to enlisted personnel with or without dependents; and to enlisted personnel occupying inadequate family housing under the provisions of Section 508 of the FY 1973 Military Construction Act.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Basic allowance for quarters is determined by multiplying the number of eligible personnel by the statutory rates to which each grade is entitled.

(In Thousands of Dollars)

PROJECT: Family Separation Allowances - Enlisted

Estimate - FY 1974....$ 9,832
Estimate - FY 1973.... 13,336
Actual - FY 1972.... 15,178

PART I - PURPOSE AND SCOPE

The funds requested are to provide for Family Separation Allowance payments to enlisted personnel with dependents for added separation expenses under the provisions of 37 U.S.C. 427 when:

(1) Travel of dependents to overseas duty station is not authorized and the member is required to maintain two homes, one in CONUS for his family and one overseas for himself; and/or

(2) When a member with dependents make a permanent change of station or is on temporary duty travel for thirty days or more either in CONUS or overseas and the travel of dependents to his duty station is not authorized and depenaents do not reside at or near duty station.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Allowances for family separation payments are determined by multiplying the number of personnel eligible for each type of family separation allowance by the statutory rate applicable.

(In Thousands of Dollars)

PROJECT: Station Allowances, Overseas

Estimate - FY 1974.....$ 36,095
Estimate - FY 1973..... 37,980
Actual - FY 1972..... 37,832

PART I - PURPOSE AND SCOPE

The funds requested will provide payments of a per diem allowance to enlisted personnel and their dependents on duty outside the United States, considering all elements of the cost of living, including quarters, subsistence and other necessary incidental expenses as prescribed by Joint Travel Regulations and authorized under the provisions of 37 U.S.C. 405.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Overseas station allowances are computed using cost factors based on past experience for each grade with the average numbers programmed to draw each of the three types of overseas station allowance: Cost of Living, Housing, and Temporary Lodging.

(In Thousands of Dollars)

PROJECT: Clothing Allowances

Estimate - FY 1974....$56,554
Estimate - FY 1973.... 63,641
Actual - FY 1972.... 61,538

PART I - PURPOSE AND SCOPE

The funds requested will provide for payment to enlisted personnel for prescribed clothing, authorized by the Secretary of Defense under the provisions of 37 U.S.C. 418 including:

(1) Initial clothing allowance including civilian clothing allowance when authorized by competent orders;

(2) For cash payment of the basic maintenance allowance (paid from the sixth month of entrance on duty through the thirty-sixth month) and cash payment of standard maintenance allowance for clothing (commencing with the thirty-seventh month and each month thereafter); and

(3) Supplementary clothing allowances for personnel assigned to special organizations or details where the nature of the duties to be performed requires additional items of individual uniform clothing.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Initial clothing allowances are determined by the types of accessions programmed. The clothing maintenance allowance is determined by the average longevity of the airman force. Supplementary clothing allowance estimates are based on numbers programmed for assignment to special details, or locations.

(In Thousands of Dollars)

PROJECT: Separation Payments

Estimate - FY 1974....$118,386
Estimate - FY 1973.... 130,859
Actual - FY 1972.... 101,860

PART I - PURPOSE AND SCOPE

The funds requested will provide for payment to enlisted personnel for:

(1) Lump sum terminal leave payments authorized under provisions of 37 U.S.C. 501; and

(2) Severance pay to members for disability separation authorized under 10 U.S.C. 1212.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Separation Payments are arrived at by using cost factors, which are based on past experience and programmed separations by type and by grade.

(Amount in Thousands of Dollars)

PROJECT: Social Security Tax - Employer's Contribution

Estimate - FY 1974....$190,412
Estimate - FY 1973.... 181,833
Actual - FY 1972.... 164,343

PART I - PURPOSE AND SCOPE

The funds requested provide for the employer's tax to the Social Security Administration as required by the Federal Insurance Contribution Act.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Social Security costs are computed by determining the average numbers of personnel paid by grade and longevity pay step, computing the total amount paid in each pay step, and applying the proper FICA rate within the total annual limit on taxable income. P.L. 92-336 increased taxable income from $9,000 to $10,800, 1 January 1973 and to $12,000, 1 January 1974. P.L. 92-603 revised the tax rate 1 January 1973 to 5.85% of the taxable income.

PROGRAM: Pay and Allowances of Cadets

SUMMARY OF REQUIREMENTS BY PROJECT
(In Thousands of Dollars)

Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
(1)	(2)	(3)	(4)
Academy Cadets.....	$ 14,640	$ 17,205	$ 17,768
Total Direct Obligations.....	$ 14,640	$ 17,205	$ 17,768

(In Thousands of Dollars)

PROJECT: Academy Cadets

Estimate - FY 1974....$17,768
Estimate - FY 1973.... 17,205
Actual - FY 1972.... 14,640

PART I - PURPOSE AND SCOPE

The funds requested are to provide for basic pay and allowances of Academy Cadets and commuted ration allowance under the provisions of 37 U.S.C. 201, 203, and 422; and for employer's share of FICA tax as provided by Federal Insurance Contribution Act.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The fund requirement was determined by applying statutory rates to the projected manyears. Estimates are based on an Academy Cadet program with a beginning strength of 4,417 end year strength of 4,417 and manyear strength of 4,184

SUMMARY OF REQUIREMENTS BY PROJECT
(In Thousands of Dollars)

Title (1)	FY 1972 Actual (2)	FY 1973 Estimate (3)	FY 1974 Estimate (4)
Basic Allowance for Subsistence	$ 266,352	$ 260,174	$ 264,712
Subsistence-in-Kind	51,310	45,839	42,331
Total Direct Obligations	317,662	306,013	307,043
Plus:Reimbursements	28,812	24,900	24,900
Total Obligations	$ 346,474	$ 330,913	$ 331,943

(In Thousands of Dollars)

PROJECT: Basic Allowance for Subsistence

Estimate - FY 1974....$264,712
Estimate - FY 1973.... 260,174
Actual - FY 1972.... 266,352

PART I - PURPOSE AND SCOPE

The funds requested are to provide for the payment of subsistence allowances to active duty enlisted personnel under the provisions of 37 U.S.C. 402. Includes allowances when individual is authorized to mess separately; individual is in leave status; rations in kind are not available; individual is assigned to duty under emergency conditions where government messing facilities are not available; and augmentation of subsistence allowance for meals taken separately (P.L. 253 - 84th Congress).

PART II - JUSTIFICATION OF FUNDS REQUESTED

The fund requirement is based on the average number of enlisted personnel entitled to receive the several types of allowances. Experience indicates that approximately 76% of enlisted personnel draw basic allowances for subsistence in lieu of subsisting in Air Force dining halls.

The commuted and leave ration rate is increased from $1.46 to $1.65 per day effective 1 January 1973.

(In Thousands of Dollars)

PROJECT: Subsistence-in-Kind

Estimate - FY 1974....$42,331
Estimate - FY 1973.... 45,839
Actual - FY 1972.... 51,310

PART I - PURPOSE AND SCOPE

The funds requested are to provide for the procurement of subsistence supplies for issues as rations to enlisted personnel, including emergency and operational rations; also includes the payment of meals furnished under contract at commercial facilities where the payment of commuted rations would create an individual hardship and/or the costs of establishment of a government mess facility are prohibitive.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The fund requirement is based on the number of rations to be furnished airmen entitled to be subsisted at government expense. The personnel strengths are based on the USAF Military Personnel Program. The ration rates are based on actual subsistence in messes rates experienced for CONUS and ashore overseas for the six-month period January-June 1972.

PROGRAM: Permanent Change of Station Travel

SUMMARY OF REQUIREMENTS BY PROJECT
(In Thousands of Dollars)

Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
(1)	(1)	(3)	(4)
Accession Travel	$ 17,801	$ 18,934	$ 15,854
Training Travel	22,512	24,026	20,711
Operational Travel Between Duty Stations	55,333	57,695	69,226
Rotational Travel to and from Overseas	269,205	310,241	353,110
Separation Travel	56,401	58,882	48,930
Travel of Organized Units	2,482	5,822	8,089
Total Obligations	423,734	475,600	515,920
Less Reimbursements	267	200	200
Total Direct Obligations	$ 423,467	$ 475,400	$ 515,720

(Amounts in Thousands of Dollars)

PROJECT: Accession Travel

Estimate - FY 1974....$15,854
Estimate - FY 1973.... 18,934
Actual - FY 1972.... 17,801

PART I - PURPOSE AND SCOPE

Funds requested are to provide for PCS movements of officers, airmen, and cadets to first duty station. This project includes movement from home or point where orders were received to Air Force duty station or school or to processing station and then to first duty station or school.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 Estimate for accession travel includes PCS requirements for officers, airmen, and Air Force Academy Cadets coming to duty with the Air Force as reflected in the Gains Section of FY 1974 Military Personnel Program.

(Amounts in Thousands of Dollars)

PROJECT: Training Travel

Estimate - FY 1974....$20,711
Estimate - FY 1973.... 24,026
Actual - FY 1972.... 22,512

PART I - PURPOSE AND SCOPE

Funds requested are to provide for PCS movements of officers, airmen, and officer candidates to training schools, from last CONUS duty station and from training school to new CONUS duty station or additional school.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 Estimate includes PCS requirements for training travel of officers and airmen in accordance with Air Force Training Programs covering technical training, career training and flying training needed to maintain the skill level and educational requirements necessary to the Air Force mission.

(In Thousands of Dollars)

PROJECT: Operational Travel Between Duty Stations

Estimate - FY 1974....$69,226
Estimate - FY 1973.... 57,695
Actual - FY 1972.... 55,333

PART I - PURPOSE AND SCOPE

Funds requested are to provide for PCS movements of officers and airmen reassigned between duty stations within CONUS and within overseas areas.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 Estimate includes PCS requirements for operational reassignment of officers and airmen between duty stations within CONUS and within overseas areas. Operational reassignments as set forth in the data below consist in part of moves to redistribute needed skills as well as to fill new requirements. The FY 1974 Estimate reflects steps taken by the Air Force to hold operational reassignments to the minimum necessary to carry out Air Force missions.

The FY 1974 Estimate also includes requirements for reassignment of officers and airmen resulting from force structure changes, such as the activation, inactivation, and reorganization of units and movements of units without personnel. These force structure moves have been segregated in the data shown below.

(Amount in Thousands of Dollars)

PROJECT: Rotational Travel to and from Overseas

Estimate - FY 1974....$353,110
Estimate - FY 1973.... 310,241
Actual - FY 1972.... 269,205

PART I - PURPOSE AND SCOPE

Funds requested are to provide for PCS moves of officers and airmen from last CONUS duty station or school to overseas duty station and from last overseas duty station to CONUS duty station or school. This project includes both land travel and trans-oceanic travel.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 estimate includes PCS requirements for rotation of officers and airmen to and from overseas duty assignments in accordance with policies approved by the Office of the Secretary of Defense for overseas tours. The Air Force program includes consideration of the maximum number of voluntary extensions of overseas tours which are reflected as savings in the rotational travel program.

Policy and/or Price Changes:

(1) Transportation Rate Adjustment: The following changes effective July 1973 were made to the transportation rates which impact on PCS Travel and resulted in an estimated decrease of $5.3 million in the FY 1974 estimate:

Item	Change
Port Handling	+4.5%
MAC Passenger	-8.5%
MSC Cargo	-2.4%

(2) Return to 36 Month Overseas Tours: During FY 1974, the Air Force will begin converting mandatory 48 month long overseas tours back to 36 months. Even though the 36 months tour will become mandatory, personnel may elect to serve the 48 months and then further extend for a maximum of 60 months. The Air Force's conversion will be done on a tour proration basis, thereby reducing the amount of funds necessary to defray the cost of this change.

(3) Bachelor Personnel Tour Change: Effective FY 1973, the Air Force permitted bachelor personnel the option of serving the "accompanied by dependents" or "all-others" tour. The purpose of this change was to place bachelors and married unaccompanied personnel on an equal basis.

(4) E-4 Travel Transportation Allowances: Enlisted personnel in the grade of E-4 with over 2 years of service who were not previously entitled will receive full travel and transportation allowances effective July 1973. This change was approved as a part of the Department of Defense Project Volunteer package for FY 1974 and is necessary to preclude financial hardships and to influence retention decisions.

(In Thousands of Dollars)

PROJECT: Separation Travel

Estimate - FY 1974....$48,930
Estimate - FY 1973.... 58,882
Actual - FY 1972.... 56,401

PART I - PURPOSE AND SCOPE

Funds requested are to provide for PCS movements of officers and airmen from last CONUS duty station or CONUS base of separation to home of record or point of entry into service, or home of selection when authorized by law, and mileage payments to airmen upon separation from the service or relief from active duty when member immediately reenlists without regard to actual performance of travel under provisions of paragraph 4157 and 4159; Joint Travel Regulations.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 Estimate for separation travel includes requirements for PCS travel costs of officers and airmen to be separated in accordance with the Air Force Personnel Program.

(In Thousands of Dollars)

PROJECT: Travel of Organized Units

Estimate - FY 1974....$ 8,089
Estimate - FY 1973.... 5,822
Actual - FY 1972.... 2,482

PART I - PURPOSE AND SCOPE

Funds requested are to provide for PCS movements of officers and airmen moving as a part of the move of an organized unit and fillers and replacements directed to move concurrent with the unit move. This project includes moves between duty stations within CONUS, within overseas areas, and to and from overseas.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1974 Estimate for travel of organized units includes requirements for relocation of Air Force units both within CONUS and overseas in accordance with published Air Force programs.

The Air Force bases its estimation of organized unit move requirements on the most comprehensive and factual planning data available. Air Force planned unit move PCS requirements are developed directly from the Air Force Program - Bases, Units and Priorities (PD) and are the moves actually programmed for the operating and budget years at applicable rates and prices. Anticipated moves are tracked throughout the operating and budget years since operational requirements dictate changes to the initial schedule.

SUMMARY OF REQUIREMENTS BY PROJECT
(In Thousands of Dollars)

Title (1)	FY 1972 Actual (2)	FY 1973 Estimate (3)	FY 1974 Estimate (4)
Apprehension of Air Force Deserters, Absentees, and Escaped Military Prisoners	$ 552	$ 450	$ 345
Interest on Uniformed Services Savings Deposits	11,626	13,000	13,095
Death Gratuities	2,930	2,850	2,860
Servicemen's Group Life Insurance	2,161	1,301	-
Total Direct Obligations	$ 17,269	$ 17,601	$ 16,300

(Amount in Thousands of Dollars)

PROJECT: Apprehension of Air Force Deserters, Absentees, and Escaped Military Prisoners

Estimate - FY 1974....$ 345
Estimate - FY 1973.... 450
Actual - FY 1972.... 552

PART I - PURPOSE AND SCOPE

The funds requested are to provide for expenses in connection with the apprehension of deserters, absentees, and escaped military prisoners and for their delivery to the control of the Department of Defense including cost of subsistence furnished during the period an enlisted member is detained in civil confinement for safekeeping when so requested by military authority, costs of rewards and reimbursements for expenses incurred (not to exceed $25.00 in either case), and cost of transportation, lodging and subsistence of a guard sent in pursuit of member.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Based on the latest actual experience, it is estimated that approximately 1,500 military absentees will be apprehended during the fiscal year. It is further estimated on the basis of past experience that each apprehension will cost approximately $ 230.00.

(Amount in Thousands of Dollars)

PROJECT: Interest on Uniformed Services Savings Deposit Program

Estimate - FY 1974....$13,095
Estimate - FY 1973.... 13,000
Actual - FY 1972.... 11,626

PART I - PURPOSE AND SCOPE

The funds requested are to provide for payment of interest at the rate of ten percent (10%) per annum on any sum not less than $5.00 which is deposited in an airman's or officer's deposit account while overseas as authorized by Public Law 89-538, August 14, 1966.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Officers and airmen who participate in the program authorized by Public Law 89-538, withdraw deposits upon return from overseas.

(Amount in Thousands of Dollars)

PROJECT: Death Gratuities

Estimate - FY 1974....$2,860
Estimate - FY 1973.... 2,850
Actual - FY 1972.... 2,930

PART I - PURPOSE AND SCOPE

The funds requested are to provide for the payment of death gratuities to beneficiaries of deceased military personnel as authorized by law. Death gratuity is composed of 6 months' basic pay, and incentive and special pay if authorized, the sum of which is not to exceed $3,000.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Fund requirements are based on the most recent mortality rates as applied against the reprogrammed manyears of personnel on flying status and non-flying status.

(Amount in Thousands of Dollars)

PROJECT: Servicemen's Group Life Insurance

Estimate - FY 1974...$ -
Estimate - FY 1973... 1,301
Estimate - FY 1972... 2,161

PART I - PURPOSE AND SCOPE

The funds reflected provide for the Air Force's contribution towards the cost of Servicemen's Group Life Insurance (SGLI) in accordance with P.L. 89-214 dated September 29, 1965 and P.L. 91-291 dated June 25, 1970, and P.L. 92-315 dated June 20, 1972.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Funds are not requested for FY 1974 to provide for Air Force's contribution towards the cost of SGLI. Dut to the reduction of the number of casualties, contributions were suspended from 1 October 1971 through 31 December 1972. The premiums paid by the insured servicemen were reduced by 15% effective 1 July 1972. As of 1 January 1973, contributions were resumed temporarily at the rate of 12% of the Serviceman's premium or $0.306 per month. Requirements in FY 1974, if any, are expected to be minimal.

SECTION 5 - SPECIAL ANALYSIS

1. Military Personnel Assigned to Communications Activities (End Strength)

Includes the total military personnel resources required for management, supervision, engineering, installation, operation and maintenance of:

- Those portions of the Defense Communications System, (DCS) for which operations and maintenance responsibility is assigned to the Air Force. Included are the Defense Satellite Communication System ground terminal, DCS transmission system and DCS AUTOVON, AUTODIN and AUTOSFVOCOM electronic switching centers and facilities.

- Terminal communication facilities of the DCS, e.g., communications centers and communications terminals for the acceptance, processing and delivery of record communications traffic; also, the fixed ground-air-ground long haul communications networks of the Air Force.

- Base communications facilities, e.g., inside and outside telephone plant, telephone switchboards and other base wire and radio communications systems.

- Tactical communications including Mobile Communications Groups and the communications components of tactical control organizations.

- Intelligence Communications, e.g., the Defense Special Security Communications System (DSSCS CRITICOM and SPINTCOM).

- Communications Security Equipment including the Air Force Cryptologic Depot.

- Command and Control Communications System of the NMCS, SAC, NORAD, HQS USAF, REDCOM and the USAF Major Air Commands.

	FY 1972	FY 1973	FY 1974
Officers	2,875	2,796	2,828
Enlisted	39,148	40,441	39,505
Total	42,023	43,237	42,333

The primary difference between FY 1973 and FY 1974 requirements results from SEA phasedown.

2. Military Personnel Assigned to ADP Activities (End Strength)

ADP manpower is defined as those personnel in the Data Automation function plus others whose principal duties are related to data automation activities. Examples of the latter are finance and supply personnel whose primary duties relate to input/output of data to and from dedicated ADPE. Excluded from reporting within the ADP activity are those personnel who are associated with ADP equipment maintenance where the computer is integral to a larger system, such as, for example certain space surveillance systems. Excluded also are those personnel engaged in process control systems utilized in industrial applications.

	FY 1972	FY 1973	FY 1974
Officers	2,244	2,227	2,070
Enlisted	11,218	11,135	10,350
Total	13,462	13,362	12,420
Personnel in Support of Reserve Appropriation	(52)	(52)	(47)

Explanation of differences between FY 1973 and FY 1974 strengths:

- Reduction of manpower in the Base Level Management application as the Base Level Data Automation Standardization Program continues. This program, consisting of B3500 computers, replaces the B263 computer at most bases.

- The Advanced Personnel Data System will be implemented at the Military Personnel Center providing management information used in the process of assigning, promoting, and maintaining the military resources of the Air Force. This results in substantial decreases in manpower utilized in this area.

- The World-Wide Military Command and Control System (WWMCCS) is a system which encompasses the broad spectrum of Command Control and WWMCCS - oriented Intelligence Data Handling Systems (IDHS) facilities. It is being implemented and currently depicts some manpower reductions as in some instances one computer is replacing several currently installed systems.

- Reduction in Southeast Asia due to the phase down.

- The Air Force Weather System realized a decrease in personnel from a directed personnel reduction action and consolidation of management personnel under an ADP Single Manpower.

- With the implementation of JUMPS, the current Base/Regionalized Military Pay System will be phased out. The reduction in personnel within the Data Automation activity will accrue as a result of discontinuing the NCR 390 computer system.

3. Military Personnel Assigned to Intelligence Activities (End Strengths)

Includes military personnel required to support the General Defense Intelligence Program (GDIP), the Consolidated Cryptologic Program (CCP), and Special Reconnaissance Vehicles (SRV). These intelligence activities include the collection, processing, production and dissemination of general and cryptologic intelligence. It excludes other intelligence programs not specifically identifiable to intelligence activities shown in Major Force Program III, Intelligence and Communications, such as reconnaissance units, surveillance and warning systems, combat support aircraft units and intelligence staffs in direct support of forces included in Major Force Program I, Strategic Forces and Major Force Program II, General Purpose Forces. Also excluded are intelligence research and development projects in Major Force Program VI and headquarters intelligence staffs included in Major Force Program IX, Administration and Associated Activities.

	FY 1972	FY 1973	FY 1974
Officers	3,650	3,341	3,019
Enlisted	26,947	24,421	23,061
Total	30,597	27,762	26,080

The following is an explanation of differences in strengths between FY 1973 and FY 1974:

- General Defense Intelligence Program (GDIP) - Minus 50 spaces

  - Although there was only a 50 space reduction in the General Defense Intelligence Program in FY 1974, 327 spaces were eliminated during FY 1973 from the total submitted in the FY 1973 President's Budget. These reductions were primarily in Technical Sensor Collection, FOREST GREEN, Intelligence Production and the Intelligence Data Handling System. 522 spaces were also transferred to other intelligence programs and an additional 2,868 spaces were transferred outside the intelligence area.

- Special Reconnaissance Vehicles - Minus 391 spaces

  - The reductions between FY 73 and FY 74 are the result of the phase out of the COMPASS ARROW System (-134) and the movement of BUFFALO HUNTER to the CONUS on a contingency status (-257). During FY 73, 359 spaces were transferred to another intelligence program and 170 were deleted as a result of the conversion of the U-2 program from a TDY to a PCS manning status.

- Consolidated Cryptologic Program (CCP) - Minus 1,241 spaces

  - There is a significant net decrease of 1,241 military spaces in the Consolidated Cryptologic Program for FY 1974 as compared to FY 1973. This drawdown in military personnel continues a multiple-year downward trend in this program.

  - These reductions were primarily due to integration of the CRITICOMM Network into AUTODIN, reduction in aircraft in Europe, phasedown in aircraft in SEA, and minor program management actions.

  - A major change to the CCP, since submission of the FY 1973 Budget last year, is the transfer into the CCP of certain other intelligence activities by direction of the Secretary of Defense. This action resulted from the President's realignment of intelligence functions. As a result, the CCP was increased by 889 spaces beginning in FY 1973.

Military and Civilian Personnel Assigned to Headquarters Activities

	FY 1972 Actual				FY 1973 Estimate				FY 1974 Estimate			
	End Strength			Civilian	End Strength			Civilian	End Strength			Civilian
	Off	Enl	Tot	ES Total	Off	Enl	Tot	ES Total	Off	Enl	Tot	ES Total
Departmental Administration												
Office of the Secretary of Defense	187	88	275		184	76	260		174	71	245	
Organization of the Joint Chiefs of Staff	263	200	463		266	197	463		266	201	467	
Department of the Air Force	2369	353	2722	2720	2196	299	2495	2798	2196	299	2495	2798
Defense Agency Headquarters	203	55	258		234	74	308		235	74	309	
Total Departmental Administration - AF	2369	353	2722	2720	2196	299	2495	2798	2196	299	2495	2798
Total Departmental Administration - Assigned to Others 1/	653	343	996		684	347	1031		675	346	1021	
Major Commands												
Alaskan Air Command	142	208	350	127	149	222	371	132	149	222	371	132
Aerospace Defense Command	525	417	942	378	547	492	1039	395	547	492	1039	395
Air Force Communications Service	335	435	770	521	373	492	865	598	373	492	865	598
Air Force Logistics Command	331	119	450	2033	335	107	442	1998	335	107	442	1997
Air Force Reserve	58	75	133	162	58	77	135	157	58	76	134	157
Air Force Systems Command	603	222	825	736	555	207	762	755	555	207	762	755
Air Training Command	489	346	835	565	495	371	866	580	495	371	866	580

1/ These personnel are included in the Defense Agencies Justification Book.

Military and Civilian Personnel Assigned to Headquarters Activities (Continued)

	FY 1972 Actual				FY 1973 Estimate				FY 1974 Estimate			
	End Strength			Civilian	End Strength			Civilian	End Strength			Civilian
	Off	Enl	Tot	ES Total	Off	Enl	Tot	ES Total	Off	Enl	Tot	ES Total
Air University	54	29	83	51	59	32	91	56	59	32	91	56
Headquarters Command	60	77	137	61	61	77	138	63	61	77	138	63
Military Airlift Command	541	447	988	526	544	445	989	560	534	443	977	552
Pacific Air Forces	516	542	1058	292	476	495	971	289	483	489	972	288
Strategic Air Command	1240	904	2144	469	1311	982	2293	517	1311	980	2291	517
Tactical Air Command	806	698	1504	386	790	671	1461	415	788	661	1449	427
United States Air Forces Europe	585	541	1126	366	591	582	1173	392	591	582	1173	392
United States Air Force Southern Command	65	55	120	41	66	56	122	43	66	56	122	43
United States Air Force Security Service	194	320	514	255	216	361	577	236	216	361	577	236
Total Major Commands	6544	5435	11979	6969	6626	5669	12295	7186	6621	5648	12269	7188
Unified Commands												
North American Air Defense Command	266	318	584	223	222	230	452	208	222	230	452	208
United States European Command	159	147	306		150	135	285		150	135	285	
Pacific Command	168	152	320		150	135	285		150	135	285	
United States Southern Command	39	28	67		32	22	54		32	22	54	
Alaskan Command	36	83	119	23	35	71	106	24	35	71	106	24
Readiness Command	92	77	169	76	87	67	154	77	87	67	154	77
Atlantic Command	33	13	46		37	19	56		37	19	56	
Total Unified Commands	793	818	1611	322	713	679	1392	309	713	679	1392	309
Total Headquarters Operations and Administration (See Note)	10359	6949	17308	10011	10219	6994	17213	10293	10205	6972	17177	10295

NOTE: 1. As reported to the Congress last year, the Air Force initiated studies during FY 1971 directed toward standardization of the definition of "headquarters" costs and the reduction of these costs. A complete array of all headquarters and direct headquarters support manpower, based on this standardized definition, was included in

Military Personnel, Air Force Justification of Estimates for Fiscal Year 1973. The following summary provides total Air Force headquarters strengths consistent with last year's array. Totals differ from the preceding Headquarters Operations and Administration totals in this exhibit by the addition of direct headquarters support (e.g. publications management, command posts and management engineering teams) and Intermediate Headquarters (numbered Air Forces, Air Division and comparable organizations).

	FY 1972 ACTUAL			FY 1973 ESTIMATE			FY 1973 ESTIMATE		
	MIL	CIV	TOT	MIL	CIV	TOT	MIL	CIV	TOT
Departmental Administration, Department of the Air Force	2,722	2,720	5,442	2,495	2,798	5,293	2,495	2,798	5,293
Major Commands	11,979	6,969	18,948	12,295	7,186	19,481	12,269	7,188	19,457
Direct Support and Intermediate Headquarters	13,440	5,260	18,700	12,456	4,915	17,371	11,962	4,755	16,717
SUBTOTAL: Principal Air Force Headquarters	28,141	14,949	43,090	27,246	14,899	42,145	26,726	14,741	41,467
Departmental Administration, Assigned to Others	996		996	1,031		1,031	1,021		1,021
Unified Commands	1,611	322	1,933	1,392	309	1,701	1,392	309	1,701
SUBTOTAL: Headquarters Outside the Air Force	2,607	322	2,929	2,423	309	2,732	2,413	309	2,722
TOTAL Headquarters FY 74 BUDGET	30,748	15,271	46,019	29,669	15,208	44,877	29,139	15,050	44,189

2. For ease of comparison the following table relates the total headquarters manpower shown above to data presented in last year's Military Personnel, Air Force Justification.

Military and Civilian Personnel Assigned to Headquarters Activities (Continued)

	FY 1972 ESTIMATED/ACTUAL			FY 1973 ESTIMATED		
	MIL	CIV	TOT	MIL	CIV	TOT
Total Air Force Headquarters as shown on page 109e, FY 1973 Military Personnel Justification Book	30,170	16,149	46,319	29,339	16,078	45,417
ADD: National Guard (Air Force), FY 73 Budget	44	155	199	44	155	199
Departmental Administration, Assigned to Others, FY 73 Budget	1,027		1,027	968		968
Unified Commands, FY 73 Budget	1,466	334	1,800	1,475	334	1,809
Total Headquarters, FY 73 Budget	32,707	16,638	49,345	31,826	16,567	48,393
Reduction resulting from continuation of Headquarters restructuring projects*	-1,959	-1,367	-3,326	-2,157	-1,359	-3,516
Total Headquarters, FY 74 Budget	30,748	15,271	46,019	29,669	15,208	44,877

*Includes FY 73 Headquarters reduction of 514 military manyears and 299 civilian manyears in conformance with intent of the FY 1973 Defense Appropriations Act.

MILITARY PERSONNEL ASSIGNED TO ACTIVITIES OUTSIDE THE USAF

	FY 1972			FY 1973			FY 1974		
	OFF	AMN	T/M	OFF	AMN	T/M	OFF	AMN	T/M
Other DOD Activities									
Office Secretary of Defense	187	88	275	184	76	260	174	71	245
(R&D)	(19)	(4)	(23)	(15)	(3)	(18)	(15)	(0)	(15)
Joint Chiefs of Staff	263	200	463	266	197	463	266	201	467
(R&D)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Defense Nuclear Agency	129	115	244	130	111	241	130	111	241
(R&D)	(39)	(34)	(73)	(40)	(38)	(78)	(40)	(38)	(78)
Defense Communication Agency	180	334	514	198	363	561	205	367	572
(R&D)	(1)	(5)	(6)	(15)	(5)	(20)	(15)	(5)	(20)
Defense Intelligence Agency	438	380	818	450	340	790	453	342	795
(R&D)	(0)	(0)	(0)	(2)	(0)	(2)	(2)	(0)	(2)
National Security Agency	253	1,217	1470	326	1,490	1,816	329	1,508	1,837
(R&D)	(45)	(2)	(47)	(70)	(3)	(73)	(70)	(3)	(73)
Defense Supply Agency	362	35	397	351	41	392	362	44	406
(R&D)	(0)	(0)	(0)	(1)	(0)	(1)	(1)	(0)	(1)
Defense Mapping Agency	0	0	0	108	599	707	110	594	704
(R&D)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Defense Investigative Service	0	0	0	154	455	609	154	455	609
(R&D)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Defense Advanced Research Agency	19	8	27	20	7	27	18	5	23
(R&D)	(19)	(8)	(27)	(20)	(7)	(27)	(18)	(5)	(23)
Defense Civil Preparedness Agency	1	0	1	1	0	1	1	0	1
(R&D)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Total	1,832	2,377	4,209	2,188	3,679	5,867	2,202	3,698	5,900
(R&D)	(123)	(53)	(176)	(163)	(56)	(219)	(161)	(51)	(212)

Military Personnel Assigned to Activities Outside the USAF (Continued)

	FY 1972			(Thous)	FY 1973			(Thous)	FY 1974			(Thous)
	Off	Enl	Total	Amt	Off	Enl	Total	Amt	Off	Enl	Total	Amt
Other Government Agencies (Reimbursable)												
Air Intelligence		9	9	102	-	9	9	86	-	9	9	88
Federal Aviation Agency	30	14	44	759	25	14	39	740	25	14	39	712
Selective Service	50	-	50	1,048	40	-	40	1,011	40	-	40	921
Intelligence Hqs USAF only	-	-	-	-	1	-	1	22	1	-	1	23
US Arms Control	9	-	9	273	10	-	10	202	10	-	10	230
Heavy Hook	2	-	2	42	-	-	-	-	-	-	-	-
AID State Department	1	-	1	21	-	-	-	-	-	-	-	-
Heavy Blue	1	1	2	30	-	-	-	-	-	-	-	-
Department of Transportation	2	-	2	63	1	-	1	22	-	-	-	-
Slow Curve	76	138	214	3,209	70	131	201	2,942	70	131	201	2,889
National Aerospace Administration (NASA)	122	160	282	6,465	95	152	247	3,970	97	153	250	3,725
Assistant General Manager for Military Application	3	-	3	63	2	-	2	45	2	-	2	46
Heavy Sand	10	111	121	1,062	20	122	142	1,432	20	122	142	1,650
Department of Labor	-	5	5	46	-	1	1	29	-	-	-	-
Smithsonian Institution	-	1	1	9	-	-	-	-	-	-	-	-
Joint Economic Commission	1	-	1	21	-	-	-	-	-	-	-	-
Voice of America	1	-	1	21	1	-	1	22	-	-	-	-
Health, Education and Welfare	1	-	1	21	-	-	-	-	-	-	-	-
GSA, ADP Simulation Center	-	-	-	-	11	-	11	247	11	-	11	253
Department of Justice	1	-	1	21	1	-	1	22	-	-	-	-
Total Other Government Agencies	310	439	749	13,276	277	429	706	10,792	276	429	705	10,537

Military Personnel Assigned to Activities Outside the USAF (Continued)

	FY 1972			FY 1973			FY 1974		
	OFF	AMN	T/M	OFF	AMN	T/M	OFF	AMN	T/M
Other Government Agencies (Non-reimbursable)									
Jt Meterological Center	1		1	1		1	1		1
Military Asst to the Vice President	1		1	1		1	1		1
The White House	8	1	9	8	2	10	7	2	9
Atomic Energy Commisssion	14		14	13		13	13		13
Radio Tech Committee for Aeronautics	1		1	1		1	1		1
Office of Emergency Planning	3		3	3		3	3		3
Air Liaison Office, Canberra	4	5	9	4	6	10	4	6	10
Rand Project Office	7		7	7		7	7		7
Dept of State	2		2	2		2	2		2
Dept of Interior	1		1	1		1	1		1
President's Aviation Advisory Commission	1		1						
National Commission on Marijuana	1		1	1		1	1		1
Federal Aviation Agency	1		1	1		1	1		1
Total	45	6	51	43	8	51	42	8	50

Reserve Personnel, Air Force

STATEMENT OF MAJ. GEN. HOMER I. LEWIS, CHIEF, AIR FORCE RESERVE

ACCOMPANIED BY:

MAJ. GEN. HOWARD M. FISH, DEPUTY DIRECTOR OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

COL. ORLANDO P. LORETTI, COMPTROLLER, OFFICE OF AIR FORCE RESERVE

COL. ZANE G. BREWER, CHIEF, PLANS, PROGRAMS, AND RESOURCES DIVISION, OFFICE OF AIR FORCE RESERVE

COL. LEWIS R. BARRETT, JR., CHIEF, PERSONNEL DIVISION, OFFICE OF AIR FORCE RESERVE

COL. HUBERT W. DUTTON, DEPUTY FOR AIR FORCE RESERVE, DIRECTORATE OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

PROGRAM AND FINANCING

Chairman McClellan. The next appropriation to be considered will be that for "Reserve Personnel, Air Force."

At this point in the record there will appear certain program and financing information from the justifications.

[The justification follows:]

Justification

RESERVE PERSONNEL, AIR FORCE

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-05-3700-0-1-051	1972 ACT	1973 EST	1974 EST
	PROGRAM BY ACTIVITIES:			
	DIRECT PROGRAM:			
	1. RESERVE COMPONENT PERSONNEL	96,170	110,568	121,019
	2. RESERVE OFFICER CANDIDATES	12,779	15,721	24,381
	TOTAL DIRECT PROGRAM	108,949	126,289	145,400
	REIMBURSABLE (TOTAL)	13	771	729
10	TOTAL OBLIGATIONS	108,962	127,060	146,129
	FINANCING:			
	RECEIPTS AND REIMBURSEMENTS FROM:			
11	FEDERAL FUNDS	.....	-751	-709
14	NON-FEDERAL SOURCES	-13	-20	-20
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-4,240	.....	.....
25	UNOBLIGATED BALANCE LAPSING	1,475	.....	.....
	BUDGET AUTHORITY	106,184	126,289	145,400
	BUDGET AUTHORITY:			
40	APPROPRIATION	106,184	123,542	139,300
44.95	JAN 1973 PAY INCREASE SUPPLEMENTAL/AMENDMENT	.....	2,747	6,100

MISSION OF THE RESERVE

Chairman McClellan. Proceed, General Lewis.

General Lewis. Mr. Chairman and members of the subcommittee, it is my privilege to appear again before this subcommittee to discuss the Air Force Reserve program and to request funds for the Reserve personnel, Air Force appropriation for fiscal year 1974.

The Reserve personnel appropriation includes funding requirements for the Air Force Reserve personnel programs, the military costs associated with the students enrolled in the Air Force Reserve Officers' Training Corps, and for the new Armed Forces health professions scholarship program. As Chief of the Air Force Reserve, I am responsible for the implementation of the approved plans, policies, and programs pertaining to the Air Force Reserve; however, other staff agencies are responsible for the execution, including budget preparation of the AFROTC and the health professions scholarship programs. With me today are representatives of the directorate of personnel programs and the Surgeon General's office, who are available to respond to these two programs.

The mission of the Air Force Reserve is to man and maintain a reserve of trained and operationally ready units and individals immediately available for active duty in time of war or threat to national security. To satisfy this mission, in accordance with Air Force policy and requirements, the Air Force Reserve conducts a program of recruitment, training, and operational support having the following four objectives:

1. To maintain a strategic reserve, capable of assuming operational responsibilities in direct relationship to the mission of the active Air Force.

2. To make possible the immediate augmentation of the active force in time of general or partial mobilization.

AIR FORCE RESERVE/CAPABILITY TO AUGMENT ACTIVE FORCES

Chairman McClellan. To what degree is the Air Force Reserve capable at this time of immediate augmentation of the active forces?

General Lewis. The capability of the Air Force Reserve to augment the active force is based on the combat readiness of the Reserve units. At the end of fiscal year 1973 75.5 percent of the Air Force Reserve units were combat ready. At the end of fiscal year 1974 92.5 percent of the Air Force Reserve units are forecast to be combat ready.

Chairman McClellan. Proceed.

General Lewis. 3. To provide for the replacement of losses from attrition, and

4. To develop new forces for combat or support.

ACCOMPLISHMENTS

During fiscal year 1972 and the first half of fiscal year 1973 there has been a continuing effort to modernize Air Force Reserve equipment and improve the combat-ready status of Reserve units through the conversion of many units to newer aircraft.

While undergoing these conversions, Air Force Reserve crews continued to provide valuable assistance to the active force as a byproduct of their training.

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In fiscal year 1972 USAFR flying units flew 10,078 productive missions in support of almost every major air command. The majority of these missions were flown for the Military Airlift Command and the Tactical Air Command. Reserve crews logged 43,819 flying hours airlifting 14,781 cargo tons over 25 million tons miles and 67,569 passengers over 47 million passenger miles. Reserve crews also airdropped 702 tons of cargo and 48,696 airborne troops.

During the first half of fiscal year 1973, USAFR units flew nearly 8,200 missions, airlifting approximately 34,000 passengers for almost 27 million passenger miles. They also airlifted nearly 5,380 tons of cargo for over 4 million ton miles. Reserve aircrews airdropped over 26,300 airborne troops during the same period. This indicates a higher level of activity in the Air Force Reserve flying units with 10,078 productive missions in all of fiscal year 1972 compared with over 8,200 productive missions during the first 6 months of fiscal year 1973.

Air Force Reserve units were involved in several major disaster relief efforts. For example, in May aircrews flew four missions assisting in relief operations during extensive forest fires in Arizona. In June personnel and equipment were airlifted to South Dakota to assist in flood disaster relief operations. After Hurricane Agnes this past June, Air Force Reserve aircrews flew 19 missions airlifting equipment and personnel in northeast United States to assist in disaster caused by extensive flooding. More recently one of our C–130's transported an inspection team to Managua, Nicaragua to determine medical requirements for relief of victims of that earthquake ravaged country.

JOINT EXERCISES

In March of 1972 six Reserve C–130's participated in a large scale joint exercise called "Gallant Hand." This exercise was designed to develop combat-ready forces, test and establish doctrine and procedures, and integrate new equipment. During this exercise the Air Force Reserve flew 26 missions for 71 hours and airlifted 75 tons of cargo and 265 passengers.

In May, Air Force Reserve units participated in a joint training exercise of the unified Atlantic Command in North Carolina called "Exotic Dancer." Ten aircraft were involved flying 128 missions.

This past August the Air Force Reserve again participated in "Ember Dawn," a joint Army, Air Force exercise conducted in Alaska.

Most of these exercises are held annually, and it is anticipated that Air Force reservists assigned to the C–130's, C–123's and A–37 units will participate in the 10 or 11 similar exercises during fiscal year 1974.

TOTAL COST OF EXERCISES FISCAL YEAR 1973 AND FISCAL YEAR 1974

Chairman McClellan. What is the total cost of exercises conducted in fiscal year 1973 and to be conducted in fiscal year 1974?

General Lewis. The cost of reservists participating in joint exercises during fiscal year 1973 is $107,000 and $169,000 during fiscal year 1974.

Chairman McClellan. Proceed.

FORCE STRUCTURE

General LEWIS. As previously mentioned, continuing efforts are being made to modernize equipment and to improve the combat-ready status of Air Force Reserve units. During fiscal year 1973, eight units are converting to more modern aircraft and three new units will be activated.

The fiscal year 1974 program provides for activating two additional C–141 military airlift units, and conversion of the following units to different aircraft:

a. One HU–16/HH–34 composite air rescue squadron will convert to HH–34,

b. Two C–141 military associate units will convert to C–5A associate units, and

c. Three of the tactical airlift units presently equipped with C–130A aircraft will convert to C–130B aircraft.

By the end of fiscal year 1974, there will be 55 flying units in the Air Force Reserve as compared to 53 by the end of 1973.

In table 1 is a comparison of a force structure for these flying units for the 2 years.

[Table I follows:]

TABLE 1.—FORCE STRUCTURE FOR AIR FORCE RESERVE FLYING UNITS

	End fiscal year	
	1973	1974
Equipped units:		
C-130 tactical airlift	18	18
C-123K tactical airlift	4	4
C-7 tactical airlift	2	2
Aerospace rescue and recovery	5	5
EC-121 airborne early warning and control	1	1
A-37 special operations force	4	4
F-105 tactical fighter	3	3
Total equipped units	37	37
Associate units:		
C-141 military airlift	13	13
C-5A military airlift	2	4
C-9A Aeromed evacuation	1	1
Total associate units	16	18
Total units	53	55

NONFLYING UNITS

General LEWIS. A thorough review has been made of Air Force Reserve nonflying units, and action has been taken to inactivate 108 medical service units, 5 aeromedical evacuation units, and 10 air postal and courier units.

To provide more efficient management and increase operational response, action has been taken to reassign the Tactical Aerial Port flights to their respective parent flying unit.

In fiscal year 1974, seven Military Airlift Support Squadrons will be redesignated as Aerial Port Squadrons to aline these units with projected wartime requirements.

AERIAL PORT SQUADRON DEFINED

Chairman McClellan. Define the function of the Aerial Port Squadron.

General Lewis. To operate air terminal facilities as required to support airlift operations, and to manage commercial transportation services. Terminal facilities operations include all services required for effective movement of passengers, mail, and cargo by military or military contract aircraft.

Chairman McClellan. Proceed.

General Lewis. This action, and the activation of one additional Aerial Port Squadron, is programed for the first quarter of fiscal year 1974. As of the end of this fiscal year, the Air Force Reserve will have 137 nonflying units, and 138 by end of fiscal year 1974.

Chairman McClellan. What is a unit composed of?

General Lewis. These are squadrons, Mr. Chairman.

Chairman McClellan. Composed of how many units?

General Lewis. We have 137 nonflying units this year.

Chairman McClellan. How many personnel in a squadron?

General Lewis. I was giving all of the nonflying units. Aerial Port Squadrons have 107 people. We have more than just aerial ports.

Chairman McClellan. More than what?

General Lewis. We have more than just aerial port nonflying units. The aerial port is about 104 people. Does that answer your question?

Chairman McClellan. I am not sure I understand.

General Lewis. I was addressing just the aerial ports. These units are trained to standards for worldwide deployment. The stringent requirements to perform under adverse circumstances dictate that the personnel in these units be highly trained in their individual specialty codes and general military training. If the training periods for these units were reduced to 1 day per month (that is 24 drills annually), they could not meet or maintain their individual specialty skills.

REDUCTION OF 1 DAY PER MONTH SIGNIFICANCE

Chairman McClellan. What is the significance of the sentence addressing a reduction to 1 day of drill per month for these units?

General Lewis. This sentence is significant in that it addresses the subject of reduced drills for nonflying units which was imposed upon us by the House of Representatives during our appropriation hearings last year. The House Committee on Appropriations recommended conversion of additional category A nonflying units to category B which would reduce their authorized drill periods from 48 to 24. (See pages 87 and 88, report 92–1389 of the House of Representatives titled "Department of Defense appropriations bill, 1973").

The point I wish to stress is that nonflying units are essential to the wartime mission of the U.S. Air Force and must attain and maintain an acceptable readiness status through an adequate number of annual drill periods. Units reduced below 48 drill periods per year could neither meet nor maintain required proficiency standards. Such a reduction would result in the deterioration of millions of dollars worth of specialized and general purpose equipment that must be operable and ready for immediate deployment. It would seriously jeopardize the units' capability to perform their missions.

Chairman McClellan. Proceed.

General Lewis. In table 2 is a comparison of the nonflying units as reflected in the original fiscal year 1973 budget, and the revised fiscal year 1973 and fiscal year 1974 programs.

[Table II follows:]

TABLE II

	Fiscal year 1973		Fiscal year 1974
	President's budget	Revised	
AMA augmentation	0	6	6
Aeromedical evacuation squadrons/flights	25	20	20
Medical service units	121	13	13
Aerial port squadrons/flights	65	36	44
Military airlift support squadrons (mobile)	7	7	0
Civil engineering flights	34	34	34
Maintenance squadrons (mobile)	7	7	7
Civil engineering squadrons/flights	2	2	2
Supply squadrons (mobile)	7	7	7
Wartime information security units	2	2	2
Air postal and courier units (group/flights)	10	0	0
Air Force Reserve regions	3	3	3
Total	283	137	138

REDUCTION IN MEDICAL SERVICE UNITS/PHASE OUT OF MILITARY AIRLIFT SUPPORT SQUADRONS

Chairman McClellan. What is the significance of the reduction in medical service units and the phasing out of the Military Airlift Support Squadrons?

General Lewis. There is no significance as far as the USAF medical service wartime mission is concerned. The 108 medical service units were determined to be excess to the wartime requirements of the USAF medical service. There was some personnel turbulence; however, medical reservists affected by the inactivation who desired to remain in the Ready Reserve were accommodated in a revitalized medical mobilization augmentee program. The Military Airlift Support Squadrons were redesignated as Aerial Port Squadrons in order to assign a higher priority mission to these units based on projected wartime requirements. The mission of the Military Airlift Support Squadrons was the wartime en route support of deploying airlift units and included a significant amount of aerial port capability.

PERSONNEL STRENGTHS

Chairman McClellan. Proceed.

General Lewis. These changes in our unit program will affect Air Force Reserve personnel strengths.

Public Law 92–436 authorized the Air Force Reserve to attain an average strength of not less than 51,296 for fiscal year 1973. Due primarily to the inactivation of nonflying units, the revised average strength of the Selected Reserve for fiscal year 1973 is programed for 49,087 and an end strength of 49,428. For fiscal year 1974, the program provides for an average drill strength of 49,773 with an end strength of 51,503.

This strength will provide an average of 97 percent manning in the flying units and 95 percent in the nonflying units.

Approximately 59 percent of the programed strength is required to support 55 flying units, and 29 percent is required for the nonflying units. Also included in the Selected Reserve average strength are 5,773 in the individual program. The individual program includes 1,000 spaces transferred from medical service units inactivated during fiscal year 1973. These are spaces for the retention of doctors, nurses and medical technicians for which there are wartime requirements. We have programed for 3,550 individual Air Force reservists who are paid only for their annual active duty tours.

RECRUITING

We expect to achieve these projected strengths with renewed emphasis on aggressive recruiting and force management throughout the Air Force Reserve.

To support recruiting a recruiting command post has been established which provides central management and direction to Reserve recruiting efforts. Active Force recruiting will be used wherever possible. However, recruiting is a major responsibility and function of each Air Force Reserve commander since units are manned by personnel from the local community. A program has been initiated to send reservists to recruiter's school, and an increase has been programed in special tour man-days to support this program.

RECRUITING/DESCRIBE

Chairman McClellan. Describe the recruiters' school program, including cost, number of personnel in attendance, and location.

General Lewis. The Air Force Reserve recruiting training programs are twofold. The first is a 2-week preparatory course taught at Robins AFB, Ga. This school is designed to screen the applicants, brief them on the Air Force Reserve policies and programs, and to prepare them for the 4-week ATC course at Lackland AFB, Tex. All applicants must successfully complete both of these schools to work in the field as Reserve recruiters.

The 4-week course at Lackland AFB, Tex., was designed for the Air National Guard, and our students share the classes with the Guard recruiter. Our student quota for each class has been 17 and we are now completing our fourth class. This 4-week school is a modified shortened course which is taught the active duty Air Force recruiters over a 7-week period. This school teaches primarily, salesmanship, public speaking, advertising, and publicity speechwriting and news releases.

For a total cost of $493,000, 271 personnel are programed to attend recruiter school in fiscal year 1974.

Chairman McClellan. What is the meaning of the statement "an increase has been programed in manning improvement special tour man-days?"

General Lewis. An increase of 29,728 special tour man-days are needed for additional part-time recruiters to achieve recruiting goals in a no-draft environment.

Chairman McClellan. Proceed.

General LEWIS. In addition, minority recruiting is emphasied in all units and an education and race relations program is conducted in conjunction with the Active Force.

FINANCIAL ASPECTS

Before I review the fiscal year 1974 budget request, I would like to highlight the revised fiscal year 1973 dollar requirements.

The revised fiscal year 1973 dollar requirement for the "Reserve Personnel" appropriation of $127.2 million, and includes supplemental of $2.7 million to cover costs of the military pay increase effective January 1, 1973. The $2.3 million supplemental originally requested to finance the new Health Professions Scholarship program has been reduced to $0.9 million as the programed strength of 1,181 has been reduced to 700 students.

The budget request for fiscal year 1974 is $145,400,000 and includes $121 million for the Air Force Reserve program, $15.1 million for the Air Force Reserve Officers' training program, and $9.3 million for the Air Force's Health Professions Scholarship program.

PAY GROUP A

Approximately 54 percent or $65.6 million of the funds requested for the Reserve personnel program are required for annual active duty and inactive duty training of an average of 42,203 reservists assigned to pay group A. These reservists are authorized 15 days paid active duty training, 48 paid inactive duty drill periods and an additional 36 drills are authorized for selected personnel on flying status. Exclusive of the recent military pay increase, the fiscal year 1974 estimate for these personnel would be $1 million less than the revised fiscal year 1973 cost which is based on a reduced average strength of 909 because of the reduction in the nonflying units.

PAY GROUPS B AND D

The fiscal year 1974 estimate includes $12 million for an average of 9,264 reservists assigned to pay groups B and D. The majority of these Air Force reservists are mobilization augmentees assigned to active Air Force major commands. The Air Force reservists assigned to pay group B are authorized 15 days active duty training and 24 paid drill periods, whereas those assigned to pay group D receive pay only for annual active duty tours. The fiscal year 1974 request for these two pay groups is an increase of $2.8 million over the fiscal year 1973 estimate; $1.6 million is required for the increased average strength of 930 in pay group B. This increase is for those Air Force reservists previously assigned to the medical service units inactivated the third quarter of fiscal year 1973, who will be assigned to mobilization augmentee positions with the major air commands. An increase of $0.8 million is requested in pay group D for 1,160 additional Air Force reservists, the majority of whom are required for the Defense Civil Preparedness Agency. The balance of the increase is for the military pay raise for a full year.

RESERVIST FUNCTION/DEFENSE CIVIL PREPAREDNESS AGENCY

Chairman McClellan. What is the function of the reservists allocated to the Defense Civil Preparedness Agency?

General Lewis. The Defense Civil Preparedness Agency has the dual role of administration of the National Civil Defense program and natural disaster preparedness planning assistance to State and local governments. To help provide professional expertise in carrying out this role at local, State, and regional levels, Department of Defense Directive 1215.6 as reissued in 1971 authorized the use of eligible Ready reservists of all services in civil preparedness activities as mobilization designees. My office was tasked by the Secretary of the Air Force to develop a plan of implementation for Air Force participation in the program. Our reservists use their civilian and military skills in such areas as engineering, electronics, medical and logistics to develop contingency plans and provide training for dealing with all types of natural and civil disasters that might occur.

PAY GROUP F

Chairman McClellan. Proceed.

General Lewis. In order to fill specific unit vacancies, not attainable from prior service enlisted sources, we are requesting $10.7 million to enter 4,012 personnel in basic military training. These are our nonprior service, who have never been in the service before. These Air Force reservists will receive initial basic training at Lackland Air Force Base along with recruits of the regular Air Force. Upon completion of basic training, approximately 80 percent will enter technical training school or on-the-job training at their home station. The fiscal year 1974 program provides the minimum number of nonprior service personnel to sustain drill strength requirements.

SCHOOLS AND SPECIAL TOURS

Additional training is required to increase the mobilization capability and readiness that cannot be achieved during the annual 15 days active duty and drill periods. This additional training is accomplished through school and special tour programs, estimated to cost approximately $29.6 million in fiscal year 1974, as compared to $27 million in fiscal year 1973. $0.5 million is required to finance the recent military pay raise for a full year. An additional $2.1 million is attributable to conversion to newer aircraft and activation of two new units. Recruiting efforts have been increased to offset reduced enlistments under the no-draft environment. A program has been initiated to send Air Force reservists to recruiter's schools and to provide special recruiting tours as a result of increased emphasis on recruiting.

ADMINISTRATION AND SUPPORT

The $3.1 million requested for "Administration and Support" will provide pay and allowances for an average of 105 Air Force Reserve officers serving under sections 265, 8019, and 8033 of title 10, United

States Code, for death gratuities, and pay and allowances for reservists while hospitalized or disabled.

AIR FORCE RESERVE OFFICERS' TRAINING CORPS

This appropriation request also includes certain costs associated with the Reserve Officers' Training Corps. These funds provide for uniforms, subsistence allowance, and travel costs associated with AFROTC summer field training.

The mission of the college level air Force ROTC program is to commission second lieutenants to meet active Air Force requirements. In fiscal year 1974, Air Force ROTC will be offered at 182 colleges and universities. The AFROTC units at Depauw University and Case Western Reserve University are scheduled for disestablishment at the end of this school year as a result of continuing low enrollments.

UNIVERSITY DISESTABLISHED/ROTC/OTHER THAN LOW ENROLLMENT

Chairman McClellan. Have any universities been disestablished for ROTC purposes in the past year for reasons other than low enrollments?

General Lewis. Contract negotiations with Princeton University were terminated at the request of the Princeton Board of Trustees on June 21, 1972. Disestablishment orders were published effective July 2, 1972, although no students had enrolled since academic year 1970–71. Parsons College, Fairfield, Iowa, was recently closed because of financial difficulties. The AFROTC unit will be officially deactivated on August 1, 1973. No other AFROTC units have been disestablished in the past year or are scheduled for disestablishment for reasons other than low enrollments.

Chairman McClellan. Proceed.

General Lewis. The programed beginning enrollment of 24,213 AFROTC cadets includes 15,518 in the general military (basic) course and 8,695 in the professional officer (advanced) course. There are approximately 2,000 women included in the enrollment as well as 6,500 in the scholarship program.

A separate division of the Air Force Reserve Officers' Training Corps is the junior ROTC program. The program is operated at high schools across the Nation and at dependent schools in Europe. The objectives of the junior ROTC program are to develop informed and responsible citizens, strengthen character, promote an understanding of the basic elements and requirements for national security, and to develop an interest in the military service as a possible career. This estimate provides for an average 30,234 cadets from 275 Air Force junior ROTC units in fiscal year 1974. Included in the enrollment are approximately 3,000 women.

The fiscal year 1974 estimate for the AFROTC program is $15.1 million including $750,000 for junior ROTC.

HEALTH PROFESSIONS SCHOLARSHIP PROGRAM

The Uniformed Services Health Professions Revitalization Act of 1972 provided for the establishment of an Armed Forces health

professions scholarship program. The purpose of this program is to obtain adequate numbers of officers for the Active Force who are qualified in various health professions. Qualified candidates for degrees in medicine, dentistry, optometry, or other health professions are eligible to participate. Briefly the qualifications are that the candidate be a citizen of the United States, be accepted for or be enrolled in an accredited institution in a course of study designated for a health profession, and meet the moral and physical qualifications for an officer. A recipient would be commissioned as a second lieutenant and remain in that grade for the duration of the scholarship period. After graduation from medical school, he would be recommissioned as a medical officer, and be required to serve on active duty for either 2 years, or 1 year for each year enrolled in the scholarship program, whichever is greater.

The maximum number of persons in this program at any one time may not exceed 5,000 and the Air Force ceiling is 1,575. The Air Force initiated this program in fiscal year 1973 with a programed enrollment of 1,181 students. Subsequently, this enrollment has been reduced to 700 students. The planned enrollment for fiscal year 1974 is 1,575.

The $9.3 million included in this appropriation request will provide for pay and allowances while performing 45 days of active duty training annually, an allowance of $400 per month except while on active duty training, an initial uniform allowance and authorized travel costs. The estimates for tuition and fees are included in the active "Air Force operation and maintenance" appropriation.

SUMMARY

Summarizing the dollar requirements for the "Reserve personnel" appropriation, we are requesting $145.4 million for fiscal year 1974 which includes $15.1 million for the Reserve Officers' Training Corps, and $9.3 million for the health professions scholarship program. The balance, or $121 million will provide training for an average of 49,773 reservists participating in a drill status, 3,550 who are paid only for annual duty tours, and supporting schools, special tours and administrative-type costs.

Mr. Chairman, this concludes my statement. I will be happy to answer any questions the committee may have.

AIR SAFETY RECORD OF AIR FORCE RESERVE

Chairman McClellan. What has been the air safety record of the Air Force Reserve in the past year?

General Lewis. The Air Force Reserve air safety record in calendar year 1972 was 2.5 accidents per 100,000 flying hours.

Chairman McClellan. Are there any questions, Senator?

Senator Young. No, Mr. Chairman.

Chairman McClellan. Thank you very much, General Lewis.

QUESTIONS BY SENATOR THURMOND

Chairman McClellan. As I have stated, Senator Thurmond was unable to be present at this meeting but has asked that questions he has prepared be answered for the record. They will be included at this point.

[The questions and answers follow:]

Air Force Reserve Percent/Relieve Active Forces

Senator Thurmond. General Lewis, what percent of the Air Force Reserve is conducting missions which relieve Active Forces?

General Lewis. Our TAC-gained airlift units provide support as follows:

C–130—About 34 percent of generated flying hours either directly or indirectly relieve Active Forces or provide an expanded capability not otherwise available from any other source.

C–123—About 20 percent of generated flying hours are a direct or indirect support effort.

C–7—The C–7 force provides about 15 percent of generated flying hours in a direct or indirect support effort.

Our A–37 units have already participated in numerous joint and interservice exercises during fiscal year 1973. Both the F–105 and A–37's will participate more in fiscal year 1974–75.

Our MAC-gained C–5/C–141 units provide support in an entirely different manner. Over 38 percent of MAC's C–141/C–5 aircrew capability rests in the Reserve associate program. Also, associate Reserve aircrew members receive about 70 percent of their total peacetime training requirements while flying productive line missions.

ARRS gained HH–34 and HC–130 units—HH–34 units have been credited with nine (9) saves in fiscal year 1973. HC–130 units stand strip alert and perform rescue missions just as Active Forces do. This percentage of total generated flying hours is estimated at 10–15 percent.

In addition to our flying activity we also support the Active Force during the training drills of our nonflying units. We have never computed this support as a specific percentage of our total activity, but as a matter of principle we try to maximize active support since most of this activity provides extremely realistic and valuable training in the wartime mission.

Increasing Reserve Ability To Relieve Active Missions

Senator Thurmond. Do you feel this (conducting missions to relieve Active Forces) can be increased and if so, what are you doing to achieve this goal?

General Lewis. The answer is "Yes," but not unequivocably. As more units are equipped and become ready, more capability will be made available for active support. We are monitoring this activity to define the point beyond which further support, or production, tends to dilute the primary mission of training for mobilization. We can and will increase our support, but only to that point where it is cost effective and does not interfere with mission training.

Relationship/AF Reserve Force to AF

Senator Thurmond. General Lewis, provide for the record how the Air Force Reserve force structure fits into the Active Forces and how they would be utilized in a mobilization situation?

General Lewis. The Air Force Reserve force structure is part of the total force requirements of the Active Force. The military departments plan and program within the resources provided by Congress, the best possible force to meet the national strategy. The utilization of a mobilized Air Force Reserve unit is based in the mission of its gaining command. The following exhibit shows the various types of Air Force units and the wartime gaining commands.

Flying units

Type unit and aircraft:	*Gaining Command*
Fighter/F–105	TAC
Special operations A–37	TAC
Airlift/C–7	TAC
Airlift/C–123	TAC
Airlift/C–130A	TAC
Airlift/C–130B	TAC
Aeromed evacuation/C–9	MAC
Airlift/C–5	MAC
Airlift/C–141	MAC
Rescue/HH–34	MAC
Rescue/HH–34/HU–16	MAC
Rescue/HC–130	MAC
Surveillance/C–121	ADC
Type unit:	
Materiel area augmentation	AFLC
Aeromedical evacuation	MAC/TAC
Medical service units	SAC/TAC/ MAC/AAC HQ CMD
Aerial port	MAC/TAC
Civil engineer flights	TAC
Civil engineer (red horse)	TAC
Maintenance (mobile) squadron	AFLC
Supply (mobile) squadron	AFLC
Wartime information security	MAC/AFRES
Air Force Reserve regions	AFRES

AFRES MANPOWER REQUIREMENT/AF MOBIL. REQ.

Senator THURMOND. General Lewis, relate your manpower requirement to the mobilization requirements of the Air Force?

General LEWIS. Our manpower requirements correspond to the mobilization requirements identified in operations and contingency plans. These manpower requirements are determined through the use of the Air Force manpower force packaging system (MANFOR). This system which operates in the command and control environment defines manpower elements used in developing operation force lists.

AF RESERVE COLLOCATION WITH AFRES

Senator THURMOND. General Lewis, provide for the record any collocation activities by the Air Force Reserve in the past year. Are any activities planned in fiscal year 1974?

General LEWIS. In fiscal year 1973 the Air Force Reserve Collocated a C–130B squadron at Keesler AFB, a C–141 associate squadron at Charleston AFB and a C–141 associate squadron at Travis AFB. In fiscal year 1974, an additional C–141 associate squadron will collocate at Travis AFB, and a C–5 associate squadron will collocate at Dover AFB. At present, 32 Air Force Reserve flying squadrons are located at active Air Force installations.

RESERVISTS ATTENDING SCHOOL/JUSTIFICATION

Senator THURMOND. General Lewis, it has come to my attention that some reservists may be attending schools or special tours which are not significantly enhancing their capability for military service. I note from your statement such programs will cost $29.6 million in fiscal year 1974. Kindly justify for the record these schools and tours for which $27 million was spent in fiscal year 1973.

General LEWIS. Yes, sir. I will do so.

Requests for schools and special tours are reviewed very critically by the unit commander to assure that the training is required. Strict guidelines are published providing reference for the commander in making his decision. Final

decision is based on whether, or not, approval of this tour will enhance the individual's capability or that of Air Force Reserve. In unusual cases the request is forwarded through channels where it is critically reviewed by each office of primary interest.

School and special tours are designed to attain and maintain combat readiness of both units and personnel so they may perform when called to active duty. In fiscal year 1973 combat readiness ratings of units increased as follows:

	C1	C2	C3	C4
End fiscal year:				
1972	16	8	7	19
1973	12	17	11	13
1974 (projected)	26	12	13	4

The decrease in C1 during fiscal year 1973 is attributed to C1 units commencing conversion to new weapon systems. Nine more units attained C2 and four more went from C4 to C3. School and special tours were indispensable in these conversions to new weapon systems and in attaining this significant increase in readiness posture.

Active Duty Annual Limit/AF Reservists

Senator Thurmond. General Lewis, what is the annual limit of active duty for Air Force reservists?

General Lewis. Reservists may not be authorized special tours of active duty funded by Reserve personnel appropriations in excess of 90 days per year (including traveltime) without secretarial waiver.

Efforts To Economize/Reducing School and Training Tours

Senator Thurmond. Has any effort been made to conserve funds by reducing school and training tours in addition to the required 2 weeks annual active duty training period?

General Lewis. During each fiscal budget cycle, requests for school and special training are screened at each intermediate command level by personnel most familiar with training requirements. This has resulted in significant reductions in both school and special training tours over requirements submitted by the units. Selection of reductions must preclude impairing the units combat readiness. To illustrate one means of reducing school training requirements, C–141, C–5, C–130 and other units are selectively recruiting replacements to fill air crew positions with fully qualified personnel recently released from active duty.

School training has increased during the conversion to modern weapon systems. Retraining at active Air Force schools has accounted for most of the increase. The trend will level off in fiscal year 1975 as the units complete their transition training.

These changes in mission have resulted in changes in training program requirements. As an example, reservists crewing C–141 and C–5 aircraft must be away from home station during most of their training periods. This training must be accomplished on active duty (special tour man-days), thus increasing the special tour requirements.

In special training activities, not related directly to weapons systems, particular emphasis has been placed on recruiter training to maintain and increase our manning during a period of reduced voluntary enlistments.

NONFLYING UNITS FISCAL YEAR 1974

General Lewis. I do have a list of the nonflying units you asked about and the strengths.

Chairman McClellan. Let that be inserted in the record.

[The information follows:]

NONFLYING UNITS FISCAL YEAR 1974

Type of unit	Number of units	Per unit authorized manning		
		Officer	Enlisted	Total
USAFR regions	3	98	101	199
Aerial port squadrons TAC	13	4	103	107
Aerial port squadrons MAC	31	4	119	123
Maintenance squadron (mobile)	7	4	[1] 85–117	[1] 89–121
Supply squadron (mobile enroute)	7	1	38	39
Censorship squadron (WIS)	2	170	20	190
Civil engineering flights	34	4	81	85
Civil engineering squadron/flights (heavy repair)	2	16	400	416
AMA augmentation squadrons	6	30	40	70
Medical service squadron (WPH)	3	38	126	164
Medical service squadron (ASU)	10	35	129	164
Tactical aeromedical evacuation squadron (TAMES)	2	24	140	164
Aeromedical evacuation squadron	8	[1] 33–51	[1] 51–80	[1] 84–131
Aeromedical evacuation flight	10	[1] 15–26	[1] 20–40	[1] 35–66
Total	138			

[1] Variable dependent upon mission.

JUSTIFICATION

Chairman McCLELLAN. At this point in the record there will be included additional information from the justifications.

[The justification follows:]

Justification

APPROPRIATION INTRODUCTION

The funds included in the Reserve Personnel, Air Force appropriation request will provide for the military personnel costs for the Reserve Personnel Program, Reserve Officer Candidates Program, and the Health Scholarship Program.

The Reserve Personnel Program provides funding for training members of the Ready Reserve required for initial mobilization needs of the Active Force. The FY 1974 budget request is based on an average of 53,323 reservists who will be assigned to 55 flying units, 138 non-flying units, and the mobilization augmentees assigned to major commands of the active Air Force. In addition to annual 15 day tours and drill periods, school and special tours of active duty will provide additional training for limited numbers of the Air Force Reserve.

The Reserve Officers Training Corps provides training for officer candidates who have enrolled in the course while attending a collegiate instutution at which an AFROTC unit has been established. This appropriation includes funds for subsistence allowances, uniforms, pay and allowances while attending field training and travel. Also included in this program are uniform costs for students enrolled in the junior AFROTC training program at the secondary level of education.

Public Law 92-426 provided for the establishment and maintenance of an Armed Forces Health Profession Scholarship Program to obtain adequate numbers of officers in various health professions. The funds included in this appropriation request will provide for a stipend, uniform allowances, and for pay and allowances while performing an annual 45 day active duty tour. The FY 1974 estimate provides for 1,575 students to be enrolled in this program. (Tuition and book costs for both AFROTC and Health Profession enrollees are paid from the appropriation, Operation and Maintenance, Air Force.)

SUMMARY OF REQUIREMENTS (In Thousands)

Program Number	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
	(1)	(2)	(3)	(4)
720	Reserve Component Personnel	$ 96,183	$ 111,339	$ 121,748
780	Reserve Officer Candidates	12,779	15,721	24,381
	TOTAL PROGRAM REQUIREMENTS (OBLIGATIONS)	108,962	127,060	146,129
	Less Actual/Anticipated Reimbursements	13	771	729
	Less Unobligated balance transferred from other accounts	- 4,240	-	-
	Unobligated balance lapsing	1,475	-	-
	Total Direct Obligations/Appropriations	$106,184	$ 126,289	$ 145,400

Budget Program 1
Reserve Component Personnel
SUMMARY OF REQUIREMENTS BY BUDGET ACTIVITY

(In Thousands of Dollars)

Budget Activity	Actual FY 1972	Estimate FY 1973	Estimate FY 1974
Direct Program			
Training, Pay Group A	$ 57,953	$ 64,660	$ 65,580
Training, Pay Group B	5,340	6,590	8,478
Training, Pay Group D	1,511	2,600	3,559
Training, Pay Group F	6,808	6,898	10,710
School Training	10,490	16,594	16,891
Special Training	11,552	10,420	12,667
Administration and Support	2,516	2,806	3,134
Total Direct Program	$ 96,170	$ 110,568	$ 121,019
Reimbursable Program			
Training, Pay Group A	13	771	729
Total Reimbursable Program	$ 13	$ 771	$ 729
Total Program			
Training, Pay Group A	$ 57,966	$ 65,431	$ 66,309
Training, Pay Group B	5,340	6,590	8,478
Training, Pay Group D	1,511	2,600	3,559
Training, Pay Group F	6,808	6,898	10,710
School Training	10,490	16,594	16,891
Special Training	11,552	10,420	12,667
Administration and Support	2,516	2,806	3,134
Total Obligations	$ 96,183	$ 111,339	$ 121,748

Air Force Reserve Personnel in Paid Status

Pay Groups	Paid Drills	Paid Days of Active Duty for Training		FY 1972 (Actual Year) Begin	FY 1972 (Actual Year) Average	FY 1972 (Actual Year) End	FY 1973 (Current Year) Average	FY 1973 (Current Year) End	FY 1974 (Budget Year) Average	FY 1974 (Budget Year) End
A	48	15	Off	8,255	8,024	8,032	7,399	6,774	6,721	6,953
			Enl	36,922	34,566	34,645	35,713	35,290	35,482	37,091
B	24	15	Off	2,505	2,590	2,642	3,099	3,662	3,672	3,682
			Enl	1,335	1,459	1,413	1,685	2,042	2,042	2,042
F	0	90 - 180	Enl	1,163	1,194	1,023	1,191	1,660	1,856	1,735
Paid Drill Training plus Non Prior Service										
		Sub Total	Off	10,760	10,614	10,674	10,498	10,436	10,393	10,635
			Enl	39,420	37,219	37,081	38,589	38,992	39,380	40,868
			Total	50,180	47,833	47,755	49,087	49,428	49,773	51,503
Paid Active Duty Training Only										
D	0	15	Off	1,887	1,574	1,574	2,180	2,180	3,085	3,085
			Enl	110	115	115	210	210	465	465
			Total	1,997	1,689	1,689	2,390	2,390	3,550	3,550
TOTAL PAID STATUS			Off	12,647	12,188	12,248	12,678	12,616	13,478	13,720
			Enl	39,530	37,334	37,196	38,799	39,202	39,845	41,333
			Total	52,177	49,522	49,444	51,477	51,818	53,323	55,053

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, 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.

RESERVE COMPONENT OFFICERS ON STATUTORY TOURS OF ACTIVE DUTY

Air Force Reserve officers performing full time active duty under Sections 175, 265, 8019, and 8033 of Title 10, United States Code:

	FY 1972 (Actual Year)			FY 1973 (Current Year)		FY 1974 (Budget Year)	
	Begin	Average	End	Average	End	Average	End
Section 175 Officer	1	1	1	1	-	-	-
Section 265 Officers	76	77	77	82	92	97	99
Section 8019 Officer	1	1	1	1	1	1	1
Section 8033 Officers	7	7	7	7	7	7	7
TOTAL	85	86	86	91	100	105	107

Section 175. Pertains to the participation of the Reserve Forces Policy Board.

Section 265. Policies and regulations: participation of reserve officers in preparation and administration

"Within such numbers and in such grades and assignments as the Secretary concerned may prescribe, each armed force shall have officers of its reserve components on active duty (other than for training) at the seat of government, and at headquarters responsible for reserve affairs, to participate in preparing and administering the policies and regulations affecting those reserve components. While so serving, such an officer is an additional number of any staff with which he is serving."

Section 8019. Provides for appointment of Chief of Air Force Reserve.

Section 8033. Reserve components of Air Force; policies and regulations for government of

"(a) There is in the office of the Secretary of the Air Force an Air Force Reserve Forces Policy Committee which shall review and comment upon major policy matters directly affecting the reserve components of the Air Force, and the Committee's comments on such policy matters shall accompany the final report regarding any such matters submitted to the Chief of Staff and the Assistant Secretary responsible for reserve affairs."

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1A: Training, Pay Group A

(In Thousands of Dollars)

Actual	Estimate	Estimate
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$57,953	$64,660	$65,580

Part I - Purpose and Scope

This budget activity provides for pay and allowances, including FICA, clothing, subsistence and travel for officers and enlisted personnel assigned to Pay Group A. Pay Group A personnel are authorized 15 days paid active duty training each fiscal year, 48 paid inactive duty drill periods, with an additional 36 drills authorized for selected unit personnel on flying status.

The average drill strength of 42,203 for Fiscal Year 1974 reflects a reduction of 909 from the FY 1973 revised average due primarily to the inactivation of 108 medical service units, five AME units and 10 Air Postal units. The strength for FY 1974 will provide 97% manning of the 55 flying units, 95% manning of the 138 non-flying units, and for 473 personnel included in the mobilization augmentee program.

In addition to the military pay increase, the daily subsistence rate for enlisted personnel has increased from $1.46 to $1.65 effective January 1, 1973.

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1B: Training, Pay Group B

(In Thousands of Dollars)

Actual	Estimate	Estimate
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$5,340	$6,590	$8,478

Part I - Purpose and Scope

This budget activity provides for pay and allowances, including FICA, clothing, subsistence and travel for officers and enlisted personnel assigned to Pay Group B. These personnel are assigned to Major Air Command Mobilization Augmentation positions or to a unit organized to serve as augmentation to a regular Air Force unit, and are authorized 15 days active duty training and 24 paid inactive duty drill periods each fiscal year.

The strengths for both Fiscal Years 1973 and 1974 have been increased in Pay Group B in order to retain some of the personnel who were affected by the inactivations of the medical service units during the third quarter of FY 1973.

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1C: Training, Pay Group D

(In Thousands of Dollars)

Actual Fiscal Year 1972	Estimate Fiscal Year 1973	Estimate Fiscal Year 1974
$1,511	$2,600	$3,559

Part I - Purpose and Scope

This budget activity provides for pay and allowances, including FICA, clothing, subsistence and travel for the Air Force Reserve officers and enlisted personnel assigned to Pay Group D. These personnel are individuals who are assigned to Major Air Command Mobilization Augmentation positions, and are authorized 14 days paid active duty training each fiscal year. These reservists will meet active force shortages during the early phase of war or general mobilization.

The increase in this budget project is due primarily to the implementation of the Civil Preparedness Program. There are 2,932 spaces authorized for the Air Force under this program. For FY 1973 we have included funding requirements for 809, and 1,787 in FY 1974 for mobilization augmentees to the Defense Civil Preparedness Agency under the Assistant Secretary of Defense for Civil Preparedness.

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1D: Training, Pay Group F

(In Thousands of Dollars)

Actual Fiscal Year 1972	Estimate Fiscal Year 1973	Estimate Fiscal Year 1974
$6,808	$6,898	$10,710

Part I - Purpose and Scope

This budget activity provides for pay and allowances, including FICA, clothing, subsistence and travel for enlisted personnel assigned to the non-prior service program. The purpose of this program is to recruit and train non-prior service personnel to fill specific unit vacancies not attainable from prior service enlisted sources. Individuals receive basic and technical training or on-the-job training, depending upon their aptitudes and Air Force specialties.

The FY 1974 input into the non-prior service program is 4,012 as compared to 3,075 for FY 1973. The original FY 1973 program of 4,200 had been reduced due to the inactivation of 108 medical service units. The 4,012 input for FY 1974 is the annual requirement in order to man the 193 Reserve units programmed for FY 1974.

In addition to the military pay increase, the daily subsistence rate has increased from $1.46 to $1.65 effective January 1, 1973.

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1E: School Training

(In Thousands of Dollars)

Actual	Estimate	Estimate
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$10,490	$16,594	$16,891

Part I - Purpose and Scope

The school program for the Air Force Reserve is designed to increase the mobilization potential and readiness of Reservists through training that connot be achieved through other means during the annual active and inactive duty training. This program has been designed not only to maintain individual proficiency at particular skill levels, but also to cross train in the related career fields. The courses vary from 5 to 328 days in length. This includes the actual period of instruction plus travel time and leave accrued at the rate of 2 1/2 days per month for courses of 30 days or more. The courses are the same as those offered to the regular Air Force and, with minor exceptions, a Reservist can attend any course offered to members of the regular Air Force.

Additional school mandays are required in FY 1974 for the conversion of seven units to new missions and the activation of two additional units.

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1F: Special Training

(In Thousands of Dollars)

Actual	Estimate	Estimate
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$11,552	$10,420	$12,667

Part I - Purpose and Scope

Special tours are provided for specific individuals and key personnel to further combat proficiency and to increase mobilization readiness of the Reserve units. These tours vary from 1 to 60 days in length. The special tour program is composed of two major types of training: (1) training requirements, and (2) support of training requirements.

Training requirements are composed mainly of training required for the purpose of increasing the combat potential of units and individuals. Special tours of this category include such tours as Airborne Support Training, Air Rescue Training and Overwater Flights, Aircraft Maintenance Training, and Emergency Procedure Training.

Support of training requirements includes Advance and Rear Echelon Cadre, Aircraft Ferrying, Aircrew Instructors, Orientation Tours with Advisory Units, Seminars, Manning Improvement, and staff visits to detached units.

As a result of increased emphasis on recruiting, approximately 30,000 additional Manning Improvement mandays are programmed for Fiscal Year 1974 to offset anticipated effects of a no-draft policy. Participation in joint exercises and Drop Zone support is expected to increase as a result of conversion of more units to the Tactical Air Command mission.

Appropriation: Reserve Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1G: Administration and Support

(In Thousands of Dollars)

Actual	Estimate	Estimate
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$2,516	$2,806	$3,134

Part I - Purpose and Scope

The funds requested in this project are to provide for pay and allowances, uniforms, permanent change of station travel, and dislocation allowances of the Air Force Reserve officers called to active duty as authorized by Sections 265, 8019, and 8033, Title 10, USC.

Funds are also requested to provide death gratuity payments to beneficiaries of the Air Force Reserve personnel who die while participating in or as a result of injury received or disease contracted while participating in active or inactive duty. training; for pay and allowances during periods of disability and hospitalization to members of the Air Force Reserve who suffer injury or contract disease in line of duty while participating in active or inactive duty training.

Budget Program 2
Reserve Officer Candidates

SUMMARY OF REQUIREMENTS BY BUDGET ACTIVITY
(In Thousands of Dollars)

Budget Activity	Actual FY 1972	Estimate FY 1973	Estimate FY 1974
Senior ROTC	$ 6,723	$ 6,583	$ 6,986
Scholarship Program	5,575	7,364	7,367
Junior ROTC	481	665	750
Health Professions Scholarship	-0-	3,409	9,278
Total Direct Program/Obligations	$12,779	$18,021	$24,381

Reserve Officer Candidates (ROTC) Enrollment

	FY 1972 Actual			FY 1973 Estimate			FY 1974 Estimate		
	Begin	Average	End	Begin	Average	End	Begin	Average	End
Senior ROTC (Excluding Scholarship Program)									
First Year	10,663	9,378	8,056	8,493	7,457	6,421	8,693	7,633	6,572
Second Year	3,615	3,005	2,388	4,625	3,841	3,057	4,625	3,841	3,057
Total Basic ROTC	(14,278)	(12,383)	(10,444)	(13,118)	(11,298)	(9,478)	(13,318)	(11,474)	(9,629)
Third Year	2,625	2,309	1,978	2,004	1,871	1,738	2,562	2,380	2,198
Fourth Year	3,032	2,692	2,534	2,083	1,951	1,818	1,833	1,725	1,617
Total Advanced ROTC	(5,657)	(5,001)	(4,512)	(4,087)	(3,822)	(3,556)	(4,395)	(4,105)	(3,815)
Total Senior ROTC Enrollment	19,935	17,384	14,956	17,205	15,120	13,034	17,713	15,579	13,444
Scholarship Program									
First Year	867	970	1,073	925	893	860	1,000	964	930
Second Year	1,288	1,348	1,407	1,288	1,275	1,262	1,200	1,187	1,176
Total Basic ROTC	(2,155)	(2,318)	(2,480)	(2,213)	(2,168)	(2,122)	(2,200)	(2,151)	(2,106)
Third Year	1,622	1,871	2,120	2,113	2,091	2,069	2,200	2,178	2,156
Fourth Year	1,723	1,746	1,645	2,174	2,119	2,065	2,100	2,047	1,995
Total Advanced ROTC	(3,345)	(3,617)	(3,765)	(4,287)	(4,210)	(4,134)	(4,300)	(4,225)	(4,151)
Total Scholarship Enrollment	5,500	5,935	6,245	6,500	6,378	6,256	6,500	6,376	6,257
Total Enrollment									
First Year	11,530	10,348	9,129	9,418	8,350	7,281	9,693	8,597	7,502
Second Year	4,903	4,353	3,795	5,913	5,116	4,319	5,825	5,028	4,233
Total Basic ROTC	(16,433)	(14,701)	(12,924)	(15,331)	(13,466)	(11,600)	(15,518)	(13,625)	(11,735)
Third Year	4,247	4,180	4,098	4,117	3,962	3,807	4,762	4,558	4,354
Fourth Year	4,755	4,438	4,179	4,257	4,070	3,883	3,933	3,772	3,612
Total Advanced ROTC	(9,002)	(8,618)	(8,277)	(8,374)	(8,032)	(7,690)	(8,695)	(8,330)	(7,966)
Total ROTC Enrollment	25,435	23,319	21,201	23,705	21,498	19,290	24,213	21,955	19,701
Completed ROTC, Commission Deferred:		216			232			193	

Reserve Officer Candidates (ROTC) Program

Numbers of schools, civilian and military personnel associated with the Air Force ROTC program follow:

	FY 1972	FY 1973	FY 1974
Schools	174	184	182
Civilian Personnel (End Strength)	34	34	34
Military Personnel (End Strength)	1393	1420	1420

NOTE: These personnel are not paid by Reserve Personnel Appropriation. They are funded under Air Force O&M and Military Personnel Appropriations.

Appropriation: Reserve Personnel, Air Force
Budget Program 2: Reserve Officer Candidates
Budget Activity 2A: Senior ROTC

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$6,723	$6,583	$6,986

Part I - Purpose and Scope

The funds requested will provide for military personnel costs for students enrolled in the Senior Air Force Reserve Officers' Training Corps (except the Scholarship Program). The estimate includes funds for subsistence allowance, uniforms, pay and allowances and subsistence while attending field training, and travel to and from field training.

Part II - Justification of Funds Requested

The following is a comparison by fiscal years of the costs included in this estimate:

($ in thousands)

	FY 1972 (Actual)	FY 1973 (Estimate)	FY 1974 (Estimate)
Subsistence Allowance	$4,172	$3,822	$4,105
Uniforms, Issue in Kind	95	97	84
Uniforms, Commutation in Lieu	888	856	933
Pay and Allowances (Summer Camp Training)	978	1,241	1,309
Subsistence of Reserve Officer Candidates	203	200	203
Travel of Reserve Officer Candidates	387	367	352
Total Requirement	$6,723	$6,583	$6,986

Appropriation: Reserve Personnel, Air Force
Budget Program 2: Reserve Officer Candidates
Budget Activity 2B: Scholarship Program

(In Thousands of Dollars

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$5,575	$7,364	$7,367

Part I - Purpose and Scope

Funds requested will provide the military personnel costs for students enrolled in the Air Force ROTC Scholarship Program authorized by P. L. 88-647 as amended by Public Law 92-166. This estimate includes funds for a subsistence allowance, uniforms, pay and allowance and subsistence while attending summer field training, and travel. The travel authorization covers initial travel to the educational institution in which matriculated, travel to and from field training, and travel on discharge. During FY 1974 scholarships will be offered to 6500 selected students. This is the maximum number provided the Air Force under the law.

The significant change between FY 1972 and FY 1973 costs resulted from the passage of Public Law 92-166. This law increased the number of scholarships from 5,500 to 6,500. The additional 1000 grants were awarded in mid fiscal year 1972.

Appropriation: Reserve Personnel, Air Force
Budget Program 2: Reserve Officer Candidates
Budget Activity 2C: Junior ROTC

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$481	$665	$750

Part I - Purpose and Scope

The funds requested will provide for issue-in-kind uniforms for students enrolled in the Junior ROTC program at secondary educational institutions.

Appropriation: Reserve Personnel, Air Force
Budget Program 2: Reserve Officer Candidates
Budget Activity 2E: Health Professions Scholarship Program

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$-0-	$3,409	$9,278

Part I - Purpose and Scope

Funds are requested to provide for the military personnel costs for students enrolled in the Armed Forces Health Professions Scholarship Program authorized by Public 92-426. This program was established for the purpose of obtaining adequate numbers of commissioned officers on active duty who are qualified in the various health professions.

Students participating in the program will be commissioned officers in the Air Force Reserves. They will be detailed as students at accredited civilian institutions for the purpose of acquiring knowledge or training in a designated health profession. In addition, they shall receive military and professional training and instruction for a period of 45 days during each year of participatin in the program. Except when serving on active duty for training, each student will receive a stipend of $400 a month. When serving on active duty for training, students will receive the full pay and allowances of a second lieutenant (pay grade O-1).

This program was implemented in mid FY 1973.

National Guard Personnel, Air Force

STATEMENT OF MAJ. GEN. FRANCIS S. GREENLIEF, CHIEF, NATIONAL GUARD BUREAU

ACCOMPANIED BY:

BRIG. GEN. JOHN J. PESCH, DEPUTY DIRECTOR, AIR NATIONAL GUARD

MAJ. GEN. HOWARD M. FISH, DEPUTY DIRECTOR OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

COL. WILLIS D. MUIR, CHIEF, AIR COMPTROLLER DIVISION, NATIONAL GUARD BUREAU

COL. E. L. LEWIS, DEPUTY FOR AIR NATIONAL GUARD, DIRECTORATE OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

PROGRAM AND FINANCING

Chairman McClellan. The next appropriation to be considered will be that for "National Guard Personnel, Air Force."

At this point in the record there will appear certain program and financing information from the justifications.

[The information follows:]

Justification

NATIONAL GUARD PERSONNEL, AIR FORCE

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

IDENTIFICATION CODE 07-05-3850-0-1-051	1972 ACT	1973 EST	1974 EST
PROGRAM BY ACTIVITIES:			
DIRECT PROGRAM:			
1. RESERVE COMPONENT PERSONNEL	148,708	172,428	191,200
REIMBURSABLE (TOTAL)	400	400	216
10 TOTAL OBLIGATIONS	149,108	172,828	191,416
FINANCING:			
RECEIPTS AND REIMBURSEMENTS FROM:			
11 FEDERAL FUNDS	-245	-197	.....
14 NON-FEDERAL SOURCES	-155	-203	-216
25 UNOBLIGATED BALANCE LAPSING	175	.....	.....
40 BUDGET AUTHORITY (APPROPRIATION)	148,883	172,428	191,200
BUDGET AUTHORITY:			
40 APPROPRIATION	148,883	167,919	181,500
44.95 JAN 1973 PAY INCREASE SUPPLEMENTAL/AMENDMENT	.....	4,509	9,700

CONVERSION AND MODERNIZATION

Chairman McCLELLAN. General Greenlief.

General GREENLIEF. Mr. Chairman, I am accompanied this morning by Brig. Gen. John Pesch who is Deputy Director of the Air National Guard.

It is a privilege to appear before you once again as Chief of the National Guard Bureau to present the Air National Guard requirements for fiscal year 1974.

The Air National Guard is on the threshold of a new era of challenges and responsibilities to national defense. The extensive conversion and modernization of the Air National Guard that began during fiscal year 1971, reached its peak in fiscal year 1972. This fiscal year and the next will culminate this transition and by the end of fiscal year 1974, 70 percent of our Air Guard units will have converted to more modern aircraft. Additionally, communications units are receiving newer equipment. The Air National Guard has emerged from this unprecedented conversion program as a formidable force, well equipped, and ready to take its place within the total force, alongside its active counterparts.

MISSION OF THE AIR NATIONAL GUARD

In spite of the turbulence that inevitably accompanies change, particularly of the magnitude experienced by our units, the Air National Guard continues to demonstrate its ability to respond to both its Federal and State missions.

ANG/DESCRIBE TURBULENCE

Chairman McCLELLAN. Describe the major problems associated with recent changes in the Air National Guard that cause you to employ the word "turbulence" in describing the changes.

General GREENLIEF. Sir, as a result of the extensive conversion and modernization program that began during fiscal year 1971, over 70 percent of our Air National Guard units will have converted to more modern aircraft by the end of fiscal year 1974. The "turbulence" occurs when a weapon system change requires retraining of all aircrews and maintenance personnel. There is also a major turnover in supplies and other equipment that is associated with the new aircraft involved.

Chairman McCLELLAN. Proceed.

General GREENLIEF. We maintain combat ready units with modern equipment and highly trained personnel for immediate use by the Active Force whenever and wherever they may be required. At the same time, we provide the States with a trained, disciplined, and well equipped force, to assist in the maintenance of law and order, preservation of the peace, and protection of life and property.

EFFECTIVENESS RATINGS

The Air Guard training standards and requirements are, with few exceptions identical to those of active units. Also, the same criteria with few exceptions are used to rate the Guard's combat capability.

The responsibility for validating the readiness and effectiveness of the ANG rests with the Active Air Force. In fiscal year 1972, the Air Force conducted 141 operational readiness and management effectiveness inspections with a pass rate of 92 percent. The pass rate as of March in the Air Guard in this fiscal year was 93 percent. In the past year the pass rate was 95 percent.

Senator YOUNG. What do you mean by pass rate?

General GREENLIEF. Pass or fail; 95 percent of all our units who received an operational readiness inspection by the Air Force passed inspection. The same standard as the Active Air Force.

PASS RATE IN READINESS OF MANAGEMENT TESTS

Chairman MCCLELLAN. If 92 percent is the pass rate in readiness and management tests, is 93 percent satisfactory?

General GREENLIEF. Sir, the 92 percent to which I referred means that 92 percent of all ANG units which were inspected in fiscal year 1972 satisfactorily passed. The other 8 percent were subsequently reinspected and passed. The overall pass rate for fiscal year 1973 was 95 percent.

AEROSPACE DEFENSE FORCES

Chairman MCCLELLAN. Proceed General.

General GREENLIEF. These units flew over 95,000 hours in fiscal year 1972, including 24-hour, 7-day-a-week runway alert, annual flying training, and the support of ADC/NORAD exercises. In addition, the Air Guard assumed a new mission in October 1972. They became responsible, along with the Active Air Force, for Aerospace Defense of the Southern perimeter of our Nation. Guard aircraft now stand 5-minute runway alert at New Orleans and Houston, and this month coverage will be expanded to include Tucson.

Our ADC units demonstrated their skill and professionalism during the USAF "William Tell" weapons meet. "William Tell" tests the capability of air and ground crews to launch aircraft and successfully intercept targets. The Active Air Force and Air Guard competed in the F–102 category, while Canadian and Air Guard teams competed in the F–101 category. ANG teams took first place in both the F–101 and F–102 categories. Winner of the F–101 competition was North Dakota's 119th Fighter Interceptor Group, nicknamed the "Happy Hooligans." This team, which amassed the highest point total for all categories, also took first place in the F–101 competition in the previous meet. In the F–102 competition, the ANG was victorious, with Wisconsin's 115th Fighter Interceptor Group winning this event.

EXERCISES/COST OF FISCAL YEAR 1974 VERSUS FISCAL YEAR 1973

Chairman MCCLELLAN. What is the estimated cost of the 16 major exercises for the Air National Guard in fiscal year 1974? Compare that with the cost of the nine such exercises in fiscal year 1973.

General GREENLIEF. Sir, the programed cost of the 16 exercises scheduled for fiscal year 1974 is $2.8 million for military pay and allowances, travel, and per diem. Due to the size of the participating forces, the cost of the nine exercises programed for fiscal year 1973 was $2.4 million.

TACTICAL FIGHTER FORCES

Chairman McClellan. Proceed.

General Greenlief. Air National Guard tactical fighter units participated in nine JCS exercises in fiscal year 1972, which included deployments and joint operations in Alaska, the Canal Zone, Germany, and Turkey. We are planning for nine major exercises in fiscal year 1973 and 16 in fiscal year 1974. These exercises test mobility, command and control, and capability to deploy overseas and effectively operate in an unfamiliar theater of operation. This type of training is most effective in the development of first line units in both the Army and Air Guard.

TACTICAL RECONNAISSANCE FORCES

Due to modernization of the Air National Guard tactical reconnaissance force, activities were concentrated primarily on training in the new equipment, although one unit deployed to Alaska and another to southeastern United States participating in JCS exercises.

Conversion training continues to highlight activities this year; however, several units have supported exercises, participated in special projects and provided assistance to civil authorities during natural disasters.

For example, the 123d Tactical Reconnaissance Group from Louisville, Ky., provided vital assistance on the east coast photographing the flood damage from Hurricane Agnes.

AERIAL REFUELING FORCES

Air National Guard refueling units are in their sixth year of the "Creek Party" mission in Europe.

MAJOR EXERCISES IN FISCAL YEAR 1973 AND FISCAL YEAR 1974

Chairman McClellan. What is the overall cost of the Creek Party mission?

General Greenlief. Sir, in fiscal year 1973 the overall cost for military pay and allowances and per diem, directly related to the Creek Party mission, was $1.2 million. In fiscal year 1974, $1.4 million is programed to support this mission.

Chairman McClellan. Proceed.

General Greenlief. This is the only full-time overseas mission performed by the Guard or Reserve while in a training status. Air and ground crews from KC–97 tanker units perform their annual training on a rotational basis at Rhein-Main Air Base, Germany, providing air-to-air refueling for Air Force fighter planes in Europe. As one detachment completes its 15 days' training they are replaced by another. This is a continuous operation, 365 days a year. A total of 700 "Creek Party" missions were flown during fiscal year 1972, while 326 missions were flown during the first half of fiscal year 1973. This joint Air Guard/Active Air Force mission produces highly qualified air and ground crews. It also promotes morale and motivation in the ANG tanker units, while contributing to the combat capability of NATO forces.

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TACTICAL AIRLIFT FORCES

Three years ago, the ANG activated its first two C–130 Tactical Airlift units and by fiscal year 1974, the force will grow to 11 squadrons. The C–130, having both long and short range capability for delivering personnel and cargo, has been the major support aircraft in Southeast Asia.

These units are now actively supporting U.S. Readiness Command joint airborne requirements. The Tactical Air Command requires that we spend the greater share of training time in support of JCS exercises and other tactical airborne missions. This training consumes most of the unit's time and resources and leaves little capability for these aircraft to airlift troops and cargo to Guard and Reserve training sites.

The value of the C–130, as well as the flexibility and dedication of the Air Guard, was shown on a number of occasions during fiscal year 1972 as airlift units responded to civil emergencies by transporting supplies and equipment to combat forest fires and provide flood relief.

SPECIAL OPERATIONS GROUP

Three special operations groups equipped with the C–119 Flying Boxcar and the versatile lightweight U–10, participated extensively in joint training with the Active Army and Army National Guard Special Forces throughout fiscal year 1972. Elements of these three groups deployed to Europe and participated in Flintlock IV and V, a combined maneuver with NATO based ground and air units. Commendations for this participation have been received from senior Air Force commanders.

TACTICAL AIR SUPPORT

Five ANG tactical support units are equipped with the light, highly maneuverable two engine O–2 aircraft. Their mission is to provide forward air control and observation for ground forces. They are the vital, coordinating link between ground units, and the strike and reconnaissance aircraft that provide air support. These units train continuously with the Army National Guard; with each group supporting one Army Guard Division. They participate in all joint ground-air exercises with tactical fighter and reconnaissance units.

TACTICAL ELECTRONIC WARFARE FORCE

The 193d Tactical Electronic Warfare Group, with its uniquely configured EC–121 aircraft, furnished electronic countermeasure support for numerous TAC, NORAD, Navy, and JCS exercises during fiscal year 1972. This one-of-a-kind Guard unit maintains a combat-ready posture and is capable of being deployed worldwide. Although this unit sustained severe flood damage during Hurricane Agnes, it is regaining its combat-ready capability. Despite problems during the flood, the 193d supplied vitally needed airlift support for flood-stricken communities in the ravaged coastal area.

STRATEGIC AIRLIFT FORCES

Three C–124 units will remain in the Air Guard inventory at end fiscal year 1973. These units, with an outsize hauling capability, average 20 missions each month to offshore islands and oversea destinations in support of the active Air Force.

During fiscal year 1972, units flew over 2,900 domestic and overseas missions, carrying 96,000 military personnel and over 14,000 tons of cargo.

In addition to supporting the active military forces, airlift was provided for domestic action programs and in response to natural disasters. After the recent earthquake in Nicaragua, C–124's from Tennessee and Georgia transported vitally needed equipment to Managua. Other units flew a number of missions to Managua, airlifting over 70 tons of food and medical supplies. They also transported evacuees to Howard AFB in the Panama Canal Zone.

TACTICAL CONTROL UNITS

We have activated two new groups in the western portion of the United States. These units now have nearly all of their mission equipment and will be 85 percent manned by the end of fiscal year 1973.

Two existing units have converted to 407L equipment. With this conversion, the ANG now possesses some of the most modern tactical command and control equipment available. This is a computerized mobile system that supports tactical air and ground units in the field, and replaces older manual systems. We are progressing toward full combat capability in all our units.

COMMUNICATIONS UNITS

Significant improvements have occurred in the equippage posture of mobile communications units. The conversion to the new 407L, tactical air control system has resulted in the modernization of two mobile communications groups with equipment developed under the 407L program.

Other mobile units have received new and modern equipment which places them on a par with the regular forces.

Electronic installation squadrons continued their support of Air Force communication services on a worldwide basis during fiscal year 1972. Over 15,000 man-days were used to install and maintain ground communications equipment at Air Force bases in the United States. Europe, and various Pacific locations. This support provides realistic training for communication electronics personnel while assisting the active Air Force.

PROGRAMED FORCES

The number of Air National Guard flying units remained at 92. Changes in mission have occurred in fiscal year 1973 and are programed between now and the end of fiscal year 1974.

The ANG had 18 aerospace defense units at the end of fiscal year 1972; the number will increase to 21 in fiscal year 1973 and remain at that level through the end of fiscal year 1974.

21 AEROSPACE DEFENSE UNITS FUNCTIONS

Chairman McCLELLAN. What are the functions of the 21 aerospace defense units programed for fiscal year 1974?

General GREENLIEF. The 21 aerospace defense units are located along the coastal regions and the northern tier of the United States. Their mission in fiscal year 1974, as in the past, is to maintain a 24-hour runway alert under the operational control of the North American Air Defense Command.

Chairman McCLELLAN. Proceed.

General GREENLIEF. At end fiscal year 1972, there were 28 tactical fighter units in the ANG. This will increase by one and remain at 29 through fiscal year 1974. There were eight tactical reconnaissance units at the end of fiscal year 1972. They will be reduced to seven this year and through fiscal year 1974.

Other tactical forces, which totaled 29 units at the end of fiscal year 1972, will increase to 32 this year, and will remain at 32 through fiscal year 1974.

The strategic and aeromedical airlift units have been reduced from nine in fiscal year 1972 to three in fiscal years 1973 and 1974.

DOMESTIC ACTION

Guardsmen are involved in a multitude of civic action, patriotic, and community betterment activities. Local units have always shown a great concern for their hometowns and the surrounding areas.

In all areas of the country, guardsmen are sponsoring Boy Scout troops, Little League athletic teams, conducting sports clinics, recreation programs and are promoting a vast array of other programs to improve the lifestyle of their fellow citizens.

FISCAL YEAR 1974 REQUIREMENTS

Gentlemen, I will devote the remainder of my time to the funding aspects of the fiscal year 1974 program.

The programed end strength for the Air National Guard in fiscal year 1974 is 92,473 with an average strength of 92,291.

REACHING GOALS/FISCAL YEARS 1974 AND 1973

Chairman McCLELLAN. Do you anticipate any difficulties in reaching your strength goals for fiscal year 1974? What has been your success in meeting fiscal year 1973 goals?

General GREENLIEF. Sir, the ANG does not anticipate a problem in executing the fiscal year 1974 strength program provided adequate support is given in terms of incentives and recruiting resources. The ANG has exceeded its statutory drill strength requirements for fiscal year 1973.

Chairman McCLELLAN. Proceed.

General GREENLIEF. This is an increase from the fiscal year 1973 programed end and average strengths. We are requesting $191.2 million in this appropriation to support this strength. It will provide pay and allowances for officers and airmen on active duty training, unit training assemblies, basic military training, school training, special tours of active duty in support of Active Force exercises, clothing,

subsistence, travel and other personnel expenses. The fiscal year 1974 appropriation request compares with $172.4 million included in this budget submission pertaining to fiscal year 1973.

The fiscal year 1973 amount includes a $4.5 million supplemental request for the January 1, 1973 military pay raise. Since preparation and submission of the budget, program adjustments have been accomplished which enabled the Air National Guard to absorb this amount. The revised fiscal year 1973 availability is $167.9 million. The increase of $23.3 million in fiscal year 1974 is primarily the result of increased drill strength, and the annualization of the fiscal year 1973 military pay increase.

Last October the joint conference committee reduced Air National Guard Project Volunteer funding by $0.4 million. This was related to the elimination of officers to be assigned to recruiting duties. We have implemented your decision and have eliminated all officers from the recruiting program in both fiscal years 1973 and 1974.

RECRUITING OFFICERS REDUCTION

Chairman McClellan. What has been your experience thus far this year in recruitment insofar as it relates to the elimination of officers assigned to recruiting duties?

General Greenlief. Sir, the ANG has had only 1 year of experience in recruiting. Because we were not permitted to use officer recruiters in fiscal year 1973, we do not have experience for comparison purposes. As we gain more experience, however, we may find it advantageous to use one officer per State to supervise recruiting.

Chairman McClellan. You may proceed.

General Greenlief. I will discuss the scope of the Air National Guard programs including an explanation of the differences in costs between fiscal years 1973 and 1974.

ANNUAL FIELD TRAINING/UNIT TRAINING ASSEMBLIES

Each year Air National Guardsmen are required to perform 15 days of annual active duty training and attend 48 unit training assemblies.

EXERCISES/PERSONNEL PERFORMING 15 DAYS ACTIVE DUTY TRAINING

Chairman McClellan. Are all of the exercises described in your statement limited to personnel performing 15 days of active duty training?

General Greenlief. No, sir. Generally, 30 percent or more of the duty for JCS exercises is in lieu of the annual training requirement of Air Guardsmen. The remainder is performed using resources allocated specifically for Air Guardsmen to participate with their active duty counterparts in realistic joint exercises.

Chairman McClellan. Proceed.

General Greenlief. In addition, aircrews are required to perform 36 additional flying training periods each year, which is essential to readiness and flying safety requirements. This program is $9.3 million more in fiscal year 1974, and includes the full year cost of the recent military pay raise and a 2 percent increase in our fiscal year 1974 drill strength.

NONPRIOR-SERVICE BASIC AND TECHNICAL TRAINING PROGRAM

Air Guardsmen receive their initial basic training at Lackland Air Force Base along with regular Air Force recruits. About 70 percent of the recruits enter a follow-on technical training school immediately upon completion of basic military training. The other 30 percent complete their active duty through home station on-the-job-training. At the time the budget was prepared, we anticipated entering 9,450 nonprior service individuals into basic training during fiscal year 1973. Since that time, we have revised our estimate to 7,300. This revision provided the majority of the funds required to absorb the impact of the January 1, 1973 pay raise. In fiscal year 1974, we have programed 10,000 recruits, which partially accounts for the $8.7 million increase in this program. The other major factor is the full year impact of the military pay increase. The fiscal year 1974 program provides the minimum number of non-prior service personnel required to sustain the drill strength necessary to achieve and maintain combat readiness.

SCHOOL TRAINING

During fiscal year 1973, approximately 5,500 officers and airmen will be enrolled in school training at active military installations and the same level will be maintained in fiscal year 1974.

NON-PRIOR SERVICE PERSONNEL/PILOT AND NAVIGATOR

Chairman McClellan. To what degree do you depend on utilization of non-prior service personnel in the categories of pilot and navigators?

General Greenlief. Sir, non-prior service personnel are recruited and trained for aircrew duties only to the extent that prior service personnel cannot be recruited in the geographic area where the requirement exists.

Chairman McClellan. Proceed.

General Greenlief. If the continued level of training is attributed primarily to aircraft conversions and recruiter training. The majority of the $1.9 million increase in this program reflects the full year impact of the military pay raise, and the increased length of training courses. School training will insure that we have adequate numbers of air guardsmen trained in critical skill areas essential to reestablish and sustain the combat capability that temporarily declined during the lengthy conversion period. These courses include flight training, technical training and professional training.

SPECIAL TRAINING

Special training provides training and active force support not contained in other programs. It includes overwater training flights, readiness, conversion, and simulator training. It also provides mandays for runway alert in support of the Aerospace Defense Command; recruiter duty and ANG participation in JCS exercises.

The $3.2 million increase in fiscal year 1974 for the most part is attributable to two new starts. There are an increase of air defense runway alert requirements dedicated to the defense of the southern

part of the Nation, and the assumption of full funding responsibility for "creek party," which was previously funded jointly by the Air Guard and active Air Force.

ADMINISTRATION AND SUPPORT

This program provides for the pay and allowances of ANG officers serving under sections 265, 8033, 8496 of title 10, and section 708 of title 32, United States Codes. It also includes death gratuities for survivor's benefits and disability pay. Fiscal year 1974 costs will increase a nominal $200,000, primarily due to the full year cost of the 1973 pay increase.

SUMMARY AND CONCLUSIONS

In conclusion, I have covered the current status of the Air National Guard and the funding required to support our fiscal year 1974 forces and programs. Increases are directly related to pay raises, additional drill strength, and new missions. I believe that the performance of our units has fully justified the previous programs approved by Congress. The funding requested for fiscal year 1974 will permit us to continue as a viable combat ready force immediately available to provide trained units for national defense.

We in the Guard appreciate your past confidence and earnestly solicit your future support.

ANG AIR SAFETY RECORD

Chairman McCLELLAN. What has been the air safety record of the Air National Guard in the past year?

General GREENLIEF. Sir, during calendar year 1972, the Air National Guard had 30 major aircraft accidents. Our units flew a total of 417,296 hours, with 7.19 accidents for each 100,000 hours flown.

So far this calendar year there have been 12 major aircraft accidents, with a rate of 5.3 accidents per 100,000 hours flown.

Chairman McCLELLAN. General, if suddenly war developed, how near readiness for combat is the National Guard?

General GREENLIEF. Sir, the Air National Guard has a very early readiness requirement. In many of our units, we have a 24-hour mobilization requirement. During the callup for Vietnam, we in fact did just that.

The Air Force did not find it necessary to deploy them that rapidly but they could have. As far back as 1963, we demonstrated in a 24-hour alert the deployment of fighter aircraft from continental United States to Europe, and it went off in great style.

We believe that we do provide the readiness that is required.

Chairman McCLELLAN. In other words, it would not take 30 days or 60 days to get them into action.

General GREENLIEF. No, sir.

Chairman McCLELLAN. In 10 days, would they be ready?

General GREENLIEF. In fact, the units that have achieved the readiness status required could be deployed in a period of 24 hours. We maintain mobility kits at all our Air Guard bases that have the equip-

ment right there on the base, they have something like 97-percent filled, that are transportable with our units as they deploy. We have an advantage that ground forces don't have and that is that our Air Guard units fly themselves to the theater and they are ready.

Chairman McCLELLAN. They stay ready.

General GREENLIEF. Yes, sir.

Chairman McCLELLAN. Senator, do you have any questions?

Senator YOUNG. I want to commend the Air National Guard for its high state of readiness. It is far better than most people realize.

Chairman McCLELLAN. I was surprised. I did not think you were correct in your estimate of its capability for immediate availability for combat.

General GREENLIEF. I am not surprised. I am proud to demonstrate the point. Having just completed or almost completed this massive conversion program, of the 92 flying units in the Air National Guard, only 19 are not combat ready now. Of the 19, three are units that are not rated because of the type of the units, and the other 16 units are not combat ready because of the recent conversion program.

The remainder of the units, rated not by the Air Guard but by the Air Force, are in fact combat ready.

Senator YOUNG. I visited our Air National Guard last year. In visiting with the commanding officer, I asked him how long would it take to get ready. He said, "I probably would have to go home and get some clothes."

General PESCH. It sounds like MacDonald.

General GREENLIEF. He is one of our best.

QUESTIONS BY SENATOR THURMOND

Chairman McCLELLAN. As I previously indicated, Senator Thurmond was unable to be present at this meeting but has asked that questions he has prepared be answered for the record. They will be included at this point.

[The questions and answers follow:]

ANG SHORTFALL/FISCAL YEAR 1974

Senator THURMOND. General Greenlief, do you anticipate a shortfall in Air Guard strength during fiscal 1974?

General GREENLIEF. Sir, as I previously stated, we do not anticipate problems in executing our fiscal year 1974 program if adequate incentives and recruiting support are provided. We need incentives such as enlistment/reenlistment bonuses, tuition assistance, and shorter initial enlistment contracts. Full-time recruiters, recruiter training, and advertising programs are also required.

ANG/ACHIEVING COLOCATION WITH RESERVE

Senator THURMOND. General Greenlief, what has the Air National Guard done in the last 2 years to achieve collocation of Reserve and active units in instances where Reserve personnel are available in sufficient numbers at the colocated site?

General GREENLIEF. During the past several years, we have relocated two tactical units from the Detroit, Mich., Metropolitan Airport to Selfridge AFB, Michigan. The Air Force Reserve, Navy Reserve, and Marine Reserve are also located at Selfridge. In addition, both Air Guard and Air Force Reserve units were relocated from the Clinton County, Ohio, Airport to Lockbourne AFB, Ohio.

ANG/Efforts To Construct at Collocated AF Active as Well as Reserve Units

Senator Thurmond. What is the Air National Guard doing toward meeting the new DOD requirements that new construction be collocated if possible not only with active units but with Air Force and Naval Air Reserve units?

General Greenlief. Sir, close coordination is effected between the Air National Guard, the Air Staff, and the gaining Major Command during the development of our military construction program. Preliminary agreements have been reached on future programing of joint ANG/AFRES facilities at O'Hare, Minneapolis-St. Paul, and General Mitchell Airports. Our fiscal year 1974 military construction program includes two joint ANG/AFRES projects at Ellington AFB, and a joint-use dining hall has just been placed in operation at Ellington.

ANG/Request for Space/Armed Forces Reserve Defense Center

Senator Thurmond. General Greenlief, has the Air National Guard requested any space at the new Armed Forces Defense Center at Los Alamitos?

General Greenlief. No, sir, the Air National Guard has not requested space at the Los Alamitos facility. Our two tactical airlift groups in the Los Angeles area are located at adequate facilities and, if moved to Los Alamitos, construction of additional facilities would be required.

ANG Coordination of Construction With Service Reserve Forces

Senator Thurmond. General Greenlief, what coordination is the Air Guard effecting between the Army, Navy, and Air Force Reserve units for which military construction projects are being considered?

General Greenlief. Sir, as I indicated earlier, the Air National Guard, in coordination with other Reserve components and the Air Force, does review the feasibility of joint utilization of facilities. Consideration is given to providing optimum training facilities at the most advantageous cost to the government. In addition, each state has a State Reserve Forces Facilities Board which reviews all proposed major construction projects for Reserve Forces within the state, to assure that the new construction will not duplicate existing facilities. Actions are presently underway to relocate ANG units from Paine Field, Washington, where most of the facilities are leased from the county, to Camp Murray, Wash., where facilities will be licensed from the State of Washington at no cost to the Federal Government.

Schedule/Replacement of Older FTR A/C

Senator Thurmond. General Greenlief, what is the schedule for the replacement of the older fighter aircraft in the Guard's tactical fighter forces? Have any of your pilots refused to fly these old aircraft?

General Greenlief. Sir, the Air National Guard is scheduled to convert three groups of F–100 aircraft to A–7D's during fiscal year 1974. I know of no instance where pilots have refused to fly older aircraft.

Effect If Enlistment Bonus Is Approved on Retention Rate

Senator Thurmond. General Greenlief, if the reenlistment bonus is approved what retention rate do you believe can be achieved among first-term obligors? General, would this not reduce overall cost through the reduction of basic military training requirements?

General Greenlief. We do not have available at this time a precise retention rate for first termers. Beginning in July of this year, a new data system will provide that information. However, we estimate that we could increase our retention rate by 10 to 15 percent through the payment of a bonus. Increases in our retention rate would have a direct bearing on our basic training requirements and costs.

ANG Strength/Mobilization Requirements

Senator Thurmond. General Greenlief, please provide for the record how the National Guard strength requirement is related to mobilization requirements in the event of a national emergency?

General GREENLIEF. I will be glad to do so. Active Force contingency plans determine the mobilization requirements of the Air National Guard. To be fully combat ready for mobilization, an ANG unit is required to achieve a readiness rating of C–1, which means the unit is adequately manned, equipped, trained, and fully capable of performing its primary mission. This requires a minimum manning level of 90 percent of authorized unit strength.

JUSTIFICATION

Chairman MCCLELLAN. At this point in the record, there will be included additional information from the justifications.

[The justification follows:]

Justification

APPROPRIATION INTRODUCTION

This appropriation provides for the military personnel costs of the Air National Guard. It includes pay and allowances, clothing, subsistence, gratuities, travel and related expenses for personnel performing annual training, inactive duty training, special training, school training and for Air National Guard officers called to active duty as authorized by Sections 265, 8033 and 8496, Title 10, United States Code and Section 708, Title 32, United States Code.

SUMMARY OF REQUIREMENTS

(In Thousands of Dollars)

	Actual	Estimate	
	FY 1972	FY 1973	FY 1974
Reserve Component Personnel	$149,108	$172,828	$191,416
TOTAL PROGRAM REQUIREMENTS (Obligations)	149,108	172,828	191,416
Less Actual/Anticipated Reimbursements	400	400	216
Unobligated balance lapsing	175	--	--
Total Direct Obligations/Appropriations	$148,883	$172,428	$191,200

Budget Program 1
Reserve Component Personnel
SUMMARY OF REQUIREMENTS BY BUDGET ACTIVITY
(In Thousands of Dollars)

Budget Activity	Actual FY 1972	Estimate FY 1973	Estimate FY 1974
Direct Program			
Training, Pay Group A	$109,865	$126,130	$134,805
Training, Pay Group F	16,606	20,242	25,034
School Training	9,828	11,387	13,325
Special Training	9,815	11,454	14,626
Administration and Support	2,594	3,215	3,410
Total Direct Program	$148,708	$172,428	$191,200
Reimbursable Program			
Training, Pay Group A	$ 400	$ 400	$ 216
Total Reimbursable Program	$ 400	$ 400	$ 216
Total Program			
Training, Pay Group A	$110,265	$126,530	$135,021
Training, Pay Group F	16,606	20,242	25,034
School Training	9,828	11,387	13,325
Special Training	9,815	11,454	14,626
Administration and Support	2,594	3,215	3,410
Total Obligations	$149,108	$172,828	$191,416

Air National Guard Personnel in Paid Status

Pay Groups	Paid Drills	Paid Days of Active Duty for Training		FY 1972 (Actual Year) Begin	FY 1972 (Actual Year) Average	FY 1972 (Actual Year) End	FY 1973 (Current Year) Average	FY 1973 (Current Year) End	FY 1974 (Budget Year) Average	FY 1974 (Budget Year) End
A	48	15	Off	11,210	11,346	11,489	11,588	11,500	12,269	12,282
			Enl	72,609	72,386	75,524	73,402	73,111	75,995	76,231
F	0	90 - 180	Enl	1,870	3,403	2,224	3,278	4,265	4,027	3,960
Paid Drill Training and Non-Prior Service			Off	11,210	11,346	11,489	11,588	11,500	12,269	12,282
			Enl	74,479	75,789	77,748	76,680	77,376	80,022	80,191
			Total	85,689	87,135	89,237	88,268	88,876	92,291	92,473

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.

RESERVE COMPONENT OFFICERS ON STATUTORY TOURS OF ACTIVE DUTY

Air National Guard Officers performing full time active duty under Sections 265, 8033, and 8496 of Title 10, United States Code and Section 708 of Title 32, United States Code:

	FY 1972 (Actual Year) Begin	FY 1972 (Actual Year) Average	FY 1972 (Actual Year) End	FY 1973 (Current Year) Average	FY 1973 (Current Year) End	FY 1974 (Budget Year) Average	FY 1974 (Budget Year) End
Section 265 Officers	54	53	54	54	54	56	56
Section 8033 Officers	6	6	6	6	6	6	6
Section 8496 Officers	28	23	26	35	35	35	35
Section 708 Officers	4	4	4	5	6	6	6
TOTAL	92	86	90	100	101	103	103

Section 265. Policies and regulations: participation of reserve officers in preparation and administration

"Within such numbers and in such grades and assignments as the Secretary concerned may prescribe, each armed force shall have officers of its reserve components on active duty (other than for training) at the seat of government, and at headquarters responsible for reserve affairs, to participate in preparing and administering the policies and regulations affecting those reserve components. While so serving, such an officer is an additional number of any staff with which he is serving."

Section 8033. Reserve components of Air Force; policies and regulations for government of: functions of National Guard Bureau with respect to Air National Guard

"(a) There is in the Office of the Secretary of the Air Force an Air Reserve Forces Policy Committee on Air National Guard and Air Force Reserve Policy which shall review and comment upon major policy matters directly affecting the reserve components of the Air Force and the Committee's comments on such policy matters shall accompany the final report regarding any such matters submitted to the Chief of Staff, and the Assistant Secretary responsible for reserve affairs."

Section 8496. Air National Guard of the United States: commissioned officers; duty in National Guard Bureau

"(a) The President may, with their consent, order commissioned officers of the Air National Guard of the United States to active duty in the National Guard Bureau.

"(b) The number of officers of the Air National Guard of the United States in any grade below brigadier general who are ordered to active duty in the National Guard Bureau may not be more than 40 percent of the number of officers of the Air Force in that grade authorized for duty in that Bureau."

Section 708. Property and fiscal officers

"(a) The governor of each State and Territory, Puerto Rico, and the Canal Zone, and the commanding general of the National Guard of the District of Columbia, shall appoint, designate or detail, subject to the approval of the Secretary of the Army and the Secretary of the Air Force, a qualified commissioned officer of the National Guard of that jurisdiction who is also a commissioned officer of the Army National Guard of the United States or the Air National Guard of the United States, as the case may be, to be the property and fiscal officer of that jurisdiction. If the officer is not on active duty, the President may order him to active duty, with his consent, to serve as a property and fiscal officer."

Appropriation: National Guard Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1A: Training, Pay Group A

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$109,865	$126,130	$134,805

Part I - Purpose and Scope

This budget activity provides for pay and allowances (including FICA), clothing, subsistence, and travel for Air National Guard officers and enlisted personnel assigned to Pay Group A. These personnel are authorized 15 days paid annual training each fiscal year, 48 paid inactive duty drill periods, 36 additional flying training periods for personnel on flying status, and four to six drills for training of civil disturbance personnel. The basic requirement for civil disturbance training has increased to four drills per individual with two additional drills authorized for leadership training of key personnel.

The FY 1974 requirements will increase $8.7M to support a higher Pay Group A drill strength level, the full year effect of the January 1, 1973 military pay raise and a BAS rate increase from $1.46 to $1.65 per day effective January 1, 1973.

Appropriation: National Guard Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1D: Training, Pay Group F

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$16,606	$20,242	$25,034

Part I - Purpose and Scope

This budget activity provides for pay and allowances, including FICA, clothing, subsistence and travel for Air National Guard enlisted personnel assigned to the non-prior service program who will receive basic and technical training or on-the-job training.

FY 1974 requirements will increase $4.8M to support the minimum number of non-prior service personnel to sustain Air National Guard drill strength requirements. Also included is the full year effect of the January 1, 1973 military pay raise and a subsistence rate increase from $1.46 to $1.65 per day, effective January 1, 1973.

Appropriation: National Guard Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1E: School Training

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$9,828	$11,387	$13,325

Part I - Purpose and Scope

This budget activity provides for pay and allowances, (including FICA), subsistence, travel, per diem and transportation for Air National Guard officers and enlisted personnel performing tours of paid active duty for training as students at regular, associate, refresher and technical courses of service schools, area schools, unit schools, officer training schools and other installations which provide training applicable to the individuals' assignments. Because of the technical and professional skills required in the Air National Guard, formal school training of selected officers and enlisted personnel is necessary for the successful accomplishment of the Air National Guard mission. The length of each course includes the actual period of instruction plus travel time as prescribed by appropriate travel regulations and accrued leave at a rate of 1-1/2 days per month if training is in excess of 30 days.

FY 1974 requirements will increase $1.9M to support training generated by aircraft conversions, recruiter training, and the full year effect of the January 1, 1973 military pay raise.

Appropriation: National Guard Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1F: Special Training

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$9,815	$11,454	$14,626

Part I - Purpose and Scope

This budget activity provides for pay and allowances including FICA, subsistence, travel and per diem for Air National Guard officers and enlisted personnel who will perform tours of paid active duty for training other than those covered by pay groups and school training. These tours include training to satisfy major air command requirements, support of command requirements directed by Hq USAF, support of command requirements for the National Guard Bureau, ANG Aerospace Defense Alerts, Recruiting, ANG support of JCS Exercises and "Operation Creek Party".

FY 1974 requirements will increase $3.2M to support overwater training flights, readiness, conversion and weapons training, runway alerts, and the full year effect of the January 1, 1973 military pay raise. The increase is also attributable to ANG assumption of costs associated with "Operation Creek Party" previously funded by the active Air Force, and additional enlisted recruiters required to achieve desired ANG strength levels in the zero draft environment.

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Appropriation: National Guard Personnel, Air Force
Budget Program 1: Reserve Component Personnel
Budget Activity 1G: Administration and Support

(In Thousands of Dollars)

Actual	Estimate	
Fiscal Year 1972	Fiscal Year 1973	Fiscal Year 1974
$2,594	$3,215	$3,410

Part I - Purpose and Scope

The funds requested in this budget activity are to provide for pay and allowances, permanent change of station travel, and dislocation allowances of officers called to active duty as authorized by Sections 265, 8033, and 8496, Title 10, United States Code, and Section 708, Title 32, United States Code.

Funds are also requested to provide death gratuity payments to beneficiaries of Air National Guard personnel who die while participating in or as a result of injury received or disease contracted while participating in active or inactive duty training and for pay and allowances during periods of disability and hospitalization to members of Air National Guard who suffer injury or contract disease in line of duty while participating in active or inactive duty training.

FY 1974 requirements will increase $.2M primarily due to the full year effect of the January 1, 1973 military pay raise.

SUBCOMMITTEE RECESS

Chairman McClellan. Gentlemen, thank you.

General Greenlief. Thank you, Mr. Chairman.

[Whereupon, at 11:45 a.m., the hearing was recessed, to reconvene at 2 p.m. the same day.]

[Afternoon Session, 2 O'clock, Wednesday, June 27, 1973]

DEPARTMENT OF DEFENSE

Department of the Air Force

Research, Development, Test, and Evaluation, Air Force

STATEMENT OF JOE C. JONES, DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE, RESEARCH AND DEVELOPMENT

ACCOMPANIED BY:

MAJ. GEN. WILLIAM J. EVANS, ASSISTANT DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT, HEADQUARTERS, U.S. AIR FORCE

MAJ. GEN. JAMES A. HILL, DIRECTOR OF AEROSPACE PROGRAMS, DEPUTY CHIEF OF STAFF, PROGRAMS AND RESOURCES, HEADQUARTERS, U.S. AIR FORCE

MAJ. GEN. HOWARD M. FISH, DEPUTY DIRECTOR OF BUDGET, HEADQUARTERS, U.S. AIR FORCE

PROGRAM AND FINANCING

Chairman McClellan. This afternoon the subcommittee will receive testimony in support of the budget request for fiscal year 1974, for the Air Force Research, Development, Test, and Evaluation Appropriation.

At this point in the record there will appear certain program and financing information from the justifications.

[The justification follows:]

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	IDENTIFICATION CODE 07-20-3600-0-1-051	BUDGET PLAN (AMOUNTS FOR RDT+E ACTIONS PROGRAMED)			OBLIGATIONS		
		1972 ACT	1973 EST	1974 EST	1972 ACT	1973 EST	1974 EST
	PROGRAM BY ACTIVITIES:						
	DIRECT:						
	1, MILITARY SCIENCES	142,038	131,532	136,220	144,512	132,248	136,400
	2, AIRCRAFT AND RELATED EQUIPMENT	1,183,680	1,289,876	1,228,025	1,226,657	1,295,751	1,228,355
	3, MISSILES AND RELATED EQUIPMENT	404,913	344,805	292,980	437,139	350,408	291,483
	4, MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	337,259	339,833	529,100	326,276	366,890	531,120
	6, ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	94,896	110,989	123,965	117,760	112,067	123,565
	7, OTHER EQUIPMENT	422,783	525,208	518,120	487,502	473,581	524,830
	8, PROGRAMWIDE MANAGEMENT AND SUPPORT	342,865	388,100	400,295	356,896	387,099	397,452
	TOTAL DIRECT	2,928,444	3,130,343	3,228,705	3,096,742	3,118,044	3,233,205
	REIMBURSABLE (TOTAL)	214,610	225,000	200,000	177,357	253,259	200,000
10	TOTAL	3,143,054	3,355,343	3,428,705	3,274,099	3,371,303	3,433,205
	FINANCING:						
	RECEIPTS AND REIMBURSEMENTS FROM:						
11	FEDERAL FUNDS	-188,637	-218,800	-187,200	-168,494	-218,800	-187,200
13	TRUST FUNDS	-23,604	-4,200	-10,800	-19,085	-4,200	-10,800
14	NON-FEDERAL SOURCES	-2,369	-2,000	-2,000	-5,656	-2,000	-2,000
21	UNOBLIGATED BALANCE AVAILABLE, START OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	-318,378	-140,957	-124,997
	REPROGRAMING FROM (-) OR TO PRIOR YEAR BUDGET PLANS	-25,001	.....	.....	.....	.....	.....
22	UNOBLIGATED BALANCE TRANSFERRED FROM OTHER ACCOUNTS	-25,000	.....	.....	-25,000	.....	.....
23	UNOBLIGATED BALANCE TRANSFERRED TO OTHER ACCOUNTS	25,000	.....	.....	25,000	.....	.....
24	UNOBLIGATED BALANCE AVAILABLE, END OF YEAR						
	FOR COMPLETION OF PRIOR YEAR BUDGET PLANS	.....	.....	.....	140,957	124,997	120,497
25	UNOBLIGATED BALANCE LAPSING						
	UNOBLIGATED BALANCE LAPSING, BUD PLAN	1	.....	.....	1	.....	.....
	BUDGET AUTHORITY	2,903,444	3,130,343	3,228,705	2,903,444	3,130,343	3,228,705
	BUDGET AUTHORITY:						
40	APPROPRIATION	2,887,944	3,122,940	3,212,500	2,887,944	3,122,940	3,212,500
41	TRANSFERRED TO OTHER ACCOUNTS	.....	-2,900	.....	.....	-2,900	.....
42	TRANSFERRED FROM OTHER ACCOUNTS	15,500	.....	.....	15,500	.....	.....
43	APPROPRIATION (ADJUSTED)	2,903,444	3,120,040	3,212,500	2,903,444	3,120,040	3,212,500
44.95	JAN 1973 PAY INCREASE SUPPLEMENTAL/AMENDMENT	.....	10,303	16,205	.....	10,303	16,205

BIOGRAPHY

Chairman McCLELLAN. The first witness will be Secretary Jones, Acting Assistant Secretary of the Air Force for Research and Development.

At this point in the record there will be included the biographical summary of Mr. Joe C. Jones.

[The biography follows:]

BIOGRAPHICAL SKETCH, MR. JOE C. JONES

Mr. Joe C. Jones is Deputy Assistant Secretary of the Air Force, Research and Development.

Mr. Jones was born in Birmingham, Alabama, September 18, 1922. He graduated from the Alabama Polytechnic Institute, Auburn, Alabama in June 1943 with a B.S. in Aeronautical Engineering and received an S.M. in Industrial Management from the Massachusetts Institute of Technology, Cambridge, Massachusetts in June 1957.

From 1943 to 1946, Mr. Jones served in the U.S. Army Air Corps as a Technical Officer for aircraft and rocket projects on the Technical Staff of the Engineering Division, Air Materiel Command, Wright-Patterson AFB, Ohio. In 1946 he was discharged in the grade of Captain and awarded the Army Commendation Ribbon for activities associated with guided missile developments.

Mr. Jones civilian experience began in 1947 when he organized and served as the head of the Air Force Engineering Field Organization of the Air Research and Development Command. In 1951 he established the Nuclear-Powered Aircraft Division of ARDC and served as the Technical Director until the outset of 1955. During 1955 he was Special Assistant to the Commander, Wright Air Development Center, Dayton, Ohio, and in 1956 he was appointed the Technical Director of the Nuclear Bomber Weapons System 125A. Also in 1956, he was awarded a Sloan Fellowship in the Executive Development Program, Massachusetts Institute of Technology. In 1958 he was assigned to the Atomic Energy Commission, Germantown, Maryland, as Technical Director of the Joint Air Force/AEC Aircraft Nuclear Propulsion Office, which monitored the nuclear aircraft, ramjet, rocket and space power programs. In 1960 Mr. Jones joined the Advanced Research Projects Agency (ARPA) as Deputy Director of the Technical Operations Division, and later became the Director of ARPA's Plans Division. In July 1961 he joined the staff of the Assistant Secretary of the Air Force for Research and Development as Deputy for Development, and in January 1966 became Deputy Assistant Secretary of the Air Force for Research and Development, with responsibilities across the overall Air Force Research and Development program from basic and applied research to operational system developments.

Mr. Jones received the Army Air Corps' Commendation Medal in 1946 for work in rockets and guided missiles; the Alfred P. Sloan Fellowship in 1956; and in 1965 and 1969 he was presented the Air Force's highest civilian award—the Exceptional Civilian Service Award—in recognition of efforts on major aeronautical and propulsion systems for the Air Force. In 1972 he was presented the Department of Defense's highest civilian award—the Department of Defense Distinguished Civilian Service Award—by Secretary of Defense Melvin Laird. He is a past Air Force nominee for the Rockefeller Public Service Award and the National Civil Service League Career Service Award.

Mr. Jones is married to the former Mary E. Bowdon of Birmingham, Alabama. They have four children: Cynthia, Cheri, James, and Joe Jr., and reside at 909 Hyde Road, Silver Spring, Maryland.

BUDGET REQUEST

Chairman McCLELLAN. Proceed.

Mr. JONES. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee, I am pleased to have the opportunity to appear before you today and to present, in con-

junction with General Evans, the Air Force's budget request for research and development. Our fiscal year 1974 request for $3.229 billion will permit us to continue the development of those weapons systems required for the modernization of the Air Force, to prove out new systems and subsystems through our prototypes and other advanced developments and to continue a technology program which will provide us new options in an age of rapid technical change.

My statement today (1) amplifies remarks by Secretary Seamans and Dr. Foster in an analysis of the budget request; (2) cites selected achievements of technology over the past years and highlights current efforts that have great potential significance upon future Air Force operations, and (3) describes important cooperative efforts in which the Air Force has both contributed and benefited. Finally, I shall make a few remarks pertaining to the longer range aspects of Air Force research and development. General Evans will then present a more detailed description of the R.D.T. & E. request.

BUDGET REQUEST ANALYSIS

Dr. Seamans has outlined to you in broad terms our fiscal year 1974 budget request by budget activity. My comments on the R.D.T. & E. budget request are by program category to achieve a somewhat different but useful perspective.

Table 1 presents the R.D.T. & E. program by category. The total for fiscal year 1974 is a 3-percent increase over the congressionally approved fiscal year 1973 program.

[Table I follows:]

TABLE 1.—R.D.T. & E. PROGRAM, AS OF JAN. 31, 1973

[In thousands of dollars]

	Fiscal year		
	1972	1973	1974
6.1 Research	87,047	80,650	81,160
6.2 Exploratory development	257,625	262,431	266,610
6.3 Advanced development	393,794	434,886	539,800
6.4 Engineering development	735,108	913,930	1,023,300
6.5 Management and support	476,139	503,802	518,095
Operational systems development	987,215	934,644	799,740
Total R.D.T. & E.	2,936,928	3,130,343	3,228,705

BUDGET INCREASES AND DECREASES

Mr. JONES. The research category reflects a 10-percent congressionally directed reduction in fiscal year 1973, and a one-half percent increase in the fiscal year 1974 request. Because of continuing inflation, actual work in this area continues to decrease both in-house and in sponsored research in universities and industry. I shall have further comment on this later in my statement.

Exploratory development or technology programs have increased by some 2 percent annually for the past 2 years. Because of increased costs, we are concentrating our priority support on those efforts which offer the greatest potential for future technology superiority.

Increases in the advanced development program category indicate our commitment to the use of prototypes to experimentally investigate concepts such as the light weight fighter and the medium STOL

transport. These advanced development prototypes incorporate laboratory technology developments and innovations into actual flying hardware. Thus we propose to demonstrate innovative technical approaches for conceptual systems to meet potential operational requirements in important mission areas prior to being faced with inventory decisions.

The increase in the engineering development category reflects the progress of programs from advanced development. Also, in response to congressional guidance, funding is included for some items that formerly would have been in procurement accounts. The Airborne Warning and Control System (AWACS) and the Advanced Airborne Command Post (AABNCP) are important programs in this category. Additional emphasis on aircraft gun systems, side-looking radar, remotely piloted vehicles and close air support including the A–10 aircraft now in engineering development, are other programs which are increased in this year's budget.

Although the request for management and support is some 3 percent greater than last year, pay raises and other cost increases tend to mask an actual decrease of 439 civilian employees in R.D.T. & E. This has been accompanied by a comparable decrease in military personnel assigned to these activities.

The decrease in operational systems development reflects the declining requirements of the F–15 and the Minuteman missile programs for R.D.T. & E. funds. This is counterbalanced in part by increases in the defense support program and other operational program activities.

TECHNOLOGY BASE

We have been placing considerable emphasis upon developments for the modernization of the force and General Evans will describe in his statement our accomplishments on the F–15, B–1, AWACS, AABNCP, A–10 and related efforts. These force modernization programs will provide the quality systems required for a stable peace. But an enduring peace also demands prudent steps be taken to prepare for the more distant future and avoid technological surprise from Soviet scientific breakthroughs. We must carefully balance our near term developments and our longer range technology and research activities.

Chairman McCLELLAN. Mr. Secretary, before you go on, let me ask a question or two.

Mr. JONES. Yes, sir.

Chairman McCLELLAN. You mention five programs here.

Mr. JONES. Yes, sir.

F–15 PROGRAM

Chairman McCLELLAN. The F–15, the B–1, AWACS, AABNCP, or the Airborne Command Post, and the A–10. Let's take them one at a time. Describe the F–15.

Mr. JONES. The F–15 is our new fighter which will modernize the tactical fighter forces for air superiority.

Chairman McCLELLAN. What is the present status of that program?

Mr. JONES. That program is in its flight test development phase. We just recently received the permission of the Defense Department to proceed on a partial allotment basis for an early phase of the production of the aircraft.

Chairman McClellan. What about the engine? That engine has not been proved and tested yet to be acceptable.

Mr. Jones. The engine has been proven to be acceptable for flight test, Senator McClellan.

Chairman McClellan. But not for production.

Mr. Jones. But not for production. We have passed the critical test for certain phases of the endurance program, but we have scheduled for the September time period a model qualification test to qualify that engine against the original endurance specifications.

Chairman McClellan. That is September.

Mr. Jones. By the end of September.

Chairman McClellan. You said scheduled but you do not know whether it will meet the test or not?

Mr. Jones. We do not. But we have every expectation from our developmental work thus far that we can meet that kind of schedule.

Chairman McClellan. Do you have an order in for production other than for the prototypes?

Mr. Jones. We are proceeding on a partial allotment basis for the first production aircraft.

Chairman McClellan. I want to know if you have made a contract for production.

General Evans. Yes, sir, I think we must say that there is a production contract.

Chairman McClellan. How many do you have on order?

General Evans. Thirty, sir.

Chairman McClellan. Thirty are already ordered. What is the expectation of final procurement?

General Evans. You mean total numbers, sir?

Chairman McClellan. Yes.

General Evans. 749 I believe is the exact number.

Chairman McClellan. What is the anticipated cost of the whole program?

General Evans. The total program acquisition cost is $7,835,200,000.

Chairman McClellan. We are hearing a great deal about cutting $14 billion from this Defense budget. Would this be a good place to start? Let's forget about this plane for a while.

General Evans. No, sir.

Chairman McClellan. Can you tell me where a good place to start to cut $14 billion out of the Defense budget would be?

General Evans. No, sir, I can't recognize or identify anything in the Air Force budget that I would like to cut.

Chairman McClellan. Nothing in the Air Force.

General Evans. No, sir.

Chairman McClellan. How much has been spent on the F–15 program so far?

General Evans. About $1.5 billion the F–15.

Chairman McClellan. Is that at the end of fiscal 1973?

General Evans. Yes, sir.

Senator Young. Suppose Congress did not appropriate any more money for it. What would the termination of the contract cost? If you don't have that figure, give us an estimate.

Mr. Jones. We would have to submit that kind of estimate for the record.

Senator YOUNG. I wish you would, because an amendment may be offered on the floor.

[The information appears on pages 680–689.]

REQUEST FOR DATA ON FIVE PROGRAMS

Chairman MCCLELLAN. Gentlemen, take each one of these five items and state exactly what the mission of the plane or weapon is, how much you have spent on research to date, how much more you will need to spend on research, the present status of the weapon, how much will the weapon program cost, what will it cost us to stop if we cancel it now, how much would you have to pay out to the contractors, and so forth, if we discontinue the program. Take each of them now. This is not trying to be picayunish. We are going to be confronted by an attempt to cut $14 billion out of this bill. I am not a military man. It is up to you to make a case. I cannot do it for you unless you can give us the cold facts, and do that on each one of these weapons.

Senator YOUNG. We will be faced with this problem on the floor of the Senate. I am inclined to be for the F–15, and maybe some of the others. But we have to make a case on the floor.

Chairman MCCLELLAN. Off the record.

[Discussion off the record.]

Chairman MCCLELLAN. On the record.

B–1 PROGRAM

Now let's go to the next one, the B–1. That is the long-range bomber.

Mr. JONES. The B–1 is the long-range manned bomber which will be the replacement for the aging B–52 force.

Chairman MCCLELLAN. How far has that program progressed?

Mr. JONES That program is at the point where we are fabricating the first of the development flight test models.

Chairman MCCLELLAN. You are working on the prototype?

Mr. JONES. We are still on the prototype.

Chairman MCCLELLAN. You don't have one completed yet?

Mr. JONES. We do not at this point.

Chairman MCCLELLAN. When do you anticipate the first one will be ready for testing?

General EVANS. We will be flying the B–1 in April of next year.

Chairman MCCLELLAN. Show us how much this program is to cost ultimately, how many planes are to be procured, how much has been spent on it to date for research and for production. Give us a complete picture so that we will have it at this place in the record. Point out in these instances what the consequences may be if you aren't able to proceed with this program.

Mr. JONES. We will be glad to do that.

Chairman MCCLELLAN. If we are going to cut $14 billion from Defense, I tell you now, some programs will be greatly affected.

Please provide us with the information on the other systems referred to. I won't belabor the record at this point since you are going to supply it for each one. I would like you to supply it so that it can appear in the record right after these questions or immediately following your statement. Get that to us as soon as you can.

[The information follows:]

TERMINATION COST OF FOUR PROGRAMS

Nonrecoverable funds are those funds which the government is required to obligate and place on contract to cover the contractors' accrued expenditures and unliquidated commitments for current programs through 30 November 1973, i.e., the amount necessary to assure contract performance through 30 November 73. If termination were to occur on 30 Nov 1973, funds obligated against the contractors' unliquidated commitments should be sufficient to close out the terminated contract. Under "Termination Expense", we have included the estimated liability under the special termination cost clause when such a clause has been incorporated in a contract in accordance with ASPR 7-108.3. In those cases where it is anticipated that termination expense may exceed the value of the unliquidated commitments and/or special termination costs, an estimate has been included. Specific information on each program follows:

F-15 PROGRAM

Mission Statement: The F-15 is designed to perform the air superiority mission in the post 1975 time period. Its capability is based on a high performance, highly maneuverable airframe equipped with a balanced mix of short and medium range weapons which will provide an outstanding kill capability against the postulated threat.

Current Program Status: The F-15 has been approved for production of the first wing of aircraft. However, production funding of the F-15 has been limited to $175M pending satisfactory completion of engine qualification testing. Planned research and development effort on this program is approximately 85% funded.

Financial Data (As of 31 May 1973)

	HAF - C267 Report				
	Appropriated	Obligated	Expended	Needed to Complete	Total Required
RDT&E	$1476.8	$1473.1	$1281.8	$ 310.1	$1786.9
Procurement	453.6	119.5	-0-	5594.7	6048.3
Construction	-0-	-0-	-0-	-0-	-0-
Total	$1930.4	$1592.6	$1281.8	$5904.8	$7835.2

Impact of Program Cancellation:

a. Program - Cancellation of this program would result in cancellation of two prime contracts and approximately 2000 subcontracts. This will result in job termination for 15,000 employees for the prime contractors alone. Because of the

extensive subcontract structure of this program, the impact on unemployment resulting from program termination would be national in scope.

b. National Security - The cancellation of the F-15 fighter would have grave consequences for the national security of the United States. Such action would delay the modernization of both active and reserve forces and in turn would degrade the military capability and readiness posture of the United States. The F-15 is specifically designed for, and is uniquely capable of defeating expected enemy aircraft in the foreseeable future. Thus, the F-15 weapons system is vital to modernize the tactical force structure of the Air Force. Experience in modern warfare has clearly demonstrated the paramount importance of gaining and maintaining air superiority. During the late 1970's and early 1980's, the ground and air threat facing NATO countries requires that the U.S. and its allies quickly establish air superiority in order to defend NATO territory. The Air Force does not believe that air superiority can be achieved without the F-15. Cancellation of this program would not only risk the defeat of NATO allies in a conflict with the Warsaw Pact countries, but would also undermine the flexibility and attendant deterrent value of U.S. military forces throughout the world.

c. If this program were terminated on 1 Dec 73, it is estimated that total nonrecoverable costs would amount to $1931.8 million. The status of the program after termination would be as follows:

	FY 73 & PRIOR	FY 74	TOTAL
RDT&E			
Current Program	$1476.8	$ 229.5	$1706.3
Nonrecoverable	1476.8	135.0	1611.8
Recoverable	-0-	94.5	94.5
PROCUREMENT: (INCLUDES CIP)			
Current Program	472.1	928.5	1400.6
Nonrecoverable	230.0	40.0	270.0
Recoverable	242.1	888.5	1130.6
TOTAL:			
Current Program	1948.9	1158.0	3106.9
Nonrecoverable	1706.8	175.0	1881.8
Recoverable	242.1	983.0	1225.1
Less Termination Exp.			-50.0
Net Recoverable			1175.1

As of the 1 Dec 73 termination, 12 RDT&E aircraft would be completed, five in final assembly and three in major assembly. Of the FY 73 procurement, eight aircraft would be in major assembly. Further analysis of this termination might prove advantageous for the Government to fund completion of all or part of the 16 incomplete aircraft. The additional cost, however, is excluded from the above summary.

Termination expenses in excess of unliquidated commitments are estimated to be approximately $50 million. The F-15 prime contract does not include the special termination clause as contained in ASPR 7-108.3. This special termination expense includes severance pay and disposition of tooling, with the same hard tooling used for both RDT&E and production aircraft. The nature of this expense precludes any meaningful allocation between RDT&E and procurement or phasing by fiscal year at this time.

B-1

Mission Statement The B-1 is being developed to provide the option to modernize the aging bomber force in the early 1980s. This will permit the manned bomber to remain a viable element of the strategic Triad. Compared to the B-52, the B-1 will have a larger internal weapons carrying capability, quicker launch reaction and escape time, increased hardness to nuclear effects, higher subsonic speed capability at low altitude, a supersonic high altitude capability and reduced detectability when penetrating on aggressor's territory. The B-1 will form an integral part of the mixed force needed to maintain a viable nuclear deterrent posture. In addition, the B-1 will provide the National Command Authority with a controlled and flexible capability to apply offensive air power over a wide range of conflict situations.

Current Program Status The B-1 is in the full scale development phase with the production decision scheduled for May 1976. The airframe design successfully completed the Critical Design Review in May of this year and the assembly of the major structure for the first aircraft has started. Manufacturing of parts for air vehicles two and three has started. The engine design completed the Design Assurance Review in May 1973. The Preliminary Flight Rating Tests (PFRT) are in progress and are scheduled to be completed in October 1973. As of 6 July a total of 1724 hours of running time had been completed on ground test engines.

The B-1 avionics equipment design completed the preliminary Design Review in March 1973. Check out of avionics components in a ground System Development Laboratory started in May 1973. Flight test of the avionics equipment is scheduled to start in August 1975.

Financial Data

	APPROPRIATED	HAF -C267 REPORT OBLIGATIONS	HAF -C267 REPORT EXPENDITURES	NEEDED TO COMPLETION	TOTAL REQUIRED
RDT&E	1133.8	1133.3	1050.2	1653.9 1/	2787.7 1/
PROCUREMENT	0	0	0	10618.5 2/	10618.5 2/
CONSTRUCTION	0	0	0	0	0
TOTAL	1133.8	1133.3	1050.2	12272.4	13406.2

1/ Includes 12 July 1973 change of Development Schedule.

2/ Based on 31 March 1973 SAR, which includes 241 production aircraft.

Impact of Denial of FY 74 Funds

a. Program

(1) 8 (prime) contracts would be terminated.

(2) 12,730 prime contract employees would be terminated. Additional employees in subcontracts would also be affected.

(3) Termination would be wasteful in that the first air vehicle is over 2/3 complete and most of the materials for the second and third aircraft has been procured. In addition, 14 engines have been completed and 45 others are in various stages of build up.

b. National Security As the bomber makes a unique and irreplaceable contribution to our deterrent, the currently planned B-1 force structure is required in the early 1980's to guarantee the ability to execute national strategy. Several important factors pertain to the development and deployment timing.

- Although the Air Force believes that B-52G/Hs can be maintained in a safe and operable condition into the 1980s, how far into the 1980s is presently a matter of conjecture.

- Strategic bombers are the only element of the TRIAD not currently limited by a SAL agreement.

- Greater sophistication in existing and projected Soviet defenses dictates a need for overall improvement in our manned bomber capabilities.

Therefore, given the long lead time -- 8 to 10 years -- involved in the development, production and deployment of a new intercontinental bomber, it is imperative that we continue development of the B-1 in order to preserve the critical option to deploy a new bomber in a timely manner.

c. If this program were terminated on 1 Dec 1973, it is estimated that total nonrecoverable costs would amount to $1462.4 million. The status of the program after termination would be as follows:

	FY 73 & Prior	FY 74	TOTAL
RDT&E			
Current Program	1133.8	473.5	1607.3
Nonrecoverable	1133.8	328.6	1462.4
Recoverable	-0-	144.9	144.9

AWACS

Mission Statement. The Airborne Warning and Control System (AWACS) -- designated the E-3A -- is a modified Boeing commercial aircraft specially equipped to provide warning of the approach of hostile or unknown aircraft, and to provide for control of friendly aircraft, for both the strategic (i.e., continental air defense) mission and the tactical mission. To fulfill this, the AWACS is designed to perform radar surveillance of aircraft at all altitudes over any kind of terrain. In the strategic role -- that of continental air defense - the AWACS aircraft would normally be kept on ground alert. At any time deemed appropriate during periods of escalating tensions and crisis, or upon indication of an imminent attack,

the AWACS would take off and fly out to stations several hundred miles from the Continental United States (CONUS). From these stations, the AWACS would detect, classify and track approaching aircraft and, if determined to be hostile, direct our interceptors - both current and advanced -- to those aircraft. In the tactical role, AWACS would perform a number of improtant surveillance, warning, and control functions. AWACS would provide a unique surveillance capability, both by virtue of its "look-down" ability and its ability to extend radar coverage beyond that possible with ground-based radar. For example, AWACS could be flown to any point on the globe within 24 hours and provide area surveillance during a crisis, and warning of attack on an ally and/or forward based U.S. forces.

Current Program Status. The Brassboard Radar Demonstration and Airborne Tracking Demonstration were completed in November 1972 ahead of schedule, under cost and with demonstrated performance exceeding or equaling established goals. Engineering development was authorized by the Deputy Secretary of Defense on 19 January 1973.

Financial Data (As of 31 May 1973)

	APPROPRIATED	HAF-0267 REPORT OBLIGATION	HAF-0267 REPORT EXPENDITURES	NEEDED TO COMPLETION	TOTAL REQUIRED
RDT&E	512.4	510.0	352.9	604.6	1117.0
PROCUREMENT				1268.0	1268.0
CONSTRUCTION				-	-
TOTAL				1872.6	2385.0

Impact of Denial of FY 74 Funds

a. Program

(1) Number of employees terminated: 3485 prime, 2715 first tier subcontractors making a total of 6200.

(2) Number of contractors involved: One prime contractor and nine subcontractors.

(3) Special items adverse to Air Force and National Economy -- an R&D investment in excess of one-half billion dollars will be wasted and the potential will be lost for revolutionizing the military concept of surveillance of aircraft. It would create a severe job loss at Boeing and subcontractor plants.

b. National Security

The primary national security objective in the nuclear era always has been the deterrence of strategic nuclear warfare. Forces are to be developed and deployed which will deter both an all-out surprise attack on the United States and the incentive to strike the U. S. first in any crisis. In this context, the deterrent aspects of a viable defensive system and its contribution to the security of the nation and our offensive second strike forces cannot be overlooked. The SAL ABM treaty and interim agreements demonstrate that both the United States and Soviet Union are willing to accept upper limits in offensive and defensive missile force levels. Bomber forces and defenses, however, remain unconstrained.

In the last several years, the Soviets have maintained relatively constant bomber force levels, while introducing the new supersonic BACKFIRE and building the most extensive air defense system in the world. Thus, in a low level confrontation, the relative advantage could go to the

Soviets if adequate surveillance, warning, and air defenses are not available to this nation. Current CONUS air defenses rely primarily on the vulnerable, ground based, and limited SAGE/BUIC concept. AWACS provides the most significant improvement in air defense of any of the proposed elements of modernization. Its termination, therefore, would require continuation of the present SAGE/BUIC system which is expensive to operate, vulnerable to attack, has very limited capabilities, and provides attractive bomber attack options to any Soviet planner. The operating costs of the present system would soon exceed the savings effected by terminating AWACS.

The cancellation of FY 74 funds for the tactical AWACS would seriously impact on the ability of the Air Force to support tactical operations during a major NATO conflict. The Warsaw Pact air and ground threat requires that the NATO forces quickly gain and maintain air superiority. In view of the large number of late model Warsaw Pact aircraft, the modest number of NATO high performance aircraft programmed to be available during the late 1970s and early 1980s will require the precise command and control system and extended low level radar coverage only afforded by the tactical AWACS in order to achieve the necessary air superiority. The lack of a tactical AWACS with its unique capabilities could well result in an unfavorable conclusion NATO conflict. Further, the tactical forces will still require improved command/control which would at least partially offset the savings accrued to AWACS termination.

c. If this program were terminated on 1 Dec 1973, it is estimated that total nonrecoverable costs would amount to $565.5 million. The status of the program costs after termination would be as follows:

	FY 73 & Prior	FY 74	TOTAL
RDT&E			
Current Program	512.4	197.8	710.2
Nonrecoverable	512.4	32.4	544.8
Recoverable	-0-	165.4	165.4
Procurement			
Current Program	-0-	11.7	11.7
Nonrecoverable	-0-	-0-	-0-
Recoverable	-0-	11.7	11.7
TOTAL			
Current Program	512.4	209.5	721.9
Nonrecoverable	512.4	32.4	544.8
Recoverable	-0-	177.1	177.1
Less Termination Expense			-20.7
Net Recoverable			156.4

The contract contains special termination cost clause with a negotiated value of $20.7 million.

AABNCP

Mission Statement

The Advanced Airborne Command Post (AABNCP) -- designated the E-4 -- is a modified Boeing 747 commercial aircraft specially equipped to serve as the National Emergency Airborne Command Post (NEACP) for the National Command Authority (NCA) and supporting staff, and as the Headquarters Strategic Air Command (SAC) Airborne Command Post. The AABNCP will provide a modernized highly survivable capability for effective

command and control of our strategic forces on a continuous basis before, during, and after any nuclear attack on the United States. The AABNCP is being designed to make those early improvements in our national command and control system needed to help offset the threat from Soviet strategic forces, and to provide the means for more flexible and responsive command and control of our forces, even under the adverse circumstances which would prevail during any nuclear attack on the United States.

Current Program Status

A contract was awarded to the Boeing Company on 28 February 1973 for the purchase of two 747 aircraft (with an option for a third) for the Interim NEACP phase of the program. The contract for modification and transfer of the existing EC-135 C^3 equipment into the 747 was awarded to E Systems, Inc., of Greenville, Texas on 11 May 1973. First flight of the #1 AABNCP 747 was conducted on 13 June 1973 and Air Force acceptance of the aircraft is scheduled for approximately 16 July 1973. This aircraft will be turned over to E Systems approximately 20 July 1973 for modification and transfer of the EC-135 C^3 equipment.

Financial Data (As of 31 May 1973)

	($ IN MILLIONS)			NEED TO	TOT
	APPROPRIATED	OBLIGATIONS	EXPENDITURES	COMPL	REQ'D
RDT&E	51.1*	19.5	10.9	110.5	161.6
Procurement	69.0	64.6	30.9	288.2	357.2
Construction	-0-	-0-	-0-	29.3	29.3
TOTAL	120.1	84.1	41.8	428.0	548.1

* $51.1M includes 48.3 for FY 73 and 2.8 for FY 72 and prior.

Impact of Program Cancellation

a. Program

(1) Number of employees terminated: Boeing unknown (Commercial aircraft production); E Systems, Inc. -- 90; C^3 development is to be selected, and the number is unknown.

(2) Number of contracts involved: 3 prime contractors and 1 subcontractor.

b. National Security

The primary national security objective in the nuclear era always has been the deterrence of strategic nuclear warfare. The capability to deter strategic attack is absolutely essential to the survival of the United States, and also it interacts with the capabilities of our general purpose forces to influence the upper limit of military threats below the level of strategic nuclear war. The capability requires a credible strategic deterrent comprised of the appropriate types, quantities, and mix of strategic forces, plus the means to effectively command and control these forces. A modernized advanced airborne command post will permit the NCA and CINCSAC to perform more effectively the tasks required to direct our strategic offensive forces before, during, and following a strategic nuclear attack on the U.S. These tasks include those associated with direction, control,

recovery, and reconstitution of forces when a response has been ordered and executed or when termination is directed. Typical "option selection" tasks include: situation monitoring, intelligence acquisition and analysis, force status monitoring, attack assessment, and finally actual selection of a response option. Representative "execution" tasks include: dispatch of generation and execution orders, operations monitoring, damage/strike assessment, strategic replanning and redirection, composition and dispatch of termination orders, reconstitution, and civil responsibilities.

To achieve the greater airborne command and control capabilities required, improvements are needed in a number of primary categories, including staff size, communications, endurance, basing flexibility, survivability against the effects of electromagnetic pulses, and data processing. Also there is a related need to provide for future growth over the life of the new system, as may be warranted by changes in the threat and by evolving national security strategy. These improvements dictate the need for a modern aircraft with increased performance, including greater space and payload capacity than possessed by the current EC-135 ABN CP. In all these respects, the E-4 AABNCP will be distinctly superior to the current EC-135 ABNCPs. Denial of FY 74 AABNCP funds will have a major impact on the ability of the NCA and SAC to perform this vital command and control function.

c. Cost

If this program were terminated on 1 December 1973, it is estimated that total nonrecoverable costs would amount to $108.1 million. The status of the program after termination would be as follows:

	FY 73 & PRIOR	FY 74	TOTAL
RDT&E			
Current Program	51.1	37.3	88.4
Nonrecoverable	25.9	1.0	26.9
Recoverable	25.2	36.3	61.5
Procurement			
Current Program	69.0	32.3	101.3
Nonrecoverable	62.0	19.2	81.2
Recoverable	7.0	13.1	20.1
TOTAL			
Current Program	120.1	69.6	189.7
Nonrecoverable	87.9	20.2	108.1
Recoverable	32.2	49.4	81.6

A-10 PROGRAM

Mission Statement: The A-10 is a specialized aircraft designed to provide close air support of friendly ground forces engaged in combat. The emphasis of this mission is to provide close supporting firepower against hostile personnel, defenses and armored targets in close proximity to friendly forces. The A-10 will also be highly capable of providing armed escort of ground and airborne movements, such as truck and helicopter convoys, and of armed reconnaissance of the battle area. The A-10 will be able to deliver tactical air munitions in conjunction with the firepower of friendly ground forces, to protect friendly troops from an enemy attack and assist them in offensive operations.

Current Program Status: The competitive prototype evaluation of the Northrop A-9 and Fairchild A-10 aircraft was successfully completed in December 1972. The source selection was completed in January 1973 and Fairchild Industries was selected to develop the A-10. The engineering development contract was awarded to Fairchild on 1 March 1973 for delivery of ten RDT&E aircraft. On 1 March 1973, General Electric Company was awarded a contract to deliver TF-34 engines for the RDT&E aircraft. The A-10 program remains on schedule, within programmed cost and with no technical problems.

Financial Data (As of 31 May 1973

		HAF-C267 Report		Needed to	Total
	Appropriated	Obligations	Expenditures	Complete	Required
RDT&E	125.0	114.1	83.5	211.7	336.7
PROCUREMENT	0	0	0	2153.0	2153.0
CONSTRUCTION	0	0	0	0	0
TOTAL	125.0	114.1	83.5	2364.7	2489.7

Impact of Denial of FY 74 Funds:

a. Program - The A-10 program has four contracts in effect pursuant to fully developing the A-10 weapon system. These contracts are described below. The impact of denial of FY 74 and subsequent funds would be termination of the contracts with layoff or firing of the number of personnel indicated below.

(1) Fairchild Republic Company, Farmingdale, L.I., New York, has a contract for developing the A-10 airframe. Total jobs terminated would be 2977, consisting of 1827 from the Republic plant, 800 subcontractor employees and 350 employees of local area vendors.

(2) General Electric Company, Lynn, Massachusetts, has one contract for developing the TF 34-100 engine and another contract for manufacturing the engines which will be used in the ten RDT&E aircraft. Total jobs terminated at the Lynn facility would be 325.

(3) General Electric Company, Burlington, Vermont, has a contract to develop the GAU-8mm gun system and Aerojet, Downey, California, is a subcontractor for the ammunition. A total of 266 personnel would be laid off or fired, consisting of 114 from Burlington and 152 from Downey.

b. National Security - The impact on national security would be grave due to the reduced capability of the United States to conduct successful land warfare on a worldwide basis. The A-10 is specifically designed and built to assist friendly ground forces in land battles.
The A-10 is the only aircraft with the degree of flexibility and survivability required to meet and defeat the formidable threat of Warsaw Pact armor. Close support is vital to our ground forces and the A-10 will have the ability to deliver fire-power quickly and effectively. This will not only reduce casualties but will minimize our loss of equipment as well. The A-10 is a low cost weapon system system capable of performing the close air support mission under adverse weather conditions in rugged terrain. Without the availability of the A-10 our ability to support our national interests would be severely limited in any future conflict.

The status of the contractors work in process is as follows: (1) several of the ten aircraft are in various states of assembly, (2) all six of the development engines for qualification test and approximately one-third of the 32 qualified engines would be committed to manufacture, and (3) the GAU-8 development effort and hardward associated with the A-10 would be lost.

c. If this program were terminated on 1 Dec 1973, it is estimated that total nonrecoverable costs would amount to $179.2 million. The status of the program after termination would be as follows:

	FY 73 & Prior	FY 74	TOTAL
RDT&E			
Current Program	125.0	112.4	237.4
Nonrecoverable	125.0	54.2	179.2
Recoverable	-0-	58.2	58.2
Procurement			
Current Program	-0-	30.0	30.0
Nonrecoverable	-0-	-0-	-0-
Recoverable	-0-	30.0	30.0
TOTAL			
Current Program	125.0	142.4	267.4
Nonrecoverable	125.0	54.2	179.2
Recoverable	-0-	58.2	58.2

HIGH POWERED LASERS

Chairman McCLELLAN. Proceed.

Mr. JONES. I cannot today tell you precisely how much research is enough—no one can. Our fiscal year 1974 defense research sciences request reflects congressional guidance of last year, but I must tell you that I consider this to be a minimumly funded element. No one can tell you precisely what benefits the fundamental research of today will yield, but you know of fundamental research of yesterday which is paying off today. This process will continue and we will benefit in the future in direct relationship to what we invest today.

You are well aware of the military significance of high power lasers. This critical new technology is the product of fundamental research extending back some 20 years, much of it supported by the Air Force basic research program. The phenomena of stimulated emission radiation was first demonstrated in the ammonia beam maser invented by Dr. Townes of Columbia University in 1954 under Air Force, Army, and Navy support. The theory of a solid state maser, forerunner of the laser, was developed at Harvard, Columbia, and Michigan under triservice support during the 1950's. Subsequent Air Force sponsored research made important or essential contributions to gas dynamic lasers, electric discharge lasers, and chemical lasers, the three current high energy laser systems of military significance. The totality of research achievements leading to these was the product of the national effort in fundamental research—private, academic and governmental.

The Air Force was an essential contributor to this effort, and while we did not specifically foresee this scientific breakthrough, we quickly recognized its significance, and we are now in the process of exploiting it for specific Air Force objectives.

REDUCTION IN R. & D. EFFORT

Our actual research effort today is only slightly more than half of what it was 10 years ago. Inflation has been the major factor, but congressional reductions reflecting changing national priorities have been almost equally severe. I urge you, as strongly as I know how, to resist the temptation to further reduce our fundamental research program. If the experience of the past has any validity for the future, the research of today is laying the groundwork for technological advances that will provide tomorrow's options essential to a lasting international peace.

Last year the Congress expressed the concern that past research and exploratory development efforts in the area of Human Resources had not been very productive, and denied part of the request for human resources exploratory development. We obviously failed to adequately communicate the contributions that have been made in this area, for the output of this and its predecessor program elements over the years are today yielding significant improvements in the training and assignment of personnel. This area will take on even greater importance as the armed services transition to an all-volunteer force, increasing the payoff to be derived from improvement in the recruitment, training, and assignment of personnel.

PAYOFFS FOR PAST RESEARCH

Let me cite just 3 of some 30 individual payoffs of past research identified by the Deputy Chief of Staff for Personnel, who is the principal user of the human resources R. & D. product.

Each year the Air Force trains about 3,200 pilots. Each washout costs $16,000 on the average, and one of every four entrants is eliminated. Realistic classification and selection tests for undergraduate pilot training candidates have been the subject of continuing development by the Human Resources Laboratory. When fully implemented, these screening tests will further reduce attrition with all the attendant benefits.

Simulation research, accomplished by our Human Resources Laboratory, has shown that a significant amount of flying time in undergraduate pilot training can be replaced by ground training. When present simulator trainers are replaced in late 1975 with state-of-the-art equipment, we will have the option of reducing undergraduate pilot flying or increasing proficiency of the graduate.

Application of the systems approach to training based upon job task analysis in enlisted occupations has permitted us to avoid millions of dollars in costs over the past 3 years. The same approach has been applied by the laboratory and the Tactical Air Command to revisions of the C–130E transition training program and to air crew training for the A–7D aircraft, with equally successful results. These three widely divergent applications indicate the power and breadth of this new approach to an old problem.

The above are benefits of past research. Present research holds equal promise for future benefits. As one example, we are presently developing an individualized self-paced instructional system for technical training. This will permit the trainee who can complete a 12-week course in 8 weeks to get on to his career assignment 4 weeks earlier than he would have in a lockstep program. This advanced instructional system approach will initially address only three technical training courses at the Air Training Command's center at Lowry Air Force Base, but its applicability spans not only most Air Force training but technical and vocational training throughout the Nation as well. Ultimately we expect to reduce training times or improve training performances by significant percentages. We expect the results of R. & D. programs such as this to be critical tools in the Air Force's program to use its personnel more productively.

CRITICAL DEFICIENCIES

A significant portion of the research and development program is devoted to what Dr. Foster has called critical deficiencies, or the weak link in the chain of military operations. Depending upon the system and military function, the critical deficiency may be finding the target, the vehicle that carries the weapon to the target, the command and control of forces, the weapon itself, the logistics, or the crew. I would like to give you some examples.

Several years ago the Air Force related to you their view of the significance of guided bombs which are able to reduce the circular error of probability (CEP) from hundreds of feet to tens of feet.

The results from these developments have now received widespread public recognition, and have reshaped operational tactics. The large CEP was recognized as a critical deficiency in the mid-1960's, and our development programs successfully addressed that deficiency.

Similarly, the F–15 is the response to the critical problem of control of the air in a tactical theater of war, without which close air support, interdiction, and logistic operations would be impossible. The defense suppression program addressed the critical problem of Soviet surface-to-air fire power. The ability to knock out hardened targets has been another weak link and led to R. & D. on hard structure munitions. These are a few instances of how we are concentrating our efforts.

COOPERATION

The days when the Air Force could independently carry out every program needed for accomplishment of mission objectives is long past. We are today searching out cooperative arrangements with our sister services, defense agencies, other departments of government, and with our NATO allies. The technology coordinating papers sponsored by the Director of Defense Research and Engineering reveal many mutual efforts in explanatory development, and are leading to others. The Navy is making direct application of the first Air Force-developed helmet-mounted sight, and we are incorporating their experience in our development efforts. A long standing cooperation with the National Aeronautics and Space Administration continues, with mutual benefit. Cooperative efforts are continuing with the National Oceanic and Atmospheric Administration (NOAA) on weather prediction and we are actively involved with the Department of Transportation on a climatic impact assessment program and air traffic control. We are fully cognizant of our responsibilities as stewards of public resources to support national interests wherever appropriate, as reflected in the cooperative program conducted with the Department of Transportation to develop and test the effectiveness of crash protective systems, and the cooperative efforts with the Forest Service to fight forest fires which we described to you last year.

With our NATO Allies, we have continued to both contribute to and profit by such activities as the SHAPE Technical Center and the NATO Advisory Group for Aerospace Research and Development (AGARD). In a study on NATO air defense we have gained much significant data from simulations and computer models developed by the SHAPE Technical Center. The international forum provided by AGARD continues to foster the interchange of science and technology between ourselves and our Allies. AGARD technical documents produced in conjunction with our Allies are highly valued tools to U.S. agencies. We have had over 19,000 requests for AGARD documents from the U.S. technical community since publications began. Very useful reports cooperatively prepared on clear air turbulence and aircraft vulnerability are examples.

Such efforts, taken all together, are clear indications of a balanced effort at international cooperation and I count this as a strong achievement.

CONCLUSION

The bulk of my remarks have dealt with recent accomplishments and near-term efforts. Let me emphasize that national security and stable peace must be considered in the context of decades and not in the context of the next few years alone. Let me assure you that we have made an earnest attempt within the R.D.T. & E. budget request to provide for such consideration.

Much of the technology base program is, of course, pointed toward providing new options for systems which may be developed for the 1980's and beyond. But in addition, advanced development prototypes will prove out technological concepts that cannot become operationally usable until the 1980's. The advanced development programs in simulation and other training improvements are aimed toward some near term applications, but their primary impact upon the Air Force will probably be realized in the late 1970's. R. & D. efforts to obtain improved reliability and greater simplification have long-term as well as nearer-term implications. Development efforts in remotely piloted vehicles, which will remove aircrews from the most hazardous environments, will probably have their greatest impact upon Air Force operations no sooner than the 5- to 10-year period. Efforts to assure the viability of strategic land-based missiles and our attention to life cycle costs of weapon systems extends well beyond the next few years.

In summary, the objectives of our R.D.T. & E. programs are to provide a balance between strategic, tactical, and support forces, between near-term and long-term requirements, between qualitative superiority and quantitative sufficiency. This is a balance consistent with the Nation's progress toward peace, and with the goal of providing national security which permits our society to more toward its domestic goals free from external threat.

Mr. Chairman, this concludes my prepared statement. After General Evans has completed his statement, I will be happy to respond to any questions you may have.

Chairman McCLELLAN. Thank you, Mr. Secretary.

STATEMENT OF MAJ. GEN. WILLIAM J. EVANS, ASSISTANT DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT, HEADQUARTERS, U.S. AIR FORCE

BIOGRAPHY

Chairman MCCLELLAN. At this point in the record there will be included the biographical summary of General Evans.

[The biography follows:]

BIOGRAPHY OF MAJ. GEN. WILLIAM J. EVANS

Major General William John Evans was born in Norwich, Conn., in 1924, and entered Yale University in 1942. In July 1943, he entered the U.S. Military Academy, and was commissioned a second lieutenant in the Army Air Corps in June 1946, receiving a bachelor of science degree in military engineering.

He was assigned to the 20th Fighter Group at Shaw Field, S.C., in November 1946, and in June 1948, was transferred to the 475th Tactical Fighter Group at Itazuke Air Base, Japan. In June 1950, he flew P–51 aircraft with the 35th Tactical Fighter Group, and later that year was transferred to Headquarters, Fifth Air Force at Taegu. From September 1951 to March 1952, he served at the Air Research and Development Center, Baltimore, Md., then was transferred to the 497th Tactical Fighter Wing at George Air Force Base, California, where he commanded the 434th Fighter Squadron. In April 1954, he was assigned as Executive Officer to the Commander, Far East Air Forces, and in July 1955 to Headquarters, Air Force Command. In July 1956, he returned to George to command the 436th Fighter Squadron and in 1958, became Director of Operations for the 479th Tactical Fighter Wing.

In August 1959, General Evans entered the Army War College. After graduating in June 1960, he was assigned to the Armed Forces Staff College where he served on the faculty until June 1964. He was next transferred to Wheelus Air Base, Libya, and served as Deputy for Operations and later as Vice Commander of the 7272d Flying Training Wing. He was transferred to the Republic of Vietnam in May 1967 as Vice Commander and later was Commander of the 31st Tactical Fighter Wing at Tuy Hoa Air Base.

In June 1968, he was assigned as Assistant Deputy Director for Concepts and Operational Readiness, Defense Communications Planning Group, Washington, D.C., and in June 1969 assumed duties as the Deputy Director. In February 1970, he was assigned to Headquarters, U.S. Air Force, as Special Assistant for Sensor Exploration. He was transferred in April 1971 to the Office of the Deputy Chief of Staff, Research and Development, as Director of Operational Requirements and Development Plans, and in September 1971, he became Director of Development and Acquisition.

In April 1972, General Evans was appointed Assistant Deputy Chief of Staff for Research and Development, Headquarters, U.S. Air Force.

General Evans is a command pilot with more than 5,000 hours to his credit, the majority of which are fighter aircraft, including P–51; P–82; P–80; F–84; F–86; F–100; F–104; F–4; F–5; Canadian CF–105; British HARRIER, Vampire, and Meteor; French Mirage; and Swedish Viggin.

His military decorations and awards include the Silver Star, Legion of Merit, Distinguished Flying Cross with 2 oak leaf clusters, Bronze Star Medal, Air Medal with 24 oak leaf clusters, Joint Service Commendation Medal, Air Force Commendation Medal with 1 oak leaf cluster, Republic of Korea Presidential Unit Citation Ribbon, and Republic of Vietnam Commendation Medal.

BUDGET REQUEST

Chairman McCLELLAN. General Evans, you may proceed.

General EVANS. Mr. Chairman, members of the subcommittee.

I appreciate the opportunity to appear before you today to present the Air Force's research and development program for fiscal year 1974. The Air Force request for research, development, test, and evaluation funds this year totals $3.229 billion and includes the January 1, 1973 pay raise.

Chairman McCLELLAN. How does this request differ from those of the last two fiscal years? Why has there been this increase? How much of this request goes for recent pay raises?

General EVANS. The Air Force fiscal year 1974 research, development, test and evaluation—R.D.T. & E.—budget request was developed within essentially the same guidelines and constraints as those of the past 2 fiscal years, and includes funding to (1) continue major force modernization development programs, (2) maintain a viable technology base adequate to introduce new weapon systems as they are required, and (3) provide a minimum level of management and support for current and future development programs. The Air Force fiscal year 1974 budget request of $3.229 billion is $33 million less than the fiscal year 1973 amended budget request of $3.262 billion. The fiscal year 1974 increase of $212 million over the fiscal year 1972 budget request is essentially contained in the aircraft and related equipment budget activity where the advanced medium STOL transport and lightweight fighter prototypes and subsonic cruise armed decoy advanced development efforts account for a large percentage of the increase. The Air Force fiscal year 1974 budget request is considered the minimum level required to continue the previously approved weapon system developments required for adequate force capability and advancement of technology to insure fulfillment of projected requirements.

The Air Force fiscal year 1974 budget request of $3.229 billion includes $16 million for the January 1, 1973 civilian pay raise.

Chairman McCLELLAN. Proceed.

General EVANS. In presenting this year's budget, the program element structure has been expanded to provide improved visibility and to aid in evaluation and management of the program.

Within this budget, we will continue with major development programs started in prior years, as well as with more recent prototype efforts. The subject of prototypes has generated considerable interest during the past few years, and two—the advanced medium STOL transport and lightweight fighter—are proceeding very well, I will later discuss the progress of these programs, as well as our technology efforts.

Of the total fiscal year 1974 R.D.T. & E. request of $3.2 billion, approximately half will be used to continue major modernization efforts started in prior years. These include systems already in production as well as such systems as the B–1 and AWACS which are ap-

proaching production decisions. This means that only about 50 percent of the request is actually available to provide innovative things—new knowledge, new technologies, new approaches.

[The information follows:]

NEW R.D.T. & E. STARTS

	Estimated total R.D.T. & E. cost (millions)	Anticipated date of completion of R.D.T. & E.
PE 63205F flight vehicle subsystem concepts:		
Project 2020 multimode matrix display	$3.7	October 1976.
Purpose: To design, fabricate, and demonstrate advanced flight instruments to replace present electromechanical and cathode ray tube (CRT) displays. The general utility of the light-emitting diode (LED) displays will be assessed.		
Project 444A advanced environmental control system	6.1	December 1976.
Purpose: To develop advanced environmental control systems for military aircraft to improve reliability in avionics, armament switches, and flight control, and to improve air crew comfort and vision.		
PE 63238F advanced turbofan engine	74.0	3d quarter fiscal year 1976.
Purpose: to design, fabricate and demonstrate an advanced turbofan engine with the general performance and cycle characteristics required by future subsonic transport type aircraft. This two contractor competitive program will demonstrate new engine technology applicable within a wide range of cycle and size variations and provide an advanced engine option for a future advanced medium short takeoff and landing transport of other subsonic transport or support aircraft.		
PE 63429F missile attack assessment:		
Project B/2016 attack assessment radar study	.8	June 1974.
Purpose: to assess the utility and cost of various improvements which have been proposed for existing surveillance radars.		
Project C/2017 CONUS radars	4.2	June 1974.
Purpose: to resolve technical uncertainties involved in applying the perimeter acquisition radar components (no longer required for the cancelled Malmstrom ABM site) to the submarine-launched ballistic surveillance mission.		
Project D/2018 low-cost satellite	.4	June 1974.
Purpose: to investigate lower cost alternative approaches for satellite-based warning systems.		
PE 64710F reconnaissance/electronic warfare equipment:		
Project 1157 forward looking infrared sensor	1.6	Fiscal year 1976.
Purpose: to provide terminal guidance for reconnaissance pilots during hours of low visibility.		
PE 64742F precision emitter location strike system:		
Project 1947 [deleted] emitter location system	.4	May 1974.
Purpose: to design an operational system to locate [deleted] emitters from airborne platforms using time-of-arrival techniques.		

MILITARY AND CIVILIANS WORKING ON RESEARCH AND DEVELOPMENT PROGRAMS

Chairman McClellan. Proceed.

General Evans. This portion of the budget must also provide for the management and support of the Air Force R.D.T. & E. effort.

Chairman McClellan. How many military and how many civilian personnel are presently working for the Air Force R. & D. program? What is the comparable pay scale for these employees? List for us the number of officers working in this program.

General Evans. Authorized personnel for the Air Force R. & D. program as of end fiscal year 1974 are 20,929 civilians and 17,713 military, including 6,954 officers. The average pay is estimated at $16,867 for civilians and $12,133 for military.

Chairman McClellan. Proceed.

General Evans. We are continually exploring new concepts to improve the management of the research and development process with a goal of providing the best possible program mix that will satisfy

both current and projected requirements. Reviews are comprehensive and priorities are established only after difficult choices have been made.

DECISION AS TO NECESSITY OF PROJECTS

Chairman McClellan. How do you decide the necessity of the projects you undertake? What organization and what procedures are followed in making these decisions?

General Evans. My staff and I—and major portions of the OSD staff—spend nearly full-time, year-around, reviewing research and development programs with a goal of providing the best possible mix that will satisfy both current and projected requirements. The requirements are derived from assigned missions and are in consideration of the threat that we perceive does and will exist.

Projects are initially proposed within the major commands and forwarded to the Air Staff. These proposed projects are considered both individually on their own merits and in toto during our annual budget reviews. Those projects which survive our Air Staff reviews are forwarded to the Secretary of the Air Force and ultimately on to the Secretary of Defense for decision.

The larger the proposed project, in terms of dollars and force structure impact, the higher the approval authority. The most important decisions are made by the Secretary of Defense based on the recommendations of the Defense Systems Acquisitions Review Council (DSARC). The decision authority for other projects is delegated to the Secretary and Chief of Staff of the Air Force.

PIECOST AND SHOULD COST

Chairman McClellan. Proceed.

General Evans. Two new techniques we are testing to improve the acquisition process are PIECOST and Should Cost. PIECOST, which stands for probability of incurring estimated cost, is designed to facilitate the analysis, forecasting, and tracking of contractor overhead. This should give us a better understanding of overhead charges leading to control of those elements which cause overheads to increase. The technique is currently being used at all contractor facilities for which the Air Force has plant cognizance and is being tested by the Defense Contract Administration Service. Should Cost studies are used to bring an integrated team approach to contract price analysis. These are designed to provide an in-depth view of contractor operations and their effect on contract costs. Eighteen Should Cost studies have been completed and their findings and recommendations used during recent contract price negotiations.

PIECOST

Chairman McClellan. Is PIECOST used by the Air Force or its contractors? When do you anticipate that PIECOST and Should Cost will cover all of your R. & D. contracts? How much money do you anticipate that the implementation of these programs will save the Government?

General Evans. PIECOST is used by the Air Force. All 20 of the plants assigned to the Air Force for contract administration cognizance use the PIECOST technique.

Both PIECOST and Should Cost are essentially concerned with the efficiency of operations within the plant. Any plantwide improvements or cost reductions will benefit all work in the plant regardless of type. To the extent that Should Cost is used to establish negotiation objectives, it is used in connection with production efforts with a history of cost and performance and not R. & D. contracts. It is exceedingly difficult to determine what new knowledge sought by R. & D. should cost.

All the benefits of these programs can not be quantified and calculated in terms of dollars. They greatly enhance the confidence and effectiveness of our negotiators. We believe that the improved credibility of our negotiation results alone justifies the continued use of the programs.

TESTING PROGRAMS

Chairman McClellan. Proceed.

General Evans. One method we are using to improve the acquisition process is in the structuring of new programs to take advantage of early and extensive hardware testing. The A–10, AWACS Surveillance radar, 25-millimeter gun, and the B–1 are examples of implementing the policy of more reliance on hardware testing and less on paper studies.

INCREASED COSTS IN HARDWARE TESTING

Chairman McClellan. Aren't there increased costs involved in hardware testing? How do you perform this testing if you may not even have our aircraft?

General Evans. Our acquisition strategy provides for more extensive testing of systems, system components, and equipment before we commit ourselves to production. While there may be increased costs involved for this testing, we anticipate that these are offset by reduction of uncertainty, risk, and costly mistakes. If mistakes are made, only small quantities of material or equipment are concerned and corrections can be made at relatively low cost.

Much of the testing can be done prior to development of the aircraft or major equipment through use of operational and environmental simulators and subsystem brass boards/mockups to duplicate the performance environment. Not all unknowns can be addressed prior to completion of the system but sufficient design/performance credibility can be achieved to reduce risk to an acceptable level.

Chairman McClellan. Proceed.

General Evans. We believe that early introduction of this concept will provide much greater control over the technical and cost risks of future programs.

[The information follows:]

COST OVERRUNS

At the present we do not anticipate that any program will have cost overruns. The funds requested in the Air Force FY 1974 budget submission are sufficient to cover the contractor's planned efforts.

FLY-BEFORE-BUY CONCEPT

Chairman McClellan. You may proceed.

General Evans. In keeping with the fly-before-buy concept, we are continuing to improve testing and evaluation capabilities. Last year, I indicated that we were making changes in management, organization, and policies in these areas. Most of these actions have been completed and are now formalized in Air Force directives. The most significant change has been to insure that a sufficient initial operational test and evaluation phase is conducted prior to the major production decision to provide an assessment of a system's operational suitability and effectiveness. This initial test and evaluation is performed by operational and technical commands and a report, independent of the developer's, is submitted to Air Force and OSD decisionmakers. Several actions are currently underway to provide better test resources and facilities to make testing as comprehensive and realistic as possible. These include better instrumentation, more realistic targets, and development of a continental operations range in the Western United States where large-scale integrated offense/defense operations can be conducted and evaluated.

ADEQUACY OF PRESENT TESTING SITES

Chairman McClellan. Aren't any of our present testing sites adequate for these purposes? Are you requesting money for the development of this range? Provide us with more detail on what will be the requirements of this range.

General Evans. Mr. Chairman. Presently, much operational testing consists of a limited sample of finite measurements of events on instrumented ranges. Normally, these tests are accomplished at facilities designed primarily for R. & D. testing. These tests are basically one-sided, or one-on-one, or two-on-one situations with little capability for measuring multiple events. While the R. & D. test facilities provide excellent instrumentation for these relatively uncomplicated tests, physical or environmental limitations preclude the testing and evaluation of multiple aircraft and multiple events in a two-sided engagement. An operationally oriented, instrumented, and properly equipped threat environment, in which tactical operations can be performed and evaluated, appears essential. An environment is needed where realistic employment of forces of sufficient size and composition can be fully evaluated, both individually and collectively, to determine overall capability, operational suitability, and effectiveness in environmental conditions which approximate those expected in a combat situation.

The existing air warfare testing capability is centered around our R. & D. test ranges. These existing ranges and facilities are not adequate to support the exercise and evaluation of nominal sized air operational elements and associated equipments in a realistic threat environment. Primarily, this inadequacy is due to one or more of the following factors: Lack of realistic threat resulting from equipment deficiencies; lack of range operating area; complex or lack of suitable instrumentation; electromagnetic emission limitations; physical encroachment on ground, water, or airspace; limited size of test force that range will

accommodate; saturation of existing capability; and lack of adverse weather instrumentation systems.

A large operational testing and training environment emphasizing realism in test operations is a critical need of the Air Force. An essential requirement is that this operational environment simulate the expected offensive/defensive conditions for engagement as realistically as possible, yet have the necessary instrumentation and data recording system to afford a capability to accurately assess operational effectiveness of opposing forces. These measurements must be designed to reveal the relationship of various system interactions in such a way as to determine the truly significant variables.

To meet service needs, the proposed environment must be located so that it is as free as possible from restrictions such as population density, supersonic flight limitations, electronic emission constraints, noise abatement constraints, and air traffic controls. It is desirable that the test environment be centrally located for ease of access to all users as well as to facilitate logistic, interservice and other support. Also, many operational tests must be protected for security reasons, including denial of electronic emissions to potential enemies in off-shore waters. Collocation of the facility with operational and combat training activities, wherever both functions can be accommodated without impairment, is desirable for investment, management, and operational efficiency.

In summary, since existing D.T. & E. and training ranges do not provide a sufficiently realistic combat environment, an effective O.T. & E. range facility must be developed. A credible assessment of our operational weapons and support systems can be best obtained through analysis of continuing and recurring tests in a realistic environment.

With regard to development funding, we are requesting $3.5 million in program elements 64735F for fiscal year 1974 continental operations range requirement. In addition, D.D.R. & E. (T. & E.) is providing $2.023 million from program element 65804D.

OBJECTIVES OF COR PROGRAM

As to your last question, Mr. Chairman, I assume that you mean what requirements will the range satisfy. The objectives of the COR program are threefold and will satisfy requirements in R. &. D. testing, operational test and evaluation, and training. These objectives are:

a. Provide a range facility which will permit operational test and evaluation (O.T. & E.) of equipment and strike-sized air warfare elements in a realistic combat environment.

b. Provide large land and airspace areas where unconstrained exercises can be conducted to train military air warfare elements in a realistic but simulated combat environment, and to evaluate tactics, performance, and capabilities of those elements.

c. Provide a combat-like environment for selected development test and evaluation (D.T. & E.) which cannot be accomplished at existing research and development (R. & D.) ranges.

Chairman McClellan. Proceed.

General Evans. The objective is to provide a realistic combat environment where squadron-sized strike forces can be fully exercised against a large-scale multidefended area. Maximum use of existing facilities and equipment will be utilized to serve as the nucleus for this range.

RESEARCH PROGRAM

The Air Force research program is necessarily made up of a large number of small projects. However, each of these projects is critically evaluated to insure its relevancy to the Air Force mission. External advisory groups, as well as interagency coordinating panels have been, and will continue to be. used extensively in this selection process.

Senator McCLELLAN. List for us all major advisory groups, their functions and the composition of their membership and their present employers.

General EVANS. I will be glad to do so.

[The information follows:]

MAJOR ADVISORY GROUPS AND INTERAGENCY PANELS

1. THE MAJOR ADVISORY GROUP

Science and Technology Advisory Group (STAG).

Function: Advises the Air Force Systems Command Director of Science and Technology on:

(a) Adequacy and quality of AF laboratories' research and technology programs.

(b) Overall priorities and balance leading to an optimum gross allocation of resources.

(c) Research and technology opportunities which would improve the stature and credibility of AF programs for appropriate interfacing of budget programs.

(d) Coupling of technical areas toward the end of demonstrating available interdisciplinary technology for system application.

(e) Specific technical problems.

Composition of membership and present employers:

Bogdonoff, Prof. Seymour M., Chairman, Head, Gas Dynamics Lab, Department of Aerospace and Mechanical Sciences, Princeton University.

Howe, Dr. Robert M., Professor and Chairman, Dept of Aerospace Engineering, University of Michigan.

McMillan, Dr. William G., McMillan Science Associates Inc.

Everett, Mr. Robert R., President, The MITRE Corporation.

Kerrebrock, Prof. Jack L., Dept of Aeronautics and Astronautics, Massachusetts Institute of Tech.

Nehama, Mr. Isaac D., President, International Computing Co.

2. AIR FORCE MAJOR INTER-AGENCY COORDINATE PANELS

(a) The DOD Advisory Group on Electron Devices—To provide technical advice to the Director, Defense Research (DDR&E) and Engineering and to the Military Departments on the research and development of electron devices such as microwave tubes, passive integrated circuits and special devices such as low light and infrared sensors. Membership includes representatives of the Military Departments, NASA, and consultant members from industry, as appointed by the DDR&E.

(b) Joint Army, Navy, NASA, Air Force (JANNAF) Interagency Propulsion Committee—To effect and exchange information on the technology of solid, liquid, hybrid, and ramjet missile and space propulsion systems based upon chemical energy release. Membership includes representatives of the Military Departments and NASA.

(c) Supporting Research and Technology Panel of the Aeronautics and Astronautics Coordinating Board (AACB)—The AACB is the principal coordinating mechanism between DOD and NASA for research and development. The Supporting Research and Technology Panel discharges these responsibilities in the technology base area. Dr. Dorough, DDR&E, is co-chairman for DOD; DDR&E provides the secretary and there is one member from the Air Force, Army, and Navy. NASA provides a co-chairman and four additional members.

(d) National Materials Advisory Board (NMAB)—Established by the National Academy of Science under contract to DOD and other Federal Agencies. It

reviews the entire R&D program in materials, furnishing both industrial and academic expertise and guidance. Membership includes representatives of DOD, other Federal Agencies and industry.

TECHNOLOGICAL SUPERIORITY

Chairman McClellan. Proceed.

General Evans. While I am continually concerned that a potentially revolutionary development may be overlooked, those candidates which do survive appear to offer the best promise of providing technological superiority in the future.

A productive technology base should not be taken for granted. We are now at the point where the investment in that base must be maintained, or increased, if possible, if it is to provide the foundation for our weapon systems of the 1980's and beyond. Composite materials, such as the boron fiber material in the F–15 horizontal and vertical stabilizers, as well as the F–15 radar's look down capability, which was made possible through the development of integrated circuits and advanced digital processors, are examples of applied technology in a current system.

Another area which is receiving increasing emphasis is the qualitative improvement of strategic offensive capability. The Strategic Arms Limitations Agreement has caused us to place a greater importance on research and development programs to protect the technological lead essential to strategic sufficiency.

EFFECT OF SALT AGREEMENT

Chairman McClellan. What effect has the SALT agreement had on your R. & D. program? Do you anticipate that it will eventually reduce the necessity of many of your efforts?

General Evans. The current SAL Interim Agreement on Offensive Systems limited selected deployments only. There is no constraint on research and development or force modernization. Thus, to maintain our technological lead, we must continue vigorously with our development programs. This is particularly true in light of the current Soviet tests of new missile systems. It is conceivable that some future agreement could permit selective reductions in some specific areas of research and development.

Chairman McClellan. Proceed.

General Evans. Recent Soviet testing of three new ICBM's and SLBM flights to a range greater than 4,000 nautical miles indicate an aggressive pursuit of qualitative force improvement by the Soviet Union. We must aggressively pursue those tasks required to insure that we maintain a technological lead within the terms of the agreement.

I would like to add that no matter what procedures are used, they will be effective only if quality managers are available to implement them. In this regard, we are giving increased emphasis on the initial assignment and retainability of program personnel to insure the continuation of outstanding managers at all levels.

At this time I would like to discuss some of the major efforts in this year's program and will begin with the strategic weapons area.

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The B–1 is being developed to replace the aging B–52 force. The aircraft is designed to penetrate enemy defenses at low altitude and high subsonic speeds. It will also be capable of high level, supersonic penetration. The current offensive avionics package is being developed using available technology and makes maximum use of off-the-shelf components. In designing the aircraft, we have considered future postulated threats by providing space, weight, and power to accommodate the next generation of avionics, should that become necessary at a later date.

B–1/F–111

Senator YOUNG. What will be the speed of the B–1 at high altitude?

General EVANS. [Deleted] mach, sir.

Chairman MCCLELLAN. Does this take the place of the F–111 in any respect?

General EVANS. No, sir. It complements the FB–111, the bomber version.

Chairman MCCLELLAN. I am talking about the bomber version.

General EVANS. It will complement that. It will be in addition to the FB–111.

Chairman MCCLELLAN. This is a better plane for bombing, isn't it?

General EVANS. Much better.

Chairman MCCLELLAN. A much advanced plane.

General EVANS. Both in payload, distance, and in penetration capability, all of those things, lower IR signature.

Chairman MCCLELLAN. I thought that when we got the F–111 it was to do all these things.

General EVANS. All things are comparative, sir. The FB–111 has attributes that the B–52 force doesn't have.

Chairman MCCLELLAN. Does the B–1 have that automatic control over the terrain?

General EVANS. Yes, sir.

Chairman MCCLELLAN. The same as the F–111?

General EVANS. The B–1 will have that.

Senator YOUNG. Which can fly at low altitude?

General EVANS. The B–1, sir, at [deleted] feet.

Chairman MCCLELLAN. What is it that the F–111 can do that the B–1 can't do?

General EVANS. There is nothing that the FB–111 can do that the B–1 will not be able to do. The B–1 will do everything better.

FURTHER PROCUREMENT OF F–111'S

Chairman MCCLELLAN. I saw something the other day in a news release that you decided to ask for more F–111's. Is that true?

General EVANS. The Air Force has not asked for any more F–111's.

Chairman MCCLELLAN. I know you have not up to now. Has there been any decision to revise that program?

General EVANS. There has been none within the Department of the Air Force, sir.

Mr. JONES. Not to my knowledge.

Chairman MCCLELLAN. Is this news story in error?

General HILL. It was attributed to action by the House Armed Services Committee in connection with the F–111.

Chairman MCCLELLAN. Does it appear that they want to order more?

General EVANS. Yes, sir.

Chairman MCCLELLAN. To keep the line open?

General EVANS. To keep the line open so as to reserve the option should further continued production of that be indicated in the event the B–1 program did not proceed as presently conceived or planned.

Chairman MCCLELLAN. It was a kind of stopgap or hedge?

General EVANS. It is a sort of hedge.

Chairman MCCLELLAN. I remembered seeing the article. I didn't know what had happened.

Proceed.

B–1

General EVANS. As indicated earlier by Secretary Seamans, we have been confronted with technical challenges during the past year and have made design, performance, and cost trades in such areas as the engine inlet and the crew escape module. During the course of the development program, if we identify additional technical problems that tend to drive costs, we intend to make similar trades. In July 1972, the program was more closely alined to the "fly-before-buy" concept by providing for flight test of offensive avionics prior to the production decision. We were able to integrate this testing with other flight test efforts so that the overall schedule impact is only 3 months. The production decision is now scheduled for July 1975. All subsequent production and operational milestones have also been slipped by 3 months.

Chairman MCCLELLAN. Let me ask you, are you satisfied with all the research that the plane and weapon are going to be what you want them to be?

General EVANS. We are still 2 years away from the production decision.

Chairman MCCLELLAN. You have not yet made the decision with respect to the B–1?

General EVANS. That is right.

Chairman MCCLELLAN. It is still prospective. Is research still being done to try to meet the specifications that you have in mind?

General EVANS. Exactly.

Senator HRUSKA. And without any flight until April of next year.

General EVANS. The first B–1 will fly in April of next year.

Chairman MCCLELLAN. Proceed.

General EVANS. Recent events have had some impact on the program. As the final engineering drawings were being completed, we found it necessary to increase our estimate of the production B–1 operating empty weight a total of 18,000 pounds over our original design goal. While the effect of this weight increase on mission performance is minimal, it has increased the estimated production cost. Using our original parametric cost model, this weight increase causes our unit cost estimate to increase by $2 million, to $32 million expressed in 1970 dollars.

Chairman MCCLELLAN. What is the total number of B–1's you propose to acquire?

General EVANS. 244 aircraft, sir; total.

Chairman MCCLELLAN. What is the cost of your now estimated program?

General EVANS. $13,327,800,000.

Senator YOUNG. Based on 1970 dollars?

General EVANS. That is in then year dollars.

Chairman MCCLELLAN. What is it in current dollars?

General EVANS. This is current dollars projected to then year values based on estimated rates of inflation.

Chairman MCCLELLAN. We will have to suspend for a few minutes so that we may vote.

[Brief recess.]

Chairman MCCLELLAN. Proceed.

General EVANS. The net result of B–1 program changes to date on the unit procurement cost has been only a 3.9-percent increase since contract award in June 1970—if the effect of inflation is excluded.

The December 31, 1972, SAR unit procurement cost estimate in then year dollars is $35.5 million based on 1970 OSD escalation factors equivalent to 1.94 percent. The empty weight increase raises this estimate to $37.7 million. In April 1973, OSD released new inflation factors which resulted in the application of a 3.7-percent rate to the production portion of the B–1 program as shown in the March 31 SAR.

Chairman MCCLELLAN. When was the B–1 program originated?

General EVANS. The advanced manned strategic aircraft (AMSA) program, which became the B–1, was initiated in 1964. Full scale engineering development was initiated in June 1970.

Chairman MCCLELLAN. When do you anticipate that the plane will be operational?

General EVANS. The initial operational capability is scheduled for February 1980.

Chairman MCCLELLAN. What will be the per unit cost of each plane?

General EVANS. The total program acquisition cost (includes R.D.T. & E.) is estimated to be $54.6 million per aircraft; the procurement unit cost (excludes R.D.T. & E.) is estimated to be $44.1 million. This equates to $32 million in fiscal year 1970 dollars.

Chairman MCCLELLAN. How many do we intend to procure?

General EVANS. A force structure decision has not yet been made, but planning has been based on 241 production aircraft.

Chairman MCCLELLAN. Why do you believe that we need this aircraft?

General EVANS. Strategic deterrence depends on our intercontinental missiles, submarine launched missiles and strategic bombers. This Triad of forces denies the enemy the possibility of neutralizing our deterrent by concentrating his attack against a single element of our strategic force. It also assures that a major technological advance by an adversary would not threaten our entire deterrent posture.

The bomber is the most flexible element of the Triad. It can be launched on warning and remain safe for attack or recall. In addition, it can easily be directed to counter changes in the threat.

We need to modernize our bomber force. After extensive study in great detail, the most desired characteristics of a replacement aircraft were defined. We are developing the B–1 for this purpose.

Chairman MCCLELLAN. What type and how many weapon systems will it carry?

General EVANS. The primary weapon for the B–1 will be the SRAM, although it will also have the capability of carrying a wide range of gravity nuclear bombs and conventional bombs. It will be able to carry 24 SRAM or SRAM equivalent weapons internally and 8 SRAMs externally. It has the capability to carry a total of 84 internal and 72 external MK–82s (500 pound) bombs, and will have the capability to carry internally, 138 (500 pound) or 93 (800 pound) modular conventional bombs when they are developed under the Tri-Service Modular Bomb program.

Chairman MCCLELLAN. How many crew members will it require?

General EVANS. The aircraft is designed for a primary crew of four, but has provisions for two instructors for training purposes.

Chairman MCCLELLAN. What will be its speed?

General EVANS. It will have a maximum speed capability of [deleted] Mach at low altitude and [deleted] Mach at [deleted] feet. On the design missions it will operate at [deleted] Mach for low level and [deleted] Mach on the supersonic high level mission.

Chairman MCCLELLAN. What difficulties have occured to date?

General EVANS. To date the B–1 program has been relatively problem free. Of course there are the normal day-to-day development problems but there have been only two significant problems, one with the escape capsule, and one with aircraft weight.

We have been unable to develop an escape module man-rated at 600 knots to support the initial B–1 flight tests. We plan to man-rate the module to 450 knots at sea level for the three R.D.T. & E. test aircraft and will proceed to qualify the module at 600 knots for the production aircraft.

In the weight area our estimates of the empty aircraft weight have increased a total of 18,000 pounds over our original design goal. We have been able to accommodate this weight increase with only slight effect on mission performance. However, this weight increase has resulted in a $2.0 million increase in our procurement unit cost estimate of $30.0 million expressed in 1970 dollars or $2.7 million in escalated dollars. The change in inflation rate has changed our then year estimate, including the increase to account for the empty weight growth, from $37.7 to $44.1 million. The increase in our estimate to account for greater inflation than expected, was of course, not controllable by Program Manager, but if not understood by the general public it could undermine the support for a well managed program.

Chairman MCCLELLAN. Do the Soviets have a similar plane or a defense system which requires the B–1 development?

General EVANS. The Soviets have test flown a long range bomber, called the Backfire, which is similar to the B–1 although somewhat smaller. The Backfire will have a mission similar to the B–1, that is long range nuclear attack. However, the major reason for developing the B–1 lies in its increased survivability and improved ability to penetrate Soviet defenses. The quick launch capability of the B–1, plus its ability to withstand high overpressures, gives the B–1 a high probability of surviving a nuclear attack by the Soviets.

We expect present Soviet defensive systems to become more effective. The B–1 overcomes this problem to a great extent with its high subsonic speed, low level penetration mode. In addition, the B–1's versatility in penetration mode means that if the Soviets are to defend against the

B–1 they must develop, deploy and maintain a number of defensive systems to cover the altitude and speed ranges of the B–1.

Chairman McClellan. What contractors have worked or will work on this project and what funds have they received to date?

General Evans. The three major contractors for the B–1 are the system and airframe manufacturer, Rockwell International; the engine contractor, General Electric; and the avionics contractor, the Boeing Co. The contractors have received, by the end of fiscal year 1973, the following funds: Rockwell International—$694.4 million; General Electric—$220.2 million; and the Boeing Co. $40.3 million.

B-1 INCREASED WEIGHT

Chairman McClellan. Would you say that increase in empty weight was 18,000 pounds?

General Evans. Yes, sir.

Chairman McClellan. That is a lot of pounds of increase. Can you give us an idea of the reason for the tremendous increase?

General Evans. Sir, we are being very careful with the design and structural integrity of the B–1. We do not want to weaken the structure and have problems that we had originally in the C–5. This is a heavy airplane. We want to construct it so that it can take the stresses of the strategic mission. We do not necessarily want to cut the strength of the structure just to keep on our estimated weight.

Chairman McClellan. I can understand that, but it seems to me that 18,000 pounds is a great deal.

General Evans. Yes, sir. You recognize we are dealing with an airplane here that at takeoff we estimated would weigh 360,000 pounds.

Chairman McClellan. Empty?

General Evans. That would be takeoff weight, sir.

Chairman McClellan. That would be loaded?

General Evans. That would be loaded.

Chairman McClellan. That is no comparison. What is it empty?

General Evans. Let's use the takeoff weight increase. We will be moving from 360,000 pounds to 390,000 pounds. That would be a 30,000 pounds increase at takeoff, that is loaded with bombs and fuel. So percentagewise that is rather a small increase.

Chairman McClellan. Are you getting more payload in strengthening it?

General Evans. No, sir. We are just building strength into the airplane.

Chairman McClellan. I am not complaining if you need to do it, of course. An 18,000 pound increase in weight sounds like a lot of increase.

General Evans. It certainly does, but it really is less than 10 percent increase in weight. It does not hurt the operational capability of the airplane. That is the important part.

Chairman McClellan. It still carries the great payload that it was designed to do.

General Evans. That is right, and still go as far.

Chairman McClellan. In other words, it does not interfere in any way with the operations specifications?

General Evans. No, sir. It has increased the takeoff roll slightly but it does not inhibit us from operating at any of the fields that we planned to operate from.

Senator Young. Would this be something parallel to strengthening the wings of the C–5 where you do have a problem of carrying the load?

General Evans. We did have. This weight is designed into the aircraft.

Senator Young. To make the wings stronger?

General Evans. It is difficult, sir, to put your finger on what portion of the aircraft. It is in the wings, the tail.

Mr. Jones. Senator, if I may, this weight increase really is an addition going from the paper design to the actual structural testing, and then fabrication of the airplane itself. Now, realize that we are building the first article right now. What this 18,000 pounds represents the growth from the engineer's earlier estimates based upon drawings, and now taking into account the component tests and material tests that we have done and then designing and building the structure to do the job that the B–1 is going to have to do.

Senator Young. It seems to me you should be able to identify at least to some extent what changes have been made in the first design and the present one.

General Evans. The design has not changed, sir. It is only the weight.

Senator Young. Where is the weight going?

General Evans. It is going into the fuselage and wings of the aircraft.

Chairman McClellan. Just to make it stronger.

General Evans. Yes, sir. As we get further along in designing the drawings, now that we have engineering drawings, we have a better feel for how much weight is going into each portion of the aircraft. This is where we get the 18,000 pounds additional.

B–1 COST

Chairman McClellan. Proceed.

General Evans. Again on the cost of the B–1, using April 1973 OSD factors, our unit procurement cost estimate of $32 million in 1970 dollars is equivalent to $44.1 million in then year dollars.

Chairman McClellan. So they are going to cost us a minimum of $44.1 million.

General Evans. Yes, sir. That is escalated dollars.

Chairman McClellan. That will be before you get these into production. By the time you get them delivered and paid for it might exceed $50 million, would you say, per unit?

General Evans. I would like not to say that, sir. If the escalation factor of 3.7% holds, then we feel that $44.1 million is a good number.

Chairman McClellan. We don't get many overestimates.

General Evans. We don't seem to get many of those, sir.

Chairman McClellan. No. But we do get many underestimates.

Senator Young. I don't quite understand your "then year" dollars. What do you mean by "then year"?

General Evans. You escalate the dollars to the year in which you are going to spend the money to get a better appreciation of how much money it is really going to cost.

Chairman McClellan. In other words, you say the dollar is going to buy 3.7 percent less. Next year the dollar will be worth 3.7 percent less.

Mr. Jones. That is compounded.

General Evans. Of course that is compounded each year. So, the longer your program the longer the time you apply the escalation factor.

Senator Young. This will be fly-away cost?

General Evans. This will be unit procurement cost.

Senator Young. I could not explain on the floor of the Senate what you are saying. Is this fly-away cost, actually delivered to the Air Force, when you actually sign the contract?

General Evans. The fly-away cost, sir, would be $38.3 million.

Senator Young. We have had escalation in the past after the contracts were signed. The F–14 and the C–5A are good examples.

General Evans. This is independent of contract. This has to do with escalation to account for the estimated inflation and lower buying power of the dollar.

RESULTS OF DESIGN REVIEWS

Chairman McClellan. Proceed, General.

General Evans. We have completed the system critical design review, the avionics preliminary design review, and the design assurance review of the preproduction engine.

Chairman McClellan. Please explain in greater detail the critical design review, the avionics preliminary design review, and the design assurance review. What have been the results of these reviews?

General Evans. During the course of a development program, the Air Force normally conducts several formal technical and management audits of the contractors design effort. These audits are scheduled to occur as the program moves from one major stage of development to the next. The purpose of these audits is to assure ourselves that the contractors efforts have satisfactorily addressed the Air Force requirements before proceeding to the next stage of development. Among the earliest of these formal audits is the preliminary design review (PDR). The purpose of this audit is to determine whether the contractor's initial design approach will meet the specification requirements and has considered and provided for effective interface between subsystems. This review is held after the initial design effort is completed and prior to the release of engineering drawings for fabrication of R.D.T. & E. articles. The PDR to which you referred was an audit of the Boeing Co. design efforts for the B–1 offensive avionics subsystem which was completed satisfactorily in March 1973.

The next audit usually performed by the Air Force is the critical design review (CDR). The purpose of this audit is to determine whether a weapon system or subsystem detailed design adequately satisfies the detailed specifications. This determination is usually based on evaluation of early component and subassembly development tests as well as detailed analyses of the contractors final detailed design.

Upon completion of this audit, the design is "frozen"' and subsequent contractor design changes must be formally submitted to the Air Force for approval. The B–1 critical design review was scheduled to occur prior to the start of flight test and helps assure that the equipment being tested is as close to the eventual production configuration as possible. As in the case of the other reviews mentioned, it includes representation from the using, support and test commands as well as the developing command and contractors.

The CDR to which you referred was an audit of Rockwell's design efforts for the B–1 system which was completed satisfactorily in May 1973.

The design assurance review is an audit of the B–1 engine subsystem occurring in conjunction with the system CDR and before the initiation of preliminary flight rating tests. It reviews the results of the engine test program to date and evaluates engine performance with respect to "design-to" goals. It also reviews all problems experienced during engine tests and the merits of the contractor's proposed solutions. This review was successfully completed in May 1973 and the engine is now entering the next phase of the development program, formal preliminary flight rating tests.

Chairman McClellan. Proceed.

General Evans. In addition to the critical milestones just mentioned, air vehicle No. 1 is in final assembly and is 75 percent complete. We have also taken delivery of two XF–101 engines for full scale engine/inlet compatibility tests, and avionics checkout in the System Development Laboratory began at Boeing in May.

During fiscal year 1974, efforts will be concentrated on the final assembly of air vehicle No. 1. Rollout will occur early in 1974 followed by final system checkout and taxi tests, leading to first flight in April 1974. Approximately 2,000 engine test running hours will be accomplished during fiscal year 1974 and approximately 18 flight qualified engines will be delivered. In the avionics development program, the critical design review will be completed, and the avionics hot mockup at Palmdale will become operational. This facility will demonstrate the integrity of the avionics subsystem leading to flight test of the offensive avionics beginning in fiscal year 1975. We also expect to select the design approach and award a contract for the development of the defensive portion of the avionics subsystem.

B–1 CONTRACT AWARD

Chairman McClellan. How will this contract be awarded? Explain "the defensive portion of the avionics subsystem."

General Evans. The defensive avionics is that segment of the total B–1 avionics designed to protect the B–1 by electronic means from enemy threats.

The defensive avionics segment includes radio frequency surveillance (RFS) and electronic countermeasures (ECM). The RFS portion monitors enemy radio frequency sources for potential threats to the B–1, and the ECM system selects and directs the appropriate electronic countermeasure (jamming) to defeat the threat.

The contract will be awarded on the basis of a source selection evaluation of competing contractor's proposals. The source selection

authority for defensive avionics is the Commander, Aeronautical System Division.

Chairman McClellan. Proceed.

General Evans. We are requesting $473.5 million for B–1 development effort in fiscal year 1974.

SUKONIC CRUISE ARMED DECOY (SCAD)

We are continuing the development of the subsonic cruise armed decoy—SCAD.

Chairman McClellan. To date how much have we expended on the development of the SCAD program?

General Evans. As of May 31, 1973, we have obligated $62.8 million and disbursed $47.1 million on the development of SCAD.

Chairman McClellan. Proceed.

General Evans. This program is now in its second year of full-scale development and contracts were awarded this past summer for the major air vehicle subsystems and for aircraft equipment. Full advantage is being taken of the prototyping accomplished through advanced development of the SCAD decoy electronics package and the turbofan jet engine.

SCAD WARHEAD

Chairman McClellan. Are you saying that instead of being just a decoy, it will also carry a warhead?

General Evans. Yes, sir. This design includes provision for incorporation of a warhead. We plan, however, to develop the unarmed decoy first because this will assure the earliest availability of an improved decoy for the bomber force and at the same time will reduce overall development risks before final commitment to production.

Chairman McClellan. Isn't the SCAD being developed for the B–52?

General Evans. Yes, sir, that is correct. Our most recent analysis shows that the B–52 would need an improved decoy before the end of this decade, if the threat develops as projected.

Chairman McClellan. What will happen if the B–1 is built?

General Evans. The same analysis that I just mentioned, indicates that there would be no compelling need for a decoy for the B–1 in an all B–1 force. In a mixed force of B–1's and B–52's, which we will have for a considerable period into the 1980's, a decoy for the B–52 part of the force would be the most beneficial.

Chairman McClellan. Why do we need a new decoy?

General Evans. The requirement for an improved decoy is based on several factors. First, the Soviet defenses have expanded and will probably continue to expand, both in quantity and in sophistication. Second, the number of our bombers has been significantly reduced over the last several years, thus our ability to dilute air defenses by mass attack is greatly diminished. This trend will also continue into the future. Third, the present decoy, the QUAIL, is totally deficient in range, flight profile flexibility, and basic ability to simulate a bomber's radar signatures. All of these factors can be cost effectively offset by the deployment of an improved bomber decoy such as SCAD.

Chairman McClellan. Explain in greater detail the necessity of having a joint effort to define the requirements of the possible warhead.

General EVANS. The joint effort on the warhead is a standard procedure under a memorandum of agreement between the Department of Defense and the Atomic Energy Commission. Under this agreement joint efforts are conducted to define the feasibility, the design, and the development and production of nuclear warheads. Essentially, the Department of Defense provides to the Atomic Energy Commission the military characteristics desired of the warhead, then through close liaison, monitors the progress of the design, development, and production.

Chairman MCCLELLAN. Proceed.

General EVANS. As part of the plan to provide an option for an armed version of the SCAD, the design includes provision for incorporation of a [deleted] warhead. One of the major issues remaining in the program is the question of the armed variant of SCAD. We are asking for $72.2 million to continue development of the SCAD to provide an improved decoy at the earliest practicable date.

MINUTEMAN

The other major development program in the strategic weapons area is the Minuteman program. In response to qualitative increases in the Soviet threat, we are continuing to improve the Minuteman within the SALT agreement.

SOVIET THREAT

Chairman MCCLELLAN. Have there been major qualitative increases in the Soviet threat? How would you compare the Soviet R. & D. program to ours? What proportion is their R. & D. program to their overall defense budget?

General EVANS. There have indeed been qualitative improvements in Soviet forces. Their ICBM force has increased its survivability [deleted]. Their new SLBM will have triple the range of its predecessor.

Variable geometry wing technology has been applied to the MIG–23 Flogger now in service, and the Backfire bomber which we expect to become operational this year. Their airlift forces have received the AN–22 Cock which has a greater range than the C–5A, and the IL–76 Candid which is similar to the C–141.

Their air defenses have been improved by [deleted] and by mobile surface-to-air missile systems.

In regard to how would you compare the Soviet R. & D. program to ours, a high priority has long been maintained by the U.S.S.R. for research and development on military weapon systems and related supporting technologies. In terms of levels of effort and resources consumed, military R. & D. is the fastest growing segment of the Soviet military establishment. Because of a serious lack of Soviet data, comparisons of United States and Soviet military expenditures should be regarded as only approximate. Various dollar estimates of Soviet military R. & D. expenditures vary somewhat in the amounts expended in any given year, but generally agree in the trend in increasing spending over longer periods. Recent levels in U.S. spending on military R.D.T. & E., together with continued growth in the So-

viet effort, have resulted in estimated dollar values of Soviet spending that have been higher than U.S. levels since 1969.

Valued in dollars, the Soviet R.D.T. & E. expenditures are estimated to have increased from some [deleted] of the total defense budget in calendar year 1970 to about [deleted] of the total in calendar year 1972. The comparable U.S. percentages for recent years has been at about 10 percent, for example, at 9.9 percent for fiscal year 1972, and 10.1 percent for fiscal year 1973.

Chairman McClellan. Proceed.

General Evans. The principal efforts are the improvement of prelaunch survival through the upgrade silo program, and improvement in the capability to manage the force through the command data buffer program.

MINUTEMAN PROGRAM DEVELOPMENT

Chairman McClellan. Explain the nature and costs of the upgrade silo program and command data buffer program.

General Evans. The upgrade silo program will result in an improved missile survivability against the nuclear effects of blast, shock, and electromagnetic pulse. This is accomplished by modifying portions of the silo and its equipment room to better withstand these adverse nuclear environments. For example, the missile suspension system within the silo is being removed and replaced with a newer design and the equipment room floor is being shock mounted. The fiscal year 1973 and prior development funding requirements were $139.1 million. The fiscal year 1974 requirement is $38 million and for subsequent years is $19.8 million for a total program requirement of $196.9 million.

The command data buffer provides rapid remote retargeting for Minuteman III. With the installation of a computer and a secure data transmission system, targeting can be accomplished remotely from the launch control facility. This results in a great reduction in retargeting times. The fiscal year 1973 and prior development funding requirements were $81.3 million. The fiscal year 1974 requirement is for $7.4 million. An additional $2.2 million will be required the following year, bringing the total program costs to $90.9 million.

Chairman McClellan. Proceed.

General Evans. High confidence in the success of the command data buffer development was substantiated in November when the complete, integrated system successfully performed all required functions in a demonstrated test at the Boeing Co. The success of this development is due in large part to the extensive use and adaptation of off-the-shelf hardware designs.

COMMAND DATA BUFFER

Chairman McClellan. What is the command data buffer program?

General Evans. The command data buffer system allows us to retarget the Minuteman force much more quickly and automates the system. For example, right now if we had to retarget all of our Minuteman III's it would take 45 days. With this system we can do that in 9.7 hours.

Chairman McClellan. Proceed, General.

General EVANS. System level testing of the F. E. Warren Air Force Base design has been completed, and deployment is under way. The first flight of 10 silos was turned over to SAC on June 20. The basic design must be adapted for use in subsequent wings, and the design for silos at Grand Forks Air Force Base is well under way. The development effort for hardening Minuteman III against the effects of dust and debris raised by attacking warheads was recently completed. The first of the dust hardened missiles were delivered in October 1972.

DUST HARDENED MISSILES

Chairman MCCLELLAN. Explain what you mean by "dust hardened missiles."

General EVANS. A dust hardened missile is a Minuteman III which has been modified to enable it to fly through the severe dust environment which can be created by an attacking nuclear burst.

Chairman MCCLELLAN. Proceed.

General EVANS. The fiscal year 1974 request of $99.8 million will essentially complete design and development associated with command data buffer and upgrade silo at Grand Forks Air Force Base and will provide for continuation of the missile performance measurement system. The missile performance measurement system is required at the Western test range to provide a means of making detailed evaluations of missile performance during flight.

WESTERN TEST RANGE

Chairman MCCLELLAN. Where is the Western test range located?

General EVANS. The Western test range (WTR) is a national range extending westward from Vandenberg AFB, California, to 90° E longitude and operated by the Air Force Space and Missile Test Center (SAMTEC) located at Vandenberg AFB. The WTR operates an integrated system of radars, optical tracking instruments, telemetry receivers, range safety command transmitters, computers and data transmitters, and display equipment. Operating sites include Vandenberg AFB and Pillar Point, Calif., Wheeler AFB, Hawaii, Eniwetok atoll, Marshall Islands; Oeno Island; the Phoenix Islands; and one instrumentation ship.

Chairman MCCLELLAN. Proceed.

General EVANS. This system is particularly effective in evaluating guidance system performance.

Senator YOUNG. I understood you had completed your updating of the Grand Forks Base. General Pitts was up here on the completion of the update program. Is this still another modification?

General EVANS. No, sir, this is the same one.

General FISH. I think what the Senator is talking about is that we completed deployment of Minuteman III at Grand Forks.

General EVANS. That was deployment of Minuteman III. This now will upgrade those silos so that they can withstand a greater impact from an enemy warhead.

Senator YOUNG. You still have another modernization program after that?

General EVANS. Yes, sir. This has to do with the silo now and incorporation of this command data suffer system into that complex.

Senator YOUNG. I understand.
Chairman MCCLELLAN. Proceed.

STRATEGIC DEFENSE

General EVANS. In strategic defense, the [deleted] has an operational satellite in synchronous equatorial orbit [deleted] capable of providing near real time warning of the launch of both land- and sea-launched ballistic missiles.

SATELLITES

Chairman MCCLELLAN. What amount of funds are you requesting for the [deleted].

General EVANS. The fiscal year 1974 R.D.T. & E. request for the [deleted].

Chairman MCCLELLAN. When was this program initiated?

General EVANS. The [deleted] was initiated as an R. & D. activity in November [deleted] under the designation [deleted].

Chairman MCCLELLAN. What information are you capable of receiving from this program?

General EVANS. The [deleted] satellites contain [deleted] sensors, [deleted] sensors. The system provides near real-time tactical warning of intercontinental ballistic missiles (ICBM), fractional orbital bombardment systems (FOBS), and submarine-launched ballistic missiles (SLBM) to the National Military Command Center (NMCC), SAC, CONAD, and other designated users. Data elements provided to users include [deleted]. The system also provides [deleted]. Information from the [deleted] is provided to users within [deleted] and [deleted].

Chairman MCCLELLAN. Proceed.

General EVANS. These satellites are performing very well and have exceeded original prediction of useful on-orbit life. A [deleted] satellite was placed [deleted] to provide increased coverage of the submarine-launched-ballistic-missile threat areas. Fiscal year 1973 funds are being used for continued development of an improved series of satellites and for studies to improve the reliability and survivability of the satellites based on analysis of actual on-orbit performance.

Chairman MCCLELLAN. Why is an [deleted] satellite necessary?

General EVANS. The [deleted]. This [deleted] coverage provides the National Command Authority a more credible launch warning notification of any launches which might occur within the area of [deleted] coverage since it increases the probability of launch sighting, reduces the effects of [deleted] and provides continuous [deleted] coverage during satellite replacement periods.

Chairman MCCLELLAN. What is the estimated cost of having [deleted] satellite?

General EVANS. The procurement cost of a satellite/booster set is approximately $58 million and is dependent on reprocurement rates and quantities.

Chairman MCCLELLAN. When would [deleted] be launched?

General EVANS. The [deleted] satellite was launched on [deleted]. The [deleted] current configuration now consists of [deleted]. Additional satellites will be deployed to replace satellites which may fail on-orbit.

Chairman MCCLELLAN. Where are the submarine SLBM threat areas?

General EVANS. The SSN–6 has a nonrotating Earth range of [deleted] nautical miles.

Launch from within these distances of either coast is possible. The current SLBM operating areas in the Atlantic and Pacific are within [deleted] nautical miles of the respective coasts.

Chairman MCCLELLAN. How many satellites does the Air Force have in operation?

General EVANS. The Air Force has [deleted] satellites deployed. One of these, the first launched, is in [deleted] orbit and has little operational utility. It has, however, been used as a R. & D. test bed to aid in the development and evaluation of subsequent satellites and their support elements. The operational system consists of the [deleted] satellites currently deployed.

Chairman MCCLELLAN. Describe the information gathered by those satellites.

General EVANS. The [deleted] satellites are equipped with [deleted] sensors, [deleted] sensors. The system provides near real-time tactical warning of intercontinental ballistic missiles (ICBM), fractional orbital bombardment system (FOBS), and submarine-launched ballistic missiles (SLBM) to the National Military Command Center (NMCC), SAC, CONAD, and other designated users. Data elements provided to users include [deleted]. The system also provides [deleted]. Information from the [deleted] is provided to users within [deleted] and launches occurring within [deleted] nautical miles of the [deleted] are reported to users within [deleted].

Chairman MCCLELLAN. What has been the Federal cost to implement, operate and maintain this satellite program?

General EVANS. Program costs from program inception through fiscal year 1974 total of [deleted] million.

Chairman MCCLELLAN. How do we compare with the Soviets in this area?

General EVANS. To the knowledge of the U.S. intelligence community, the Soviets [deleted].

Chairman MCCLELLAN. Proceed.

General EVANS. We are also developing the capability to operate these satellites in [deleted] orbit to provide greater flexibility in the program. The request for [deleted] million in fiscal year 1974 will continue development of the improved satellites, improve satellite sensor performance based on operational experience, and increase the reliability and survivability of the satellites.

SPACE SHUTTLE

We are continuing planning and analysis efforts in support of the NASA Space Shuttle program to assure that the system when developed will have utility to the national defense.

SPACE SHUTTLE PROGRAM

Chairman McClellan. What is the present status of the Space Shuttle program? What role will the Air Force play in the program?

General Evans. NASA is presently in the design phase of the Space Shuttle system. There are four major components to the system; (1) the Orbiter, (2) the external hydrogen/oxygen tank, (3) the solid rocket boosters, and (4) the ground support equipment. The Orbiter design has been on contract since August 1972 and is well into the design phase. The contractor for the external tank is expected to be announced within a few weeks. The request for proposal for the solid rocket booster is to be released by mid-July and the selection of the contractor is expected in October 1973. NASA is designing the ground support equipment in-house and the effort is on schedule. The NASA program schedule is for the first horizontal flight test in 1977, the first manned orbital flight December 1978 and a shuttle operational capability at Kennedy Space Center in December 1979.

The Air Force is the executive agent for DOD for shuttle related activities. We are coordinating closely with NASA on the development of the shuttle system to assure that it will have utility to the DOD as a user of the system. We plan to use the shuttle when it becomes operational and are planning to provide the west coast launch facility at Vandenberg when required. NASA and the Air Force are jointly evaluating upper stage concepts and it is planned that the development approach and responsible development agency will be determined in late 1973.

Chairman McClellan. Proceed.

General Evans. The shuttle offers potential improvements in operational flexibility and capability leading to more effective use of space military missions.

AWACS

Required for both strategic defense and tactical forces is the E–3A Airborne Warning and Control System, AWACS. This system is required to provide a needed capability for air defense of the continental United States and to perform a vital role in tactical command and control. A single hardware configuration will be used for both missions and changing from one to the other can be accomplished by inserting the appropriate software program into the data processor. The capability to detect and track low-level aircraft over a large area in the presence of ground clutter will permit AWACS to complement ground radars which are unable to detect low-level penetrators. The survivability of AWACS results from its mobility, capability to maintain awareness of the developing air situation, and ability to command weapons as appropriate in its own defense. A modified Boeing 707–320B will be used as the airborne platform for the radar, communications, display, identification, data processing, and navigation equipment.

Chairman McClellan. Will this system be carried by plane? Explain in greater detail the practical operation of the system. When did the AWACS program originate? When do you anticipate that it will be operational?

General EVANS. AWACS is an airborne surveillance, command, control and communications system consisting of special avionics and a large surveillance radar installed in a Boeing 707 airframe.

AWACS is to provide warning of the approach of hostile or unknown aircraft, and to provide for control of friendly aircraft, for both the strategic—that is, continental air defense—mission and the tactical mission. To fulfill this purpose, AWACS is designed to perform radar surveillance of aircraft at all altitudes over any kind of terrain.

In the strategic role—that of continental air defense—the AWACS aircraft would normally be kept on ground alert. At any time deemed appropriate during periods of escalating tensions and crisis, or upon indication of an imminent attack, the AWACS would take off and fly out to stations several hundred miles from the continental United States—CONUS. From these stations, the AWACS would detect, classify and track approaching aircraft and, if determined to be hostile, direct our interceptors—both current and advanced—to those aircraft. Further, AWACS would respond flexibly to the air battle and could direct repeated and sustained attacks against a hostile bomber force throughout the engagement. AWACS will reinforce realistic deterrence against strategic attack by denying a potential aggressor confidence of being able to degrade CONUS air defenses through attack on our air defense detection, tracking, and control facilities which are currently located at fixed, ground-based sites. It will also enhance deterrence—and reduce the impact of an enemy attack should deterrence fail—by increasing substantially the total effectiveness of current as well as future interceptors.

In the tactical role, AWACS would perform a number of important surveillance, warning, and control functions. AWACS would provide a unique surveillance capability, both by virtue of its look-down ability and its ability to extend radar coverage beyond that possible with ground-based radar. For example, AWACS could be flown to any point on the globe within 24 hours and provide area surveillance during a crisis, and warning of attack on an ally and/or forward based U.S. forces. If U.S. tactical air forces were committed to contingency operations, the AWACS could provide command and control during deployment to the contingency area and air traffic control upon arrival in the area of operations. In defense of an ally, AWACS could provide the surveillance and control of friendly aircraft engaged in close air support, interdiction, and air superiority missions. This assistance could be accomplished with a minimum of U.S. involvement, thus maintaining a low profile, since no U.S. ground forces need be involved. Should other U.S. forces be deployed, AWACS could fill the need for an effective tactical air control system (TACS) during the early stages of deployment. Initially, before a ground TACS could arrive and be placed in operation, the AWACS could also function as a direct air support center or control and reporting center in controlling all air activity in support of friendly ground forces. As the situation stabilizes and ground elements of the tactical air control system become operable, AWACS would supplement the capabilities of the ground TACS. The AWACS could also be used to extend the effective command and control of tactical air forces well beyond the range of ground system coverage.

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As an all-altitude surveillance system in a theater air defense role, the AWACS could effectively position fighters to attack enemy strike aircraft or position friendly strike aircraft to counter or avoid attacks by enemy interceptors. Finally, the AWACS will increase the effectiveness of search and rescue efforts throughout the spectrum of tactical employment. Exploratory development work on the AWACS radar technology began in 1965 and the AWACS program was approved in December 1968. The engineering development contract was awarded in July 1970. The system initial operating capability will be achieved by March 1977 and full operating capability will be achieved in July 1978.

Chairman McCLELLAN. Proceed.

General EVANS. Integrated presentation of the air situation on a near real time basis and command of the resources needed to influence the air battle results makes AWACS a significant addition to the combat forces of the Air Force.

During fiscal year 1973, the competitive radar flight test program was completed ahead of schedule under cost and with demonstrated performance that exceeded expectations.

AWACS/COMPETITIVE RADAR FLIGHT TEST PROGRAM

Chairman McCLELLAN. How much under cost was this program completed?

General EVANS. The contract price for the brassboard radar demonstration program was $169 million; whereas the price at completion was $167 million, which constituted a $2 million underrun.

Chairman McCLELLAN. Proceed.

General EVANS. Westinghouse was selected as the winner and an airborne tracking test was conducted with their equipment. The data from these efforts was presented to OSD and authority was given to proceed with full scale development. Development of mission avionics prototypes for the system integration demonstration, known as SID, is now underway.

AWACS—EXPENDED TO DATE FOR RADAR FLIGHT TEST PROGRAM

Chairman McCLELLAN. How much has been expended on this program to date?

General EVANS. The AWACS R.D.T. & E. approved funding through fiscal year 1973 is $512.4 million, which includes $194.2 million in fiscal year 1973. Of the $512.4 million, $510 million have been obligated and $352.9 million expended through May 1973.

Chairman McCLELLAN. Proceed.

General EVANS. The inclusion of additional equipment will permit the using commands, TAC and ADC, to conduct a concurrent initial operational test and evaluation. An example of the testing is the AWACS Evaluation in Europe which was completed on April 30. The test was an unqualified success which not only met all the test objectives, but highly impressed NATO observers with its capabilities. This type of testing will permit the production request to be supported by both technical feasibility and operational suitability data and essentially avoids program concurrency.

Plans for fiscal year 1974 call for installation of the hardware and software items in the SID aircraft with flight testing scheduled to start in March 1974.

AWACS/RADAR FLIGHT TEST PROGRAM COMPLETION

Chairman McClellan. When do you anticipate that this program will be completed?

General Evans. Development and initial acquisition of the AWACS program will be completed with achievement of full operating capability in July 1978.

Chairman McClellan. Proceed.

General Evans. All functions essential to accomplishment of the AWACS mission will be demonstrated. Work will continue on reconfiguration of one of the aircraft used during the radar demonstration and on the two new test aircraft started in fiscal year 1973. These three aircraft will be used for both development test and evaluation as well as operational test and evaluation.

TACTICAL FORCES F–15

The Air Force is placing great emphasis on the development of the F–15 Eagle to have an initial operational capability for this advanced air superiority aircraft in fiscal year 1976.

Chairman McClellan. When was the F–15 development program initiated?

General Evans. The F–15 had its inception in 1965 during efforts to define a follow-on fighter to replace the F–4 generation of aircraft. From 1966 to 1969, numerous engineering and design studies were conducted both by the Air Force and by major airframe contractors to define the configuration and capability of the proposed F–15. These efforts led to the selection of a prime contractor to develop and produce the F–15 in December 1969. The F–15 development contract became effective on January 1, 1970.

Chairman McClellan. How many do we intend to procure?

General Evans. The Air Force plans to buy 20 aircraft for flight test efforts and 729 for operational use for a total procurement of 749 F–15 aircraft.

Chairman McClellan. How fast will the plane fly?

General Evans. The F–15 designed for a maximum sustained speed of [deleted] Mach with a dash capability of [deleted] Mach.

Chairman McClellan. What was the original estimate of the cost of the plane and will there be an overrun?

General Evans. The original development estimate on the F–15 showed a total acquisition cost of $7,355,200,000 for 749 aircraft. The current estimate as reported in the 15 May 1973 selected acquisition report to the Congress is $7,835,200,000. This reflects a cost increase of $480 million in the total F–15 program.

Chairman McClellan. Who is the major contractor and what funds has the company received?

General Evans. The major contractor on the F–15 is the McDonnell Aircraft Corp. of St. Louis, Mo., a subsidiary of the McDonnell-Douglas Aircraft Corp. To date, $987 million in research and development

moneys, and $118 million in procurement funds have been obligated to McDonnell-Douglas on the F–15 contract.

Chairman McClellan. Proceed.

General Evans. The F–15 is a high performance, highly maneuverable single seat fighter equipped with a cannon and advanced Sparrow and Sidewinder missiles. This balanced mix of air-to-air weapons will provide a close-in visual and medium range all-weather kill capability superior to that of the present and projected threat through the 1980's.

The fiscal year 1973 program was highlighted by First Flight on 27 July 1972. Flight testing is proceeding very well and as of 13 June we had flown 462 flights for a total of 489.8 hours. Two structural demonstration milestones were completed in January 1973, and the F–100 engine has satisfactorily completed a modified 150–hour endurance test. The modified test was required because of a needed redesign of the fan stator assembly.

Chairman McClellan. What is the fan stator assembly and why is it necessary that it be redesigned?

General Evans. A stator assembly, or stage, in a turbine engine is a grouping of stationary vanes that smooth and direct the airflow from one rotating stage to the next. The stator stages are interleaved between the rotating stages along the path of the airflow. As the name implies, the fan stator assembly is a stator stage located in the fan or large front compressor section of a turbofan engine. In the F–100 engine, design modification is required on the second and third fan stator stages because the existing design lacks sufficient structural rigidity to insure that the stator will not contact the adjacent rotating assembly at designed maximum engine pressures. This deficiency was identified during normal development testing in March 1973. Following the failure of an experimental engine on March 14, 1973, it was determined that high pressures in the engine can cause the stator vanes to flex sufficiently to rub against the adjacent rotating stage. This results in catastrophic damage to the engine. This redesign of the stator assemblies will strengthen the stator vane mounts and will preclude this possibility.

Chairman McClellan. Proceed.

General Evans. This assembly has been fabricated and will be qualified to the original 150-hour endurance criteria. Negotiations are underway with Pratt & Whitney to assess the cost and schedule impacts. On February 15, OSD authorized the Air Force to proceed with the fiscal year 1973 production of 30 aircraft. Longlead funding was approved in October in preparation for the February production decision.

The request for fiscal year 1974 funds for the F–15 is $229.5 million. During fiscal year 1974, nine test aircraft will be delivered and we will concentrate on Air Force flight evaluation.

F–15/ANTICIPATE FULLY OPERATIONAL

Chairman McClellan. When do you anticipate that the plane will be fully operational?

General Evans. The contractor flight testing is scheduled to be essentially completed, and the first operational F–15 delivered to Tactical Air Command in November 1974. The first squadron of F–15's is expected to achieve initial operating capability in July 1975.

Chairman McClellan. Proceed.

General Evans. From the beginning of the development of the F–15, the program has been guided by the concept of successful demonstration of established milestones prior to major decisions. This philosophy has provided a methodical and conservative approach to key decisions. High-risk items have been competitively developed and thoroughly tested before being incorporated into the F–15. Examples are the 25-millimeter cannon and the radar. Of equal importance in reducing concurrency in the program is the low-production rate maintained throughout the early flight test program. Specifically, the 20-test aircraft are being initially built at a rate of one every other month, reaching a rate of only one per month 21 months after first flight.

Chairman McClellan. How does this production rate compare with other planes?

General Evans. The production plan for the F–15 is extremely conservative both in the rate at which production is accelerated, and in the maximum production rate planned. The F–15 production will build from a 1 per month rate in calendar year 1974 to a maximum rate of 12 per month in calendar year 1976. The 12 per month rate will be maintained through late calendar year 1980 when the currently planned production is completed. By comparison, the F–4 had peak production rates of 75 per month (all models), the A–7 reached rates of 20 per month, and the F–111 had production rates as high as 15 per month.

Chairman McClellan. Proceed.

General Evans. The production rate will increase to 3 per month 30 months after first flight and the maximum planned rate of 12 per month will not be reached until 4 years after first flight.

F–15 ENGINE PROGRAM

Chairman McClellan. What happens if that engine never measures up to your expectations?

General Evans. The program will have to be reevaluated at that time.

Chairman McClellan. What I am concerned about is the whole practice of having it only on paper and then ordering it into production.

General Evans. If the engine fails to pass the 150-hour endurance test, then we must go back to OSD, to what we call the DSARC principals—who are at the director level of OSD.

Chairman McClellan. Before you can order production planes?

General Evans. Before we can go ahead with the engine program.

Chairman McClellan. In other words, you have to go back to them and satisfy them that the engine has passed the test before you order the engines?

General Evans. No, sir. If the engine successfully passes the test by September 30, 1973, then we are authorized to proceed with production. If the engine fails to pass the test by that date, then we must go back to DSARC for further guidance.

Chairman McClellan. In the meantime you are going ahead and ordering the planes?

General Evans. Yes, sir; that is correct.

Chairman McClellan. Does that make much sense?

General EVANS. It makes sense, sir, only because we have so much faith in the fact that the engine will measure up to the standards that we require. I am sure you realize that if we terminate the McDonnell Douglas effort this will cost money. So, we weighed the situation and decided in the best interest of the U.S. Government it would be best to continue.

Chairman MCCLELLAN. To take the chance, that is what it amounts to?

General EVANS. Yes, sir.

Chairman MCCLELLAN. I think the odds are in favor of it. I am not trying to ridicule you here or being unduly critical. I am trying to make a record of what you are doing.

General EVANS. We looked at the situation very carefully before we made that decision. We looked at it not only from scheduling the program but the cost effect on the program.

Chairman MCCLELLAN. I am most hopeful that we will get away from buying stuff on paper.

General EVANS. You understand that we have these aircraft that we are flying at Edwards Air Force Base, Calif.

Chairman MCCLELLAN. I understand they fly. If I did not understand that you had not proceeded that far, I might take serious issue with you on it.

What I am trying to emphasize is that I am not very strong for it. It would have to be a somewhat exceptional circumstance for me to gladly appropriate money to buy something that is only on paper. I want to be sure that we know what we are buying—not what we hope to get, but what we have that we are buying—before we give a contract for procurement. Of course, exceptions can be made, if you have a situation where you are completely satisfied with the airframe.

General EVANS. And we have 500 flight hours on the aircraft.

Chairman MCCLELLAN. On the engine, you have?

General EVANS. Yes, sir.

Chairman MCCLELLAN. That is not the engine that is being developed.

General EVANS. Yes, sir.

Chairman MCCLELLAN. You are trying to make improvements.

General EVANS. Some small improvements, but basically the series 2 engine that is flying in the aircraft today is generally the one that we will be testing in the cell. We are talking two things, performance on the one hand, and endurance on the other, generally speaking. It is the endurance test, that milestone, that has not been satisfied.

Chairman MCCLELLAN. Has the model of the engine you have now met all performance tests?

General EVANS. No, I can't say all.

Mr. JONES. All of the flight testing has not been completed at this point in time.

Chairman MCCLELLAN. You are generally satisfied that it is meeting the performance test.

General EVANS. No question about it. That is why we made the decision to continue.

Chairman MCCLELLAN. The only big issue, other than the completion of the performance test, is to be satisfied with respect to the endurance test, is that correct?

General EVANS. That is correct.

Chairman MCCLELLAN. But as far as being able to bring about the performance you expect to have in the plane, the engine you now have is doing this, is that correct?

General EVANS. That is correct. There is no hesitancy on the part of the pilot in the Air Force to go out and fly the F–15 because it is a safe airplane.

Chairman MCCLELLAN. There is no reason from your standpoint for any delay in making appropriations and authorizing the procurement because of the engine situation.

General EVANS. No, sir.

Senator YOUNG. What will be the speed and altitude of the F–15?

General EVANS. It will be capable of going up to [deleted] mach and be able to fly above [deleted] feet.

Senator YOUNG. That will be less than the Foxbat.

General EVANS. In top speed, sir, it will, as well as altitude. However, in maneuverability we have a much superior aircraft. With the radar and the missiles that we will have aboard the F–15, analysis shows that we will have no difficulty in defeating the Foxbat.

F–14 USE OF 401 ENGINE

Senator YOUNG. When this engine is perfected or when it is fully tested will this engine be usable in the F–14?

General EVANS. The 401 engine which the Navy has under development is under the same program as the F–100.

Senator YOUNG. They are not going ahead with the big engine?

General EVANS. They have not made a decision on the 401 engine. The derivative of the F–100 engine could be used in the F–14. It has a common core and about 50 percent of the parts are the same.

Senator YOUNG. The Navy is not taking part in the development of the big engine? They are going for the smaller one?

General EVANS. They have development money in the program but no production has been set aside.

Senator YOUNG. I was interested because this is a bigger and better engine. I have some questions, myself, whether we should have gone ahead with the F–14 with a smaller engine.

General EVANS. They have the less capable engine in the current F–14.

Senator YOUNG. That is right, less cost too.

Chairman MCCLELLAN. Senator, we have another vote.

[Brief recess]

A–10 PROGRAM

Chairman MCCLELLAN. Proceed.

General EVANS. In January, the A–10 was selected as the winner of the A–X competition. The A–10 program will provide an aircraft designed specifically for the close air support mission. The aircraft will have excellent maneuverability and will be capable of operating under low ceilings and in confined areas in direct support of ground forces. It will be able to carry up to 16,000 pounds of ordnance optimized for destroying ground targets and will be equipped with the Maverick missile.

A–10

Chairman McClellan. When was the A–10 program originally undertaken?

General Evans. This program was designated A–10 upon award of the development contracts to Fairchild and General Electric on March 1, 1973. Prior to that date, the program was designated the A–X. The A–X program began in September 1966 when the Air Force Chief of Staff directed that action be taken to obtain a specialized close air support aircraft.

Chairman McClellan. When will it be operational?

General Evans. The first A–10 squadron will become operationally ready in [deleted]. By that date, a training cadre will be established and the first fully equipped squadron will be trained and ready for combat.

Chairman McClellan. How many do we intend to procure?

General Evans. In addition to the two A–9 and two A–10 prototypes procured for competitive evaluation, we plan to procure 10 R.D.T. & E. and 729 production A–10 aircraft. A total of 743 aircraft will be procured in this program.

Chairman McClellan. What is the estimated per unit cost?

General Evans. Based on the 743 aircraft planned in the A–10 program, the unit program cost is estimated to be $3.35 million. Unit flyaway cost is estimated to be $2.40 million. The above costs include an economic escalation factor of approximately 4.8 percent compounded annually.

Chairman McClellan. What contractor is developing the plane and what funds has it received to date?

General Evans. That Fairchild Republic Co. is the prime contractor for developing the A–10 aircraft. The General Electric Co. is an associate contractor responsible for developing and supplying the TF34–100 engines and the GAU–8 gun. To date, the Air Force has obligated $24.4 million to Fairchild and $9.3 million to General Electric for the A–10 development program. It should be noted that Fairchild received $41.8 million for developing the A–10 prototype aircraft for competitive evaluation.

Chairman McClellan. Proceed.

General Evans. We are also developing a rapid fire, high-muzzle-velocity 30-millimeter gun which could be internally mounted in the A–10. The aircraft will be capable of extended air loiter and will be able to operate from austere forward airstrips. It will be a relatively simply, easily maintained aircraft, capable of high sortie rates and responsive to peak demands for air support.

The program has been very successful with first flight of the prototype aircraft occurring in May 1972—a month ahead of schedule. Contractor flight testing was completed in October 1972 and the Air Force flight evaluation, using Air Force pilots, was conducted from October through December. The program demonstrated primary aircraft performance characteristics, weapon delivery capability, and operational suitability. Survivability was given a high-priority in the A–10 design, and testing has been conducted using [deleted] 23-millimeter anti-aircraft-artillery ammunition and A–10 hardware. We found that the cockpit armor could withstand direct hits of the 23-millimeter and that the fuel tanks would provide fire and explosive suppression.

The competitive phase of the program was completed within the forecast cost of $84.5 million which included $7.6 million of the $48.1 million total approved for fiscal year 1973. The balance of $40.5 million in fiscal year 1973 funds is being used to initiate full scale development of the A–10 design.

We are requesting a total of $112.4 million in fiscal year 1974 to continue A–10 development. This effort will include fabrication of test aircraft, tooling fabrication, engine development, system testing, and design/development of support equipment.

The A–10 program has been characterized by considerable hardware demonstration prior to major decision points. This concept is also being applied to the full scale development phase to insure that appropriate testing supports the initial and subsequent production decisions. This will maintain program continuity and avoid premature commitment of production funds.

IMPROVED AIRCRAFT GUNS

We have two major gun programs underway. The first of these is the 25-millimeter GAU–7A, scheduled to be available for use in the F–15. The 20-millimeter M–61 gun will be used in the first wing of the F–15's.

Chairman McClellan. When was research begun on the GAU–7A?

General Evans. The full scale development was initiated in December 1971. The advanced development program was initiated in March 1968.

Chairman McClellan. How will this gun differ from those on-shelf?

General Evans. The gun fires a completely consumable caseless round of ammunition whereas on-shelf guns utilize conventional brass cased ammunition.

Chairman McClellan. How much will be the total cost of this program?

General Evans. The total cost of the full scale development program will be $60.7 million. The advanced development program cost $20.5 million.

Chairman McClellan. When will the gun be operational?

General Evans. The present development schedule calls for release to production in October 1974.

Chairman McClellan. Will other aircraft besides the F–15 be able to use it?

General Evans. The F–15 is the only aircraft scheduled to carry the GAU–7 gun at this time.

Chairman McClellan. How many do we intend to procure?

General Evans. We intend to procure 489 complete gun systems.

Chairman McClellan. What will be the per unit cost?

General Evans. The unit production cost in then-year dollars is estimated to be $72,600 for a production quantity of 489 systems.

Chairman McClellan. Proceed.

General Evans. However, if the GAU–7A development is successful, it will replace the M–61 in later F–15 wings. We entered full scale development with the GAU–7A a year ago, and are now conducting an extensive test program. The gun will use an encapsulated round which was developed specifically to reduce the potential fire hazard associated with caseless ammunition. The new round is encapsulated in a light weight, fire resistant, outer wrapper which is stripped off

as the round emerges from the storage container for transfer through the conveyor to the gun. This provides the weight saving of caseless ammunition, without the potential fire hazard. The $22.7 million for the GAU–7A program in fiscal year 1974 will complete qualification testing and prepare the GAU–7A for flight test in the F–15 early in fiscal year 1975.

The second gun program is the 30-millimeter GAU–8A which can be used in the A–10 as well as other aircraft. This program is proceeding on schedule.

GAU–8A

Chairman McClellan. When was the GAU–8A program undertaken?

General Evans. Development of the GAU–8A gun system was initiated in June 1971.

Chairman McClellan. Why will we need this gun rather than the GAU–7A?

General Evans. The GAU–7A is optimized for air-to-air combat rather than close air support targets. The GAU–8 is optimized for action against close air support targets including medium and heavy targets.

Chairman McClellan. How much have we to date expended on this program?

General Evans. Program cost through fiscal year 1973 is $26.4 million.

Chairman McClellan. When will this gun be operational?

General Evans. Production guns will be available in August 1975.

Chairman McClellan. Will any other aircraft besides the A–10 be able to use it?

General Evans. The F–4 and A–7 aircraft will be able to use the GAU–8A gun if a decision is made to develop a GAU–8 gun pod.

Chairman McClellan. How many do we intend to procure?

General Evans. We intend to procure 729 production systems plus squares.

Chairman McClellan. What will be the per unit cost?

General Evans. The unit recurring cost for 729 gun systems is $125,000 in then-year dollars.

Chairman McClellan. Proceed.

General Evans. A competitive shootoff of the General Electric and Philco-Ford systems was recently completed with excellent results and General Electric was selected to proceed with full-scale development. The $10.3 million requested in fiscal year 1974 will support full-scale development of the selected design.

OTHER DEVELOPMENTS

Contributing to an effective tactical capability are development efforts in areas such as the side looking airborne radar, tactical support jamming, and automated processing of tactical intelligence information. The side looking radar has the ability to provide high-resolution imagery while penetrating clouds and other atmospheric conditions and can provide intelligence information under conditions which render other sensors ineffective. This system enables intelligence data to be acquired from a standoff position beyond the high-threat

environment. Five million dollars is requested in fiscal year 1974 for preliminary design work and long-lead items leading to competitive development of flyable brassboard subsystems.

SIDE LOOKING RADAR

Chairman McClellan. Is this research duplicative of what the other services are also developing?

General Evans. No. The results of this research will provide the services the first side looking radar that will employ all digital data processing techniques. The advantages of using digital processing include simplification of the ground data processing procedures, permits handling wide signal dynamic ranges, and provides data output in near-real time.

Chairman McClellan. What is the estimated cost of this program?

General Evans. The estimated research and development cost of this program is $59.5 million.

Chairman McClellan. Where will the sensors be used?

General Evans. The sensors will be used in any tactical military situation that requires airborne surveillance/reconnaissance of a threat during day/night or all-weather conditions.

Chairman McClellan. Explain "high threat" environment.

General Evans. A "high threat" environment exists where an enemy defensive posture is sufficiently strong to present a high risk to the operations of friendly military resources.

Chairman McClellan. Explain "flyable Brassboard subsystems."

General Evans. These are assembled flyable subsystems suitable for evaluation of the techniques used to attain the desired capability, and to derive the design specifications for a prototype. They are research and development tools with very little emphasis on form or fit, designed only to demonstrate a technology.

Chairman McClellan. Proceed.

General Evans. The capability to process, interpret, and disseminate intelligence data has not kept pace with improved collection capabilities.

JOINT INTELLIGENCE PROGRAM WITH DOD

Chairman McClellan. What joint programs are operating within the Department of Defense in the collection and dissemination of intelligence data?

General Evans. The tactical information processing and interpretation system called TIPI is the only truly joint intelligence-related development program in terms of funding and management in which the Air Force is involved. The Marine Corps shares funding and management responsibility for the development of this equipment which is intended to develop an automated capability to process, interpret, and disseminate intelligence data.

Management of all intelligence requirements within the Department of Defense is the responsibility of the Defense Intelligence Agency. All intelligence requirements are channeled through that Agency, which then takes the most capable or appropriate DOD activity to collect, process, and disseminate the information required. Thus, while the Air Force intelligence functions are generally not joint in terms of funding or specific project management, they are cooperative with the

activities of the other services and responsive to the overall tasking of the Defense Intelligence Agency.

The National Security Agency has been designated Department of Defense program manager for signals intelligence activities. In this role this Agency is responsible for technical control of signals intelligence activities of the military departments. Many of the signals intelligence collection activities are jointly manned by the participating military units. The product of these signals intelligence activities is freely provided by the National Security Agency to all Department of Defense activities without regard to the military source of collection.

Chairman McClellan. Proceed.

General Evans. The tactical information processing and interpretation system, called TIPI, will apply automated data processing equipment and techniques to the exploitation and fusion of tactical reconnaissance and surveillance products. Fiscal year 1974's effort will continue fabrication of the display and control/storage and retrieval segment of the system. The integration effort, which insures interface among the program segments, will continue throughout the development and acquisition phases of the program.

DISPLAY AND CONTROL STORAGE SYSTEM

Chairman McClellan. Explain in greater detail the operation of the display and control storage system.

General Evans. This segment is the heart of the tactical information processing and interpretation (TIPI) system. The display and control/storage and retrieval (DC/SR) segment is the automated fusion center where the output of other TIPI segments will be collated with multisource information to provide finished intelligence in a timely manner to the decisionmakers. The DC/SR segment will provide the capability to place up to 23 intelligence analysts on line with a continually updated intelligence data base. The equipment will enable the analysts to evaluate, correlate, display, store, retrieve, produce, and disseminate multisource intelligence data. Examples of tasks the analysts will perform include targeting, defense assessment, and order of battle analysis.

Chairman McClellan. How much has been expended to develop this program?

General Evans. To date the Air Force has obligated $21.5 million for the display and control/storage and retrieval segment. Government expenditures are dependent upon receipt of billing by the contractors.

Chairman McClellan. What is your request for fiscal year 1974?

General Evans. The Air Force is requesting $7.5 million for the display and control/storage and retrieval segment in fiscal year 1974.

Chairman McClellan. When will the system be operational?

General Evans. The display and control/storage and retrieval segment will be operational by January 1, 1976.

Chairman McClellan. Proceed, General.

General Evans. As a result of the programed phaseout of the EB–66 airframe, we identified a force mix consisting of manned aircraft, drones, and expendable countermeasures to provide jamming support for our tactical forces. Fiscal year 1974 funds will be used to continue with development of expendable countermeasure devices and delivery

methods. We are also requesting funds to develop a modification package to convert early F–111A aircraft to an EF–111A configuration. The fiscal year 1974 request of $15 million will provide for design and procurement of equipment modification packages, aircraft modification, and ground testing.

EF–111A MODIFICATION

Chairman McClellan. What is the purpose of modifying this aircraft? What amount of funds are you requesting for this purpose?

General Evans. Power, space, and weight limitations prevent us from carrying the electronic countermeasures to defeat the entire enemy threat spectrum on our tactical aircraft. Therefore, jamming support aircraft are required to reduce our attrition to enemy defenses. Our current jamming support aircraft, the EB–66, is obsolescent and will be phased out. The EF–111, an F–111 aircraft with an internally installed high-power jamming subsystem, will replace, and improve upon, the EB–66.

The total R.D.T. & E. program cost is estimated to be $68.7 million, which includes our request of $2.5 million in reprogramed fiscal year 1973 funds and $15 million for fiscal year 1974.

Chairman McClellan. Proceed.

General Evans. The fiscal year 1974 request of $7.4 million for traffic control and landing systems will continue the R. & D. effort on the AN/TPN–19 radar, the evaluation of collision avoidance systems and the program for a competitive flyoff for tactical air navigation avionics.

TRAFFIC CONTROL AND LANDING SYSTEM

Chairman McClellan. Is the major thrust of this program traffic control or the development of collision avoidance equipment?

General Evans. The major thrust of traffic control and landing system (TRACALS) is air traffic control. TRACALS consists of a family of related airborne and ground electronic equipments as opposed to a single end-item of equipment. Not only is collision avoidance equipment a part of TRACALS, but so also are radar systems, instrument landing systems, control towers, navigation beacons, and radios.

Chairman McClellan. Proceed.

General Evans. Effort in support of the microwave landing system has been transferred to the FAA which now has responsibility for that program. However, we will work closely with the FAA during development of this system to insure that Air Force requirements are considered. They indicated an interest in continuing to fund the Doppler techniques investigations and the all weather landing system efforts initially started under the TRACALS program, and a formal agreement on transferring responsibility for these areas has been finalized.

DRONES AND REMOTELY PILOTED VEHICLES

R.D.T. & E. activities will be continued in drones and remotely piloted vehicles during fiscal year 1974. Most significant among these efforts will be the flight test of high-altitude long-endurance drones in the Compass Cope program.

This competitive prototype demonstration is expected to provide a vehicle capable of [deleted] hours on station above [deleted] feet with a variety of payloads.

Chairman McClellan. What are those and what are their missions?

General Evans. This platform, sir, could serve as an airborne relay, radio relay for relaying data from another system further forward behind enemy lines to a ground station.

Chairman McClellan. They are unmanned planes?

General Evans. It is an unmanned plane. You either program its route or you remotely pilot it with controls on the ground. You have instrumentation to tell you where the aircraft is, what attitude it is in, the air speed.

Chairman McClellan. Is it recoverable?

General Evans. It is recoverable. In this particular program it takes off and lands as a conventional aircraft. It is a lightweight drone, very long endurance, over [deleted] hours, for example.

Chairman McClellan. Without refueling?

General Evans. Yes, sir. We could put sensors aboard it to give us data on enemy activities, take pictures from it.

Chairman McClellan. It must have slow speed.

General Evans. Yes, sir.

Chairman McClellan. Could it be shot down?

Mr. Jones. It could be shot down if you could find it.

General Evans. Not necessarily. It depends on the application. In most cases, we would keep it over friendly lines, but being able to get it so high, [deleted] feet or above, we could look over enemy territory and still be over friendly lines and be protected by them.

Chairman McClellan. How many of those have you contemplated procuring?

General Evans. We have not formalized any production plans.

Chairman McClellan. This is all research?

General Evans. It is strictly early stages of development. We have a prototype built by Boeing and one built by Teledyne-Ryan. We will test these two to see which one we should pursue into engineering development. We expect to fly the Boeing aircraft at Edwards Air Force Base next month.

Senator Young. What is the difference between this drone and the one we have now that we have been using in North Vietnam?

General Evans. This one, sir, is much more versatile. It flies higher, it flies much longer, [deleted] hours for this one, versus about 4 hours.

Chairman McClellan. It is a lightweight plane?

General Evans. Very lightweight. It has a long wing, as you would imagine.

Senator Young. We have lost quite a few of the drones over North Vietnam.

General Evans. Yes, sir. Those drones were designed to penetrate enemy territory whereas this one would be more of a standoff plane, to use as a relay or platform to look over into enemy territory.

We will also conclude flight test demonstration of a new drone navigation system for photo reconnaissance drones. This avionics package will greatly improve the navigation accuracy for future low-altitude drones.

REMOTELY PILOTED VEHICLES

Chairman McClellan. Are these remotely piloted vehicles used mainly for decoy, reconnaissance, or strike missions?

General Evans. The Compass Cope remotely piloted vehicles are intended for a variety of reconnaissance and relay missions. Although some of these will be in support of strike aircraft, the remotely piloted vehicle will not carry any weapons.

Chairman McClellan. What system will these new drones replace?

General Evans. Initially compass cope will replace the AQM–34R drone currently in operational use.

Chairman McClellan. Why are they necessary?

General Evans. The long endurance of compass cope together with its runway takeoff and landing capability will significantly reduce the operating costs of the present system. Based on our current projections this will provide a considerable savings in the high altitude reconnaissance area and also offer a cost effective alternative for manned aircraft performing a variety of relay functions.

Chairman McClellan. How much was expended in this program in fiscal year 1973, and what is your request for fiscal year 1974?

General Evans. A total of $8.2 million was expended by the USAF in fiscal year 1973 with the two compass cope contractors. We are requesting $7.6 million in fiscal year 1974 to complete both prototype flight demonstrations.

Chairman McClellan. Who operates these vehicles?

General Evans. During the prototype flight demonstrations, the vehicles are operated and maintained by contractor personnel under the cognizance of the Air Force Systems Command. Once operational, we envision that they will be operated exclusively by Air Force military personnel.

Chairman McClellan. How many of them do we have?

General Evans. Our prototype contracts provide for two vehicles from each of two contractors for a total of four drones.

Chairman McClellan. Where will they be used?

General Evans. The AQM–34R drone that I mentioned earlier is currently operated from [deleted] however, the Compass Cope vehicles with their long endurance and range could be operated practically anywhere in the world and flown from any normal military runway.

Chairman McClellan. Are any of the other services developing similar systems?

General Evans. No, sir. The Navy has expressed interest in Compass Cope as a candidate vehicle to perform ocean surveillance, however, they are just monitoring our program and have no similar development effort of their own.

Chairman McClellan. Proceed.

General Evans. One significant new effort in fiscal year 1974 will be the start of a flight test demonstration of a future drone control system. This control system is the key to a greatly expanded use of remotely piloted vehicles. Initially the system will be used for the compass cope vehicle, but it can also be used in low altitude drones performing reconnaissance, electronic warfare or air-to-ground strike missions.

COMMAND CONTROL AND COMMUNICATIONS

In the area of command and control, the fiscal year 1974 program reflects the continuing emphasis on improving the effectiveness of the command and control of our strategic forces.

Chairman McCLELLAN. How much is the AF requesting for fiscal year 1974 for command control and communications? List for us all major AF command control and communications programs, their specific purposes, and how much was expended in 1973 and the request for 1974.

General EVANS. I will be glad to do so.

The Air Force is requesting $2.510 billion which is composed of all appropriations including military pay. The following is a list of major Air Force command control and communications programs with a brief explanation of the specific purpose and associated funding in fiscal years 1973 and 1974.

Title	Fiscal year—	
	1973	1974
SAC communications	55.4	60.5
Provides staff and CINCSAC with high-speed command control and continuous communications and data on worldwide basis for positive and rapid control of the SAC forces.		
Surveillance radars	123.7	128.4
Provides warning and surveillance information essential to the performance of the air defense function.		
Defense support program	232.4	115.3
The defense support program mission is to provide a highly available and reliable [deleted] on a near global basis.		
Tactical air control systems	90.5	99.4
This program provides tactical Air Force component commanders with the organization and equipment necessary to plan, direct, and control all tactical air operations.		
SEA tactical air control system	52.3	36.2
This program provides a system of control agencies, facilities, radars, communications, and aircraft to control tactical air operations in Southeast Asia (SEA).		
AIRCOM	210.8	209.2
The USAF Aerospace Communications Complex (AIRCOM) comprises communications facilities and other resources employed by the Air Force for the exchange of the information between and/or within surface installations and aerospace vehicles.		
AIRCOM—DCS	180.3	186.0
This program is composed of long-haul point-to-point leased and Government-owned communication facilities, material, manpower, and associated costs identifiabe and measurable to the defense communications system.		
Weather Service (433)	84.8	80.0
This element provides all resources and manpower within the Air Weather Service which are required to provide a global environmental support capability.		
Traffic approach and landing system	143.5	170.3
Traffic approach and landing system (TRACALS) combines USAF ground facilities and equipments (fixed and mobile) with associated avionics, personnel and procedures to provide safe, orderly, and expeditious aerospace vehicle movements on a worldwide basis.		
AFCS (engineering and installations)	88.9	90.4
This program contains manpower, equipment facilities, and associated costs, facilities identified and measurable to the fixed command and control facilities.		
Advanced Airborne Command Post	117.3	83.1
This program will provide the national command authorities and CINCSAC with an enhancement capability to execute and control the strategic forces of the United States.		
Airborne warning and control system	194.2	209.5
This program contains money for R.D.T. & E. functions and procurement funds for long lead production items.		

DESIGN FEATURES FOR C. & C. SYSTEMS

Chairman McCLELLAN. Proceed.

General EVANS. Special attention is being given to design features, which will insure the successful integration of the C. & C. systems into an effective worldwide military command and control system. A fully integrated system will provide a more responsive command and control capability which is in balance with the capability of the strategic forces.

ADVANCED AIRBORNE COMMAND POST (AABNCP)

The advanced airborne command post will replace EC–135's of the National Military Command System and the Strategic Air Command with larger, more capable aircraft. We will start production of the 747 AABNCP development test bed aircraft and initiate the development program early in fiscal year 1974.

Chairman McClellan. When was the AABNCP program originated?

General Evans. The program was initiated by a statement of requirement submitted in 1964 by Commander-in-Chief Strategic Air Command (CINCSAC) to the Joint Chiefs of Staff. The requirement was studied and validated and refined until the program was presented to the newly established Worldwide Military Command and Control System (WWMCCS) Council in December 1971. Mr. Packard recommended to the SECDEF that the AABNCP be immediately initiated. The approved program was then submitted to the Congress in January 1972.

Chairman McClellan. How many aircraft do you intend to procure?

General Evans. We plan to acquire seven 747 aircraft, three for replacement of the EC–135 national emergency airborne command posts, three for the Strategic Air Command, and one as a command support aircraft operationally assigned to SAC.

Chairman McClellan. Proceed.

General Evans. The automatic data processing system for the AABNCP is being reviewed to assure compatibility with the worldwide military command and control system processors. Studies completed thus far indicate that substantial technical issues remain to be resolved before we are in a position to determine the automatic data processing equipment to be included in the AABNCP.

SATELLITE COMMUNICATIONS

Satellite communications provide another significant element of an integrated approach to command and control. The Air Force satellite communication system will provide a reliable UHF communications capability to the national command authority for direct command and control of the airborne elements of the SIOP forces.

NATIONAL COMMAND AUTHORITY RESPONSIBILITY

Chairman McClellan. Explain in greater detail the responsibilities of the national command authority.

General Evans. The national command authorities (NCA) consist of the President and the Secretary of Defense or their duly deputized alternates or successors. The responsibilities of the NCA embody the lawful duties of the highest echelon of the executive branch of the Government to direct and control military activities necessary to maintain the national security of the United States.

The chain of command runs from the President to the Secretary of Defense and through the Joint Chiefs of Staff to the commanders

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of unified and specified commands. The unified and specified commands were established by authority of the National Security Act of 1947, as amended, which required that these commands be responsible to the President and to the Secretary of Defense for such military missions as may be assigned. The means for operational direction and technical administrative support involved in the function of the command and control of U.S. military forces is through the worldwide military command and control system (WWMCCS).

Chairman McClellan. Proceed.

General Evans. The system will operate through the satellites of the Navy fleet satellite communications system and the Air Force satellite data system. In addition, small UHF transponders will be fabricated and integrated into selected DOD satellites to complement these two basic satellite systems and insure the reliability of the communications links, especially over the polar regions. Terminals will be installed on B–52's, FB–111's, on other SIOP support aircraft, and on the worldwide airborne command post force. The satellite data system will also support communication between satellite control facility ground stations.

The advanced space communication program is designed to develop the technical base needed to acquire a survivable satellite communication system for operational deployment in the eighties.

ADVANCED SPACE COMMUNICATION PROGRAM

Chairman McClellan. When was the advanced space communication program undertaken? What are the major goals of this project? What funds are you requesting for fiscal year 1974?

General Evans. The advanced space communication program was undertaken in fiscal year 1973 as two projects under program element 33601F, Air Force satellite communications system. Subsequently these technology developments related to space communications were placed in PE 63431F, advanced space communications. The major goals of the program are to provide the technology necessary for a survivable satellite communication system for command and control of the strategic forces and for improvements in reliability, capability, and survivability for present and planned space communications systems. For fiscal year 1974, we are requesting $18.8 million for the program.

Chairman McClellan. Proceed.

General Evans. The fiscal year 1973 effort continued development of subsystems in the optical and advanced microwave areas and initiated development of an advanced microwave terminal. In fiscal year 1974, we will fabricate and initiate testing of the advanced microwave terminal to be ready for a space test with experimental communication satellites in fiscal year 19[deleted]. We will also continue the development and evolution of subsystem components and techniques to enhance survivability of satellites.

In addition to communications satellites, we have the defense system application program which gathers high-quality meteorological data to support unique DOD requirements that cannot be met by the civilian weather system.

AF USE OF CIVILIAN WEATHER SYSTEMS OR EXISTING DOD SYSTEMS

Chairman McClellan. What information do you require that cannot already be acquired either through our civilian weather system or existing DOD systems?

General Evans. The DOD requires satellite weather data in the early morning, between 0700 and 0800 hours; near noon, between 1130 and 1230 hours; and near midnight, between 2330 and 0030 hours local time. The civilian system provides data only at mid-morning, about 0900 hours, and in the evening, about 2100 hours. DOD also has requirements which are not met by the civilian system in the following areas: resolution, data location accuracy, high-resolution data storage capacity, data rectification, nighttime visual data collection, security of the command and control and direct readout links, and control of spacecraft reprograming to meet changes in coverage requirements. As far as other existing DOD systems are concerned, DSAP satellites are the only source of global meteorological data. DSAP is the only DOD program which collects this type of data.

Chairman McClellan. Proceed.

General Evans. The data produced by the program were recently declassified and arrangements are being made to provide the data to the National Oceanic and Atmospheric Administration. There is a joint study underway to investigate the possibility of combining the military and civilian systems into a more integrated national system in the 1980 time period.

JOINT STUDY/INTEGRATE WEATHER SYSTEMS

Chairman McClellan. Who is participating in this joint study and how much is the AF funding?

General Evans. The Department of Commerce, NASA, and DOD are the participating organizations. The entire AF effort has been conducted in-house by the DSAP System Program Office as an additional duty, with the exception of three small contractor studies to estimate the cost of various satellite modifications. These were with RCA, $5,000; Westinghouse Electric Corp., $12,000; and McDonnell Douglas, $15,000.

Chairman McClellan. Proceed.

General Evans. The fiscal year 1974 request of $7.5 million for this program will be used to complete development of the latest series of satellites now scheduled for launch in late 1974.

RESEARCH AND TECHNOLOGY/QUESTION OF HOW MUCH

Research and technology is a difficult area to discuss, not because of any inherent mystery, but because the issue is always one of degree. The question is how much, and I can assure you, that we are still trying to answer that question.

Chairman McClellan. What are you doing to answer this question?

General Evans. There is no single action which balances the long-term R. & D. needs against the more immediate and pressing force modernization requirements. Each budget decision in each program represents part of the answer. As a general rule, our highest priority

is given to those programs which will provide the greatest increase to our operational capability to negate the current and/or projected threat. Once these activities are established in a sound program, future needs in terms of research and technology are addressed.

In summary, to answer this question we are continually reviewing our top priority force modernization programs to insure that they are not taking an excessive amount of funds. At the same time, we strive to use our research and technology dollars in such a way that the products of our efforts are relevant to our future military requirements.

Chairman McClellan. Proceed.

General Evans. Individual projects are continually reviewed for relevancy to the Air Force mission and are thoroughly scrubbed to insure that we are not duplicating work already in progress. We try to take maximum advantage of work being performed by other agencies and, where possible, to include our specific requirements in their investigations. In addition to the reviews directly related to the budget process, we have conducted three separate comprehensive reviews of the fiscal year 1974 technology program.

[The information follows:]

In-house and Outside Research

R. & D. work is performed at these AF installations:

1. Rome Air Development Center, Griffis AFB, N.Y.
2. AF Aeropropulsion Laboratory, Wright-Patterson AFB, Ohio.
3. AF Avionics Laboratory, Wright-Patterson AFB, Ohio.
4. AF Flight Dynamics Laboratory, Wright-Patterson AFB, Ohio.
5. AF Materials Laboratory, Wright-Patterson AFB, Ohio.
6. AF Rocket Propulsion Laboratory, Edwards AFB, Calif.
7. AF Weapons Laboratory, Kirtland AFB, N. Mex.
8. AF Human Resources Laboratory, Brooks AFB, Tex.
9. AF Armament Laboratory, Eglin AFB, Florida.
10. USAF School of Aerospace Medicine, Brooks AFB, Tex.
11. 6570th Aerospace Medical Research Laboratory, Wright-Patterson AFB, Ohio.
12. AF Cambridge Research Laboratory, L. G. Hanscom Field, Bedford, Mass.
13. Aerospace Research Laboratories, Wright-Patterson AFB, Ohio.
14. Frank J. Seiler Research Laboratory, USAF Academy, Colorado.
15. AF Office of Scientific Research, Arlington, Va.
16. Aeronautical Systems Division, Wright-Patterson AFB, Ohio.
17. Electronics Systems Division, Wright-Patterson AFB, Ohio.
18. Space and Missile Systems Organization, Los Angeles, Calif.
19. Foreign Technology Division, Wright-Patterson AFB, Ohio.
20. Aerospace Medical Division, Brooks AFB, Tex.
21. Arnold Engineering Development Center, Tullahoma, Tenn.
22. AF Flight Test Center, Edwards AFB, Calif.
23. AF Special Weapons Center, Kirtland AFB, N. Mex.
24. Armament Development & Test Center, Eglin AFB, Florida.
25. Hqs AF Systems Command, Washington, DC.

Those organizations listed 1 through 14 above are Air Force Laboratories doing "in-house" R&D in the 6.1 (research) and 6.2 (exploratory development) areas.

The percentage of AF R&D done in-house and outside based on $80 million 6.1 (research) and $260 million 6.2 (exploratory development) in FY–73 funds is 48.5% in-house and 51.5% outside.

A listing of Educational Institutions and Contractors doing AF R&D follows:

EDUCATIONAL INSTITUTIONS PREPARED ON 3 JULY 1973

EDUCATIONAL INSTITUTION

Akron University of.
Alabama University of.
Alaska University of.
Arizona State University.
Arizona University of.
Auburn University.
Auckland University.
Berlin Free University of.
Bern University of.
Boston College.
Boston University.
Brigham Young University.
Brooklyn Polytechnic Institute of.
Brown University.
California Institute of Technology.
California University of.
Cambridge University of.
Canterbury University.
Carnegie-Mellon University.
Case Western Reserve University.
Catholic University of America.
Chicago University of.
Cincinnati University of.
City Univ of New York Research Foundation.
City University of New York.
Clarkson College of Technology.
Clemson University.
Colorado School of Mines.
Colorado State University Research Foundation.
Colorado State University.
Colorado University of.
Columbia University.
Connecticut University of.
Cornell University.
Cranfield Institute of Technology.
Dartmouth College.
Dayton University of.
Dayton University Research Institute.
Delaware University of.
Denver University of.
Drexel University.
Emmanuel College.
Findlay College.
Florida Atlantic University.
Florida State University.
Florida Technological University.
Florida University of.
Franklin Institute of Pennsylvania.
George Washington University.
Georgetown University.
Georgia Institute of Technology.
Georgia Technical Research Institute.
Georgia University of.
Ghana University.
Glasgow University of.
Gottingen University of.

Harvard University.
Hawaii University of.
Houston University of.
Hull University of.
I I T Research Institute.
Illinois Institute of Technology.
Illinois University of.
Indiana University Research Foundation.
Indiana University.
Innsbruck University.
Institute for Advanced Study.
Iowa University of.
Johann Gutenberg University.
Johns Hopkins University.
Kentucky University of Research Foundation.
Kentucky University of.
Lancaster University of.
Lehigh University.
Liverpool University of.
Louisana State University.
Lowell Technical Institute Research Foundation.
Manhattan College.
Maryland University of.
Massachusetts Institute of Technology.
Massachusetts University of.
McGill University.
Miami University.
Miami University of.
Michigan University of.
Minnesota University of.
Mississippi State University.
Mississippi University of.
Missouri University of.
Montana State University.
Naples University of.
Nebraska University of.
New Hampshire University of.
New Mexico Institute of Mining and Technology.
New Mexico State University.
New Mexico University of.
New York State University Research Foundation.
New York State University of.
New York University.
North Carolina State University.
North Carolina University of.
Northeastern University.
Northwestern University.
Notre Dame University of.
Ohio State University Research Foundation.
Ohio State University The.
Ohio University.
Oklahoma State University.
Oklahoma State University of.
Oklahoma University Research Institute.
Oregon University of.
Oxford University.
Pennsylvania State University.
Pennsylvania University of.
Perugia University of.
Pittsburgh University of.
Princeton University.
Purdue Research Foundation.
Purdue University.
Regis College.
Rensselaer Polytechnic Institute.

Rhode Island University of.
Rice University.
Rochester University of.
Rockefeller University.
Royal Holloway College.
Rutgers University.
Saint Louis University.
Salford University of.
Santa Clara University of.
Sheffield Unversity of.
Sherbrooke University of.
South Carolina University of.
South Florida University of.
Southampton University of.
Southeastern Massachusetts University.
Southern California University of.
Southern Methodist University.
Stanford Research Institute.
Stanford University.
Stevens Institute of Technology.
Strathclyde University of.
Sydney University of.
Syracuse University Research Institute.
Syracuse University.
Syracuse University Research Corporation.
Technical University of Denmark.
Tel Aviv University.
Temple University.
Tennessee University of.
Texas A and M Research Foundation.
Texas A and M University.
Texas Technological University.
Texas, University of.
Toronto, University of.
Trinity University.
Tufts University.
University College.
Uppsala, University of.
Utah State University.
Utah, University of.
Vanderbilt University.
Vermont, University of.
Virginia Polytechnic Institute and State University.
Virginia, University of.
Washington State University.
Washington University.
Washington, University of.
Wayne State University.
Wentworth Institute.
Wesleyan University.
West Indies, University of.
Western Michigan University.
Wichita State University.
Windsor, University of.
Wisconsin, University of.
Wright State University.
Yale University.
Yeshiva University.

CONTRACTORS

A A I Corp.
Accumetrics Corp.
Adams, Russell, Co., Inc.
Adaptronics, Inc.
Advanced Kinetics, Inc.

Advanced Technology Center, Inc.
Aerochem Research Laboratories, Inc.
Aerodyne Research, Inc.
Aerojet General Corp.
Aerojet Liquid Rocket Co.
Aerojet Solid Propulsion Co.
Aeronautical Research Association of Princeton.
Aerophysics Research Corp.
Aerospace Research Associates, Inc.
Aerospace Systems, Inc.
Aerotherm Corp.
Aerovironment, Inc.
Air Vehicle Corp.
Airesearch Manufacturing Co.
Alar Products, Inc.
Aleghany Technology, Inc.
Alpha Research, Inc.
Amercon, Inc.
American Cyanamid Co.
American Institutes for Research.
American Oil Co.
American Science and Engineering, Inc.
American Transportation Co.
Ampex Corp.
Analytic Sciences Corp.
Analytical Research Laboratories, Inc.
Anamet Laboratories, Inc.
Anderson, James P., and Co.
Applied Psychological Services.
Applied Sciences Associates, Inc.
Applied Theory, Inc.
Argo Systems, Inc.
Atlantic Research Corp.
Atomics International.
Austin Research Associates, Inc.
Avco Corp.
Avco-Everett Research Lab.
Ball Brothers Research Corp.
Barkley & Dexter, Inc.
Battelle Memorial Institute
Beckman Instruments, Inc.
Beech Aircraft Corp.
Bell Aerospace Co.
Bendix Corp.
Beukers Laboratories, Inc.
Block Engineering, Inc.
Boeing Co.
Boeing Computer Services, Inc.
Bolt Beranek Newman, Inc.
Booz-Allen Applied Research, Inc.
Bourns, Inc.
Braddock, Dunn & MacDonald, Inc.
Breed Corp.
Bunker Ramo Corp.
Burroughs Corp.
C and C Research, Inc.
CCI Corp.
CNR Corp.
Cabot Corp.
Cadre Corp.
Calspan Corp.
Cambridge Collaborative Co.
Canadian Commercial Corp.
Carborundum Co.
Cartwright Engineering, Inc.

Cayuga Associates, Inc.
Celanese Corp.
Celesco Industries.
Center for Communications Research.
Charybdis, Inc.
Chromatix.
Cincinnati Electronics Corp.
Clark David Co., Inc.
Colt Industries, Inc.
Colts Industries, Inc.
Columbia Broadcasting Systems, Inc.
Computer Sciences Corp.
Comstock Wescott, Inc.
Conrac Corp.
Control Data Corp.
Creative Electric, Inc.
Cutler-Hammer, Inc.
DBA Systems, Inc.
Danish Meteorological Institute.
Data Corp.
Datacraft, Inc.
Debell and Richardson, Inc.
Devlr.
Digital Programming Service, Inc.
Donbar Development Corp.
Dow Chemical Co.
Dow Corning Corp.
Dunlap and Associates.
Duvvuri Research Associates.
Dynamics Research Corp.
E F Industries, Inc.
ESB, Inc.
E-Systems, Inc., Melpar Division.
Eagle Picher Industries, Inc.
Earth Sciences Research, Inc.
Edo Corp. Government Products Division.
Electro-Optical Research Co.
Electro-Optical Systems.
Electro-Optical Systems, Inc.
Electromask, Inc.
Electron Emission Systems, Inc.
Electronic Communications, Inc.
Emerson and Cuming, Inc.
Emerson Electric Co.
Environmental Research & Technology, Inc.
Environmental Research Institute of Michigan.
Epsilon Laboratories, Inc.
Esso Research & Engineering Co.
FMC Corp.
Fabric Research Laboratories, Inc.
Fairchild Camera and Instrument Corp.
Fairchild Industries, Inc.
Falcon Research and Development Co.
Fels Research Institute.
Flow Research, Inc.
Foster-Miller Associates, Inc.
Fulmer Research Institute.
GTE Sylvania, Inc.
Garrett Corp.
GCA Corp.
General American Transportation Corp.
General Applied Science Laboratories, Inc.
General Atronics Corp.
General Dynamics Corp.

General Electric Research and Development Center.
General Electric Co.
General Motors Corp.
General Research Corp.
General Technology Corp.
Geomet, Inc.
Geotel, Inc.
Germantown Laboratories, Inc.
Globe Union, Inc.
Goodyear Aerospace Corp.
Gould, Inc.
Greek Atomic Energy Commission.
Grumman Aerospace Corp.
Gulf Oil Corp.
Gulf Radiation Technology.
H. R. B. Singer, Inc.
HSS, Inc.
Hallicrafters Co., The
Hazeltine Corp.
Hercules Inc.
Hewlett-Packard Co.
Hi-Shear Corp.
Hitec Corp.
Holobeam Inc.
Honeywell Inc.
Hughes Aircraft Co.
Hughes Research Laboratories.
Human Resources Research Organization.
Hycor Inc.
Hydronautics Inc.
I L C Industries Inc.
I T L Research Corp.
I T T Gilfillan Inc.
Idealab Inc.
Ikor Inc.
Informatics Inc.
Institute of Fluid Mechanics.
Institute of Organic Chemistry.
Institute of Theoretical Astrophysics.
Instituto Geofisico Del Peru.
Intelcom Industries Inc.
Interand Corp.
International Business Machines Corp.
International Harvester Co.
International Laser System Inc.
International Telephone & Tel Corp.
Interstate Electronics.
Invention Talent Inc.
Iowa State University Press.
Itek Corp.
J–Tec Associates Inc.
K D I Corp.
K M S Technology Center.
K S W Electronics Corp.
Kaman Corp.
Kewanfe Oil Co.
Kinergetics Inc.
Knras-Alterman Corp, the.
L N R Communication Inc.
L O M Corp.
L T V Aerospace Corp.
Laboratory for Experimental Biology.
Lear-Siegler Inc.
Lee Ray Machine Co. Inc.
Leeming and Associates.
Lifson Wilson Ferguson & Winick Inc.

Ling-Temco-Vought Inc.
Linkabit Corp.
Little Arthur D Inc.
Litton Industries.
Litton Systems Inc.
Lockheed Aircraft Corp.
Lockheed Missiles & Space Co Inc.
Loral Corp.
M and B Associates.
Magnavox Co.
Magnetic Corp of America.
Manila Observatory.
Manlabs Inc.
Marquardt Co.
Martin Marietta Corp.
Mason Research Institute.
Mathematical Sciences Corp.
Maxwell Laboratories Inc.
McDonnell Douglas Corp.
McGraw Edison Co.
Mead Technology Laboratories.
Mechanical Technology Inc.
Methonics Inc.
Microwave Associates Inc.
Midwest Research Institute.
Milcom Systems Corp.
Minnesota Mining and Manufacturing Co.
Miteq Inc.
Monsanto Research Corp.
Motorola Inc.
Mount Auburn Research Associates Inc.
National Institute for Aerospace Techniques.
National Committee for Space Research.
Nexon Inc.
Nielsen Engineering and Research Co.
Nielson Engineering and Research Co.
Norman Engineering Co.
North American Philips Corp.
North Electric Co.
Northrop Corp.
Oceanics Inc.
Ohman Research Laboratories Inc.
Olin Mathieson Chemical Corp.
Ordance Research Inc.
Oregon Graduate Center for Study Research.
Orlando Rsearch Corp.
Owens-Illinois Inc.
Panametrics Inc.
Parke Mathematical Laboratories.
Parker Hannifen Corp.
Parsons Corp.
Pattern Analysis Recognition Corp.
Payne Inc.
Peninsular Chemical Research Inc.
Pennwalt Corp.
Perkin Elmer Corp.
Philco Ford Corp.
Photochem Industries Inc.
Photometrics Inc.
Physics International Co.
Pierce John B. Foundation of Connecticut.
Pinson Associations Inc.
Planning Research Corp.
Plastic Coating Corp.
Polhemus Navigation Science Inc.
Quantum System Inc.
Quest Research Corp.
R and D Associates.

R C A Corp.
Radiation Inc.
Radiation Research Associates Inc.
Raven Industries Inc.
Raytheon Co.
RCA Laboratories.
RCA Victor Co Ltd.
Reactive Metals Inc.
Resalab Inc.
Research Triangle Institute.
Reynolds Metals Co.
Rockwell International Corp.
Rohr Corp.
S K F Industries Inc.
S T D Research Corp.
Sage Laboratories Corp.
San Calixto Observatorio.
Sanders Associate Inc.
Santa Barbara Research Center.
SCI Electronics Inc.
SCI Systems Inc.
Science Applications Inc.
Shared Applications Inc.
Shock Hydrodynamics Inc.
Signatron Inc.
Sikorsky Aircraft Co.
Singer Co.
Society of Automotive Engineers.
Solid State Research Inc.
Southern Research Institute.
Southwest Fund for Research and Education.
Southwest Research Intsitute.
Space Data Corp.
Space Ordnance Systems Inc.
Space Sciences Inc.
Spectronics Inc.
Speech Communications Research Laboratory Inc.
Sperry Rand Corp.
Stabilized Optics Corp.
Summit Scientific Corp.
Sun Chemical Corp.
Sun Oil Co.
Sundstrand Corp.
Sundstrand Data Control Inc.
Synectics Corp.
Systech Inc.
Systems Consultants Inc.
Systems Control Inc.
Systems Research Laboratories Inc.
Systems Technology Inc.
T R W Incorporated.
Tamarack Scientific Co.
Technion Inc.
Technion Research and Development Foundation.
Technology Inc.
Technology Service Corp.
Telcom Inc.
Teledyne Inc.
Teledyne Industries Inc.
Texas Instruments Inc.
Texas Nuclear Corp.
Textron Electronics Inc.
Textron Inc.
Thermal Technology Laboratories.
Thiokol Chemical Corp.
Threshold Technology Inc.

Timken Roller Bearing Co.
Titanium Metals Corp of America.
Tri-Con Associates Inc.
Tyco Laboratories Inc.
U R S Corp.
Ultrasystems Inc.
Union Carbide Corp.
Uniroyal Inc.
United Aircraft Corp.
United Technology Corp.
Universal Energy Systems Inc.
Universal Propulsion Co.
Universal Systems Technologies Corp.
Universal Technology.
Valpey Corp.
Varian Associates.
Versar Inc.
Visidyne Inc.
Von Karman Institute for Fluid Dynamics.
Warnecke Electron Tubes Inc.
Watkins-Johnson Co.
Webb Associates.
Weiler Research Inc.
Weizmann Institute of Science.
Westinghouse Electric Corp.
Whittaker Corp.
Williard, Pennington, Vandyke, Inc.
Xerox Corp.
Xonics Inc.
Zenith Radio Corp.

REVIEWS

Chairman McClellan. Proceed.

General Evans. The first review was conducted by the Air Force Systems Command and involved detailed examination at each AFSC laboratory and division doing technology work. The second review was conducted jointly with AFSC, the Air Staff, SAF/RD, and D.D.R. & E. The third review was recently completed in preparation for initiating the fiscal year 1974 program. We are confident that these reviews have accomplished their purpose.

As with domestic programs, we are also scrutinizing the research and technology programs of allies to encourage complementary rather than competitive programs. The European countries are now developing first-rate technology that can be coordinated with the U.S. effort to increase the efficiency of mutual R.D.T. & E. expenditures.

NATO R. & D.

Chairman McClellan. How are you coordinating these programs?

General Evans. We coordinate these programs in many ways and at many levels within DOD. At the Defense Department level, for example, the Director, Defense Research and Engineering, meets twice yearly with his NATO counterparts. Here the broad aspects of weapons development decisions are discussed. At my level, I meet with my counterparts in the European air forces, normally semiannually, and discuss development projects of mutual interest. At the middle management level, there are many panels, subgroups and working groups which address specific weapons systems, technologies, and military

requirements. These groups are under the auspices of NATO and the many bilateral agreements with the NATO nations. In total, this coordination provides to the NATO nations the information necessary for the R. & D. decisions which each of the nations face as they address their NATO obligations of equipping their national forces.

Chairman McClellan. Isn't most of the European research NATO oriented?

General Evans. That is correct, sir, and their research is concentrated in tactical and conventional weapons systems which support European defense.

Chairman McClellan. How much of the Air Force R. & D. is related to NATO?

General Evans. I cannot answer the question precisely because within the Air Force, we do not plan and allocate our R. & D. resources in that manner. Air Force R. & D. is based on future weapons system requirements which in turn are based on U.S. worldwide commitments. The requirements of our forces assigned in Europe are considered along with the requirements of other U.S. forces both at home and abroad. I am unaware of any unique requirements for NATO which generate specific R. & D. tasks not otherwise required.

Chairman McClellan. What percentage of R. & D. funds are expended for developing systems for NATO defense?

General Evans. I am unaware of R. & D. funds expended specifically for developing systems for NATO defense. However, R. & D. funds are used to pay the salaries of 19 U.S. Civil Service personnel assigned to SHAPE Technical Center which does studies related to NATO defense.

ADVANCED MEDIUM STOL TRANSPORT

Chairman McClellan. Proceed.

General Evans. One example of efforts to exploit current technology is the advanced medium STOL transport prototype. This program is proceeding very well, and contracts were awarded to both Boeing and McDonnell Douglas to design and fabricate two prototype aircraft each.

Chairman McClellan. What plan will this replace?

General Evans. It will provide an option to replace the C–130's assigned to the Tactical Airlift Force.

Chairman McClellan. Why is this program necessary?

General Evans. The great majority of the C–130's assigned to the Tactical Airlift Force must either be replaced in the early 1980's if an adequate airlift structure is to be maintained or these aircraft must undergo extensive and probably expensive modifications to extend their useful life beyond this time period. The C–130 is based on early 1950's technology. It is deficient in short takeoff and landing capability, payload, speed, flotation, cargo compartment size, and costs for operations and maintenance.

Chairman McClellan. To date, how much have we expended on this project?

General Evans. As of May 31, 1973, the Air Force has obligated $27.1 million on the advanced medium STOL program.

Chairman McClellan. How many planes do you intend to procure?

General Evans. We have only received approval for the prototype program and have no production commitment. If a production decision is made and approved, we would then determine the number of aircraft we need.

Chairman McClellan. What is the estimated per-unit cost?

General Evans. The estimated unit cost is about $5.0 million (in fiscal year 1972 dollars) for the 300th production aircraft. However, one of the purposes of the prototype program is to obtain greater visibility on the cost of a short takeoff and landing transport.

Chairman McClellan. Proceed.

General Evans. The program objectives are to design and fabricate prototype transport aircraft for test and evaluation to provide a low cost development option for modernizing the tactical airlift force. The prototype program will also define operational rules, safety margins, and related design criteria for STOL transports which could substantially reduce maintenance support requirements.

Although the prototype transport aircraft will use currently available engines, improvements in takeoff distance, radius of action, payload, and operating economy could be realized with advanced technology engines.

Senator Young. Are these cost-plus contracts or what kind of contracts are they? You are contracting with two different companies for the same thing, aren't you?

General Evans. Yes, sir; we are. I will verify this for the record but I think these are fixed price contracts. Normally in a prototype, competitive prototype program, we have to specify a maximum Government obligation otherwise they would just spend more money to better their candidate. So we have to put a lid on them. If it is cost plus we always put a lid on the amount of money we spend.

Chairman McClellan. You set a limit within which the contractor may work.

General Evans. We watch the way he spends that amount of money but he can't spend any more.

Chairman McClellan. You want to make certain he does not collect the maximum and produce much less than the maximum should procure.

General Evans. That is right.

[The information follows:]

AM/STOL Kind of Contract

The contract with the Boeing Company is a cost reimbursement contract with a maximum Government obligation. The contract with the McDonnell Douglas Corporation is a cost share contract with a maximum Government obligation.

BUDGET REQUEST

Chairman McClellan. Proceed.

General Evans. We are requesting $67.2 million for the program in fiscal year 1974. Manufacturing plans will be completed, initial drawings released, and approximately 25 percent of the structure design completed. In addition, tooling fabrication will begin and the contractors will begin fabrication of their No. 1 prototype. The first flight of the prototypes is scheduled for the summer of 1975.

LIGHTWEIGHT FIGHTER PROGRAM

A second advanced development prototype program is the lightweight fighter program.

Chairman McClellan. Is this program coordinated with the projects underway to design systems for specific fighters? Where will this fighter be used? Explain in detail the purpose and costs of this program.

General Evans. The advanced technology features which will be evaluated in the flight test demonstration of the lightweight fighters are expected to contribute significant improvements in air combat maneuvering capabilities. Concerning the coordination with other programs, these features will be applicable to future fighter aircraft and, in some cases, to the modernization of our current fighters. These prototypes are not missionized aircraft—rather they are demonstrators of promising new technology which could not be incorporated in production aircraft because of the risks involved. The program will, however, evaluate the operational utility of an austere, lightweight, high performance fighter and provide an accurate determination of the cost of follow-on operational versions should such an aircraft prove feasible. The total program cost of $117 million includes $10.5 million to develop the General Electric YJ101 turbojet engine to a preliminary flight rating for the Northrop YF–17. The remaining $106.5 million is broken out as follows: $37.9 million to General Dynamics; $39.1 million to Northrop; $8.6 million for YJ101 engines; $9.1 million for F100 engines; and $11.8 million for flight test, support, and management costs.

Chairman McClellan. Proceed.

General Evans. This program is an investigation and hardware demonstration, in a low-cost, high thrust-to-weight fighter prototype, of promising new aerodynamic concepts and design ideas which are expected to have application to future fighter requirements.

In April of 1972, General Dynamics and Northrop were each selected to design, fabricate, and flight test two prototype fighters. The aircraft will weigh approximately 20,000 pounds, have a thrust-to-weight ratio in excess of 1, and be optimized for rapid acceleration and maximum maneuvering capabilities in the air combat arena at speeds from 0.8 to 1.6 mach. Detailed designs have been completed and initial fabrication has begun. The current schedule calls for first flights of both aircraft in early 1974 to be followed by a year of joint contractor-Air Force flight testing. The request for fiscal year 1974 is $48 million for the airframe and the engine.

ADVANCED BALLISTIC REENTRY SYSTEMS (ABRES)

Another technology effort that is of continuing importance is the advanced ballistic reentry systems program. This is a triservice technology program managed by the Air Force.

Chairman McClellan. What funds is the Air Force contributing to this triservice program? When was the program originated and what is its present status? How is each service represented in the program?

General Evans. Although the ABRES program is a triservice program, it is totally funded by the Air Force; $95.3 million is budgeted for the ABRES program in fiscal year 1974.

The program was originated in 1963 by the director of defense research and engineering, Dr. Harold Brown. It is a continuing program which provides the technology base for subsequent engineering development, by the services, of penetration aids and reentry vehicles. The program also includes joint efforts with the Army, primarily in related offense/defense use of optics.

The program director is an Air Force colonel. Reporting to him are three "services"—an Army colonel, an Air Force colonel, and a Navy captain.

Chairman McClellan. Proceed.

General Evans. It provides the technological foundation upon which the future needs of all U.S. strategic missile systems can build and, as such, it represents the only base for ballistic missile reentry vehicle technology in the United States. The fiscal year 1974 program of $95.3 million for ABRES will provide technology development for maneuvering reentry vehicles, multiple reentry vehicles, penetration aids, and basic technology which would be applicable to all classes of reentry vehicles and related disciplines. In addition, we are initiating efforts in the ABRES program for a potential upgrade modification of the Minuteman III reentry vehicle (MK–12) in lieu of a new [deleted] requested last year, engineering development costs will be considerably less.

Senator Young. I don't quite understand what is new about reentry vehicles.

General Evans. It is not just the vehicles themselves but the materials that we use to reduce the erosion of the nose cone. We are working on a maneuvering reentry vehicle that will be able to evade the terminal defenses of the enemy, new penetration aids that will go along with these reentry vehicles which spook the enemy's ability to discriminate which one is the reentry vehicle and which one is the penetration aids. The technology is not new. It is just the techniques, modernization of the technology.

Chairman McClellan. Proceed.

SUMMARY

General Evans. Mr. Chairman, I have tried to summarize for you today a program that will prepare us for the future as well as continue to modernize current forces. I think your review will show it to be an austere program, but one necessary for the Air Force mission. I will be happy to answer any questions you have.

[Tables I–VIII, inclusive, follow:]

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TABLE I
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

RDT&E PROGRAM BY BUDGET ACTIVITY

	FY 73	FY 74
MILITARY SCIENCES	131.5	136.2
AIRCRAFT AND RELATED EQUIPMENT	1,289.9	1,228.0
MISSILES AND RELATED EQUIPMENT	344.8	293.0
MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	339.8	529.1
ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT	111.0	124.0
OTHER EQUIPMENT	525.2	518.1
PROGRAM-WIDE MANAGEMENT AND SUPPORT	388.1	400.3
TOTAL DIRECT PROGRAM	3,130.3	3,228.7

TABLE II
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

MILITARY SCIENCES

	FY 73	FY 74
IN-HOUSE LABORATORY INDEPENDENT RESEARCH	5.3	5.3
DEFENSE RESEARCH SCIENCES	75.3	75.9
ENVIRONMENT	7.0	9.5
MATERIALS	24.2	26.3
PRELIMINARY DESIGN AND DEVELOPMENT	3.0	3.0
INNOVATIONS IN EDUCATION AND TRAINING	6.7	6.0
AIR FORCE PROJECT RAND	8.5	8.7
ANALYTIC SERVICES, INCORPORATED (ANSER)	1.5	1.5
TOTAL	131.5	136.2

TABLE III
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

AIRCRAFT AND RELATED EQUIPMENT

	FY 73	FY 74
INTERNATIONAL FIGHTER AIRCRAFT (F-5E)	17.7	2.6
F-111 SQUADRONS	3.5	0
F-15 SQUADRONS	454.5	229.5
AEROSPACE FLIGHT DYNAMICS	31.9	30.7
AEROSPACE BIOTECHNOLOGY	20.8	20.0
AEROSPACE PROPULSION	28.6	29.5
AEROSPACE AVIONICS	46.8	45.6
AIRCRAFT PROPULSION SUBSYSTEM INTEGRATION	4.3	4.7
ADVANCED AVIONICS FOR AIRCRAFT	12.9	8.2
FLIGHT VEHICLES SUBSYSTEM CONCEPTS	8.8	6.4
RECONNAISSANCE SENSORS/PROCESSING TECHNOLOGY	2.1	2.4
AEROSPACE STRUCTURAL MATERIALS	11.1	12.7
ADVANCED TURBINE ENGINE GAS GENERATOR	11.5	8.0
SUBSONIC CRUISE ARMED DECOY (SCAD)	48.6	72.2
ADVANCED AERIAL TARGET TECHNOLOGY	6.6	5.2
LIGHTWEIGHT FIGHTER PROTOTYPE	40.0	46.5
ADVANCED MEDIUM STOL TRANSPORT PROTOTYPE	25.0	67.2
STALL/SPIN INHIBITORS	1.0	0
ADVANCED TURBOFAN ENGINE	0	15.6
LIGHTWEIGHT FIGHTER ENGINE	6.0	1.5
ELECTRONICALLY AGILE RADAR	3.8	8.2
F-4 AVIONICS	3.9	2.4
AIRCRAFT EQUIPMENT DEVELOPMENT	7.9	8.0
B-1	444.5	473.5
EF-111A	0	15.0
A-10	48.1	112.4
TOTAL	1,289.9	1,228.0

TABLE IV
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

MISSILES AND RELATED EQUIPMENT

	FY 73	FY 74
MINUTEMAN SQUADRONS	139.7	99.8
TACTICAL AIR INTERCEPTOR MISSILES	4.6	4.6
TACTICAL DRONE SUPPORT SQUADRON	.5	0
ROCKET PROPULSION	21.6	20.3
ADVANCED ICBM TECHNOLOGY	7.9	6.0
ADVANCED BALLISTIC RE-ENTRY SYSTEM (ABRES)	95.0	95.3
STRATEGIC BOMBER PENETRATION	3.4	4.0
TACTICAL AIR-TO-GROUND MISSILE (MAVERICK)	8.3	0
HOUND DOG II	2.2	0
WESTERN TEST RANGE	57.6	59.5
WESTERN TEST RANGE TELECOMMUNICATION	4.0	3.5
TOTAL	344.8	293.0

TABLE V
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

MILITARY ASTRONAUTICS AND RELATED EQUIPMENT

	FY 73	FY 74
DEFENSE SUPPORT PROGRAM	32.3	50.2
DEFENSE SYSTEMS APPLICATIONS PROGRAM	6.9	7.5
DEFENSE SATELLITE COMMUNICATIONS SYSTEM	1.6	0
AIR FORCE SATELLITE COMMUNICATION SYSTEM	15.1	17.3
SPECIAL ACTIVITIES	188.4	299.4
SATELLITE CONTROL FACILITY	3.0	3.0
SPACE BOOSTERS	1.8	3.1
SATELLITE DATA SYSTEM	23.0	40.0
SPACE VEHICLE SUBSYSTEMS	4.0	4.1
SPACE TEST PROGRAM	12.0	19.9
SPACE SHUTTLE	4.0	5.5
SATELLITE SYSTEM FOR PRECISE NAVIGATION	3.5	10.7
ADVANCED SURVEILLANCE TECHNOLOGY	11.5	24.5
MISSILE AND SPACE DEFENSE CONCEPTS	1.5	.7
MISSILE ATTACK ASSESSMENT	1.0	10.3
ADVANCED SPACE COMMUNICATIONS	16.2	18.8
SPACE DEFENSE SYSTEM	.9	1.0
AEROSPACE	13.1	13.1
TOTAL	339.8	529.1

TABLE VI
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT

	FY 73	FY 74
ADVANCED WEAPONS	22.1	21.4
CONVENTIONAL MUNITIONS	14.1	14.4
CONVENTIONAL WEAPONS	10.0	11.1
ADVANCED RADIATION TECHNOLOGY	27.1	26.2
CHEMICAL/BIOLOGICAL DEFENSE EQUIPMENT	.5	.5
ARMAMENT/ORDNANCE DEVELOPMENT	8.8	9.4
IMPROVED AIRCRAFT GUN SYSTEMS (GAU-7A)	16.4	22.7
30mm CLOSE AIR SUPPORT GUN SYSTEM (GAU-8A)	9.0	10.3
CLOSE AIR SUPPORT WEAPON SYSTEM (CASWS)	3.0	8.0
TOTAL	111.0	124.0

TABLE VII
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

OTHER EQUIPMENT

	FY 73	FY 74
STRATEGIC AIR COMMAND COMMUNICATION	4.8	4.9
CONUS OVER-THE-HORIZON (OTH) RADAR SYSTEM	3.4	5.5
TACTICAL AIR CONTROL SYSTEM	3.2	4.5
JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC)	2.9	8.6
CLASSIFIED PROGRAM	3.8	7.2
SPECIAL RECONNAISSANCE VEHICLES	10.9	0
AIR FORCE COMMUNICATIONS (DCS)	3.9	3.4
COMMUNICATIONS SECURITY (COMSEC)	2.1	.6
TRAFFIC CONTROL, APPROACH AND LANDING SYSTEM (TRACALS)	6.1	7.4
GROUND ELECTRONICS	40.0	40.5
HUMAN RESOURCES	5.4	8.4
OVER-THE-HORIZON RADAR TECHNOLOGY	2.4	0
BASE SECURITY	2.7	3.6
RECONNAISSANCE/INTELLIGENCE	1.7	0
ELECTRONIC WARFARE TECHNOLOGY	9.3	6.3
SIMULATOR FOR AIR-TO-AIR COMBAT	3.2	2.2
AEROSPACE FACILITIES TECHNOLOGY	2.6	2.6
ADVANCED COMMUNICATIONS TECHNOLOGY	.7	1.2
ADVANCED COMPUTER TECHNOLOGY	1.0	1.0
ADVANCED DETECTION SYSTEM DEVELOPMENT	5.2	5.6

TABLE VII (Contd)

	FY 73	FY 74
ADVANCED DRONE/REMOTELY PILOTED VEHICLE DEVELOPMENT	1.5	2.0
GROUND BASED SENSORS TECHNOLOGY	.9	0
DEFENSE SUPPRESSION	9.6	4.2
AIR-TO-AIR IDENTIFICATION OF NON-COOP TARGETS	2.5	1.9
ELECTRO-OPTICAL WARFARE	3.0	4.3
TACTICAL INFORMATION PROCESSING AND INTERPRETATION	13.2	13.0
LIFE SUPPORT SYSTEMS	4.9	5.3
OTHER OPERATIONAL EQUIPMENT	8.0	6.3
IMPROVED TACTICAL BOMBING	2.3	1.1
RECONNAISSANCE/ELECTRONIC WARFARE EQUIPMENT	8.6	6.1
SYSTEMS SURVIVABILITY	5.2	8.3
IMPROVED AIRCRAFT FIRE FIGHTING EQUIPMENT	.5	.5
INTEGRATED PROGRAM FOR AIR BASE DEFENSE	.3	0
SENSORS FOR WEATHER RECONNAISSANCE AIRCRAFT	3.5	0
COBRA MIST	.5	0
COMMON MOBILITY SUPPORT	.3	.4
ADVANCED AIRBORNE COMMAND POST (AABNCP)	48.3	37.3
TACTICAL LORAN	4.8	9.1
GROUND-BASED SENSORS DEVELOPMENT & TESTING	.3	0
DRONE/REMOTELY PILOTED VEHICLE SYSTEM DEV	0	8.4
SURFACE DEFENSE SUPPRESSION	7.8	6.0
IMPROVED CAPABILITY FOR OPERATIONAL TEST AND EVALUATION	3.5	3.5

TABLE VII (Contd)

	FY 73	FY 74
FOREIGN WEAPONS EVALUATION	1.7	0
PROTECTIVE SYSTEMS	6.7	8.4
F-4/F-105 PROTECTIVE SYSTEMS	5.1	4.5
SIDE-LOOKING RADAR	0	5.0
PRECISION EMITTER LOCATION STRIKE SYSTEM	10.2	8.0
TACTICAL SUPPORT JAMMING	4.4	5.6
AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	194.2	197.8
F-4 WILD WEASEL/ALQ-99	1.8	0
EXPENDABLE DRONES	.3	0
ELECTROMAGNETIC PULSE TEST FACILITIES	8.3	8.1
ADVANCED FIGHTER PROTECTIVE SYSTEMS	14.9	14.9
INTELLIGENCE EQUIPMENT	.9	2.5
ELECTROMAGNETIC COMPATIBILITY ANALYSIS CENTER (ECAC)	4.5	5.0
LINCOLN LABORATORY	18.0	18.0
MITRE	8.5	8.5
AIRCRAFT NAVIGATION SYSTEM	.9	.6
TOTAL	525.2	518.1

TABLE VIII
DEPARTMENT OF THE AIR FORCE
FISCAL YEAR 1974 RDT&E BUDGET ESTIMATES
(In Millions of Dollars)

PROGRAM-WIDE MANAGEMENT AND SUPPORT

	FY 73	FY 74
INTERNATIONAL MILITARY HEADQUARTERS	.9	.6
INTERNATIONAL COOPERATIVE RESEARCH AND DEVELOPMENT	.3	.3
ARNOLD ENGINEERING DEVELOPMENT CENTER BASE COSTS	53.8	57.1
DEVELOPMENT AND TEST SUPPORT	141.7	149.7
ACQUISITION & COMMAND SUPPORT	191.4	192.6
TOTAL	388.1	400.3

JUSTIFICATION INFORMATION

Chairman McCLELLAN. Any further questions, Senator?

Senator YOUNG. No, I don't think so.

Chairman McCLELLAN. As I indicated to you, questions will be submitted to you promptly for your reply.

General EVANS. Thank you, Mr. Chairman.

Chairman McCLELLAN. At this point in the record there will be included additional information from the justifications.

[The justification follows:]

Justification

Personnel Summary (in thousands of dollars)

	1972 actual	1973 estimate	1974 estimate
Total number of permanent positions	20,819	22,496	21,326
Full-time equivalent of other positions	231	200	
Average paid employment	21,705	21,936	21,932
Average GS grade	7.7	7.6	7.5
Average GS salary	$12,171	$12,378	$12,040
Average salary of ungraded positions	$ 7,906	$ 8,564	$ 9,189

PROJECT LISTING

SUMMARY BY BUDGET ACTIVITY

($ In Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
1. MILITARY SCIENCES	142,513	131,532	136,220
2. AIRCRAFT AND RELATED EQUIPMENT	1,184,608	1,289,876	1,228,025
3. MISSILES AND RELATED EQUIPMENT	405,013	344,805	292,980
4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	337,269	339,833	529,100
6. ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT	95,196	110,989	123,965
7. OTHER EQUIPMENT	423,373	525,208	518,120
8. PROGRAMWIDE MANAGEMENT AND SUPPORT	348,956	388,100	400,295
TOTAL RDT&E - DIRECT	2,936,928	3,130,343	3,228,705
REIMBURSEMENTS	214,610	225,000	200,000
TOTAL PROGRAM	3,151,538	3,355,343	3,428,705

PROJECT LISTING

SUMMARY BY PROGRAM CATEGORY

($ In Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
6.1 RESEARCH	87,047	80,650	81,160
6.2 EXPLORATORY DEVELOPMENT	257,625	262,431	266,610
6.3 ADVANCED DEVELOPMENT	393,794	434,886	539,800
6.4 ENGINEERING DEVELOPMENT	735,108	913,930	1,023,300
6.5 MANAGEMENT AND SUPPORT	476,139	503,802	518,095
TOTAL RESEARCH AND DEVELOPMENT PROGRAM	1,949,713	2,195,699	2,428,965
TOTAL OPERATIONAL SYSTEMS PROGRAMS	987,215	934,644	799,740
TOTAL RDT&E - DIRECT	2,936,928	3,130,343	3,228,705
REIMBURSEMENTS	214,610	225,000	200,000
TOTAL PROGRAM	3,151,538	3,355,343	3,428,705

PROJECT LISTING

DETAILS BY BUDGET ACTIVITY

($ in Thousands)

1. MILITARY SCIENCES

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.1		RESEARCH, AIR FORCE				
6.11.01.F		IN-HOUSE LABORATORY INDEPENDENT RESEARCH	5,300	5,300	5,300	1
6.11.02.F		DEFENSE RESEARCH SCIENCES	81,747	75,350	75,860	3
		General Physics	9,347	7,990	8,270	6
		Chemistry	5,397	4,350	4,740	9
		Mathematics	5,785	4,720	5,140	11
		Electronics	9,099	7,390	9,280	14
		Materials	9,067	8,090	8,660	16
		Mechanics	8,257	7,130	7,260	19
		Energy Conversion	6,503	6,560	6,620	22
		Terrestrial Sciences	1,957	2,210	1,720	25
		Atmospheric Sciences	19,456	20,140	17,640	28
		Astronomy and Astrophysics	3,790	4,150	4,210	32
		Biological and Medical Sciences	1,839	1,410	1,210	36
		Human Resources	1,250	1,210	1,110	40
		Subtotal Research Category	87,047	80,650	81,160	
6.2		EXPLORATORY DEVELOPMENT				
6.21.01.F		ENVIRONMENT	7,500	7,000	9,500	44
	4603	Generation and Propagation of Low Frequency Radio Waves	158	154	160	
	4642	Alleviation Techniques for Re-Entry Plasmas	345	255	340	
	4643	Aerospace Radio Propagation	285	216	300	

1. MILITARY SCIENCES (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.21.01.F		ENVIRONMENT (Continued)				
	6665	High Altitude Balloon Development		236	255	
	6670	Atmospheric Sensing Techniques	300	240	300	
	6672	Weather Radar Techniques	265	218	275	
	6687	Aerospace Composition	475	465	802	
	6688	Solar Ultraviolet Radiation	460	490	681	
	6690	Aerospace Density	500	434	785	
	6698	Satellite Meteorology	115	105	315	
	7600	Geodesy for Naviguidance	200	125	150	
	7601	Electric and Magnetic Fields	380	361	380	
	7605	Weather Modification	220	223	230	
	7621	Atmospheric Optics	485	437	485	
	7628	Geophysical and Geokinetic Effects	110	159	205	
	7635	Upper Atmosphere Chemical Processes	435	756	865	
	7639	Wave Propagation Studies	190	125	145	
	7649	Solar Environmental Effects	425	419	475	
	7655	Micrometeorology	125	112	125	
	7659	Aerospace Research Instrumentation	520	296	400	
	7661	Polar Atmospheric Processes	120	81	147	
	7663	Ionospheric Characteristics	142	125	415	
	7670	Infrared Properties of the Environment	380	179	380	
	8624	Variability of Meteorological Elements	110	107	120	
	8628	Mesoscale Weather Forecasting	210	190	215	
	8666	Space Environment Observing and Forecasting Techniques	280	264	280	
	8682	Millimeter Wave Propagation Research	265	228	270	

1. MILITARY SCIENCES (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.21.02.F		MATERIALS	25,440	24,182	26,360	49
	06DS	Air Force Materials Laboratory Operation	9,590	10,908	11,331	52
	7312	Surface Finishes	500	117	200	
	7320	Fibrous Materials	775	755	800	
	7340	Non-Metallic Materials	4,400	4,332	4,900	54
	7343	Aerospace Lubricants	400	468	400	
	7350	Ceramics and Graphite	725	255	500	
	7351	Metallic Materials	3,800	3,310	4,014	57
	7360	Chemistry and Physics of Materials	800	437	434	
	7371	Research in Electrical Materials	1,050	1,100	1,140	
	7381	Materials Applications	3,400	2,500	2,641	
		Subtotal Exploratory Development	32,940	31,182	35,860	
6.3		ADVANCED DEVELOPMENT				
6.31.01.F		PRELIMINARY DESIGN AND DEVELOPMENT	5,300	3,000	3,000	60
6.31.02.F		INNOVATIONS IN TRAINING AND EDUCATION	6,100	6,700	6,000	63
	1192	Advanced Simulation in Undergraduate Pilot Training	5,900	6,300	3,000	65
	1193	Advanced Instructional System		400	3,000	67
	1194	Fully Proceduralized Job Performance Aids	200			
		Subtotal Advanced Development	11,400	9,700	9,000	
6.5		MANAGEMENT AND SUPPORT				
6.51.01.F		AIR FORCE PROJECT RAND	9,600	8,500	8,700	69
6.51.02.F		ANALYTIC SERVICES INCORPORATED (ANSER)	1,526	1,500	1,500	71
		Subtotal Management and Support	11,126	10,000	10,200	
		TOTAL MILITARY SCIENCES	142,513	131,532	136,220	

2. AIRCRAFT AND RELATED EQUIPMENT

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
		SUPPORT OF OTHER NATIONS				
0.10.07.F		INTERNATIONAL FIGHTER AIRCRAFT	42,500	17,700	2,600	74
		Subtotal Support of Other Nations	42,500	17,700	2,600	
		GENERAL PURPOSE FORCES				
2.71.29.F		F-111 SQUADRONS	19,200	3,500		
2.71.30.F		F-15 SQUADRONS	420,200	454,500	229,500	77
		Subtotal General Purpose Forces	439,400	458,000	229,500	
		AIRLIFT AND SEALIFT				
4.11.19.F		C-5 AIRLIFT SQUADRONS	22,400	———	———	
		Subtotal Airlift and Sealift	22,400			
6.2		EXPLORATORY DEVELOPMENT				
6.22.01.F		AEROSPACE FLIGHT DYNAMICS	36,230	31,880	30,730	31
	06DF	Air Force Flight Dynamics	19,210	19,080	18,430	34
	1207	Advanced Military Aircraft Configuration	919	450	355	
	1309	Environmental Interactions	26			
	1315	Bearings	69			
	1347	Structural Testing	147	170	110	
	1362	Crew Escape	297			

2. AIRCRAFT AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.22.01.F		AEROSPACE FLIGHT DYNAMICS (Continued)				
	1366	Aeromechanics	3,594	600	595	
	1367	Structural Design Criteria	82	525	340	
	1368	Structural Design Concepts	326	1,110	720	
	1369	Mechanical Subsystems	501	330	415	
	1370	Dynamic Problems	445	525	475	
	1425	Crew Station	59			
	1426	Simulation of Flight Mechanics	435	260	260	
	1431	Performance Analysis	149	230	230	
	1467	Structural Analysis	202	525	340	
	1470	Cryogenic Cooling	231			
	1471	Aero-Acoustic Problems	405	425	385	
	1472	Dynamic Measurement	68	80	70	
	1476	Airframe Propulsion Compatibility	580	620	615	
	1987	Flight Control Systems		1,860	2,470	
	1988	Aerothermodynamic Simulation		40	40	
	1989	Remotely Piloted Vehicle		470	370	
	1990	Advanced Aircraft Configuration		75	60	
	1991	Small Scale Aircraft		20	20	
	4362	Advanced Structures	454			
	4363	Combat Survivability	2,945	735	585	
	4364	Composite Structures	695	360	230	
	4437	Sound Simulation	61			
	6065	Aerodynamic Decelerators	490	970	565	
	6146	Environmental Control	198	450	820	
	6190	Control-Display	602	465	620	
	8219	Stability and Control	900	905	1,010	
	8222	Control Data	337			
	8224	Stored Energy Data System	257			
	8225	Flight Control Equipment	772			
	8226	Flight Control Techniques	774	600	600	

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2. AIRCRAFT AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.22.02.F		AEROSPACE BIOTECHNOLOGY	20,478	20,761	19,975	85
	06CH	Operation of Aerospace Medical Division and In-House Laboratories	14,848	15,486	15,375	88
	6301	Laser and Nuclear Biomedical Hazards	175	328	350	
	6302	Toxic Hazards of Propellants and Materials	1,000	950	825	
	6319	Mathematical Analysis of Medical Data	20			
	6770	Biotechnology Studies in Advanced Systems	550	52	75	
	6893	Performance in Air Force Operational Environments	175	45	50	
	7164	Aircrew Protective Techniques	180	253	200	
	7184	Human Engineering for Air Force Systems	850	1,203	1,000	
	7222	Combined Stress in Air Force Environments	650	790	725	
	7231	Mechanical Forces on Air Force Personnel	675	831	700	
	7233	Biological Principles in Information Processing	175	291	200	
	7753	Epidemiological Aspects of Air Force Operations	250	5		
	7755	Medical Aspects of Air Force Operations	30	169	100	
	7757	Radiobiology in Aerospace Operations	400	263	225	
	7930	Acceleration/Atmospheric Criteria for Aircrews	350	86	100	
	7996	Exploratory Development of Medical Systems and Equipment	150	9	50	
6.22.03.F		AEROSPACE PROPULSION	28,570	28,639	29,550	89
	06CL	Air Force Propulsion Laboratory Operations	7,837	8,188	9,150	92
	3012	Ramjet Technology	4,074	2,000	2,000	
	3048	Fuels, Lubrication and Hazards	3,145	2,538	2,200	
	3066	Gas Turbine Technology	7,850	10,694	10,700	93
	3145	Power Generation	5,664	5,219	5,500	95

2. AIRCRAFT AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.22.04.F		AEROSPACE AVIONICS	46,940	46,796	45,570	98
	06CQ	Air Force Avionics Laboratory Operations	13,934	17,189	18,070	101
	6090	Avionic Data Handling Technology	797	1,282	1,000	
	6091	Avionic System Design Techniques	819	802	900	
	6095	Inertial Reference and Guidance Technology	2,394	2,525	1,900	
	6096	Electronic Device and Circuit Technology	2,349	1,825	1,985	
	6098	Microwave Device and Circuit Technology	1,839	2,215	2,000	
	6099	Radar and Microwave Technology	2,085	1,555	1,700	
	6100	Laser Technology	2,665	2,374	2,000	
	6102	Electro-Optical Technology	1,934	1,666	1,570	
	6103	Target Signatures and Phenomena	1,326			
	7622	Tactical Weapon Delivery	2,452	1,758	2,000	
	7629	Strategic and Defensive Weapon Delivery	2,368	1,590	1,340	
	7633	Electronic Passive Countermeasures	2,416	2,362	2,000	
	7636	Microwave Active Countermeasures	2,905	2,710	2,250	
	7644	Electro-Optical Active Countermeasures	1,460	1,594	1,555	
	7645	Aerospaceborne Reconnaissance Subsystem Development	2,256	2,750	2,500	
	7646	Reconnaissance/Surveillance Photographic Technology	513	559	500	
	7660	Space Surveillance [Deleted]	1,437	1,656	1,500	
	7662	Avionic Data Transmission and Reception	991	384	800	
		Subtotal Exploratory Development	132,218	128,076	125,825	
6.3		ADVANCED DEVELOPMENT				
6.32.02.F		AIRCRAFT PROPULSION SUBSYSTEM INTEGRATION	8,265	4,300	4,700	103

2. AIRCRAFT AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.3		ADVANCED DEVELOPMENT (Continued)				
6.32.03.F		ADVANCED AVIONICS FOR AIRCRAFT	13,500	12,900	8,200	106
	666A	Advanced Aircraft Navigation	3,400	4,000	3,300	109
	698CK	Advanced Devices	3,900	2,600	2,100	
	698DF	Advanced Weapon Delivery	6,200	6,300	2,800	
6.32.05.F		FLIGHT VEHICLE SUBSYSTEM CONCEPTS	21,150	8,800	6,400	112
	1961	Aircrew Rescue and Escape		800	500	
	444A	Advanced Environmental Control System			700	
	484A	Transonic Aircraft Technology	5,600	1,500	500	
	487T	Controls Configured Vehicle	2,600	2,200	1,800	
	643A	Tactical Airlift Technology	3,700	900		
	680J	Survivable Flight Control Systems	4,700	1,700	1,400	
	695D	Air Cushion Landing System	2,800	1,700	1,000	
		747 Tanker Study	1,750			
	202D	Multimode Matrix Display			500	
6.32.08.F		RECONNAISSANCE SENSORS/PROCESSING TECHNOLOGY	2,700	2,100	2,400	116
6.32.11.F		AEROSPACE STRUCTURAL MATERIALS	13,900	11,100	12,700	119
	69CW	Advanced Composites	8,900	7,000	6,000	122
	486U	Advanced Metallic Structures	5,000	3,500	5,700	124
	1926	Improved Windshields		600	1,000	
6.32.16.F		ADVANCED TURBINE ENGINE GAS GENERATOR	13,700	11,500	8,000	126
6.32.25.F		SUBSONIC CRUISE ARMED DECOY	10,000	48,600	72,200	129

2. AIRCRAFT AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.3		ADVANCED DEVELOPMENT (Continued)				
6.32.32.F		ADVANCED AERIAL TARGET TECHNOLOGY	5,720	6,600	5,200	133
	469A	High Altitude Supersonic Target (HAST)	5,720	4,100	2,200	
	1922	Supersonic Full Scale Maneuvering Target (PQM-102)		2,500	3,000	137
6.32.35.F		LIGHTWEIGHT FIGHTER PROTOTYPE	6,000	40,000	46,500	139
6.32.36.F		ADVANCED MEDIUM STOL TRANSPORT PROTOTYPE	6,000	25,000	67,200	142
6.32.37.F		STALL/SPIN INHIBITORS		1,000		
6.32.38.F		ADVANCED TURBOFAN ENGINE			15,600	145
6.32.40.F		LIGHTWEIGHT FIGHTER ENGINE	3,000	6,000	1,500	148
6.32.41.F		ELECTRONICALLY AGILE RADAR	1,600	3,800	8,200	150
		Subtotal Advanced Development	105,535	181,700	258,800	
6.4		ENGINEERING DEVELOPMENT				
6.42.06.F		F-4 AVIONICS	11,500	3,900	2,400	152
6.42.12.F		AIRCRAFT EQUIPMENT DEVELOPMENT	13,755	7,900	8,000	155
	1126	Hurricane Reconnaissance Radar	445	650	2,000	
	1145	Parachute Altitude Sensing System	150	717	100	
	1197	Replaceable Tread Tire for C-130	165	75	100	
	1908	Improved Pave Aegis	748			
	1912	Modular Airborne Fire Fighting System	240			
	1914	Visual Aerial Delivery Sight		80	100	

2. AIRCRAFT AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Continued)				
6.42.12.F		AIRCRAFT EQUIPMENT DEVELOPMENT (Continued)				
	1927	Standard Precision Navigator		1,858	3,500	162
	2713	Cockpit Instrumentation and Integration	223	520	500	
	4022	Radar Correlation Bombing	10			
	4366	Gunship Test Aircraft	1,150	700	700	
	5047	Audio Video Recording System	150	50		
	5068	F-4E Leading Edge Slat	8,257	2,400	500	
	5069	Advanced Laser Seeker	1,150			
	5075	C-141 Container Delivery	10	50		
	5551	Terrain Avoid/Terrain Following Radar	250	450	500	
	5610	Electro Explosive Devices Safety Qualification	400	350		
	6033	Defense Suppression	307			
	6040	Have Auger	100			
6.42.15.F		B-1	370,300	444,500	473,500	165
6.42.20.F		EF-111A			15,000	168
6.42.25.F		A-10	47,000	48,100	112,400	171
		Subtotal Engineering Development	442,555	504,400	611,300	
		TOTAL AIRCRAFT AND RELATED EQUIPMENT	1,184,608	1,289,876	1,228,025	

3. MISSILES AND RELATED EQUIPMENT

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
		STRATEGIC FORCES				
1.11.18.F		SHORT-RANGE ATTACK MISSILE (AGM-69)	5,882			
1.12.13.F		MINUTEMAN SQUADRONS	181,600	139,700	99,800	175
		Basic Minuteman	98,300	68,500	54,400	175
		Force Modernization	83,300	71,200	45,400	180
		Subtotal Strategic Forces	187,482	139,700	99,800	
		GENERAL PURPOSE FORCES				
2.71.41.F		TACTICAL AGM MISSILES	1,645			
2.71.61.F		TACTICAL AIR INTERCEPTOR MISSILES	7,800	4,600	4,600	185
		Sparrow AIM-7F	7,000	3,500	1,900	176
		Sidewinder AIM-9L	800	1,100	2,700	190
2.72.43.F		TACTICAL DRONE SUPPORT SQUADRONS		500		
		Subtotal General Purpose Forces	9,445	5,100	4,600	
6.2		EXPLORATORY DEVELOPMENT				
6.23.02.F		ROCKET PROPULSION	20,300	21,553	20,280	194
	06CJ	Air Force Rocket Propulsion Laboratory Operation	8,800	8,953	8,980	197
	3058	Space Propulsion Technology	2,532	2,880	2,000	

3. MISSILES AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.23.02.F		ROCKET PROPULSION (Continued)				
	3059	Ballistic Missile Propulsion Technology	4,363	4,260	4,300	198
	3148	Air Launch Missile Propulsion Technology	2,690	3,660	3,300	201
	5730	Supporting Rocket Technology	1,915	1,800	1,700	
		Subtotal Exploratory Development	20,300	21,553	20,280	
6.3		ADVANCED DEVELOPMENT				
6.33.05.F		ADVANCED ICBM TECHNOLOGY	8,440	7,900	6,000	204
6.33.11.F		ADVANCED BALLISTIC RE-ENTRY SYSTEM	95,800	95,000	95,300	207
6.33.14.F		STRATEGIC BOMBER PENETRATION	1,300	3,450	4,000	212
		Subtotal Advanced Development	105,540	106,350	105,300	
6.4		ENGINEERING DEVELOPMENT				
6.43.01.F		TACTICAL AIR-TO-GOUND MISSILE (MAVERICK)	7,825	8,300		
6.43.09.F		HOUND DOG II	4,958	2,200		
		Subtotal Engineering Development	12,783	10,500		
6.5		MANAGEMENT AND SUPPORT				
6.53.01.F		WESTERN TEST RANGE	64,638	57,602	59,500	215
6.53.04.F		WESTERN TEST RANGE (TELECOMMUNICATIONS)	4,825	4,000	3,500	218
		Subtotal Management and Support	69,463	61,602	63,000	
		TOTAL MISSILES AND RELATED EQUIPMENT	405,013	344,805	292,980	

4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
		STRATEGIC FORCES				
1.24.31.F		DEFENSE SUPPORT PROGRAM	31,600	32,300	50,200	220
		Subtotal Strategic Forces	31,600	32,300	50,200	
		INTELLIGENCE AND COMMUNICATIONS				
3.10.35.F		DEFENSE SYSTEM APPLICATIONS PROGRAM	3,300	6,900	7,500	224
3.31.10.F		DEFENSE SATELLITE COMMUNICATION SYSTEM		1,600		
3.36.01.F		AIR FORCE SATELLITE COMMUNICATIONS SYSTEM	6,868	15,100	17,300	228
	1205	Satellite Communications Terminals	2,400	11,100	13,700	232
	1224	Satellite Communications Transponders	1,200	4,000	3,600	235
		SCF Communications	3,268			
3.41.11.F		SPECIAL ACTIVITIES	154,600	188,420	299,400	
3.51.10.F		SATELLITE CONTROL FACILITY	31,632	3,013	3,000	237
3.51.19.F		SPACE BOOSTERS	3,400	1,800	3,100	239
3.51.58.F		SATELLITE DATA SYSTEM	17,800	23,000	40,000	242
		Subtotal Intelligence and Communications	217,600	239,833	370,300	

4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.3		ADVANCED DEVELOPMENT				
6.34.01.F		SPACE VEHICLE SUBSYSTEMS	7,200	4,000	4,100	245
6.34.02.F		SPACE TEST PROGRAM	18,700	12,000	19,900	248
6.34.04.F		SATELLITES, BALLOONS AND ROCKETS	1,600			
6.34.08.F		ADVANCED LIQUID ROCKET TECHNOLOGY	1,600			
6.34.11.F		SPACE SHUTTLE	3,000	4,000	5,500	250
6.34.21.F		SATELLITE SYSTEM FOR PRECISE NAVIGATION	2,700	3,500	10,700	254
6.34.24.F		ADVANCED SURVEILLANCE TECHNOLOGY	22,585	11,500	24,500	257
	A/1980	Advanced Sensor Technology	9,735	2,400	15,200	261
	B/1981	Boost Phase Surveillance Technology	12,850	9,100	9,300	264
6.34.28.F		MISSILE AND SPACE DEFENSE CONCEPTS	2,471	1,500	700	267
6.34.29.F		MISSILE ATTACK ASSESSMENT		1,000	10,300	269
	A/1214	Attack Assessment System		1,000	4,900	272
	B/2016	Attack Assessment Radar Study			800	
	C/2017	CONUS Radars			4,200	274
	D/2018	Low Cost Satellite			400	
6.34.31.F		ADVANCED SPACE COMMUNICATIONS	10,100	16,200	18,800	276
	1227	Space Communications Technology	6,500	13,400	16,200	279
	1228	Satellite Support Subsystems	3,600	2,800	2,600	
		Subtotal Advanced Development	69,956	53,700	94,500	

4. MILITARY ASTRONAUTICS AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT				
6.44.06.F		SPACE DEFENSE SYSTEM	3,113	900	1,000	282
		Subtotal Engineering Development	3,113	900	1,000	
6.5		MANAGEMENT AND SUPPORT				
6.54.02.F		AEROSPACE	15,000	13,100	13,100	285
		Subtotal Management and Support	15,000	13,100	13,100	
		TOTAL MILITARY ASTRONAUTICS AND RELATED EQUIPMENT	337,269	339,833	529,100	

6. ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT				
6.26.01.F		ADVANCED WEAPONS	14,800	22,077	21,350	288
	06CB	Air Force Weapons Laboratory Operations	8,734	9,420	9,490	292
	1900	Control of Noxious Effluents		1,400	850	
	3326	[Deleted]	3,447	9,100	9,000	294
	5791	Arming & Fuzing Technology	516	47		
	5797	Advanced Weapons Concepts	8	10	10	
	8809	Nuclear Vulnerability Technology	2,095	2,100	2,000	
6.26.02.F		CONVENTIONAL MUNITIONS	12,300	14,117	14,415	297
	06CD	Air Force Armament Laboratory Operations	7,710	8,272	8,715	301
	1082	Flame and Incendiary Munitions	630	585	400	
	1921	Aerial Target Technology		220	545	
	2502	Anti-Personnel/Anti-Materiel Munitions	510	510	500	
	2508	Fuzing Technology	310	395	600	
	2510	Target Activated Munitions Technology	252	460	400	
	2511	Development and Evaluation of New Explosives	208	100	250	
	2513	Warheads and Physics of Explosives	257	295	400	
	2543	Weapons Effectiveness Methodology	327	480	500	
	2547	Ballistics Technology	635	410	550	
	2549	Target System Vulnerability for Weapon Development	295	710	500	
	2560	New Gun Concepts	590	1,000	505	
	2563	Illumination and Target Marking Technology	63	260	150	
	2567	Weapon Carriage and Release	513	420	400	
		Subtotal Exploratory Development	27,100	36,194	35,765	

6. ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.3		ADVANCED DEVELOPMENT				
6.36.01.F		CONVENTIONAL WEAPONS	8,555	10,000	11,100	305
	670A	Conventional Weapons Technology	4,755	3,500	2,000	
	670B	Air-to-Surface Weapon Integration			1,300	
	670C	Optical Weapons Delivery Systems			500	
	670D	Modular Weapons		1,800	2,000	
	670E	Air-to-Air Technology			1,100	
	679A	Weapons Guidance Technology	3,800	4,700	4,200	308
6.36.05.F		ADVANCED RADIATION TECHNOLOGY	26,100	27,100	26,200	310
		Subtotal Advanced Development	34,655	37,100	37,300	
6.4		ENGINEERING DEVELOPMENT				
6.46.01.F		CHEMICAL/BIOLOGICAL DEFENSE EQUIPMENT	500	500	500	313
6.46.02.F		ARMAMENT ORDNANCE DEVELOPMENT	10,641	8,795	9,400	315
	1120	Truck Interdiction	975			
	1200	Cold Smoke	65		200	
	1256	BIU-62 Bomblet	400			
	1815	Electro-Optical Guided Bomb	1,000	300		
	1928	SRAM/AEC Joint Test Unit	1,700	1,030	1,500	
	1937	Improved 40mm Ammunition	385			
	2517	Multi-Purpose Bomb Fuzes	639			
	2532	Aircraft Flares/Dispensers	74	65	200	
	2573	Surface Look-Alike Mine Systems	300	1,700	1,450	
	2586	All Altitude Spin Projected Munitions	400	400		
	2592	Airfield Attack Munition	592	500	1,500	
	3122	Advanced Target Activated Munition	1,039	1,200	800	

6. ORDNANCE, COMBAT VEHICLES AND RELATED EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Continued)				
6.46.02.F		ARMAMENT ORDNANCE DEVELOPMENT (Continued)				
	3133	Select Modular Fuzes	601	1,500	1,500	
	3322	Infrared Guided Bomb	140			
	3792	Wide Area Anti-Personnel Munitions		300		
	4432	Cluster Proximity Fuze	250	500	800	
	5113	Anti-Personnel/Anti-Materiel Bombs and Equipment	300	300	300	
	5555	Munitions Handling Equipment	83	225	710	
	5558	Improved Long Duration Target Marker	71	200	131	
	5613	F-4 Supersonic Delivery Capability	215	100	209	
	5708	Nuclear Weapons Support	212	200	100	
	5971	Target Acquisition Aids for Electro-Optical Weapons	1,100	275		
		Arnold Engineering Development Center	100			
6.46.03.F		IMPROVED AIRCRAFT GUN SYSTEMS	14,000	16,400	22,700	321
6.46.05.F		30mm CLOSE AIR SUPPORT GUN SYSTEM	6,300	9,000	10,300	325
6.46.08.F		CLOSE AIR SUPPORT WEAPON SYSTEM	2,000	3,000	8,000	329
		Subtotal Engineering Development	33,441	37,695	50,900	
		TOTAL ORDNANCE, COMBAT VEHICLES, AND RELATED EQUIPMENT	95,196	110,989	123,965	

7. OTHER EQUIPMENT

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
		STRATEGIC FORCES				
1.13.16.F		STRATEGIC AIR COMMAND COMMUNICATIONS	4,589	4,800	4,900	331
	1136	Strategic Air Command Automated Total Information Network (SATIN IV)	1,636	1,000	1,000	
		Emergency Rocket Communications System (494L)	1,300	700		
		Air Force Support to Minimum Essential Emergency Communication Network (616A)	1,653	3,100	3,900	335
1.24.17.F		CONUS OVER-THE-HORIZON (OTH) RADAR SYSTEM	2,979	3,400	5,500	338
1.24.25.F		OVER-THE-HORIZON (OTH) RADAR	1,034			
		Subtotal Strategic Forces	8,602	8,200	10,400	
		GENERAL PURPOSE FORCES				
2.74.12.F		TACTICAL AIR CONTROL SYSTEM	4,232	3,179	4,500	341
2.80.10.F		JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC)	447	2,900	8,600	344
		Subtotal General Purpose Forces	4,679	6,079	13,100	

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
		INTELLIGENCE AND COMMUNICATION (Continued)				
3.31.25.F		AIR FORCE COMMUNICATIONS (DEFENSE COMMUNICATIONS SUPPORT)	1,400	3,900	3,400	352
	1143	Group Data Modem	2	185		
	1144	Automated Technical Control	1,398	3,715	2,400	
	2022	Automated Digital Switching			1,000	
3.34.01.F		COMMUNICATIONS SECURITY (COMSEC)	1,200	2,105	610	355
3.51.14.F		TRAFFIC CONTROL APPROACH AND LANDING SYSTEM (TRACALS)	3,167	6,100	7,400	357
	1956	Landing Control Center (LCC) (AN/TPN-19)	1,644	4,400	4,500	361
	2023	Microwave Landing System	1,353	500		
	2024	Collision Avoidance System	100	500	500	
	2025	Tacan Avionics		700	2,300	
	2026	System Support	70		100	
		Subtotal Intelligence and Communications	22,451	26,817	18,610	
6.2		EXPLORATORY DEVELOPMENT				
6.27.02.F		GROUND ELECTRONICS	39,390	40,035	40,500	363
	06DM	Rome Air Development Center Operations	24,520	24,265	24,835	366
	2801	Information Systems Design Methodology	180	150	150	
	3176	Spaceborne Computation and Control	270	200	220	
	4027	Electronic Warfare Data Processing Techniques	50	200	200	
	4506	Electromagnetic Surveillance Techniques	1,450	1,350	1,350	

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.27.02.F		GROUND ELECTRONICS (Continued)				
	4519	Surface and Long Range Communication Techniques	1,150	1,150	1,160	
	4540	Electromagnetic Vulnerability Reduction	740	800	800	
	4557	Instrumentation, Integration and Test	200	340	150	
	4594	Non-Numerical Data Processing	910	1,040	1,000	
	4600	Electromagnetic Radiation Techniques	180	170	170	
	4610	Information Processes for Communications	100			
	4641	Advanced Data Processing Technology	90			
	5519	Reliability and Maintainability Techniques for Electronics	900	1,400	1,460	
	5534	Special Purpose Sensing Techniques	430	460	460	
	5556	Advanced Recognition and Detection Techniques	165	210	210	
	5569	Advanced Targeting and Charting Techniques	700	650	650	
	5573	Microwave Tubes and Devices	950	1,055	1,050	
	5581	Information Processing Development	2,660	2,760	2,770	
	5597	Display Techniques for Command and Control	720	700	700	
	6244	Reconnaissance Interpretation Techniques	950	970	980	
	6512	Space Surveillance Sensors	285	270	270	
	6515	Lightweight Radar Technology	290	275	275	
	6519	Electromagnetic Counter-Countermeasures for Contingencies	250	250	250	
	6523	Applied Ground Communication Techniques	960	1,070	1,090	
	6527	Optical Surveillance Techniques	290	300	300	

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7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.2		EXPLORATORY DEVELOPMENT (Continued)				
6.27.03.F		HUMAN RESOURCES	5,677	5,391	8,380	368
	06EH	Air Force Human Resources Laboratory Operation	3,784	5,179	8,260	372
	1121	Technical Training Development	464	90		
	1123	Flying Training Development	207			
	1124	Human Resources in System Development and Operations	97	58		
	1125	Air Force Professional Education	62			
	1710	Training for Advanced Air Force Systems	116			
	4499	Evaluation of Department of Defense Manpower Development Programs	6			
	6114	Simulation Techniques for Air Force Training	452	64	120	
	6323	Personnel Management Research and Development	211			
	7719	Air Force Personnel System Development	104			
	7734	Development of Methods for Structuring Air Force Occupations	174			
		Subtotal Exploratory Development	45,067	45,426	48,880	
6.3		ADVANCED DEVELOPMENT				
6.37.02.F		OVER-THE-HORIZON RADAR TECHNOLOGY	1,685	2,400		
6.37.06.F		ADVANCED COMMAND AND CONTROL CAPABILITY	3,200			

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.3		ADVANCED DEVELOPMENT (Continued)				
6.37.14.F		BASE SECURITY	800	2,700	3,600	373
6.37.15.F		RECONNAISSANCE/INTELLIGENCE	4,300	1,736		
6.37.18.F		ELECTRONIC WARFARE TECHNOLOGY	11,540	9,300	6,300	375
6.37.19.F		SIMULATOR FOR AIR-TO-AIR COMBAT	4,200	3,200	2,200	378
6.37.23.F		AEROSPACE FACILITIES TECHNOLOGY	3,025	2,600	2,600	380
6.37.27.F		ADVANCED COMMUNICATIONS TECHNOLOGY	1,500	700	1,200	382
6.37.28.F		ADVANCED COMPUTER TECHNOLOGY	1,900	1,000	1,000	384
6.37.31.F		ADVANCED DETECTION SYSTEM DEVELOPMENT	6,358	5,200	5,600	386
6.37.39.F		ADVANCED DRONE/REMOTELY PILOTED VEHICLE DEVELOPMENT	2,400	1,500	2,000	389
6.37.40.F		GROUND BASED SENSORS TECHNOLOGY	1,900	900		
6.37.41.F		DEFENSE SUPPRESSION	16,100	9,600	4,200	392
	1901	Defense Suppression		6,500	3,700	395
	5974	Pave Storm	2,000	2,100	500	
	5975	Defense Suppression	10,500			
	5976	Area Correlation Technology	2,000	500		
	5977	Remotely Piloted Vehicle Ordnance	1,600	500		

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.3		ADVANCED DEVELOPMENT (Continued)				
6.37.42.F		AIR-TO-AIR IDENTIFICATION OF NON-COOPERATIVE TARGETS	3,800	2,500	1,900	399
6.37.43.F		ELECTRO-OPTICAL WARFARE	4,000	3,000	4,300	401
		Subtotal Advanced Development	66,708	46,336	34,900	
6.4		ENGINEERING DEVELOPMENT				
6.47.01.F		TACTICAL INFORMATION PROCESSING AND INTERPRETATION	10,400	13,195	13,000	404
6.47.02.F		AIR TRAFFIC CONTROL RADAR BEACON SYSTEM/AIR IDENTIFICATION MARK XII SYSTEM (ATCRBS/AIMS)	266			
6.47.06.F		LIFE SUPPORT SYSTEMS	5,750	4,900	5,300	408
6.47.08.F		OTHER OPERATIONAL EQUIPMENT	5,664	7,999	6,300	410
	1135	Armed Forces Entrance Examining Station	27	814	1,000	
	1183	Digital Radar Land Mass Simulator	100	300	1,000	
	1196	Uniform Development	135	130	100	
	1244	Cargo Handling Equipment	1,045	950	200	
	1266	Microform Personnel Record System	1,078	1,410	600	
	1559	Operational Support Equipment for Test and Evaluation	990			
	1752	Radiation Detection Instrumentation	50	50	200	
	1913	Low Level Surveillance	45			
	3834	Aircraft Arresting System	373	460	200	

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Cont'd)				
6.47.08.F		OTHER OPERATIONAL EQUIPMENT (Cont'd)				
	3835	Flight Line Checkout Equipment	150	370	400	
	4054	Aerospace Medical Equipment	100	31	200	
	4133	Shrike Target Simulator	70			
	5559	Cold Fog Dissipation Equipment	180	144		
	5576	Ultra High Frequency Radio		1,170	100	
	5973	Visual Coupled Aids	1,150	1,950	1,900	
	6337	Aircrew Eye Protection		70	300	
	6517	COIN Ranging and Homing	90			
	7045	Expendable Remote Operating Weather Station	6			
	7784	Coherent Radiation Hazard Protection	75	150	100	
6.47.09.F		IMPROVED TACTICAL BOMBING	1,666	2,340	1,100	418
	1129	Pave Spike	1,385	800		
	1210	High Performance SCANA Prototype		400		
	5069	Pave Penny		1,140	1,100	
		Seek Point	281			
6.47.10.F		RECONNAISSANCE/ELECTRONIC WARFARE EQUIPMENT	11,660	8,598	6,100	420
	1146	Non-Silver Printer Processor	350	390	100	
	1155	Optical Intelligence Signatures	850	990	1,500	
	1156	Radiation Intelligence Signatures	575	200	600	

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Continued)				
6.47.10.F		RECONNAISSANCE/ELECTRONIC WARFARE EQUIPMENT (Continued)				
	1157	Forward Looking Infrared Sensor			800	
	1178	Compass Robin	1,500	1,400		
	1180	SR-71 Sensors	425		300	
	1190	Compass Counter	390			
	1232	Electromagnetic Compatibility Measurement	200	150	100	
	1608	Microwave Reconnaissance Receiver	250			
	2704	Tactical Electronic Reconnaissance Sensor	3,465	1,748	1,000	
	3631	Compass Quick	110	97	900	
	4007	Tactical Reconnaissance Film Processor		118	600	
	4010	Infrared Reconnaissance Set	2,495	3,230	100	
	4494	USAF Security Service Data Display	250	275		
	5999	Intelligence Quick Reaction Capability	750			
	6514	Interference Control	50			
	9202	Cobra Ball			100	
6.47.11.F		SYSTEMS SURVIVABILITY	3,100	5,200	8,300	423
	1088	Instrumentation	200	400	300	
	1353	Transient Radiation Effects Facility	200	300	300	
	3763	Survivability of Aeronautical Systems	2,000	2,500	3,800	426
	4695	EMP Assessment of Command and Control Communications	700	2,000	3,900	428
6.47.14.F		IMPROVED AIRCRAFT FIRE FIGHTING EQUIPMENT	500	525	500	431
6.47.15.F		INTEGRATED PROGRAM FOR AIR BASE DEFENSE	800	250		
6.47.16.F		SENSORS FOR WEATHER RECONNAISSANCE AIRCRAFT	5,302	3,500		

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project No.	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Continued)				
6.47.18.F		COBRA MIST	8,317	500		
6.47.20.F		MAPPING CHARTING AND GEODESY	900			
6.47.21.F		COMMON MOBILITY SUPPORT	2,100	300	400	433
6.47.23.F		ADVANCED AIRBORNE COMMAND POST (AABNCP)		48,300	37,300	435
6.47.28.F		TACTICAL LORAN	2,660	4,800	9,100	438
6.47.30.F		GROUND BASED SENSORS DEVELOPMENT & TESTING	2,000	250		
6.47.32.F		DRONE/REMOTELY PILOTED VEHICLE SYSTEM DEVELOPMENT			8,400	441
	468B	Avionics Update			800	
	1184	Compass Cope			7,600	444
6.47.33.F		SURFACE DEFENSE SUPPRESSION	9,900	7,828	6,000	446
6.47.35.F		IMPROVED CAPABILITY FOR OPERATIONAL TEST AND EVALUATION	2,000	3,500	3,500	450
6.47.36.F		FOREIGN WEAPONS EVALUATION	1,000	1,700		

7. OTHER EQUIPMENT (Cont'd

Element Code	Project No.	Title	FY 1972 Estimate	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Continued)				
6.47.38.F		PROTECTIVE SYSTEMS	19,550	6,681	8,400	453
	1627	Simulations, Analysis and Evaluation	4,494	1,258	2,100	
	3829	Infrared and Optical Countermeasures	1,599		1,400	
	4700	Quick Reaction Capability	5,823	390		
	5615	B-52 Protective Systems	796	1,423	900	
	5616	F/FB-111 Protective Systems	877	1,351	700	
	5617	SR-71 Protective Systems	2,100	1,300	1,200	
	5970	Expendable Countermeasures	812			
	5972	Electronic Counter-Countermeasures	160	47	100	
	6510	Flight Test Simulations	2,889	912	2,000	
6.47.39.F		F-4/F-105 PROTECTIVE SYSTEMS	241	5,079	4,500	456
6.47.41.F		SIDE LOOKING RADAR			5,000	459
6.47.42.F		PRECISION EMITTER LOCATION STRIKE SYSTEM		10,200	8,000	463
	1190	[Deleted]		10,200	7,600	467
	1947	[Deleted]			400	
6.47.43.F		TACTICAL SUPPORT JAMMING		4,400	5,600	471
6.47.44.F		AIRBORNE WARNING AND CONTROL SYSTEM	139,300	194,200	197,800	474

7. OTHER EQUIPMENT (Cont'd)

Element Code	Project Number	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.4		ENGINEERING DEVELOPMENT (Continued)				
6.47.45.F		F-4 WILD WEASEL/AIQ-99		1,800		
6.47.46.F		EXPENDABLE DRONES		300		
6.47.47.F		ELECTROMAGNETIC PULSE TEST FACILITIES		8,300	8,100	479
6.47.48.F		ADVANCED FIGHTER PROTECTIVE SYSTEMS	9,400	14,940	14,900	482
6.47.50.F		INTELLIGENCE EQUIPMENT	740	850	2,500	486
		Subtotal Engineering Development	243,216	360,435	360,100	
6.5		MANAGEMENT AND SUPPORT				
6.57.04.F		ELECTROMAGNETIC COMPATIBILITY ANALYSIS CENTER (ECAC)	5,030	4,515	5,030	489
6.57.05.F		LINCOLN LABORATORY	18,000	18,000	18,000	492
6.57.06.F		MITRE	8,500	8,500	8,500	495
6.57.08.F		AIRCRAFT NAVIGATION SYSTEM VERIFICATION	1,120	900	600	498
		Subtotal Management and Support	32,650	31,915	32,130	
		TOTAL OTHER EQUIPMENT	423,373	525,208	518,120	

8. PROGRAM-WIDE MANAGEMENT AND SUPPORT

Element Code	Project Number	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
		SUPPORT OF OTHER NATIONS				
0.10.04.F		INTERNATIONAL MILITARY HEADQUARTERS AND AGENCIES	1,056	915	630	500
		Subtotal Support of Other Nations	1,056	915	630	
6.5		MANAGEMENT AND SUPPORT				
6.58.01.F		INTERNATIONAL COOPERATIVE RESEARCH, AND DEVELOPMENT	274	300	300	502
6.58.02.F		ARNOLD ENGINEERING DEVELOPMENT CENTER BASE COSTS	12,500	53,765	57,120	505
6.58.05.F		DEVELOPMENT AND TEST SUPPORT	142,132	141,660	149,695	508
		Air Force Flight Test Center (California)	45,200	45,373	47,103	509
		Air Force Special Weapons Center (New Mexico)	29,532	28,412	31,548	511
		Armament Development and Test Center (Florida)	67,400	67,875	71,044	513
6.58.06.F		ACQUISITION AND COMMAND SUPPORT	192,994	191,460	192,550	515
		Aeronautical Systems Division (Ohio)	93,993	90,719	92,629	517
		Aerospace Medical Division (Texas)	6,043	5,994	6,068	519
		Electronic Systems Division (Massachusetts)	36,497	39,613	39,123	522

8. PROGRAM-WIDE MANAGEMENT AND SUPPORT (Cont'd)

Element Code	Project Number	Title	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate	Descriptive Summary Page Number
6.5		MANAGEMENT AND SUPPORT (Continued)				
6.58.06.F		ACQUISITION AND COMMAND SUPPORT (Continued)				
		Headquarters, Air Force Systems Command (Maryland)	24,680	23,903	24,658	523
		Space and Missile Systems Organization (California)	31,781	31,231	30,072	526
		Subtotal Management and Support	347,900	387,185	399,665	
		TOTAL PROGRAM-WIDE MANAGEMENT AND SUPPORT	348,956	388,100	400,295	

Section 7 - Federal Contract Research Centers

Federal Contract Research Centers (FCRCs) are organizations primarily engaged in providing independent, specialized technical and scientific support necessary to supplement resources available within the Department of Defense. These centers are sponsored by the Department of Defense and assist the Air Force in the planning, development and execution of the Research, Development, Test and Evaluation programs as well as programs financed by other Air Force appropriations. Amounts included in this request are specifically identified by FCRC, appropriation, and program.

The Air Force FY 1974 estimate for Federal Contract Research Centers totals $137,855,000, of which $105,339,000 is in the RDT&E appropriation, $9,635,000 in the Missile Procurement appropriation, $22,304,000 in the Other Procurement appropriation and the balance of $377,000 in the Operations and Maintenance appropriation.

To insure maximum control of each Air Force Federal Contract Research Center, the Air Force has recently implemented revised management procedures in accordance with direction from the Director of Defense Research and Engineering. The Air Force is now responsible for all defense expenditures at Mitre, Aerospace and Analytic Services, Inc. in addition to its sponsorship of Air Force Project RAND. The control of the defense effort at Lincoln Laboratory will continue to be vested in the Joint Advisory Council which is comprised of the Air Force, Army, and the Advanced Research Projects Agency. The Air Force will continue to exercise judicious management to maintain the Federal Contract Research Center program at a minimum level consistent with the requirements of approved Air Force programs.

AEROSPACE. Aerospace provides systems engineering and technical development in the areas of ballistic missile and military space systems to the Air Force. Most of this effort is in support of the Air Force Space and Missile Organization. Other efforts are devoted to development planning and technology, foreign technology analysis, and research carried on at the Aerospace Corporation laboratories. Major programs with Aerospace support are the Advanced Ballistic Re-entry System, Space Booster systems and the Satellite System for Precise Navigation.

ANSER. Analytic Services Inc. (ANSER) satisfies a continuing need for timely and objective assistance in the analysis of advanced weapon systems from an operational point of view. ANSER's activities are in the general areas of systems analysis, operations research, and the evaluation of the cost effectiveness and technical feasibility of advanced weapon systems. These studies and analyses are used as inputs in the requirements process for new systems and modifications of existing systems.

LINCOLN LABORATORY. Lincoln Laboratory is part of the Massachusetts Institute of Technology. The mission of the laboratory is to carry out a program of research and development pertinent to national defense, with particular emphasis on advanced electronics. A major portion of the research program concerns space communication satellite technology and advanced ballistic re-entry system research. The technical program is managed by a Joint Advisory Council made up of the Air Force, Army and Advanced Research Projects Agency.

MITRE. The MITRE Corporation supports the Electronic Systems Division of the Air Force Systems Command. Major areas of activity are command and control, communications, sensor and support systems. The corporation performs systems engineering, technical direction and supports development planning activities of the Air Force in the general area of electronics. Major programs being supported by MITRE include the Advanced Airborne Command Post; Airborne Warning and Control System; and various strategic and tactical command, control and communications systems.

RAND. The Rand Corporation is an independent, non-profit organization devoted to research in the interest of the national security and welfare of the United States. Rand also conducts research of its own and under contract with other government agencies. Project RAND is that portion of Rand's research effort devoted to furnishing information and independent objective findings derived from selected research and analysis of a wide range of subjects of interest to the Air Force. This research encompasses the study of force posture, doctrine, strategy and allocation of resources primarily in the strategic, tactical, logistics, manpower and system acquisition areas.

A detailed tabulation of the Federal Contract Research Center program follows.

Summary of Federal Contract Research Centers By Appropriation

($ in Thousands)

	FY 1972 Actual	FY 1973 Estimate	FY 1974 Estimate
Aerospace Corporation			
RDT&E	44,253	36,991	40,151
Aircraft Procurement	57		
Missile Procurement	2,879	12,197	9,635
Other Procurement	14,081	14,090	16,039
Operations & Maintenance	284	460	230
Total Aerospace Corporation	61,554	63,738	66,055
MITRE Corporation			
RDT&E	23,325	24,582	26,078
Other Procurement	3,617	4,342	6,265
Operations & Maintenance	1,964	2,259	147
Total MITRE Corporation	28,906	31,183	32,490
Lincoln Laboratory			
RDT&E	24,996	26,628	27,860
Rand Corporation			
RDT&E	9,600	8,500	8,700
Analytic Services, Inc.			
RDT&E	1,770	1,840	1,950
Applied Physics Laboratory/Johns Hopkins University			
RDT&E	500	800	800
Total Program Summary by Appropriation			
RDT&E	104,444	99,341	105,539
Aircraft Procurement	57		
Missile Procurement	2,879	12,197	9,635
Other Procurement	17,698	18,432	22,304
Operations & Maintenance	2,248	2,719	377
Total Federal Contract Research Centers	127,326	132,689	137,855

SUBCOMMITTEE RECESS

Chairman McClellan. That concludes this hearing. The subcommittee will recess, to reconvene at the call of the Chair.

[Whereupon, at 3:40 p.m., Wednesday, June 27, the subcommittee was recessed, to reconvene at the call of the Chair.]

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