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STATEMENT OF SECRETARY OF DEFENSE ROBERT S. McNAMARA

BEFORE THE SENATE SUBCOMMITTEE ON DEPARTMENT OF DEFENSE APPROPRIATIONS

THE FISCAL YEAR 1963-67 DEFENSE PROGRAM AND 1963 DEFENSE BUDGET

FEBRUARY 14, 1962

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Mr. Chairman and Members of the Committee:

We come before you this morning with the first Defense program and budget prepared wholly by President Kennedy's Administration. It is also the first to be developed under the new programming and budgeting procedure. Under this new procedure, the Defense program is developed in relation to the principal military missions of the Defense establishment, rather than by organizational component as in the past. Accordingly, I have arranged my statement in the same manner and will present to you our fiscal year 1963 budget proposals and our longer range program projections in terms of the principal missions of the Defense establishment. Later in your hearings Mr. Hitch will summarize the Defense budget in the traditional manner, by budget category and by appropriation title. The Service Secretaries and Chiefs will then present statements on their respective Services.

To present the program, I will have to cover a considerably broader scope than has been the custom in the past. Furthermore, I believe you would want to have before you essentially the same body of facts upon which we have drawn in reaching our decisions in the formulation of this program. Therefore, my statement today is unusually long by past standards and I would propose, if agreeable to the Committee, to present it in sections, holding myself available for questioning at the end of each or several sections, as it may please the Committee.

Briefly, my presentation is organized in eleven sections. The first section is a general introduction covering the manner in which we developed the program and budget, the assessment of the international situation as it bears on military policies and programs, and major defense policy problem areas. The second section deals with the Strategic Retaliatory Forces; the third with the Continental Air and Missile Defense Forces; the fourth, the General Purpose Forces (tactical ground, air, and sea forces); the fifth, Sealift and Airlift; the sixth, Reserve and National Guard programs; the seventh, Research and Development; the eighth, General Support programs not directly allocable to a mission; the ninth, Civil Defense; and the tenth, the organization and management of the Department of Defense. The eleventh and concluding section is a financial summary

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of the fiscal year 1963 program and budget and a reconciliation of the program costs with the total budget request and with the amounts included in the Bill now before this Committee.

Throughout the presentation I will discuss the programs primarily in terms of forces and quantities of weapons and equipment, and not only for fiscal year 1963 but also for the five years through 1967. Because of the great technical complexity of modern-day weapons, their lengthy period of development, their tremendous combat power and their enormous cost, sound choices of major weapon systems in relation to military tasks and missions have become the key decisions around which much else of the Defense program revolves. But the full cost implications of these decisions, present and future, cannot be ascertained unless both the programs and their cost are projected over a period of years, ideally over the entire life cycle of the weapon system. Since such long-term projections are very difficult to make with any degree of precision, we have fixed on a five-year period, which is short enough to assure reasonably accurate estimates and long enough to provide a good approximation of the full cost.

I am sure you realize that the further into the future we project the programs, the more provisional they should be considered. As we move along, changes will have to be made in the projected programs and entirely new projects, the need for which cannot now be clearly foreseen, will have to be added. As you well know, all such long-term projections tend to have a downward bias, simply because we cannot see clearly the course of future developments.

These uncertainties are even more pronounced in the "costing" of the forward programs. Although we have costed the programs projected through fiscal year 1967, we do not yet have a very high degree of confidence in our estimates beyond 1963, since they have not been subjected to the detailed and rigorous review accorded to the 1963 and current year estimates. Therefore, I will not attempt to project program costs beyond 1963. Perhaps next year, after we have perfected our costing techniques and gained greater experience with the new procedure, we will be able to develop more reliable cost estimates for the years further out in the future.

The costs I will be talking about will be in terms of what we call "total obligational authority." This will differ from new obligational authority in many cases, particularly in the procurement accounts where certain prior-year funds are available for 1963 programs. Furthermore, most of my discussion will deal with the total cost of a program, including the directly attributable costs of military personnel and operation and maintenance, as well as procurement, research and development, and military construction.

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A reconciliation of the program costs with the appropriation accounts and budget titles for fiscal years 1962 and 1963 is shown on Tables 27 and 28.

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I. INTRODUCTION

A. APPROACH TO THE FY 1963-1967 PROGRAM AND FY 1963 BUDGET

When I took office in January 1961, President Kennedy instructed me to:

1. Develop the force structure necessary to our military requirements without regard to arbitrary budget ceilings.

2. Procure and operate this force at the lowest possible cost.

I followed this guidance in all of the three amendments to the fiscal year 1962 program and budget, and I have applied it to the development of the fiscal year 1963-67 programs and to the fiscal year 1963 budget.

Our first step in the formulation of the fiscal year 1963 budget was to initiate a series of studies dealing with what we judged to be the most critical requirements problems. At the same time we began a detailed review and analysis of the Communist threat, now and in the future, based on the latest and best intelligence information available.

While this work was under way, we requested the Military Departments, in May, to submit their program proposals for the period 1963 through 1967. No dollar ceilings were assigned. Instead, the Military Departments were instructed to submit proposals for such forces and such new programs as, in their judgment, were required to support our basic national security objectives. The Departments were particularly encouraged to submit alternative forces and programs so that we would have before us in reaching our decisions the principal choices available.

The Service proposals were received during July and August. Including Civil Defense and the Military Assistance Program, they aggregated over $63 billion in obligational authority for fiscal year 1963 and more than $67 billion for fiscal year 1966. Since these submissions were prepared unilaterally by each Service, it is understandable that duplication and overlapping occurred in certain areas, particularly the Strategic Retaliatory Forces.

The Service proposals were consolidated and subjected to a systematic analysis by the OSD staff. With the assistance of our principal military and civilian advisers, Mr. Gilpatric and I then reviewed in great detail each of the programs in the light of:

1. The mission to be accomplished,

2. The cost/effectiveness relationships among the various alternative means of performing the mission, and

3. The latest intelligence data on the capabilities of the Soviet Union and its satellites.

In September, upon completion of this review, my tentative program decisions were forwarded to the Military Departments and the Chairman of the Joint Chiefs of Staff to serve as the basis for the preparation of the detailed budget requests for fiscal year 1963. In order to assist the Services in their forward planning, this guidance, in most cases, was projected through fiscal year 1967.

In my memorandum forwarding the guidance I made the following points:

1. The Services should feel free, in preparing their fiscal year 1963 budget requests, to change details of the guidance wherever they felt such changes essential to meet military requirements.

2. I expected to continue discussing the tentative program decisions with the Service Secretaries and the Chiefs until the final fiscal year 1963 budget decisions were made.

3. Our major objective would be to increase combat power and, therefore, non-essentials and expensive programs that contribute only marginally to our combat strength must be eliminated.

4. The cost estimates associated with the tentatively approved programs projected in the guidance were approximate and, in many cases, probably too high, and would be subjected to detailed scrutiny by me during the budget review.

No attempt was made to preclude the Services from recommending programs over and above those contained in the guidance. In effect, this arrangement provided the Services with an opportunity to reclama my tentative program decisions. We did this to ensure that all reasonable alternatives would be thoroughly considered before the final 1963 budget decisions were made.

The last step involved the formulation and review of the fiscal year 1963 budget request. The Military Departments submitted their requests beginning on October 23rd. As has been the custom in past years, the requests were reviewed jointly by the budget examiners of my office and the Bureau of the Budget. The findings and analyses developed in this review were forwarded to me for decision.

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Again, in consultation with our principal advisers, Mr. Gilpatric and I reviewed and decided some 560 individual items ranging in value from several hundred thousand dollars to several hundred million dollars. These decisions were transmitted to the respective Services, and in the final step of the review outstanding differences were resolved.

Throughout the program and budget review phases, discussions were held with the Service Secretaries, the Chiefs of Staff, and the Director of the Bureau of the Budget. Progressively, during these discussions, outstanding differences were resolved. I believe it is fair to say that the Defense budget recommended to the Congress by President Kennedy is the product of the best thought available in the Department of Defense and the Executive Branch of the Government. Through our collective efforts, we were able to provide a balanced program adequate to our needs and at the same time to reduce the budget, in terms of new obligational authority, from about $54.2 billion requested by the Services to about $51.6 billion proposed by the President.

There is one basic qualification implicit in our fiscal year 1963 budget request which warrants special comment. Obviously, no one can foretell at this time how or when the Berlin crisis will actually be resolved. Therefore, simply for the purposes of preparing this budget we arbitrarily assumed that the special measures associated with that crisis will terminate by the beginning of fiscal year 1963. Accordingly, the force structure and personnel strength shown in the budget for the end of fiscal year 1962 will not necessarily mesh with those shown for the beginning of fiscal year 1963. Depending on the course of future events, therefore, one or the other of these force and strength projections will have to be adjusted.

Because the international situation may require higher force levels at that time, we have requested for fiscal year 1963 the continuation of the authority contained in Section 612c of the 1962 Defense Appropriation Act. This provision authorizes the Secretary of Defense, upon determination by the President that it is necessary to increase the number of military personnel on active duty beyond the number for which funds are provided, to treat the cost of such an increase as an excepted expense. The vital importance of being able to respond promptly to sudden changes in the international situation was clearly demonstrated last fall. In view of the critical uncertainties which still confront us in Berlin, re-enactment of this provision for fiscal year 1963 is clearly warranted.

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B. ASSESSMENT OF THE INTERNATIONAL SITUATION AS IT BEARS ON MILITARY POLICIES AND PROGRAMS

Although we have taken certain special measures directly related to the Berlin crisis, the defense program we are recommending for the coming fiscal year is geared to our global requirements over the long term. We are well aware that the Berlin crisis is but another chapter in the continuing struggle between Communist Imperialism and Freedom. Even while we meet here today, the forces of Freedom and Communism are locked in an armed struggle over the future of South Vietnam. The sovereignty of Laos still hangs in the balance. Even now the Soviet Union is exerting strong pressure on Finland. The Communists are seeking to gain a foothold in the Congo. Already they have secured a grip on Cuba, only 90 miles off our own coast.

Serious instability in other parts of the world may provide the Communists other opportunities to enlarge the area of the struggle. As we have seen in the past, the Communists are quick to take advantage of a breakdown of law and order in any part of the world. They are quick to identify themselves with any change in the status quo, and with any emerging threat to existing authority. One has only to contemplate the ferment which exists in many countries around the globe, including the Western Hemisphere, to appreciate the potential for new crises. Clearly, one of the major problems confronting this nation and its allies is how to help safeguard freedom during a period of rapid and often drastic change in many parts of the world. The problem is particularly acute in the emerging nations of Africa, the relatively new sovereignties in Southeast Asia and in those nations in South and Central America which are now and will be going through a period of great social reform.

Obviously, military power alone cannot solve all of these problems. Diplomacy, economic assistance, and ideological conviction all have their roles to play in the struggle to safeguard freedom. The principal purpose of our military programs, including military assistance, is to deter the Communists from resorting to the use of armed force in seeking to achieve their objectives. Even here, the line of demarcation is far from clear. As we have seen in recent months, the Communists have stepped up what Mr. Khrushchev calls "wars of national liberation" or "popular revolts" and which we know as covert armed aggression, guerrilla warfare and subversion. To meet this form of the Communist threat, new means must be devised.

Meanwhile, we must continue to guard against general nuclear war and local wars which may escalate into general war. These continue to be the most acute dangers to our national security and, indeed, to the security of the entire free world.

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But our policy is not merely defensive. We need not and are not merely reacting to the Communist initiative. Our ultimate objective is a peaceful world in which every nation large and small is free to determine its own destiny. To this end we shall continue our efforts to achieve a safeguarded system of disarmament or arms reduction. But, we shall not hesitate to take up arms to defend freedom and our own vital interests. We are resolved to continue the struggle in all its forms until such time as the Communist leaders, both Soviet and Chinese, are convinced that their aggressive policies, motivated by their drive to communize the world, endanger their security as well as ours.

C. MAJOR DEFENSE POLICY PROBLEM AREAS

1. Collective Defense

Our military policy, as in the past, continues to be firmly based on the principle of the collective defense of the Free World. Aside from the obvious fact that we are stronger united than alone, any loss in the Free World position is a loss to the security of the United States.

The issue of Berlin is a prime example. What is at stake there is not only the territory of that city or the freedom of its 2 million people, but even more important, the ability of the Free World Alliance to continue to be master of its own destiny. What Mr. Khrushchev seems to be seeking is a virtual capitulation by the Alliance. He is trying to show that the Soviet Union now has the power to dictate the future shape of the world.

It should be clear to all Americans that we cannot enhance our own safety by a retreat in Berlin. The slippery road of appeasement can only lead to our isolation and ultimately to disaster. It would inevitably lead to the breakdown of the NATO Alliance and to a loss of confidence in the strength and purpose of the United States -- everywhere.

For the sake of our own safety we must be prepared to defend the outposts of Freedom around the world. We must be ready to meet the Communist challenge in its various forms using whatever means -- military, economic, political or ideological -- best serves the purpose. We cannot, and need not, do this job alone. Our allies around the world have great and growing economic and military strength. What is needed is a unity of purpose -- a common determination to use this strength effectively in the collective defense of the Free World Alliance.

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In this Alliance, NATO plays a very special role. Not only do our NATO partners represent, after the United States, the greatest source of economic, political, military, and ideological strength opposing the Communist camp; they also constitute the bastion of Free World power closest to the center of Communist military strength. There is no question but that European NATO represents the balance of power in the struggle against Communism. The loss or neutralization of this area would be a disastrous blow to our own security. Therefore, if for no other reason than our own self-interest, we must maintain within the NATO Alliance the closest kind of cooperation at all levels and in all spheres; we must concert our efforts no matter how great the difficulties. And, indeed, the existence of difficulties should not dismay us. After all, we are dealing with sovereign nations whose history extends back far beyond our own, nations with their own particular devotion to democracy and freedom. They are entitled to their own views and their views are entitled to the most careful consideration by us.

Thus, in planning our own military forces we must take into account the plans of the other Free World nations, particularly our NATO partners. We must continue to plan for the collective defense, with each member of the Alliance providing the forces best suited to its capabilities and talents. Collectively, particularly within NATO, these forces should be brought into better balance with the changing character of the threat.

After long and intensive study, we have reached the conclusion that, while our nuclear forces are increasing, greater emphasis than in the past must be given, both by ourselves and our NATO Allies, to our non-nuclear forces. This does not mean that we would hesitate to use nuclear weapons even in a limited war situation, if needed. As I stated in my appearance before the Committee last spring:

> ". . . Even in limited war situations we should not preclude the use of tactical nuclear weapons, for no one can foresee how such situations might develop. But the decision to employ tactical nuclear weapons in limited conflicts should not be forced upon us simply because we have no other means to cope with them. There are many possible situations in which it would not be advisable or feasible to use such weapons. What is being proposed at this time is not a reversal of our existing national policy but an increase in our non-nuclear capabilities to provide a greater degree of versatility to our limited war forces."

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That is still our policy.

With the help and support of the Congress, I believe we have made a good start in adding to our conventional forces. But much more needs to be done. We must not only raise the general level of our non-nuclear forces, but we must also bring the various elements into proper balance. If we are to have the capacity to respond promptly to limited wars in any part of the globe, and possibly in more than one place at the same time, we must have:

a. Adequate combat-ready conventional forces.

b. Airlift and sealift to move these forces promptly to wherever they may be needed.

c. Tactical air support for the ground forces.

d. Sea forces to ensure control of the seas.

e. Balanced and properly positioned inventories of weapons, equipment, and combat consumables to ensure that these forces have what they need to fight effectively.

We have also made a good start on building up the specialized forces required to cope with covert military aggression, guerrilla warfare, etc., and we are pressing forward with the development of the specialized equipment and weapons required by such forces.

But, even more important, we must help the less-developed and less-stable nations of the Free World to develop these same capabilities. This is the primary need in such countries as South Vietnam. We must help them, not only with the specialized weapons and equipment required, but also with training and on-the-spot advice. All of us in the Free World have much to learn about counter-insurgency and guerrilla warfare operations, but learn we must if we are to meet successfully this particular aspect of the Communist threat.

Admittedly, it will take much more than military force alone to stamp out Communism permanently in such places as South Vietnam. We must help these people to provide a more desirable alternative to Communism, and to do so will require all the means at our disposal -- political, ideological, technical, scientific and economic, as well as military.

2. Balance Between Regular and Reserve Forces

Another area of military policy which has caused us a great deal of concern is the balance between our regular and reserve forces, and the role of the reserve forces in this cold war period. Particularly pertinent is the use to be made of the reserve forces in situations short of general war, and especially in periods of cold war crisis when our military forces may have to be brought up to peak readiness without necessarily being committed to combat. If the reserve components are to serve a limited war or cold war role, they must be available, at least in part, for an immediate call-up in times of crisis -- and these crises may occur quite frequently in the years ahead. We recognize the hardships such repeated call-ups would inflict on the reservists involved.

What then can be done to minimize the penalties to the reservists while maintaining proper military strength? First, we could reduce our reliance on the reserve components for limited war and especially cold war duty by increasing the size of our regular forces. Second, we could establish in the reserves selected, priority forces with a high state of readiness. By providing these forces with a truly high level of manning, training and equipping, we could raise their readiness to a point where they could be committed to combat within a period of weeks after being called up.

Plainly, if we could bring at least selected units of the reserve components to a high level of combat readiness, we would not need to call them to active duty until the situation had reached the point where conflict had started or was clearly imminent. This is what we had in mind in the Second Amendment to the Fiscal Year 1962 Budget, but our plan was overtaken by events. It would have required many months of hard work to bring the selected units up to the level of combat readiness desired and we did not get the time. Therefore, when the Berlin crisis reached a point where prudence dictated an increase in our combat ready, limited war forces, we had no alternative but to call up two National Guard divisions and their supporting forces, plus a large number of other reserve units required to round out and expand the active forces. Obviously, these reserve units could be made combat ready much more quickly on a full-time basis than they could on reserve status.

This action has served its purpose well. We are convinced that the rapid build-up in our conventional forces made possible by the call-up of the reserves has done much to stabilize the

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Berlin situation. But improvisation is not a substitute for a sound long-term policy. It is not a practical policy to rely on the reserve forces to meet the repeated crises which inevitably lie ahead. We must maintain an adequate level of active forces to meet these crises, relying on the reserve forces for augmentation only when armed conflict is imminent. Those reserve units which are subject to call for limited war crises must be brought to a much higher level of combat readiness and given first call on all the resources available to the reserve components.

The increase in the regular forces and the planned improvements in the readiness of the reserve forces should make possible some reduction in the size of the latter. The time has come when the reserve forces must be tailored to fit our over-all force requirements and all unnecessary drains on our resources eliminated. The concept of "one military establishment" must be made a reality. This is not a new problem. It has been under study for many years. We believe that now is the time to start doing something about it.

3. Civil Defense

Another problem of long standing is Civil Defense. If we believe what we say about being prepared to fight an all-out nulear war if one should be forced upon us, then we must take whatever reasonable measures are available to us to protect our population.

It is universally recognized that there is no practical way to protect the population within the immediate range of a nuclear bomb detonation. Even blast shelters would offer no protection in a direct hit and the feasibility of providing such shelters for any large part of our population is questionable. But we can protect our population against the after-effects of a nuclear attack, namely, fallout. This is a real and widespread danger which could kill or injure tens of millions of our people. We have already made a good start in attacking this problem, but the hardest and by far the costliest part of the task still lies ahead.

4. Impact of the Defense Program on the Economy

Major changes in the size, composition and pace of the Defense program are bound to have an important impact on the Nation's economy, both directly and indirectly. The rapid advance of technological innovation not only creates the need for new weapon systems and facilities but also renders obsolete the old.

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We recognize that these changes create very difficult problems for the businesses, communities, and individuals affected. Therefore, we have taken whatever reasonable measures lie within the capabilities of the Government to alleviate hardships. Within the Defense Department, itself, we have established a special office to deal with problems stemming from such dislocations. In this endeavor, we have had the help of other agencies, notably the Department of Commerce and the Department of Labor.

We shall continue these efforts in the future but we cannot compromise the basic principle that the Defense program must be guided primarily by national security requirements. All other considerations, as important as they may be, must be considered secondary to this primary objective. I am sure that all of our citizens recognize this imperative.

5. Balance of Payments

Another area in which the Defense program has an important economic impact is in our international balance of payments. Defense expenditures entering the balance of payments, including military functions, military assistance and the purchase of uranium, have been running at a rate of about $3 billion per year. Wherever it has been possible to curb this dollar outflow without disturbing vital foreign programs or reducing needed military strength abroad, the necessary steps have been taken. During the past year Department of Defense personnel overseas have undertaken a voluntary program to reduce their personal expenditures in foreign economies; the number of foreign civilians employed by the Defense Department is being reduced; purchases of supplies and equipment of foreign origin -- by both appropriated and nonappropriated fund activities -- are being curtailed; and the movement of dependents to Europe has been suspended -- although for military rather than balance-of-payments reasons.

We have also undertaken to persuade our financially-capable allies to make offsetting purchases from us of military goods and services and to share and finance jointly support and training facilities which we maintain abroad. Recent negotiations to this end with the Federal Republic of Germany have been very successful, and we are pursuing similar arrangements with other countries.

6. Financial Burden of the Defense Program

Finally, we are not unmindful of the burden which our defense effort places on the American taxpayer. We have tried, in developing our 1963 budget request, (summarized on pg 122) to eliminate all unnecessary and marginal expenditures, in order to keep the total at the lowest possible level consistent with our military needs.

* * * * *

II. STRATEGIC RETALIATORY FORCES

I would now like to turn to the specifics of the program proposed for the coming fiscal year and planned through fiscal year 1967.

First, I would like to discuss the Strategic Retaliatory Forces. These are the forces which are designed to carry out the long-range strategic mission and which would carry the main burden of the battle in a general nuclear war. They include the long-range bombers, their air-to-ground and decoy missiles, and their tankers; the land-based and submarine-based strategic missiles; and the system for the command and control of the forces.

A. THE REQUIREMENT

In contrast to most other military requirements, the requirement for strategic retaliatory forces lends itself rather well to reasonably precise calculation. A major mission of these forces is to deter war by their capability to destroy the enemy's war-making capabilities, including not only his military installations but also his production and government-control centers, and under certain conditions, his urban society. With the kinds of weapons available to us, this task presents a problem of reasonably finite dimensions, which are measurable in terms of the number and type of targets or aiming points which must be destroyed and the number and types of weapon delivery systems required to do the job under various sets of conditions.

The first step in such a calculation is to determine the number, types, and locations of the aiming points in the target system.

The second step is to determine the numbers and explosive yields of weapons which must be delivered on the aiming points to ensure the destruction or substantial destruction of the target system.

The third step involves a determination of the size and character of the forces best suited to deliver these weapons, taking into account such factors as:

1. The number and weight of warheads that each type of vehicle can deliver.

2. The ability of each type of vehicle to penetrate enemy defenses.

3. The degree of accuracy that can be expected of each system, i.e., the CEP.

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4. The degree of reliability of each system, i.e., the proportion of the ready operational inventory that we can count on getting off successfully within the prescribed time.

5. The cost/effectiveness of each system, i.e., the combat effectiveness per dollar of outlay.

Since we must be prepared for a first-strike by the enemy, allowances must also be made in our calculations for the losses which our own forces would suffer from the initial enemy attack. This, in turn, introduces a number of additional factors into our calculations:

1. The size, weight, and effectiveness of a possible enemy attack--based on estimates of the size and character of the enemy's long-range strategic offensive forces and the warhead yields, reliability and accuracy of their weapon systems.

2. The degree of vulnerability of our own strategic weapon systems to such an attack.

Clearly, each of these crucial factors involves various degrees of uncertainty. But these uncertainties are not completely unmanageable. By postulating various sets of assumptions, ranging from optimistic to pessimistic, it is possible to introduce into our calculations reasonable allowances for these uncertainties. For example, we can use in our analysis both the higher and lower limits of the range of estimates of enemy ICBM's and long-range bombers. We can assign to these forces a range of capabilities as to warhead yield, accuracy and reliability.

With respect to our own forces, we can establish, within reasonable limits, the degree of reliability, accuracy, and vulnerability of each type of offensive weapon system and its ability to penetrate the enemy defenses under various modes of operation. Obviously, the last factor also involves an estimate of the size and character of the enemy's defenses.

This is, admittedly, a somewhat oversimplified version of the actual calculations we made to help us determine the size and character of the Strategic Retaliatory Forces required, now, and over the next five or six years -- to assure that we have at all times the capability to destroy any nation which might attack us, even after we have absorbed the first blow.

B. PRESENT STRATEGIC RETALIATORY FORCES

There is no question but that, today, our Strategic Retaliatory Forces are fully capable of destroying the Soviet target system, even

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after absorbing an initial nuclear surprise attack. We have a total of about 600 manned bombers on 15-minute ground alert plus about 50 operational ATLAS and TITAN missiles on launchers and 80 POLARIS missiles in deployed submarines. These forces can carry about 1300 weapons aggregating about 2500 megatons of yield. Allowing for losses from an initial enemy attack by about 200 bombers, about 25 ICBM's, and, perhaps, a few submarine-launched missiles and allowing for losses enroute to target, we calculate that our forces could destroy virtually all of the Soviet target system, and without any help from the deployed tactical air units or carrier task forces.

C. FUTURE STRATEGIC RETALIATORY FORCES

As to the future: How large a strategic retaliatory force and what combination of weapons system do we need over the next several years to continue to deter the Soviet Union, or, if deterrence fails, to be able to strike back decisively even after absorbing an initial nuclear attack?

Obviously, the size and kind of forces we will need in the future will be influenced, in large part, by the size and kind of long-range nuclear forces the Soviets could bring against us and our allies and by the effectiveness of their defensive system. If we assume, as in fact we have, that the Soviet Union will eventually build a large ICBM force, then we must concentrate our efforts on the kind of strategic offensive forces which will be able to ride out an all-out attack by nuclear-armed ICBM's in sufficient strength to strike back decisively. As the Soviet Union hardens and disperses its ICBM force and acquires a significant number of missile launching submarines (as we must assume that it will do in the period under discussion), our problem will be further complicated.

Furthermore, it is possible that the Soviet's initial strike might be directed solely at our military installations, leaving our cities as hostages for later negotiations. In that event, we might find it to our advantage to direct our immediate retaliatory blow against their military installations, and to withhold our attack on their cities, keeping the forces required to destroy their urban-industrial complex in a protected reserve for some period of time.

Accordingly, we should plan for the 1965-1967 time period a force which could: 1. Strike back decisively at the entire Soviet target system simultaneously; or 2. Strike back, first, at the Soviet bomber bases, missile sites and other military installations associated with their long-range nuclear forces to reduce the power of any follow-on attack -- and then, if necessary, strike back at the Soviet urban and industrial complex in a controlled and deliberate way. Such a force would give us the needed flexibility to meet a wide range of possible general war situations.

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With these over-all objectives in mind and utilizing the analytical procedures I outlined earlier, we studied a large number of alternative combinations of weapon systems and finally arrived at the force structure presented in Table 2 to this statement.

As you can see from this Table, we plan to continue a mixed force of missiles and manned bombers throughout the entire planning period, 1963-1967. Although most of the aiming points in the Soviet target system, because they are fixed, soft and of known locations, can best be attacked by missiles, there is still a role to be played by the manned bombers. They will be useful in tracking down and destroying targets of uncertain location and in attacking hardened targets.

In order to improve their chances of penetrating to their targets, the manned bombers will need the help of missiles for suppression of enemy air defenses HOUND DOG and SKYBOLT air-to-ground missiles, and MINUTEMAN ICBM's. Hard targets could also be attacked directly by ATLAS and TITAN missiles because of their heavier warheads, but they are less accurate than bombs dropped by manned aircraft. Because the POLARIS has the greatest survival potential of any of our long-range nuclear delivery systems in a nuclear war environment, it would be one of the most suitable weapons to hold in the protected strategic reserve. Thus, a properly balanced combination of all of these weapon systems is required in our Strategic Retaliatory Forces.

1. Aircraft Forces

a. Bombers

The build-up of the B-52 force to 14 wings or 630 operational aircraft will be completed by the end of this year, and that force will be maintained at least through fiscal year 1967. Sufficient advance attrition aircraft have been procured with fiscal year 1961 and prior-year funds to maintain the 14 wings at authorized strength through this time period. The $515 million appropriated last year for the procurement of additional B-52's will not be required and, subject to the approval of the Congress, will be applied against fiscal year 1963 Air Force aircraft requirements.

I believe my reasons for not using the additional B-52 funds are well known to this Committee, but it may be useful to restate them briefly once more. Procurement of another wing of B-52's would increase the operational inventory of that aircraft by only 7%, and the total inventory of long-range nuclear delivery vehicles by less than 2% at end fiscal year 1964. Furthermore, manned bombers present soft and concentrated targets and they depend upon warning and quick response for their survival under nuclear attack. This is a less reliable means of protection than hardening, dispersal, and mobility. Moreover, reliance

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on warning and quick response means that the bombers must be committed to the attack very early in the war and cannot be held in reserve to be used in a controlled and deliberate way. Finally, bombers are expensive. It costs about $1.4 billion to buy a wing of B-52's, together with its tankers and SKYBOLT missiles, and to operate it for five years. For the same cost, we can buy and operate for the same period of time 250 hardened and dispersed MINUTEMAN missiles or 6 POLARIS submarines.

Twenty-nine of the 42 B-52 squadrons will be equipped with the HOUND DOG air-to-ground missile. Initially, each squadron will be provided with 20 missiles. As the SKYBOLT becomes available, beginning in 1965, we plan to reduce the number of HOUND DOG squadrons but increase the number of HOUND DOG missiles per squadron to 24, and start to equip some of the B-52 squadrons with the SKYBOLT. Since the B-52 can carry 4 SKYBOLT in place of 2 HOUND DOG, each squadron will be provided 46 SKYBOLT missiles. By the end of fiscal year 1967, we should have 17 B-52 squadrons equipped with 408 HOUND DOG and 22 squadrons equipped with 1012 SKYBOLT, for a total of 39 squadrons of aircraft and over 1400 missiles. With this air-to-surface missile inventory, the B-52 alert force will be loaded to it's full capacity, keeping in mind that not all B-52's can carry SKYBOLT. One note of caution: the SKYBOLT is still under development and there are a number of serious technical problems yet to be solved.

By the end of the current fiscal year, fourteen B-52 squadrons will also be equipped with 28 QUAIL decoy missiles each and this program will be maintained at least through fiscal year 1967.

The planned B-58 force of 2 wings or 80 operational aircraft will be in place by the end of this year. We plan to maintain two wings throughout the programmed period.

As the missile forces are built up, the number of B-47's will be gradually reduced until by the end of fiscal year 1966, all have been phased out of the force. We will, of course, continue to have the option during this period of retaining some of these aircraft in the force if later developments should make that necessary.

Thus, our total manned bomber force by end fiscal year 1966 would comprise 710 operational aircraft, 630 B-52's, and 80 B-58's.

b. Alert measures for manned bomber force

In July of last year, we implemented a program to place 50% of the manned bomber force on 15-minute ground alert. This measure is essential to the survival of the bomber force in the event of a ballistic missile attack, and will be continued throughout the programmed period.

Although we do not now foresee a need to expand the present air alert program of 12 sorties per day plus an on-the-shelf capability to fly one-eighth of the force for one year, we do strongly recommend that Section 612b of the fiscal year 1962 Defense Appropriation Act be continued. This Section authorizes the Secretary of Defense, upon determination by the President that such action is necessary, to provide for the cost of an airborne alert as an excepted expense. Until we build up greater experience and confidence in our warning systems, it would be very prudent to retain this option to increase quickly the airborne alert in periods of great international tension.

c. Tankers

We have programmed for 1966-67 a force of 645 KC-135's. About 470 are required to support the B-52's, a ratio of somewhat more than 2 tankers for every 3 bombers. Eighty tankers are required to support the 80 B-58's, a ratio of one for one. Seventy KC-135's are required to support the Tactical Air Command and 25 are needed as airborne command posts. Together with command support, attrition requirements, etc., we will need to buy a total of well over 700 KC-135's. Six hundred and thirty-six have already been funded and an additional 92 are included in our 1963 budget request.

d. Strategic Reconnaissance Aircraft

For strategic reconnaissance, we plan to procure [redacted] specially configured C-135's to replace the 45 RB-47's still in the force. These new aircraft, designated RC-135, will be acquired over a 2-year period and all are expected to be operational by fiscal year 1965.

2. Missile Forces

a. ATLAS

Turning now to the strategic missiles, our program provides for the completion of the 13-squadron ATLAS program and 12-squadron TITAN program. As shown in Table 2, all 129 ATLAS missiles on launchers should be in place by the end of fiscal year 1963 and the 114 TITAN a year later. As we build up the MINUTEMAN and POLARIS forces, it may be desirable to start phasing out some of the soft ATLAS. The reduction from 129 at end fiscal year 1965 to 114 by end 1967, shown on Table 2, is merely indicative of the trend. As I pointed out at the beginning of my statement, our force projections beyond fiscal year 1964 or 1965 are still quite tentative and we may decide later on to retain all of the ATLAS missiles through fiscal year 1967 or to phase them out faster.

b. TITAN

We considered again a proposal to increase the planned number of TITAN II's. This missile will use storable fuel and will be emplaced in well-dispersed and hardened sites. But its total system cost per missile on launcher is estimated at 4 times that of a MINUTEMAN missile. Although the TITAN II will be able to deliver a [redacted] warhead, compared with the [redacted] warhead planned for the MINUTEMAN missiles to be procured in 1963, four MINUTEMAN are preferable to one TITAN II for the following reasons: First, four separate sites are less vulverable than one. Second, four MINUTEMAN missiles provide greater target coverage than one TITAN II. Third, the planned force of 114 TITAN, 129 ATLAS, and 710 B-52's and B-58's will provide all the large yield delivery systems we will need to take care of those targets which can be destroyed only by such weapons.

c. MINUTEMAN

Twelve squadrons totaling 600 hardened and dispersed MINUTEMAN missiles have been funded through fiscal year 1962. These should be in place by the end of fiscal year 1964. We propose to increase this force by 200 missiles in fiscal year 1965 and 150 in fiscal years 1966 and 1967, respectively, making a total of 1100 missiles on launchers by 1967. Although our thinking is still quite tentative, we envision a total MINUTEMAN force of about 1200 missiles, to be in place by the end of fiscal year 1968.

Further study of the rail-mobile MINUTEMAN has convinced us that the benefits to be gained are not worth the cost. Because of the extremely large research and development required, the per-missile cost of the mobile MINUTEMAN, for any reasonable size force, would be about $15 million, several times the cost of the fixed-base version. And it would be much more expensive to operate. Furthermore, the mobile MINUTEMAN would be less reliable and less accurate than the fixed-base version. It would be much more susceptible to sabotage and would involve many difficult operational problems such as protection from fallout, safety, etc. We therefore decided to cancel the development of the mobile system with savings of $30 million in 1962.

Although the MINUTEMAN program I have outlined will not fully utilize the 30 per month production capacity already built, we still believe we should complete the expansion of production capacity to 60 a month which was started last year. Because of such crucial uncertainties as the timely development of the SKYBOLT missile and the size, pace and character of the future Soviet ICBM build-up, we deem it prudent to incur the relatively small amount of additional expense to provide now an option for a much faster build-up of our MINUTEMAN force, if that should be needed later.

[redacted]

d. POLARIS

Twenty-nine POLARIS submarines were funded through fiscal year 1962. To this force we propose adding six more submarines in fiscal year 1963 and six in fiscal year 1964, bringing the total to forty-one, all of which should be operational by the end of fiscal year 1967. Assuming that two-thirds of these submarines would be on station at any one time, we would have a force of approximately 440 POLARIS missiles within range of Communist bloc targets by that date. This force would constitute a main element of the protected reserve which we could hold for use against the Soviet urban-industrial target system in the event that strategy appeared advantageous. Considering the number of MINUTEMAN missiles and other strategic delivery vehicles available, it is difficult to justify a POLARIS force of more than 41 submarines.

The first 6 POLARIS submarines are equipped with the A-1 missile which has an effective range of 1200 nautical miles. The 7th to the 19th submarines will be equipped with the A-2 missile which has an effective range of 1500 nautical miles. The 20th and all subsequent submarines will be equipped with the A-3 missile with an effective range of 2500 nautical miles. Subsequently, all of the earlier submarines will be re-equipped with the A-3 missile, although the missile tubes of the first 5 GEORGE WASHINGTON-class submarines will have to be replaced to accommodate the larger missiles. This work will be done during their second overhaul, sometime during 1965-66, so as to minimize the time off-station.

The fiscal year 1962 Budget, as amended by President Kennedy, did not provide funds for the advanced procurement of long leadtime components for submarines subsequent to the 29th. Following the suggestion of the Congress, we are borrowing $83 million of unobligated funds earmarked for the 1962 POLARIS shipbuilding program to procure, in 1962, the necessary long leadtime components for the 1963 submarines and one submarine tender. Our 1963 budget request for the POLARIS program includes funds for 6 complete submarines and advance procurement of long leadtime items required to support a program of six submarines for 1964.

The 12th to the 29th POLARIS submarines are scheduled to be delivered at the rate of one a month. The 30th to the 41st submarines are planned to be delivered one every two months.

The question naturally arises, "Why, if the urgency was sufficient to justify producing the 12th to 29th boats at a rate of one per month, it is not sufficient to justify continuing that rate beyond the 29th?" The answer is that our force of hardened and mobile missiles is now very small. It is urgent that we build it up rapidly

[redacted]

When we reach 29 submarines (by which time over 600 MINUTEMAN will be in place), nearly three-fourths of our total POLARIS requirement will be met. Meeting the balance, though in my judgment well worth the cost, will not be so urgent as to warrant continuation of what amounts to a crash program.

The presently planned 41 boat POLARIS force will require a supporting fleet of 5 tenders, 6 resupply ships, plus a number of floating dry docks and other support ships. Through the 1962 program, 3 tenders and 5 support ships have been funded. The 1963 budget contains funds to complete construction of the fourth tender and for the conversion of a resupply ship. The balance of the requirement will be brought into the force in phase with the deployment of submarines.

A large logistics support and training complex has been provided on the East Coast and only small additions to these facilities will be required. However, present Navy facilities on the West Coast must be augmented substantially to permit the planned deployment of POLARIS submarines to the Pacific in FY 1965. $44.5 million has been included in the 1963 budget to begin the construction and equipping of the West Coast complex -- including a missile assembly facility similar to, although smaller than, the Naval Weapons Annex at Charleston, South Carolina; overhaul, repair and maintenance facilities; and a training center. In addition, about $10 million is requested for additional lgostics training and test facilities at Charleston and the Atlantic Missile Range.

e. Penetration Aids

Although we do not believe that the Soviet Union now has an operational anti-missile defense system or will have an effective system within the next few years, we know that they are working on subh a system and prudence dictates that we take the possibility of a Soviet capability in this area into consideration in our future planning. While we have no way of knowing whether the Soviet Union will ultimately decide to make the tremendous investment required to try to protect even their principal urban-industrial and government control centers, we must assume that they have the technical knowledge and production know-how required to develop, produce and deploy an anti-ICBM system.

A careful analysis of the problem which a Soviet anti-missile defense system would pose to our offensive forces leads to the conclusion that an effective solution would require the development of various penetration aids for our strategic missiles. Multiple warheads, a combination of warheads and decoys, maneuverable re-entry vehicles, tankage fragmentation, electronic countermeasure devices, and salvo firing for ATLAS, TITAN, MINUTEMAN and POLARIS are among the possibilities.

The budget transmitted to the Congress last January provided $15 million for the Air Force for this purpose. In President Kennedy's first amendment to that budget this sum was increased to $35 million. The 1962 figure has now been increased to $56 million and we are requesting $206 million more in the fiscal year 1963 budget. In addition, $33 million is requested for POLARIS in 1963. Work of a related nature will be conducted in conjunction with other programs such as NIKE-ZEUS and DEFENDER.

D. NEW STRATEGIC RETALIATORY SYSTEMS

Looking beyond fiscal year 1967, there will clearly be a need for new strategic retaliatory systems. Not as clear are the kinds of systems which will be required in that time period.

1. Manned Aircraft Systems

As you well know, we have had under development for some years a Mach 3 high-altitude manned bomber, the B-70, for which the Congress last year provided $180 million more than President Kennedy requested. We have again restudied the role of the B-70 in our Strategic Retaliatory Forces in the period after 1967 and again have reached the conclusion that the B-70 will not provide enough of an increase in our offensive capabilities to justify its very high cost. Our reasons for this judgment are already known to this Committee, but it may be useful to summarize them again at this point.

The principal advantage of the B-70 is its ability, in common with other manned bombers, to operate under positive control and to deliver a large number of nuclear weapons in a single sortie. Considering the increasing capabilities of ground-to-air missiles, the speed and altitude of the B-70, in itself, would no longer be a very significant advantage. Furthermore, it has not been designed for the use of air-to-surface missiles such as HOUND DOG or SKYBOLT, and in a low altitude attack, it must fly at subsonic speeds. In addition, the B-70 is not well suited to an era when both sides have large numbers of ICBM's: it would be more vulnerable on the ground than hardened missiles and it does not lend itself to airborne alert measures.

Nevertheless, we plan to complete the limited development program outlined to the Congress last year -- namely, to demonstrate the technical feasibility of the aircraft structure and configuration, as well as certain major subsystems required in a high speed, high altitude environment. This approach would still preserve the option of developing a manned bomber if we should later determine that such a system is required. The total cost of this program is estimated at

$1.3 billion. About $800 million was funded through fiscal year 1961. $220 million of the $400 million appropriated by the Congress last year will be applied to 1962 and$171 million to 1963. The balance of the $1.3 billion will be funded in subsequent years.

If not the B-70, what manned bomber system, if any, should we develop? Certain alternatives are now being considered. For example, the Air Force has studied the reorientation of the B-70 to a reconnaissance strike vehicle. Such an aircraft might be useful in providing damage assessment and reconnaissance information for the retargeting of the missile force during the attack period. It would also have a capability to attack previously unlocated, undetected or incompletely destroyed targets. The Air Force proposal would involve the development of improved reconnaissance sensors, display systems, augmented communications subsystems and the development of controlled air-to-surface glide bombs and powered missiles.

The Air Force proposes an initial force of 45 RSB-70's in addition to the 3 test aircraft included in our present program. The total cost of this proposal, including the $1.3 billion already earmarked for the B-70 program, would amount to at least $5 billion or more than $100 million per aircraft. The next hundred-plus aircraft to build a force of about 150 aircraft, would cost on the order of $50 million per aircraft. Obviously this proposal will require a great deal more study to determine whether the advantages to be gained from this force are worth the great costs involved.

2. Missile Systems

In addition, we are quite sure that technological progress will in time produce more efficient systems than the present ICBM's. Looking to the period, say beyond 1965, there may be a need for a more advanced solid fuel ICBM which would have the capacity to carry a heavy load of penetration aids, a larger warhead, multiple warheads, more accurate guidance, or some combination of these features. Accordingly, we have requested funds to initiate a study of an advanced ICBM.

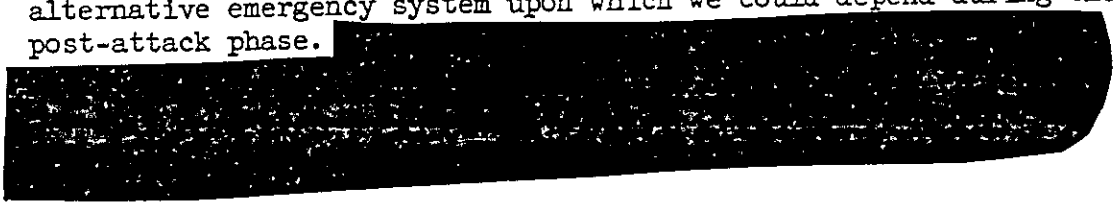
We have also initiated, in the Research and Development program, preliminary studies of an advanced sea-based deterrent system. Such a system might be a follow-on to the POLARIS submarine-launched missile or it might involve entirely new concepts of launching. I will discuss these and other exploratory projects related to the strategic retaliatory mission in greater detail when I take up the Research and Development program.

E. COMMAND AND CONTROL

Achievement of our over-all national security objectives requires that our strategic retaliatory forces be kept continually under the

control of the constituted authorities, from the President on down to the commanders of these forces -- before, during, and after a nuclear attack. The present Strategic Air Command control system, with certain basic improvements, can adequately perform its functions in peacetime and in the pre-strike phase of a nuclear war. But because this system is essentially soft and thus vulnerable, we cannot count on it functioning after absorbing an initial nuclear attack.

Unfortunately, this system is so large and complex that it is not practical to harden it sufficiently to ensure its survival under a determined attack. It is therefore necessary to devise an alternative emergency system upon which we could depend during the post-attack phase.



The improved pre-strike system (SACCS or 465L) -- consisting of a computer and a communications network -- is now under development and is expected to be operational in 1963. Its total cost is estimated at $320 million, a large part of which will be funded in fiscal years 1962 and 1963, with smaller amounts in 1964, 1965 and 1966.

The post-attack system (PACCS) will be developed in three phases:

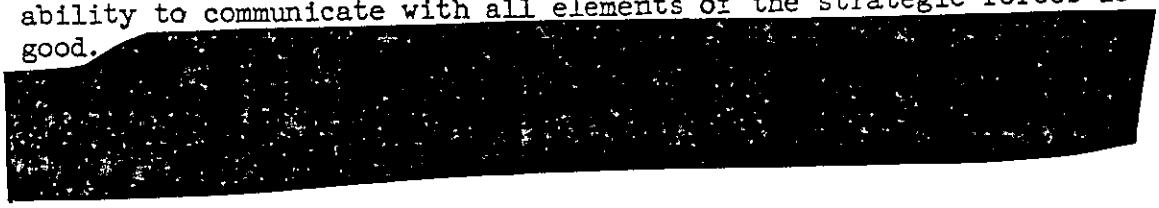
Phase 1, a system of airborne command post and communications relay aircraft with manually operated equipment aboard, is to be fully operational by December 1962. Part of this system is already in operation and when fully implemented will provide a minimum of one command post continuously airborne and a fleet of communications relay aircraft on either ground alert or actual continuous airborne alert.

Phase 2, equipping of the command post and relay aircraft with automated communications and data processing equipment, is planned for completion by December 1963.

Phase 3, construction of a deep underground command post capable of surviving extremely heavy and prolonged attack, is planned to be completed sometime in 1965.

While all three phases have been approved in concept, we are presently requesting funds to begin implementation of Phases 1 and 2 only; Phase 3 requires further study and a more detailed planning before we are ready to ask for funds. The total cost of Phases 1 and 2 of PACCS is about $500 million; for Phase 3 our current rough estimate is about $85 million.

The airborne and underground features of PACCS are complementary and both are necessary to ensure, with a high degree of probability, that we will be able to maintain effective control of the forces in the post-attack period. The airborne command post and relay aircraft are virtually certain of surviving the initial attack and their ability to communicate with all elements of the strategic forces is good.



The deep underground command post, on the other hand, would have almost unlimited endurance in the post-strike environment and would have space and facilities for extensive staffs, computer equipment, etc. However, it will take some time to construct and place in operation. Furthermore, a determined enemy attack with very high yield weapons could cut off its communication outlets if not actually damage the center itself. Therefore a combination of both systems is required.

F. ADEQUACY OF THE PROPOSED FORCES IN THE 1965-67 PERIOD

We believe that the Strategic Retaliatory Forces programmed through 1967 are fully adequate to accomplish the objectives which I discussed earlier. We base this conclusion on the series of analyses which we have made, and which I described on page 13, to test the proposed forces against the assumed Soviet target system under a wide variety of possible contingencies, ranging from the most optimistic to the most pessimistic.

We have even tested the forces against the possibility that by 1965-67 the Soviet Union might have a significant number of ICBM's armed with 50 and 100 megaton warheads. There is no gainsaying the fact that such weapons would wreak great devastation on the United States, but they could not destroy any considerable number of our dispersed and hardened ICBM's and, assuming we received 15 minutes warning, they could not destroy our alert manned bomber force. Obviously, they would have little effect on the POLARIS force. Therefore, the attainment of such a force by the Soviet Union would not change the calculations of our force requirements to any significant degree.

Finally, to judge the value of more forces, we also tested a strategic retaliatory force roughly one-third larger than the one we are proposing here today. We found that the additional capabilities that this larger force would provide are quite marginal in relation to the additional cost.

[redacted]

Therefore, we concluded that the forces proposed for the 1963-67 period are adequate to the task of deterring war through their ability to destroy the attacker, even after absorbing the first strike.

G. STRATEGIC RETALIATORY FORCES - FINANCIAL SUMMARY

The Strategic Retaliatory Forces I have outlined will require total obligational authority of $9.4 billion for fiscal year 1963, compared with almost $9.5 billion for fiscal year 1962.

Shown in Table 3 is a breakdown of total obligational authority for fiscal years 1962 and 1963 by program element and by research and development, investment, and operating costs. "Research and Development" costs include the amounts associated with developing a new capability to the point where it is ready for introduction into operational use, including the necessary related equipment, facilities, supply and personnel costs; "Investment" costs include the one-time or initial outlays required beyond the development phase to introduce a new capability into operational use, including initial training, initial stocks of spares and supplies, etc.; and "Operating" costs are the recurring amounts required to maintain and operate the capability for the year, including the cost of the personnel, directly identifiable training, repair and overhaul and supply.

As you can see from this table, R&D funding is declining slightly in this program, reflecting the completion of the R&D phase of many of our major systems. Investment and operating costs, however, continue to increase as the total force continues to grow.

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[redacted]

III. CONTINENTAL AIR AND MISSILE DEFENSE FORCES

Closely allied to the Strategic Retaliatory Forces are the Continental Air and Missile Defense Forces, i.e., those forces specifically designed to defend the North American continent from enemy attack. Because our gegraphic position and great naval strength still provide us a large measure of security from attack by land or across our beaches, we are concerned here principally with attack through the aerospace environment, by land-based bombers and ICBM's and by shorter range missiles fired from submarines. The Continental Air and Missile Defense Forces, therefore, include those weapons systems, warning and communications networks and ancillary equipment required to detect, identify and track unfriendly forces approaching the North American continent and to destroy them.

A. THE DEFENSIVE TASK

I know that this Committee is well aware of the increasingly difficult problems we face in carrying out this task. In large part, these problems stem from the same factors which I discussed in relation to the Strategic Retaliatory Forces. But in contrast to the offensive mission, the defensive mission does not lend itself to even a reasonably close calculation of requirements. Further, we must bear in mind that no matter how much we spend, we simply cannot in this day and age provide an absolute defense for the continental United States.

We have today on the North American continent and across the seaward approaches a very extensive and sophisticated air defense system, costing in the neighborhood of $2 billion a year. But this system was designed primarily to defend against mass attack by manned bombers. In that role it is quite effective, particularly since the Soviet Union did not build the large manned bomber force anticipated many years ago by the planners of the system. We currently estimate that now or at any time during the next few years the Soviet Union could place over North America approximately 200 bombers in an initial attack, using two-way missions.

But the threat is now shifting to the ICBM and submarine-launched missile. Against this threat, the existing system is completely ineffective except for certain parts of the warning network, i.e., BMEWS and [redacted] Moreover, we must in prudence assume that the Soviet Union in an attack on the United States would strike first with its missiles and then with its manned bombers. In that event, the effectiveness of the existing air defense system could be seriously degraded before the enemy's

bombers could be engaged, and therefore would have limited effectiveness once the Soviet Union achieves a substantial ICBM force.

When that time comes, we will also need an effective system of warning against ICBM attack. A good start has been made with the construction of the Ballistic Missile Early Warning System. But the importance of timely warning is so great that we must do everything feasible to extend the period of warning and assure its reliability. Unambiguous and timely warning is crucial to the survival of our alert manned bomber forces and the soft elements of our missile forces.

We must also do whatever is feasible to develop, produce, and deploy an effective system of active defense against ICBM attack. We have extensive development programs on NIKE-ZEUS and on more advanced versions of terminal defense systems, as well as on other ideas involving underdeveloped technology. For any system which we could now deploy, however, there are relatively easy ways to modify the ICBM attack so that much of it would penetrate the defense.

Even if we could devise an anti-missile system with a very high degree of effectiveness, we would still not necessarily solve the problem of nuclear fallout from surface explosions outside the defended areas. There is a limit to the range of effectiveness of any terminal defense system, and fallout from ICBM's landing outside this range could still be lethal. Therefore, we must provide, in any event, for the protection of our population against that danger.

We must also take steps now to improve our defenses against the growing threat of submarine-launched missiles. As I pointed out earlier, the Soviet Union probably already has some missile-firing submarines, a few of which may be nuclear-powered. This fleet may be expected to grow in numbers and in capability, and new measures will have to be devised to counter that threat.

Finally, there is the possibility farther out in the future of a satellite-borne threat. The problem of detecting, tracking and identifying satellites is already with us. Although the Soviet Union may have the capability to place in orbit bomb-carrying satellites, there does not appear to be any logical reason for them to do so, since there are much more efficient ways for them to deliver nuclear warheads on the United States. But we should not ignore the possibility of that kind of a threat developing in the future.

Thus, the defensive task over the next few years is to:

1. Reduce the vulnerability of the existing bomber defense system to ballistic missile attack.

2. Improve the certainty and timeliness of warning of ballistic missile attack.

3. Provide, to the extent feasible, for an active system of defense against ballistic missile attack.

4. Improve our defenses against attack by submarine-launched missiles.

5. Develop a system for the detection, tracking and identification of satellites and study the problem of destroying unfriendly satellites.

6. Provide, to the extent feasible, fallout protection for our population.

Shown in Table 4 are the Forces and Programs (excluding Civil Defense) proposed through fiscal year 1967 to accomplish this task.

B. DEFENSE AGAINST MANNED BOMBERS

The bomber defense system is composed of the surveillance, warning and control network and the manned interceptors and surface-to-air missiles.

1. Semi-Automatic Ground Environment System

The heart of the entire aircraft control and warning network is the Semi-Automatic Ground Environment (SAGE) system. When the present system was conceived about 10 years ago, the major threat envisioned was a mass attack by long-range bombers. It was thought then that the management of the air battle would require a single integrated and automated system through which all or most of the air defense weapons could be controlled. As a result, most of the new interceptors and all of the BOMARC's are heavily dependent on the SAGE system for their efficient operation during the air battle.

The system consists of 22 direction centers, one of which is in Canada. None of the U.S. centers are hardened and eight are located in close proximity to SAC bases. Thus, a successful Soviet attack on the SAC base complex would also destroy more than one-third of the 22 centers. The remaining 14 centers could be destroyed with less than 30 Soviet ICBM's.

As this Committee knows, there was a plan some years ago to harden the SAGE system, but it was abandoned because of the impracticality of hardening all elements of the system, particularly

[redacted]

the communications links. Yet, unless the entire system could be hardened, it would be no stronger than its weakest link. We have re-examined in the light of current technology the feasibility of hardening SAGE and have reached the conclusion that it is still impractical. Therefore, our present problem, and a most urgent one, is to find some feasible alternative to complete dependence on SAGE.

Last year, in our amendments to the fiscal year 1962 budget, we requested and the Congress approved funds to begin the reconstitution of the manual backup to the SAGE system. These manual-control facilities are being installed at certain of the heavy radar stations, and fallout shelters are being provided for the crews. Additional funds in the amount of $48.2 million are requested for this purpose and for the semi-automatic backup system (SABU) in the fiscal year 1963 budget. The completion of this program will give us an alternative means of controlling our air defense weapons in the event that all or most of the SAGE centers are put out of commission.

SAGE, however, will continue to perform a very useful and important function in peacetime and in the pre-air battle period, primarily surveillance of our air space. In peacetime, we must still continue to check out intrusions of our air space and this, SAGE already does quite well. In the pre-air battle period, SAGE could preclude a Soviet manned bomber or bomber-missile attack from catching us by surprise. As long as we have the ability to detect a manned bomber attack, the Soviet Union would have to hold its bombers beyond the perimeter of our radar system until after their missile attack was launched.

But we must face up to the fact that SAGE, in its present form, would be of questionable value once the air battle had started. Accordingly, we do not now plan to add to our investment in this system, beyond what is already under way. The savings realized from this source will be applied to offset the cost of the backup systems.

The other elements of the control and warning system do not suffer the same shortcomings; sufficient duplicate coverage has been provided in the radar networks for them to function effectively, even during an attack. (An attack on them, of course, would in itself provide the necessary warning.) We plan to continue all elements of this system, including SAGE, the radar picket ships, and the airborne early warning aircraft. This system is all in place and in operation.

[redacted]

2. MISSILE MASTER

The MISSILE MASTER command and control centers, located in ten metropolitan areas within the continental United States, will also be continued and improved. MISSILE MASTER consists of an integrated group of warning and height-finding radars, data processing and display equipment, automatic and manned communications subsystems and auxiliary power sources. Within its geographical area, this system can provide a limited capability to detect and identify incoming aircraft, and can exercise operational control over the NIKE-AJAX and HERCULES batteries in the area, with or without SAGE control. Some of the centers have been modified to permit limited local control of interceptor aircraft also. Although all 10 installations have been activated, an additional $2.0 million is requested in this budget for improvements to the system.

3. Manned Interceptors

At the present time we have an active force of about 900 all-weather interceptors in units committed to the defense of the North American continent -- mostly F-101, F-102, and F-106 fighters. In addition, there are 25 Air National Guard squadrons providing runway alert aircraft and a number of Canadian squadrons committed to NORAD.

We plan during the FY 1963-67 period to retain in the active forces the maximum possible number of these aircraft -- allowing, of course, for obsolescence, attrition, and wear-out. Thus, by the end of FY 1967 we would still have about 770 interceptors -- all F-101, F-102, and F-106 models.

No additional procurement of interceptor aircraft is contemplated this year. The principal reason for this decision is simply that the Soviet manned bomber force, which they are designed to defend against, is expected to decline gradually in size over the period, even though there may be some qualitative improvement if the supersonic BLINDER comes into operational service in any significant numbers. Later on, if a new interceptor is required, we could consider the new TFX fighter for that role. Development of an advanced long-range fire control system and air-to-air missile is also continuing.

More important than procuring additional interceptors, in our judgment, is the need to improve the survivability and effectiveness of those that we already have. One of the chief weaknesses of our all-weather fighters is that they are heavily dependent on the SAGE system for their direction and control during the air battle. With the survival of the SAGE direction

centers so uncertain in an all-out nuclear attack, we cannot be sure the interceptors will be able to function effectively when they are most needed. As I explained earlier, there is little we can do in a practical way to harden the SAGE centers, but provision of the manual back-up capability at the prime radar sites will ensure that some degree of guidance and control can be furnished to the fighters in engaging enemy bombers.

Another serious deficiency, which we are now taking steps to overcome, is that the fighters and their bases are soft and relatively few in number; in fact, of the present 39 bases on which interceptors are deployed, 25 also have SAC units. Thus, a successful ICBM attack on our SAC bases could also eliminate most of our interceptors, even before the Soviet bombers arrived.

Work is already under way to disperse the fighter interceptors to additional bases and $5.0 million is being requested in this budget to continue the dispersal program. Over the next two years we plan to provide a turn-around and re-load capability at additional bases for emergency dispersal of interceptors away from the bases in critical target areas -- thus reducing the losses of interceptors due to an ICBM attack.

Some further dispersal of the interceptor force already exists, since most of the Air National Guard fighter squadrons are located at commercial rather than military airfields.

4. Surface-to-Air Missiles

During the coming fiscal year we will have a BOMARC force of 389 missiles, of which 188 in U.S. plus 56 in Canada will be the longer range "B" model. We plan to retain this system throughout the FY 1963-67 period, but no new procurements will be made. BOMARC suffers from the same defects as the manned interceptors, but to an even greater extent. They are concentrated on just 7 soft bases and are therefore highly vulnerable to an initial ICBM attack.

In contrast to the interceptors, the BOMARC cannot take off to avoid the attack and later return to base. They must sit there until they can be used against the incoming bombers. Furthermore, the BOMARC missile, and the "B" model in particular, are almost completely dependent on the SAGE system for their effectiveness. Thus, if the SAGE system were destroyed or severely damaged by ICBM attack before the bombers arrived, the usefulness of the BOMARC force would be drastically degraded.

We have considered the possibility of dispersing the BOMARC force, but have reached the conclusion that the potential benefits would not be commensurate with the high cost since the system would still remain dependent on the SAGE direction centers.

The NIKE-HERCULES force represents a very useful air defense weapon system. The batteries deployed around our major urban industrial complexes, together with the MISSILE MASTER acquisition, tracking and control system, constitute a self-contained system, which can operate independently of SAGE, although with a degraded capability. We plan, therefore, to continue the HERCULES force of 2,340 UE missiles through fiscal year 1967. As shown in Table 4, however, an increasing share of the force will be assigned to the Army National Guard for on-site operation.

There are certain measures which should be taken to enhance the operational capabilities of the NIKE-HERCULES batteries under conditions of nuclear warfare. I believe that additional NIKE-HERCULES missiles should be procured to increase the number from 12 to 18 per battery and that procurement of high power radar and associated equipment should be completed. $105 million for these purposes has been included in our fiscal year 1963 budget request.

NIKE-AJAX, of which we still have 19 battalions operated by the Army National Guard, will gradually be phased out by fiscal year 1965.

All of these measures are designed to enhance the ability of our bomber defense forces and systems to survive and function in a nuclear attack environment.

C. DEFENSE AGAINST ICBM ATTACK

The next group of forces and systems shown in Table 4 is for defense against ICBM attack. In this area, we are in better shape with respect to warning than active defense.

1. Ballistic Missile Early Warning System

The Ballistic Missile Early Warning System is well along toward completion. The first two stations -- one at Clear, Alaska and the other at Thule, Greenland -- are already operational. The third at Fylingdales, U. K., will become operational in fiscal year 1963.

The Thule site is equipped with 4 detection radars and one tracking radar and can cover launches from the central portion of the U.S.S.R. The Clear site has 3 detection radars and together

with the Thule site can cover launches from most of the U.S.S.R. The Fylingdales site is to be equipped with 3 tracking radars which, together with the other 2 sites, would be able to cover launches with trajectories [redacted] from almost any point in the U.S.S.R.

It is conceivable that the Soviet Union, using shallow trajectories, could launch a limited ICBM attack from certain selected sites which would not be detected by BMEWS. Also, it is conceivable that the Soviet Union could launch an ICBM attack over the Antarctic, thus, in effect, end-running the BMEWS system. But these contingencies we consider highly unlikely, as the accuracy would be degraded and the payload significantly reduced. It seems fairly reasonable to assume that BMEWS will provide reliable detection of the most likely mode of attack, i.e., a mass ICBM attack over the Arctic, [redacted] The BMEWS radars are technically capable of detecting missile warheads at ranges of from [redacted] nautical miles. The system could be jammed by an all-out effort on the part of the enemy, but this in itself could provide the warning.

2. Missile Defense Alarm System

Because of the critical importance of warning of ICBM attack, we are also continuing the development of MIDAS, the Missile Defense Alarm System. This system of orbiting satellites would detect, but not track, enemy ICBM's in their launch phase, thus increasing the warning time provided by BMEWS. [redacted] Three ground readout stations would be required -- one in Alaska, one in the U.K., and one other. The data from these stations would be transmitted instantaneously through the BMEWS circuits to a central computing and display center located in the U.S.

MIDAS is an extremely complicated and sophisticated system. We still have a number of very difficult technical problems to solve before we can consider it for operational use. Therefore, we have not included it in our force projections through fiscal year 1967, even though theoretically this system might become operational by 1964 or 1965.

The development cost alone is expected to total about $700 million of which $374 million will have been committed through 1962, and $100 million is requested for 1963. One-half billion dollars will be required, in addition to the development costs, to attain an operational system, and the operating cost could range from $100-400 million per year, depending on the degree of reliability that can be built into the satellites.

Meanwhile, we are exploring other types of warning systems such as Over-the-Horizon radar, and are also doing a great deal of exploratory work in this area in Project DEFENDER.

3. Bomb Alarm System

Another type of warning program which became operational last year is the bomb alarm system. This system is designed to provide automatic detection of nuclear detonations at selected sites in the NORAD area of responsibility, and immediate automatic relaying of the data to central display centers, both for military and civil defense use. It is the only system designed to provide data on both the time and place of such detonations. The system consists of:

1. Continuously operating detectors which are capable of recognizing a nuclear explosion [redacted] even under adverse atmospheric conditions. Three or more detectors would be equidistantly spaced in [redacted] separate areas.

2. A signal generating station which would automatically send the message.

3. A master control center; and

4. Display centers which visually present the status of all the detectors in the system and the alarm information.

We hope in time to refine this system further so that it can also provide timely information for the evaluation of fallout data and damage assessment. For this purpose, we will need more elaborate detection devices, which have yet to be developed. Funds are included in the Research and Development program for this purpose.

4. NIKE-ZEUS

The problem of providing an effective active defense against ICBM attack still remains critical. The principal system now under advanced development is, of course, NIKE-ZEUS. Well over $1.1 billion has been budgeted for this program through fiscal year 1962, $235 million is requested for fiscal year 1963, and the total development cost through fiscal year 1965 is estimated at about $1.7 billion.

NIKE-ZEUS is what we call a terminal defense system. The incoming targets are detected and tracked by radar, the ZEUS

missile is launched and by command guidance steered to an intercept point, and then its nuclear warhead is detonated by ground command -- thus destroying the target toward the end of its ballistic trajectory.

We believe the system could be quite effective against individual ICBM warheads used without decoys. A standard 2-battery deployment could handle six targets simultaneously at a maximum range of about 75-100 nautical miles, and repeat this engagement approximately every 30 secondsuntil its 192 missiles are exhausted.

However, in an ICBM attack in which the enemy used saturation fire, including multiple warheads and decoys, the effectiveness of the system would be rapidly degraded. First, its effective range would be reduced because of the need to hold fire until atmospheric discrimination is effected between the live warheads and the decoys. Second, because the NIKE-ZEUS radars are relatively soft, they could be destroyed by the detonation of a warhead anywhere nearby. Third, if the defense is saturated and one warhead gets through, the entire target area would be destroyed.

These are very real shortcomings. It is entirely feasible to develop ICBM's with multiple warheads and/or decoys, and to reduce the effectiveness of the radars by jamming them electronically or, under certain circumstances, with "blackout" from high altitude nuclear explosions. That is exactly what we are developing in our "penetration aids" program. The Zeus system is very expensive, and the attacker, with a much smaller outlay of resources, can always offset any increases in the defense, particularly by use of multiple warheads and/or sophisticated decoys.

Because of these serious questions as to the practicality of the NIKE-ZEUS system, we are not recommending funds for its procurement and deployment at this time, but we are requesting the maximum amount of funds which can be effectively used in 1963 in the Research and Development Program to continue development and testing on a top priority basis. The start of these tests had been delayed by about three months by a munber of technical problems, especially the difficulty in developing the acquisition radars, but they are now under way and should yield a significant amount of additional data on the many problems of ballistic missile defense.

5. Other Approaches to ICBM Defense

We consider an effective defense against ICBM attack to be of such importance that we are also exploring a number of other approaches. Although they are included in the Research and Development Program, it might be useful to review them here.

One of these approaches is the so-called ARPAT concept. Under this concept final weapon commitment would be delayed until targets have reached 150,000 to 200,000 feet altitude, and then all targets, decoys, as well as warheads, would be attacked by a barrage of relatively inexpensive interceptors. But it would still be a very expensive program.

Another approach is the so-called "hard point" defense. This type of defense system would, of course, be limited to installations which can be hardened. Since the target is hard, the incoming missile could be allowed to come within 10,000 feet of its target prior to interception, thereby permitting the use of shorter range, less expensive interceptors. Since a very limited cone in space would have to be searched, it could also very likely reduce the cost of other elements of the system. To a considerable extent it would solve the decoy problem since by the time the attacking elements reached the altitude (say 50,000 feet) corresponding to the time at which the missile must be launched to intercept at 10,000 feet, it would be quite easy to discriminate between the decoy and the warhead.

To further the "hard point" defense concept, we now have under development the ZMAR phased array radar and the SPRINT, high performance, quick reacting, anti-ICBM missile, both of which would be hardened and both of which would be compatible with the ZEUS system. About $33 million is included in the 1963 Research and Development program for these two projects.

A variant of the hard point approach is HELMET. Rather than employ anti-missile missiles, this concept would use a barrage of pellets which would be designed to destroy warheads and decoys alike.

BAMBI is still another approach to the problem. Under this concept, the interceptor would be carried by satellites in orbit and would attack the ICBM during the launch phase. This would, of course, be an exceedingly expensive program, since it would involve placing and maintaining in orbit literally tens of thousands of interceptors. And, of course, there are seemingly endless technical problems yet to be solved. We are continuing to explore all of these and other approaches, and funds for this purpose are requested in our fiscal year 1963 budget.

D. SPACE SURVEILLANCE

1. Space Detection and Tracking System (SPADATS)

Closely related to the problem of defense against ICBM attack is the potential problem of defense against satellite

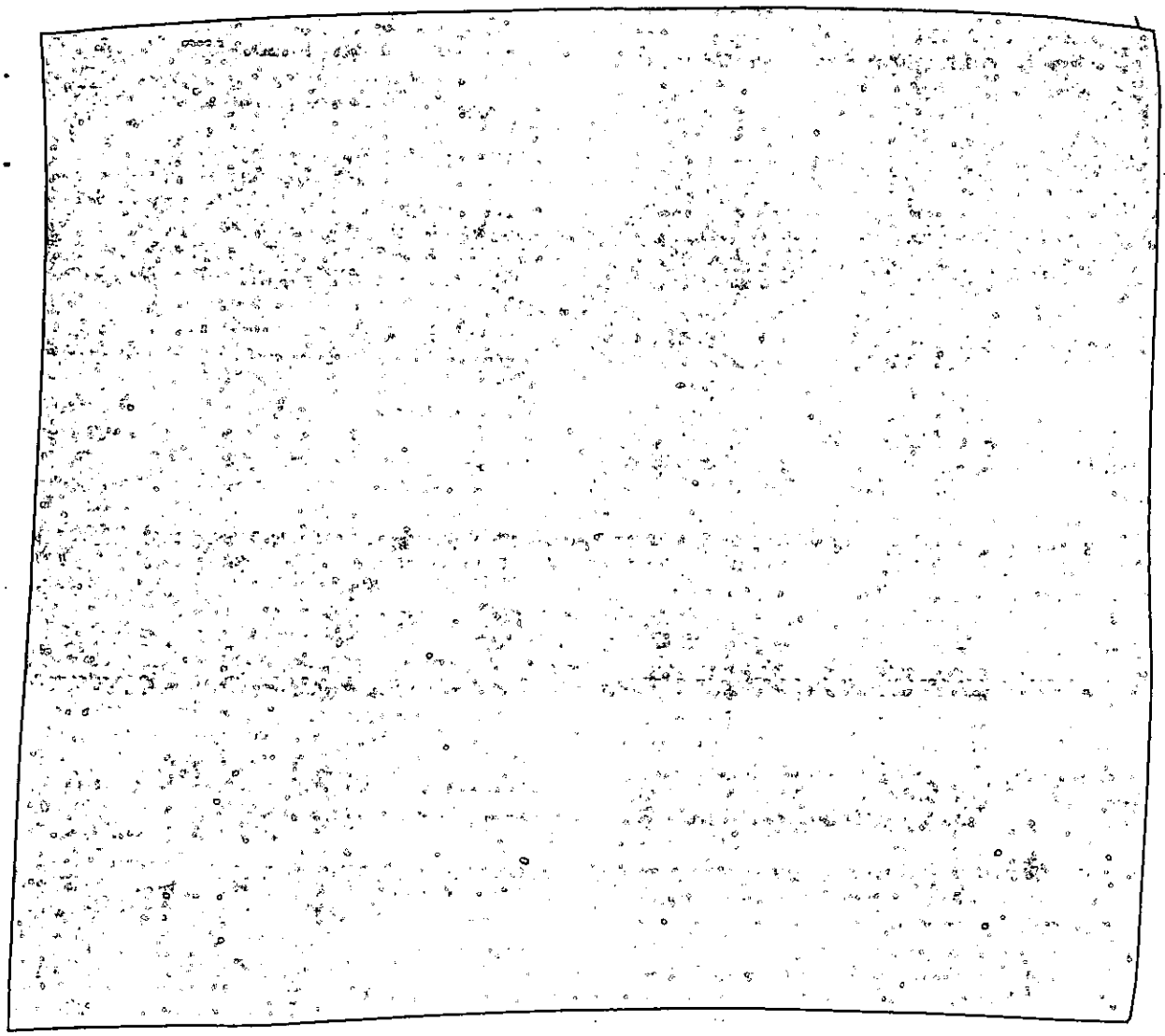
attack. The first task is to detect, track, and identify all satellites in orbit. This we are doing through the NORAD space detection and tracking system (SPADATS). This system consists of two major components, both under the control of NORAD. The Navy's Space Surveillance System (SPASUR) operates a "fence" of detection devices across the southern United States and a computer and correlation center located at Dahlgren, Virginia. The second component of SPADATS, the Air Force SPACETRACK system, has a series of radars located on the North American continent. Data from these two systems plus additional information from scientific centers and other military systems such as BMEWS [redacted], are fed to the surveillance center at NORAD where a catalog of all space objects is maintained. $31.4 million was allocated to the SPADATS system in FY 1962 and $37.0 million is included in this budget request for 1963. These funds will support the development of greatly improved radars, other sensory devices, and computers, as well as the operation of the system.

2. Satellite Inspector Program

The next task is to develop a means of inspecting objects in space to determine whether they are friendly or hostile. This is the purpose of the Satellite Inspector Program, formerly known as SAINT, for which $40 million is requested for fiscal year 1963. Under this program a satellite would be placed close to and in the same orbit as the object to be observed, reporting back to the ground station its observation. [redacted]

E. DEFENSE AGAINST SUBMARINE-LAUNCHED MISSILES

A more immediate problem is defense against submarine-launched missiles. To provide strategic and tactical warning and provide intelligence on submarine locations and concentrations prior to SLBM launches, research, and exploratory development work is being conducted under Projects TRIDENT and ARTEMIS. [redacted]



F. CONTINENTAL AIR AND MISSILE DEFENSE FORCES -- FINANCIAL SUMMARY

The Continental Air and Missile Defense Forces I have outlined will require total obligational authority of $2.1 billion for fiscal year 1963, compared to $2.2 billion for fiscal year 1962. As I pointed out before, total obligational authority represents all of the funds to be applied during the fiscal year to the forces in this program, regardless of the appropriation account in which funded or the year in which provided.

Shown in Table 5 is a further breakdown of the total obligational authority for the continental Air and Missile Defense Forces by program element; and by development and investment costs, and operating costs.

[redacted]

Investment for the Continental Air and Missile Defense Forces will decline in 1963, reflecting the substantial completion of the manned bomber defense system. Operating costs, however, will remain at a high level. Most of the research activity associated with this mission is for anti-ICBM defense and is reflected in the Research and Development program.

* * * * *

[redacted]

[redacted]

IV. GENERAL PURPOSE FORCES

I would now like to turn to what we call the General Purpose Forces. These are the forces on which we would depend in any conflict short of general nuclear war. Obviously, we could also use certain elements of the Strategic Retaliatory Forces and Continental Air and Missile Defense Forces for particular limited war tasks and, of course, all our forces would be employed in a general war. But it is the limited war mission which primarily shapes the size and character of the General Purpose Forces.

A. THE REQUIREMENT

The specific requirements for General Purpose Forces are most difficult to determine with any degree of precision. This is so for several reasons:

1. The great diversity of units and capabilities included in these forces.

2. The relationship between our General Purpose Forces and those of our Allies around the world.

3. The wide variety of possible contingencies that they must be prepared to meet.

4. The important role that the reserve components play in these forces.

5. The sheer number and diversity of weapons, equipment and supplies involved.

I am far from satisfied that the longer range aspects of the General Purpose Forces program have received the intensive analysis they deserve, but I believe the increment that we are proposing for the coming fiscal year is soundly conceived. Meanwhile, we will continue to work on the programs projected beyond 1963.

With regard to our General Purpose Forces, we should bear in mind that the United States carries only a part of the burden in the collective defense of the Free World. Indeed, in the NATO area and the Far East, the forces of our Allies clearly outnumber our own, and that is as it should be. Nevertheless, our General Purpose Forces represent the essential margin -- particularly in modern weapons -- needed to counter the weight of the tactical forces of the Communist bloc.

[redacted]

This role of our General Purpose Forces in the collective defense has a most important bearing on the kinds of forces we require.

First, they must either be stationed in potential trouble areas or must be highly mobile and readily deployable, if they are to serve as a central reserve in the United States.

Second, if we retain a central reserve of forces in the United States, we must have adequate airlift and sealift to move them promptly to wherever they may be needed.

Third, since there is a practical limit on the volume of material that we can ship in any short period of time, we must consider the possibilities of pre-positioning stocks for our mobile forces in various parts of the world.

Fourth, since we cannot be sure where in the world our forces may have to fight, we must build into them a great deal of versatility.

Fifth, since our General Purpose Forces to a large extent are designed to complement the forces of our Allies, their size and character will be affected by the size and character of the forces of our Allies.

B. COLLECTIVE DEFENSE

This collective aspect of the problem is most apparent in the NATO area. The events of the last year have convinced us that the NATO forces in Europe must be greatly strengthened. While we will always be prepared to use our nuclear weapons when needed, we also want to have a choice other than doing nothing or deliberately initiating a general nuclear war; or as President Kennedy said, a choice between "inglorious retreat or unlimited retaliation." No one can put a precise figure on what the conventional strength ought to be, but we do know it must be more than what we had available last year.

Clearly this is not a problem solely for the United States but rather for all the NATO partners. But we, as the strongest of the NATO partners, have a duty to provide the leadership and set the example. Accordingly, through the measures recommended by President Kennedy and approved by the Congress last year, we significantly increased our General Purpose Forces. And I can report that our NATO partners are responding to our example. As a result NATO will soon have on the central front in Europe the equivalent of 26 divisions, including the 5 fully manned and ready U.S. divisions and their supporting forces. At home, we have on active duty an additional 10 combat-ready divisions -- 6 regular Army, 2 Army National Guard, and 2 Marine Corps divisions.

As I pointed out to the Committee last year, the force build-up is directed at the major problem of Communist threats and pressures all around the globe, and not solely at Berlin. We have not lost sight of the dangerous situation in Southeast Asia or the possibility of sudden outbreaks in other areas of the world. But the problems outside of the NATO area are substantially different. Most of our Allies in the Far East, for example, and particularly those on the periphery of Communist power, do not have the financial resources to support their military forces. They have the manpower but they do not have the materiel -- and in some cases they cannot even meet the military payroll. Here, military assistance, and in many cases economic assistance, is absolutely essential.

Where the nations involved have the will to defend their independence we can help them best by providing materiel, training, and budgetary support for their military forces instead of bringing our own forces into the conflict. It is in the interest of the entire Free World for the nations directly involved to fight their own battles insofar as possible without the direct intervention of U.S. military forces. And it is in our own national interest to provide these nations with the military and economic means to do so. We must, of course, continue to be ready to meet our obligation to our SEATO partners and our other Allies.

C. THE PROBLEM OF SUBLIMITED WAR

There has come into prominence, in the last year or two, a kind of war which Mr. Krushchev calls "wars of national liberation" or "popular revolts," but which we know as insurrection, subversion, and covert armed aggression. I refer here to the kind of war which we have seen in Laos and which is now going on in South Vietnam. It is sometimes called "sublimited war" because the scale and character of the hostilities are kept just below the threshold where the world would recognize it as overt military aggression. Actually it is not a new Communist technique: we have seen it in many other parts of the world since the end of World War II, notably in Greece as well as in the Philippines and Malaya. It was defeated in those countries and I am confident it can be defeated in Southeast Asia.

You will recall that Mr. Krushchev, in his speech of January 6, 1961, made it quite clear that he considered world wars and even local wars too dangerous for the Soviet Union; he favored "wars of national liberation" or "popular revolts" as the preferred method of armed aggression against the Free World because it was, in his view, the safest.

[redacted]

It may well be that as long as we maintain the kind of forces which would make global nuclear war, and even local wars, unprofitable for the Soviet Union, we could deter them from starting such wars. But this still would leave us with the problem of guerrilla or sublimited wars. Indeed, to the extent we deter the Soviet Union from initiating these larger wars we may anticipate even greater efforts on their part in the sublimited war area. Conflict, as Mr. Molotov so rightly pointed out, is a cardinal tenet of Communist doctrine.

I think we can all agree that the Communists have a distinct advantage over the democracies in this area of conflict. They are not inhibited by our ethical and moral standards: political assassination, robbery, arson, subversion, bribery--all are acceptable means to further their ends. They are quick to take advantage of any breakdown of law and order, of any resentment of people toward their government, or of any economic or natural disaster. They are masters of mass psychology and of propaganda, having had many decades of experience in these fields. We have a long way to go in devising and implementing effective countermeasures against these Communist techniques. But this is a challenge we must meet if we are to defeat the Communists in this third kind of war. It is quite possible that in the decade of the 60's the decisive struggle will take place in this arena.

But to meet successfully this type of threat will take much more than military means alone. It will require a comprehensive effort involving political, economic, and ideological measures as well as military. What we need to do in our own Defense program -- and in the Military Assistance Program -- is to develop the kind of military forces -- the weapons, the equipment, the organization and training, and above all the techniques -- which can deal with this type of covert armed aggression. We made a good start toward these objectives in our revision of the fiscal year 1962 budget, and we are providing for a continuation of this effort in the 1963 budget.

D. BALANCE WITHIN THE GENERAL PURPOSE FORCES

One of the most difficult problems in this area has been to achieve a better balance among the Army, Air Force, Navy, and Marine Corps elements of the General Purpose Forces. There has been a tendency on the part of the Services to base their planning and force structures on their own unilateral views of how a future war might be fought. Admittedly, there has been joint planning for military operations, but it has not affected significantly the basic strategic thinking and planning of the individual Services.

[redacted]

[redacted]

Joint planning, up to this point, has represented more "combined" planning than unified planning, in that the divergent views of the Services are often accommodated in the plans.

A clear example of this lack of balance is the amount of airlift furnished by the Air Force for strategic deployment of all the Services. Although the record shows that the problem had been studied repeatedly over the years, this Nation still did not have the capacity to airlift the forces, particularly the Army's, that had to be moved. One of the first actions taken by this Administration, therefore, was to increase the available airlift so that we would, in fact, have the capacity to move our forces in accordance with our deployment objectives.

Another example is the imbalance between the Army ground forces and the air support provided by the Air Force. This, too, was a long-standing issue and had been studied many times. In contrast to the Marine divisions which are supported by the Marine air wings with an average of 170 aircraft per division, there are only about 80 tactical aircraft in the Air Force to match each of the Army's divisions.

Closely related to the foregoing is the problem of balance in our inventories of weapons, equipment and, particularly, combat consumables. Because of a lack of truly unified planning, we find significant discrepancies in the policies of the Services with regard to combat stocks. For example, the Air Force, planning primarily in terms of a short nuclear war, did not provide sufficient stocks of combat consumables for conventional limited war. Thus, we find that the Air Force could not fight a conventional war for as long a period as the Army which it has to support.

On the other hand, the Army had been basing its requirement calculations on plans for a large-scale conventional war of long duration. However, the resulting large requirements were never actually used as the basis for the annual procurement programs. The net result was that the Army had on hand in inventory, on the average, only about one-third of the so-called requirement. And even the inventories on hand were sadly out of balance, ranging in some extreme cases from zero to well over 100% of requirements. No useful purpose is served by such unrealistic requirements, either for procurement or operational planning. There is no point in building forces, unless they are furnished the weapons, equipment and combat consumables they need to engage in sustained combat over a reasonable period of time, and as a well-balanced and integrated force.

[redacted]

[redacted]

Accordingly, we have established as the logistics objective for our procurement program for the General Purpose Forces a properly balanced inventory sufficient to provide a conventional combat capability for approximately 6 calendar months. It is assumed, for this purpose, that an average of two-thirds of the force would be engaged during the six month period and that combat beyond the six month period would be supported by current production. This objective is designed to provide our forces with an over-all capability which will permit them to cope with a wide variety of situations.

I then directed the Service Secretaries and Chiefs to select the most critical combat items needed to meet the logistics objective and make a detailed readiness study of each. The Military Departments developed a list of about 550 major items, accounting for approximately 85% of the total planned procurement, other than ships and aircraft, for the General Purpose Forces. The studies, although still preliminary in character and requiring much refinement, considered all logistic implications which would have a bearing on the quantities to be procured in FY 1963, including:

1. Present inventories and condition of assets.

2. Substitute items which are operationally acceptable for short-term employment.

3. Peacetime and wartime consumption rates.

4. Present and prospective production schedules.

5. Production limitations, or the need to stretch out production in order to preserve a production capability and "going lines" for a longer time into the future.

6. The need to phase the production of a particular item to the availability of related items, e.g., ammunition with guns, or vehicles with the activation of new units.

7. The desirability of spreading procurement over a longer period to avoid future "block obsolescence".

The item readiness studies were personally reviewed by the Secretaries and Chiefs of the Military Departments and by myself.

[redacted]

[redacted]

E. BALANCE BETWEEN THE REGULAR AND THE RESERVE FORCES

One of the most difficult problems we encountered in the formulation of our General Purpose Forces was that of achieving a proper balance between our regular and reserve forces. It had been traditional throughout our national history to reduce our military forces in peacetime to a minimum level, sufficient only to serve as a nucleus for a much larger force in the event of war. We relied on our civilian reserve components and a general mobilization for the additional personnel needed in a war. This "militia" system served the country well in the past, but the Korean War demonstrated that it would not meet the needs of the present era. Since that time we have maintained a very sizeable permanent military establishment, while at the same time greatly improving the training and readiness of our civilian components - the reserve forces.

It has long been accepted that our Strategic Retaliatory Forces must be immediately ready and therefore part of the regular establishment. It has also been accepted that most of our Continental Air and Missile Defense Forces must also be immediately ready and part of the regular establishment, and that even those reserve elements participating in this mission must be ready within a matter of hours or even minutes.

But with regard to the General Purpose Forces, we have continued to rely, in large part, on a cumbersome pre-Korean style mobilization of the reserve components. We have maintained, particularly in the case of the Army, very large active reserves on the assumption that in a general war we would mobilize all of our resources, and in a limited war we would have the time necessary to mobilize selectively whatever manpower would be required. Implicit in these plans was the further assumption that there would be a period of months in which to complete the organization, training, and equipping of the Army reserve components ordered to active duty before they were committed to combat. However, the events of the last year have convinced us that these assumptions are no longer workable.

It was apparent to this Administration, from the very beginning, that we did not have sufficient strength and readiness in our General Purpose Forces to meet all our commitments around the world. Of the 14 Army divisions, 3 were engaged in training and, therefore, were not combat ready or available for immediate deployment. Furthermore, there were insufficent technical service units to support the combat units. In the Army Reserve Forces, we found that most of the units were only partially equipped, undermanned, and would require up to nine months to become combat ready. Thus, we had available for immediate use only 11 Army divisions plus the 3 Marine Corps divisions.

[redacted]

This was inadequate to meet our obligations in Europe, Korea, Southeast Asia, and the rest of the world -- particularly, if we were to have some choice in Europe other than all-out nuclear war or retreat.

Our first step was to initiate a plan to increase Army procurement and to bring selected units of the Army National Guard and Army Reserve up to a much higher level of readiness. But we needed time to make the reserve plans effective and that time Mr. Khrushchev did not give us. The Soviet threat to our position in Berlin necessitated far more urgent and drastic measures. I need not recount them here. I am sure you are all familiar with what has been done since last July to strengthen our conventional military forces.

But these measures, as I stated to this Committee last July, were not meant to be permanent. What we sought to achieve then -- and to achieve quickly -- was a peak readiness of our military establishment to respond promptly with appropriate forces, and in adequate strength, to any kind of Communist aggression anywhere in the world; and to maintain that posture until we could see more clearly how events would develop. This we have done. Now, our problem is to determine the course for the future.

The events of the last six months have convinced us that we must permanently maintain in the regular establishment larger, better equipped, and more mobile General Purpose Forces than has been the case in recent years. We must have available in this country up to 6 divisions for rapid deployment to Europe, if needed, and yet have a reserve of ready divisions available for deployment to other parts of the world. This means we must have more than the 3 Marine divisions plus the 11 combat-ready and 3 training divisions in the regular Army. And, we shall also need a much higher degree of readiness in the reserve forces, particularly the Army components.

To the extent that the active forces are increased and the readiness of the reserve improved, we believe the number of men in the reserve forces can be slightly reduced. We are convinced the time has come when our resources must be concentrated on combat readiness instead of mere numbers of reservists on paid status.

F. THE GENERAL PURPOSE FORCES THROUGH 1967

The attached tables show our tentative plans for General Purpose Forces through fiscal year 1967. Because of the number, size, and diversity of the program elements constituting these forces, we have grouped them by Service for convenient reference.

1. Army General Purpose Forces

a. Active Forces

It is assumed that at the beginning of the next fiscal year we will have a total of 16 divisions -- 2 airborne, 3 armored, 9 infantry, and 2 mechanized. Under this assumption the 2 National Guard divisions, 1 armored and 1 infantry, will be replaced by 2 new mechanized regular divisions now being formed at Fort Hood and Fort Carson. The first new division should be combat ready in August and the second division in October. Both will be organized in line with the ROAD concept.

As you know, in 1956 the Army divisions were reorganized along so-called pentomic lines in order to fit them better for operations in a nuclear war environment. Nuclear weapons were made organic to the divisions and non-nuclear firepower was reduced. Although the armored division structure was not substantially altered, the organization of the airborne and infantry divisions was markedly changed, and the old triangular arrangement of three regiments was abandoned and replaced by five smaller battle groups.

Five years of experience with the pentomic structure as well as changes in the international situation have pointed up certain needed improvements:

1. The structure of the divisions must be made both more uniform and more flexible so that they can, by adding or removing subordinate units, be properly tailored to meet varying requirements in different parts of the world.

2. Their command and control structure must be made more effective, the span of control reduced, and greater opportunities provided for the training of small units and their commanders.

3. Their non-nuclear firepower must be raised.

4. Their tactical mobility must be increased.

We believe ROAD or "tailored division" concept meets these needs. The basic building blocks of the ROAD division are the "division base" and the "combat maneuver battalion". The division base is uniform for all types of divisions and includes command and control, combat support, and administrative or service support elements. To improve the span of control, each division normally has an intermediate command echelon composed of 3 brigade headquarters, each of which has two to five combat maneuver battalions under it -- depending on the particular task to be performed.

The combat maneuver battalions are of four types -- infantry, tank, mechanized infantry, and parachute infantry. Divisions are formed by combining the division base with a mix of varying numbers of the four kinds of maneuver battalions, thus permitting them to be tailored to particular tasks. Each division would have from 5 to 15 battalions, with an average, in most cases, of about 10. This arrangement produces four basic kinds of divisions -- armored, mechanized, infantry, and airborne. Armored and mechanized divisions are heavier and stronger. Infantry and airborne divisions are organized and equipped to provide maximum firepower consistent with strategic mobility. All are more flexible.

In the light of present world tensions and because ROAD has not been fully field tested, it would not be prudent to commence the reorganization of the existing 14 regular Army divisions at this time. Some loss of combat readiness is inevitable in such reorganizations. Instead, we will concentrate our efforts, for the time being, on the organization and equipping of the two new divisions on the new ROAD pattern and give them a thorough field service test. This will enable us to work out any problem which may develop from the new organization before we undertake the much larger task of reorganizing the existing 14 divisions.

Of the 16 regular Army divisions to be supported through 1967, all would be combat ready and none would be used as training divisions. Five would usually be deployed in Europe, 2 in Korea, and 1 in Hawaii. The remaining 8 divisions would normally be held in the United States forming a central reserve.

The Army General Purpose Forces at the end of 1963 will also include 3 brigades, 6 armored cavalry regiments, 10 battle groups, 3 missile commands, and 34-3/4 air defense battalions. The latter are over and above those Army air defense battalions deployed for continental air defense. In addition, the Army program calls for 40 other combat battalions and 33 surface-to-surface missile battalions.

The drop in the number of surface-to-surface missile battalions from 1963 to 1964 reflects primarily the phaseout of 9 liquid fueled CORPORAL and REDSTONE battalions. By that time the Army will have 9 separate battalions of solid fuel missiles -- 4 SERGEANT and 5 PERSHING, plus the equivalent of two SERGEANT battalions in the Missile Commands.

The forces shown in Table 6 will be manned within a total of 960,000 military personnel at end fiscal year 1963, compared with a strength of about 860,000 on July 1, 1961.

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b. Army Reserve Components

Although all the reserve components are grouped together in a separate program, all the Army National Guard and Army Reserve forces, except for the on-site air defense battalions comprising about 9,500 men, are primarily designed to augment the General Purpose Forces of the Army. Therefore, I believe that they can be discussed more meaningfully in this context.

We believe the Army reserve components should satisfy two specific requirements:

(1) The ability on short notice to augment significantly the active Army during periods of grave international tension or during limited wars. For this purpose we require a relatively small reserve force maintained at a very high state of readiness.

(2) The ability to provide a base for a large scale mobilization in the event of general war. For this purpose we need a large but not necessarily highly ready reserve establishment.

We now have 37 divisions in the reserve components: 27 Army National Guard and 10 Army Reserve. Although under the present system some units are provided slightly higher manning and somewhat more equipment than others, there is no sharp distinction between the priority and the non-priority units. Furthermore, military plans do not require 37 reserve divisions. With a 16-division active force, all that is needed is 27 to 29 reserve divisions. This is 8 to 10 less than the number now being maintained and would still give us a total force of 43 to 45 active and reserve divisions.

You may recall that in President Kennedy's Second Amendment to the 1962 Budget of May 25th we had planned to substitute 8 operational headquarters for 8 of the reserve component divisions. At that time the following reserve readiness objectives were established: 2 divisions and supporting forces with 3 weeks notice; 2 more divisions and supporting forces with 5 weeks notice; and 6 additional divisions and their supporting forces with 8 weeks notice. This gave a total of 10 divisions deployable within 8 weeks. The 2-division increase in the active Army eliminates the need for the first requirement, and we now believe it would be wise to substitute 9 brigades for 2 of the remaining 10 priority divisions. Accordingly, it now appears that an active Army of 16 divisions plus a priority reserve of 6 divisions, or a total force of 22 divisions plus the independent regular and reserve brigades, would meet the first priority requirements.

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The priority reserve force would require about 465,000 men, 155,000 in units needed to reinforce the active Army, 203,000 in 6 divisions and their supporting forces, 32,000 in 9 brigades, 68,000 for training and base units, and about 7,400 to man the on-site air defense battalions. These priority units would be provided higher manning, additional equipment, and more full-time technicians than they now receive under current plans.

To avoid the administrative problems that occurred in the recent call-up, a ready pool of obligated reservists, preferably those with only 6 months of training, would be created within the existing Ready Reserve Reinforcement Pool. These persons would be carefully screened to eliminate all those not available for immediate recall for reasons of occupation, family status, etc., and would be the first to be called as individual fillers for the priority reserve units to be added to the active Army.

The non-priority forces would be organized in 21 to 23 divisions and their supporting units, plus 8 to 10 operational headquarters. The operational headquarters would provide general officer and staff supervision of non-divisional units. A portion of the units from the eliminated divisions would be utilized in the priority brigades and as priority non-divisional units; the others would be inactivated.

An analysis of Army reserve troop strength indicates that at least 130,000 personnel can maintain individual and unit proficiency with less than 48 weekly drills per year. These individuals are in units such as support battalions, truck companies, MP companies, civil affairs or postal units which require less extensive training. For these units, we recommend 24 drills annually instead of the present 48. This proposal will require legislative action to repeal the requirement that not less than 48 drills annually be provided for all National Guardsmen.

With these adjustments, we believe a drill pay strength of 670,000 in the Army National Guard and Army Reserve is all that is required. This is a reduction of 30,000 from the combined Army National Guard and Reserve strength funded in the fiscal year 1962 Appropriation Act. However, there would be no parallel reduction in costs or in our appropriations requests for fiscal year 1963 since these reserve components will be maintained at higher levels of combat readiness. Shown in Table 7 is the proposed distribution of the 670,000 reservists by type of unit assignment.

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We consulted with the Army's General Staff Committee on National Guard and Army Reserve policy -- known as the Section 5 Committee -- on January 26 with respect to our reserve reorganization proposals. On February 1, the proposals were also discussed with the Reserve Forces Policy Board, my principal advisor on reserve matters. After we have had an opportunity to consider their recommendations carefully, we will be in a position to submit our final plan.

It is quite possible that in fiscal year 1963 the Army Reserve components will not be able to maintain even the 670,000 strength level. This is largely attributable to the suspension of the 6-month training program from September through December 1961, in order to assist the build-up of the active Army forces. We plan that a substantial part of the unusually large requirement for reserve replacements in fiscal year 1963 be met by a more thorough screening of the half-million individuals in the ready reserve pool who have an unfulfilled obligation to serve in a unit, rather than by an abnormal increase in the 6-month training program. By 1964, the increased draft calls of the current fiscal year will have produced a large number of 2-year draftees with an obligation to serve an additional 2 years in the reserve, thus eliminating the replacement problem.

I am fully aware that the program we are proposing will not fully satisfy everybody concerned. The record is clear that the Army reserve component program has been a matter of controversy over many years. The previous Administration clearly indicated its dissatisfaction with the existing program and three times recommended a 10% reduction in the number of Army National Guard and Army Reserve personnel on drill pay status and in the funds provided for the reserve. With the increase of 100,000 men in the size of the active Army, we believe there is no longer a requirement for 700,000 men on drill pay status. In view of the significantly increased level of Defense expenditures, we owe it to the taxpayer to make whatever savings we can without adversely affecting our combat capability.

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c. Army procurement

To properly equip the 16 regular and 6 priority reserve divisions and provide sufficient stocks for 88 division-months of combat consumption will necessitate a considerably higher level of Army procurement in FY 1963 than the level of the past four or five years.

Fiscal year 1962 procurement was increased from $1.8 billion planned in the January budget to $2.6 billion. We are recommending for fiscal year 1963 a program of about $2.7 billion (the 1963 figure includes about $200 million of items previously funded in other appropriation accounts). This is almost double the level of Army procurement in the five years prior to fiscal year 1962. The fiscal year 1963 Procurement Program was derived as follows:

SUMMARY OF ARMY FY 1963 PROCUREMENT PROGRAM (PEMA)

GROSS REQUIREMENT UNFUNDED THRU FY 1962 (excluding NIKE-ZEUS)	($ MILLIONS)
1. 161 Principal Items Intensively Studied	$9,400
2. Remaining PEMA Items	399
3. Initial Parts Support	126
4. Production Base Program	127
5. First Destination Transportation	22
	$10,074*
PROCUREMENT TO BE DEFERRED BECAUSE OF:	
1. Substitute Assets Which Can Be Applied	3,400
2. Production Limitations (need to keep sustained level, inability to produce, desirability of stretchout to incorporate improvements)	1,100
3. Phasing of deliveries among related items, and to match activation of units	2,900
	7,400
Proposed FY 1963 Procurement Program	$ 2,674

*Does not include provision for ROAD

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Almost all of this procurement is for the Army's General Purpose Forces. It would be impossible in this discussion to deal exhaustively with the several hundred line items on the Army's procurement list. However, I will attempt to describe the trend of Army procurement by broad categories and illustrate our over-all procurement objectives by using the most important or significant items within each category.

(1) Small arms, etc.

Army procurement in 1963 in this category will total $136 million, approximately double the 1961 level.

One of the major modernization objectives for the Army has been to replace the old .30 caliber weapons with the new NATO standard 7.62mm family of small arms. The principal items in the new family are the M-14 rifle and the M-60 and M-73 machine guns. The M-14 rifle was designed to replace the .30 caliber M-1 rifle, the M-1 and M-2 carbines, the Browning automatic rifle and that portion of the .45 caliber submachine gun inventory which is not assigned to tank crewmen. The M-60 machine gun replaces several older models of .30 caliber machine guns which have been standard items since World War I. The M-73 machine gun replaces the M-37 machine gun, and is primarily designed for mounting in tanks and armored vehicles. Thus, instead of eight weapons we now have three, all firing 7.62mm ammunition common to the NATO countries. The logistics, training and operational advantages gained in this replacement program are quite impressive.

The 300,000 M-14 rifles included in the 1963 program, together with those previously funded, will give us about 50% of the current inventory objective of about 2 million. This quantity will be enough to meet our highest priority requirements (i.e., the U.S. Army forces in Europe and the eight divisions of the Strategic Army Corps, together with training and 180 days of combat support for these forces) -- particularly in view of the fact that we still have a considerable stock of the .30 caliber weapons on hand which can still be used. Similarly, in the case of the 7.62mm M-60 machine gun, the 1963 procurement will give us a modernized inventory equal to about 80% of the current objective, the balance being filled by the older .30 caliber machine guns.

The M-73 machine gun is a newly developed item which had been funded at a very low level in previous years. The 1963 quantity of about 8,000 is the first major procurement of this gun and, when added to those previously funded, will provide about half of the current inventory objective of about 22,000. However, here again we have a considerable stock of the older .30 caliber machine guns.

Another important item is the DAVY CROCKETT nuclear delivery system, which provides a standby nuclear capability to the battlefield commander. With the $12.6 million requested in the 1963 program, we will be able to reach about 60% of our inventory objective.

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(2) Combat vehicles

For Army combat vehicles we propose a total of $452 million, about three-quarters again as high as 1961. The most significant item in this category is the M-60 main battle tank. As you know, last year we increased the production of this tank to 100 per month in order to complete the equipping of Army forces in Europe more quickly. Commencing in fiscal year 1963, the production rate will go back to 60 per month. Accordingly, the 1962 program was increased by 305 tanks through the reprogramming of available funds, and 720 tanks are requested for 1963.

The 1963 procurement, together with those previously funded, will give us a total of 3,335 M-60 tanks. This is enough to equip the U.S. Army forces in Europe and provide combat and training support for those forces. For Army forces in areas other than Europe we are currently planning to utilize the M-48 series tanks, of which we have almost 10,000, pending the development of a new main battle tank. Some 600 90mm gun M-48A1 tanks are being retrofitted with the use of 1962 funds to replace the light tanks now being used by the armored cavalry units in Europe. Future procurement of the M-60 tank, or retrofit of additional M-48 series tanks, will depend upon the progress made in the development of a new main battle tank, as well as on changes in requirements which may develop as a result of the proposed reorganization of Army divisions.

Another of the important steps we are taking to increase the mobility and firepower of the modern Army is the introduction of a new family of self-propelled artillery. This family includes the 105mm, the 155mm, and 8-inch self-propelled howitzers and the 4.2 inch self-propelled mortar. During 1963 we propose to buy about 1,615 of these weapons, which when added to those funded in prior years, and including acceptable substitutes, will give us almost two-thirds of our current inventory objective of about 6,600. In subsequent years we plan to continue or even increase the current production rates. We consider these new combat vehicles to be a major improvement over the older models and want to replace them at the earliest practicable date. In this connection, I would like to point out that our current assets include some 1,670 of the older models, all of which were either produced or rebuilt to their present configuration during the 1953-1958 period.

Finally, we plan to procure 3,000 M-113 armored personnel carriers, thus bringing our assets of these modern, air transportable, amphibious vehicles to about 9,400 -- or about 72% of the current inventory objective of over 12,900. With appropriate modifications, this vehicle can also fill a number of Army requirements for missile

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carriers, medical treatment facilities, communications vehicles and command posts, so the ultimate inventory objective for the item will no doubt be increased in future years. As you may know, the Federal Republic of Germany is also buying 1,030 of these vehicles and negotiations are under way for a considerable increase in that quantity. Because the M-113 is a considerable improvement over the older types of carriers, we want to replace them as soon as practicable, particularly in the higher priority units. However, we still have about 6,000 of the older models, many of which were built in recent years.

(3) Tactical and support vehicles

1963 procurement of tactical and support vehicles will total $361 million, more than double the 1961 level.

Over two-thirds of the funds in this category will be used to procure some 36,730 tactical trucks in the 1/4, 3/4, 2½ and 5 ton categories. Most of these will replace older trucks for which further repairs are uneconomical. Our over-all inventory objective for these four tactical trucks is 273,000. The 1963 program will give us an inventory of the latest models of these trucks equal to about two-thirds of this objective. When older substitute models are included, our stocks will total about 90% of the objective, which we consider an adequate degree of readiness for equipment of this type.

(4) Electronics and communications

Procurement of Army electronics equipment in 1963 will total $296 million.

The largest item in terms of value is the new AN/VRC-12, a rugged and easily maintained vehicular radio set. The 1963 budget provides for 6,744 sets at a cost of nearly $30 million, which will increase our stocks to 40% of our inventory objective. Present assets of less desirable, but useable, vehicular radios are available to provide the remainder of the inventory objective.

Another important item in this category is the "man-portable" radio, AN/PRC-25, which fills a most vital requirement for more effective communications for company-size combat units. $13 million is included for 8,100 sets, bringing our assets up to approximately 26% of our inventory objective. The balance of the objective can be met from present stocks of older radios.

(5) Aircraft

The 1963 budget provides $219 million for 582 Army aircraft, compared with $248 million and 537 aircraft planned for 1962, and $180 million and 379 aircraft procured in 1961.

Included are 48 Caribou, twin-engine, transport aircraft, which will give the Army an inventory of 148 aircraft or 55% of the inventory objective, the balance being met by the older and less capable Otter.

360 Iroquois helicopters, for personnel, cargo and casualties are also included to replace older helicopters and fixed wing aircraft. The 1963 procurement will give us an inventory of 914 helicopters or 38% of the objective. Together with older models, 77% of the objective will be met.

We are also requesting a continuation of procurement of the Chinook helicopter to replace the older medium and light helicopters such as the H-21, the H-37, and the H-34. We propose to buy 24 Chinook transport helicopters in 1963, increasing the inventory of this aircraft to 68. This quantity, together with older aircraft, will meet about three-quarters of the inventory objective.

150 observation helicopters will be procured in 1963 to replace the older fixed wing observation aircraft. The 1963 procurement will give us an inventory of about 1,675 of these aircraft -- almost half of the inventory objective. When the older L-19's are added, we shall have an inventory of over 3,200 aircraft -- almost 90% of the objective.

(6) Other major equipment

Procurement of other major equipment for the Army in 1963 will amount to $198 million -- about 2½ times the 1961 level. This category includes construction equipment, such as crane shovels, road scrapers and tractors; materials handling equipment, such as fork-lift trucks and warehouse tractors; protective field masks, and chemical warfare warning devices; and other heavy equipment, such as the amphibious lighters BARC and LARC.

One of the largest single items in dollar value is the new 5-ton amphibious lighter, commonly called the LARC-5. This is an amphibious vehicle designed to replace the World War II "Duck." The 1963 procurement of 315 vehicles will give us about three-quarters of our inventory objective.

(7) Ammunition

Army procurement of ammunition in 1963 will total about $328 million -- slightly above the 1961 level. The items involving the largest dollar volume are 7.62mm cartridges and 155mm T-379 projectiles.

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The 7.62mm cartridge will be phased in with the delivery of the new weapons. Procurement of over 395 million rounds in 1963, together with the quantities funded in prior years, will give us an inventory of over 550 million rounds. This will meet the current inventory objective and provide adequate ammunition for peacetime training purposes.

The new T-379 high-explosive projectile for the 155mm howitzers provides increased range and lethality against personnel and materiel targets. Our inventory objective for this projectile is almost 860,000 rounds. The 200,000 rounds funded in 1962, together with the 360,000 rounds requested in the 1963 budget, will give us about two-thirds of the current inventory objective.

(8) Missiles

Almost $560 million is included in the 1963 budget for all types of missiles. Three air defense missiles will be procured in 1963: 662 NIKE-HERCULES, 1,200 HAWK, and 3,900 REDEYE. The NIKE-HERCULES procurement will fully meet the tactical requirements and provide training missiles for the future. The HAWK procurement will meet 95% of the deployment objective of 21 battalions. The remaining quantity for tactical use and for training missiles for later years will be provided in the 1964 budget.

Tentatively, the REDEYE will be placed in production with an initial procurement of 1,670 missiles in the 1962 program. Another 3,900 are included in the 1963 budget. Recent tests of this missile have not gone well and our production plans are very uncertain at this moment.

The 1963 procurement of 180 SERGEANT missiles, together with those funded in prior years, will completely meet the inventory objective for the approved six-battalion force, except for future requirements for training missiles. 120 PERSHING missiles are included in the 1963 budget, raising the total tactical inventory to about 150 missiles - against the ultimate requirement of 350 for the five-battalion force.

(9) Production base program

$127 million is requested for the Army's production base program -- more than 50% above the 1961 level. The major reason for this increase is the substantial expansion of the procurement program, with a resulting requirement for greater production facilities.

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2. Navy General Purpose Forces

a. Active Navy forces

For the General Purpose Forces of the Navy we are recommending an active fleet of 824 ships for the end of fiscal year 1963, including 15 attack carriers, 9 anti-submarine warfare carriers, 14 cruisers, two command ships, about 250 destroyer types, 103 submarines, and over 400 amphibious, mine warfare and auxiliary ships. These forces are shown on Table 8. We now plan to continue the same number of carriers and cruisers through fiscal year 1970, but a gradual reduction is planned in other types as we increase the combat power of individual units of the fleet over the years. Thus by 1970 we would have about 240 destroyer types, 98 submarines and about 420 other ships, or a total active fleet of 761 general purpose ships, compared with 824 planned for end 1963 and the 864 now in the fleet. The reduction from 1962 to 1963 is of course predicated on the easing of the Berlin crisis.

(1) Attack carrier forces

We are recommending in the fiscal year 1963 shipbuilding program one new attack carrier, conventionally powered. We have also tentatively programmed one more in fiscal year 1965 and another in fiscal year 1967. By 1970 we would have in the fleet 9 Forrestal-class carriers, the nuclear powered carrier Enterprise, 3 Midway and 2 Essex-class carriers, for a total of 15.

The principal use of the attack carriers in the years ahead will be in the limited war role. As we acquire larger forces of strategic missiles and POLARIS submarines, the need for the attack carrier in the general war role will diminish. However, they will still maintain a significant nuclear strike capability which could augment our strategic retaliatory forces. But in the limited war and cold war roles, the attack carrier force provides a most important and unique capability.

There are many potential trouble spots in the world where the attack carrier is and will continue to be the only practical means of bringing our air striking power to bear. Carrier airpower can be employed without involving third parties, without invoking treaties, agreements, or over-flight rights. And, as has been demonstrated many times before, the carrier task force is a most effective means for presenting a show of force or establishing a military presence, which often has helped to maintain the peace and discourage hostilities.

There is no reason to expect that the need for this form of airpower will diminish in the future. All of Africa is, today, an unstable area, and most of this area is within reach of our carrier airpower. Southeast Asia, the South Pacific and, indeed, the whole Far East present potential trouble spots in which the carrier would play a major role. Even in the European-Mediterranean area they provide a stabilizing influence, and they constitute a highly useful force for limited war operations in such places as North Africa and the Near East. The fact that they may be vulnerable to attack in a general nuclear war does not detract from their value in limited war.

To meet our commitments around the world we believe a force of 15 attack carriers is required. The ESSEX class carrier is marginal for this purpose. Most are about 20 years of age and despite extensive modernization, they no longer are fully effective in their role as attack carriers. For example, a FORRESTAL carrier can launch aircraft twice as fast as can an ESSEX class carrier. The added length and tonnage of the FORRESTAL carriers are a distinct advantage under severe sea conditions prevalent in the Western Pacific-China Sea area in the typhoon season, or the northern oceans in the winter. In the North Atlantic, for example, aircraft can be operated 345 days per year from the FORRESTAL class carrier and only 220 days from the ESSEX class carrier. Moreover, the FORRESTAL carriers have about 300% more jet fuel and over 150% more ordnance capacity. Finally, for the same type aircraft the accident and fatality rates on the ESSEX class are considerably higher than on the FORRESTAL class. Carrier operations are hazardous, and aside from the property losses involved, we should take every reasonable step to minimize the loss of life.

We have carefully considered the question as to whether the new carriers should be conventional or nuclear powered. Our studies indicate that a nuclear-powered carrier costs about 1/3 to 1/2 more to construct and operate than a conventionally powered carrier of otherwise equivalent characteristics. The operational benefits to be derived from the nuclear-powered carrier, particularly in limited war operations, do not, in our judgment, justify the higher cost.

We now have one nuclear-powered carrier and one nuclear-powered cruiser. The first nuclear-powered frigate will join the fleet in 1963. Another was in the 1962 program and we are recommending a third in this budget. Together, these five ships would constitute a small nuclear-powered task force which would give us a unique capability for sustained high speed operations and provide invaluable operating experience.

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The application of nuclear power to naval vessels is still in its early stages. Together with the Atomic Energy Commission, the Defense Department is continuing its efforts to develop a more economical nuclear power plant. No doubt the time will come when nuclear power will become more competitive with conventional power. That will be the time to introduce nuclear propulsion into the fleet on a larger scale. Meanwhile, we should proceed with the gradual modernization of the attack carrier force with conventionally powered ships.

(2) Anti-submarine warfare carrier force

With regard to the ASW carrier force of nine ships, no new construction is required. As ESSEX-class ships are released from the attack carrier force, they will replace the older carriers in the ASW force. We also plan, during the fiscal year 1963-1967 period, to put one CVS each year through the fleet rehabilitation and modernization program, thus keeping the force in good operating condition.

(3) Cruiser forces

By the end of the current fiscal year we will have a force of 14 cruisers, one of which - the LONG BEACH - is nuclear powered. Ten of these cruisers are armed with either TERRIER or TALOS missiles, while the remaining four are armed solely with guns.

In fiscal year 1963, two guided missile cruisers which have been converted to TALOS and ASROC will join the fleet, replacing two of the cruisers armed solely with guns.

We presently plan to continue this force through fiscal year 1970. Considering the increase planned in the frigate force, we do not now consider that further major modernization of the cruiser force is justified. However, the role of the cruiser in the years ahead is still under active study, particularly with regard to the construction of new TYPHON cruisers.

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(4) National command ships

We now have in the fleet one cruiser type converted to a command ship - the NORTHAMPTON. This ship, which can serve as an alternate national command post, provides a capability essential in a nuclear war environment. Because of the urgent need for this type of capability, we are reprogramming FY 1962 funds to start the conversion of one mothballed CVL hull to a command ship in place of the major communications relay ship (AGMR) in the 1962 program. The AGMR is included in the 1963 budget along with a second command ship conversion. The first command ship conversion will be ready about the end of fiscal year 1963, and the second about a year later. For the 1964-67 period we have tentatively programmed the construction of one new command ship in each year, providing a total of 6 in the fleet by the end of fiscal year 1970.

(5) Destroyer-type ships

we now have in the general purpose forces of the Navy about 295 destroyer-type ships including 15 frigates, 222 destroyers and 56 escorts, and small patrol ships. Included are the 40 destroyers and escorts ordered to active duty last year. In consonance with our assumption that the Berlin crisis will have abated before June 30, 1962, we have programmed a force of 254 destroyer types for the end of fiscal year 1963. Seven guided missile frigates, including the first nuclear powered frigate, will join the fleet during the coming fiscal year, giving us a total of 17 guided missile frigates and 5 gun frigates.

Five more guided missile destroyers will join the fleet in 1963, raising the total to 18. In addition, we will have 214 other destroyers, destroyer escorts, and patrol ships.

For fiscal year 1963, we are recommending the construction of one nuclear powered guided missile frigate. This ship will be designed to accommodate the TYPHON system. The new construction program also includes 5 DE's and 3 DEG's. Twenty-four more World War II type destroyers will undergo major modification under the FRAM-I program.

For the period 1964 through 1967 we have tentatively programmed 2 more frigates in each year, also designed to accommodate the TYPHON system. We also plan to convert 4 of the gun frigates to missile armament during this period -- 2 in 1964 and 2 in 1965.

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Twenty-four more destroyers will be put through FRAM-I in 1964. This will complete the last of the World War II destroyers and initiate FRAM-I conversions for the DD-931 class built after the war. Five of these ships will receive FRAM-I in 1964 and the remaining 13 in 1965. We also plan to start 36 more DE's and 10 more DEG's during the 1964-67 period.

The proposed program, plus ships already in the fleet or authorized, will give us a total of 237 destroyer types by the end of fiscal year 1970, including 39 guided missile frigates, 3 of which will be nuclear powered, 45 guided missile destroyers and 17 guided missile destroyer escorts. Under this program all of these ships will either have joined the fleet since the end of the Korean War or will have been put through the FRAM program since 1960. Thus we will have gone a long way in overcoming the block obsolescence stemming from the fact that the bulk of the destroyer force was built during World War II.

(6) Attack submarine forces

By the end of the current fiscal year the submarine force, excluding POLARIS and REGULUS, will number 104 submarines, including 17 nuclear powered. For the end of fiscal year 1963 we plan a force of 103 submarines, 21 of which will be nuclear powered. We propose to start 8 more nuclear powered submarines in 1963, and during the period 1964-67 we have tentatively programmed 30 more. This will give us a force in 1970 of 98 submarines, 70 of which will be nuclear powered. Of the remaining 28 conventionally powered submarines 18 will have joined the fleet after the Korean War or will have been put through major modernization since 1952.

(7) Mine warfare forces

Our mine warfare force consists of 84 ships, the same number as planned for the coming fiscal year. Our 1963 program includes one conversion, a mine countermeasures support ship. We have tentatively programmed another such conversion for 1964 and the construction or conversion of about 13 mine warfare ships during the 1964-67 period.

(8) Amphibious ships

Last year we substantially increased the amphibious lift for assault units from a 1-1/2 division/wing capacity to a full 2 division/wing capacity and the number of amphibious warfare ships from 110 to 130. We plan to continue the amphibious force at this level through 1964, reducing the number thereafter to 103 by 1970, as the force is modernized with new and vastly more efficient ships.

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The 1962 program, as amended, includes one LPH, a fast, high-capacity troop carrier with adequate facilities for large-scale helicopter operations; and 3 LPD's, high speed ships capable of landing troops, heavy equipment and cargo over the beach by means of embarked landing craft. The LPD also has a limited helicopter capability. One LPD was included in the 1961 program. For fiscal year 1963 we propose the construction of 4 more LPD's and 1 LPH. During the 1964-67 period we have tentatively programmed 14 more LPD's, 6 more LPH's, and 3 AGC's, (amphibious force command ships). In addition, in 1966 and 1967, we would make a start on the construction of new LST's and LSD's -- over-the-beach assault craft -- to begin the replacement of these types, most of which were constructed during World War II.

(9) Logistic support auxiliary ships

We are proposing for 1963 a total of 213 auxiliary ships, about the same number we have at the present time. This force will decline gradually to about 205 by 1967 as new and more efficient ships are introduced into the fleet. Our proposed 1963 shipbuilding program includes one new AOE, a fast underway replenishment ship, and 6 conversions. During the 1964-67 period we have tentatively programmed the construction of 58 logistic support ships and the conversion of 14.

(10) Landing and service craft

$15 million is also included in the budget for landing and service craft, compared with $7 million in 1962. We have tentatively programmed about the same level of funding for this purpose through 1967.

b. Active Marine Corps Forces

For the coming fiscal year we recommend the continuation of the present Marine Corps force of 3 division/air wings plus a nucleus for a fourth division, and a total strength of 190,000 military personnel. We currently plan to continue this force through the fiscal year 1964-67 period, with perhaps some changes in the force structure as may be required by the introduction of new weapons.

c. Navy & Marine Corps Aircraft Inventory

The total combat operating aircraft inventory for the general purpose forces of the Navy, including the Marine Corps, as shown in Table 10, will average about 3,950 in the current fiscal year, reflecting the increase resulting from the Berlin crisis. In 1963 we plan to reduce the combat operating inventory to about 3,800 as certain reserve units called to active duty revert to inactive

[redacted]

[redacted]

status. Based on our tentative programs for fiscal year 1964-67, the inventory would decline gradually to about 3,600 as new and more effective aircraft are introduced into the forces.

Of the 3,800 aircraft in the combat operating inventory planned for 1963, about 1,500 will be in the attack carrier air groups, 360 in the ASW carrier air groups, about 390 in the ASW patrol squadrons, and about 425 in the tactical support squadrons. The 3 Marine air wings will have about 1,110 aircraft.

d. Navy and Marine Corps Aircraft Procurement

To maintain and modernize this inventory, we propose to buy in fiscal year 1963 almost 900 aircraft, compared with about 800 aircraft in 1962 and less than 700 aircraft in 1961. Based on our force projections we would expect to buy about 950 aircraft a year, in 1964 through 1967.

Among the principal models in the procurement list is the F4H. We are requesting funds to procure 162 of these aircraft for the Navy and Marine Corps in 1963 and under our projected program we would continue to buy at about that rate through 1965, tapering off to 70 in 1967. The 90 F8U's in the 1963 procurement list are, according to our present plans, the final procurement of that model. In 1966 we would hope to make the initial procurement of the new TFX, with follow-up procurements in succeeding years.

Two hundred and forty A4D-5's are included in the 1963 procurement list. We have tentatively programmed the same level of procurement through 1965. Some time after that date we should be able to initiate procurement of the new VAX Tri-Service close support aircraft, the development of which is to be started in 1963. Also included in this budget are 40 A3J-3 aircraft configured for reconnaissance missions to support Navy and Marine Corps operations. Because of the urgent requirement to replace the older aircraft now carrying out the reconnaissance mission, we are reprogramming 1962 funds to procure 20 A3J-3's during the current fiscal year. We also propose the procurement of 55 A2F-1's in 1963, with increasing quantities in later years. This is the new all-weather close support attack and electronics reconnaissance aircraft.

For the ASW carrier air groups we propose to buy in 1963, 60 fixed wing S2F-3 long-range search aircraft and 42 HSS-2 helicopters. We plan to continue to procure both of these aircraft during the 1964-67 period. 24 WF-3 early warning aircraft are included in the 1963 procurement program for the attack carriers. We tentatively plan to continue to procure these aircraft through 1967 to replace the earlier models.

[redacted]

Forty-eight P3V-1 are included in the 1963 buy to continue the modernization of the land-based patrol squadrons now predominantly equipped with the propeller-driven P2V. This is the Lockheed turboprop aircraft which has a much greater speed, flight endurance and capacity than the P2V. We plan to continue to buy this airplane through the 1964-67 period.

Other aircraft procurement in 1963 includes 36 HU2K-1 utility helicopters, 36 HRB-1's, 30 ASH assault helicopters and 24 T3J trainers. Under our projected program we would continue to buy additional quantities of all of these aircraft during the 1964-67 period.

e. Navy missile procurement

Our 1963 procurement program also includes substantial quantities of air defense missiles. The 1963 procurement of 3,000 SPARROW III missiles is double the 1961 quantity and about 800 less than the 1962 quantity, including the Third Amendment. Completion of the 1963 procurement will give us about 54% of the inventory objective for this item.

In 1963 we plan to procure 2,960 SIDEWINDER 1c air-to-air missiles. This new missile is superior to its predecessor and we hope to increase production when present development problems are solved. The Navy will, of course, still have well over 10,000 of the earlier SIDEWINDER 1a missiles available.

The 1963 procurement of 1,200 TERRIER missiles amounts to over twice the 1961 quantity of 480 and slightly more than the 1962 quantity of 1,138. Completion of the 1963 procurement will provide 61% of the inventory objective. The 1963 procurement of 800 TARTAR missiles is more than half again as much as the 1961 quantity of 510 and slightly less than the 1962 quantity of 1,049. Completion of the 1963 procurement will provide about 70% of the inventory objective.

The 1963 procurement of 240 TALOS missiles amounts to one-third more than the 1961 procurement of 178 and about half of the 1962 procurement of 407. Completion of the 1963 procurement will provide about 75% of the inventory objective.

The 1963 procurement of 6,500 tactical BULLPUP missiles (including the improved BULLPUP B) is somewhat less than the 1962 procurement of 7,589 but about twice the 1961 quantity of 3,575. Provision is also made for 3,000 training BULLPUP missiles in 1963, the first time this item has been scheduled for Navy procurement. Completion of the 1963 procurement will provide over 65% of the operational inventory objective.

The first buy of 360 SHRIKE antiradar missiles is included in the 1963 budget together with another 108 SUBROC antisubmarine rockets. Also included in the 1963 budget are about 1,300 target drones and 100 antisubmarine drone helicopters, a level substantially greater than 1961.

f. Other Navy procurement

Navy procurement, other than ships, aircraft, and missiles, includes substantial quantities of ZUNI 5" air-to-surface rockets, new type bombs, torpedoes, ASW sonobuoys, electronics and communications equipment, training devices, etc. One of the major expenditures involves the procurement of 3700 MK44 torpedoes in 1963, at a cost of about $72.8 million, which will improve our readiness position from 16% to 43% of the inventory objective. Delivery of this new lightweight ASW torpedo will be expedited by the opening of a second production source.

The Navy electronics program for 1963 represents a modest increase of about 19% over the 1961 program, and about 9% over that for 1962. While these increases are not large, the quantities recommended are sufficient to support the other Navy programs.

Our logistics objective for the General Purpose Navy Forces is to provide inventories for [redacted] of combat. For this purpose we propose to provide ship fills for the active and selected reserve ships plus [redacted] comsumption for the active fleet and high readiness reserve ships, and for one-third of the other reserve ships having a wartime mission. For naval aviation support, our objective is to provide [redacted] consumption for two-thirds of the force.

g. Marine Corps procurement

Our logistics objective for the Marine Corps is to support a 4-division force for [redacted] This will require an inventory to support [redacted] of combat.

Included in the 1963 procurement program is another increment of 63,500 M-14 rifles, the same number procured in 1961 and 1962. The 1963 procurement will increase readiness for the rifle to 81% of the objective. Here again, as with the Army, we also have a large stock of .30 caliber weapons on hand, which can be used in an emergency. Some 226,000 rounds of newly designed 105mm ammunition will also be procured, about three times the 1962 level, thus increasing the inventory to about 43% of the objective. Production of this item is being expedited. The 1963 list includes 59 self-propelled 155mm howitzers, compared with 30 in 1962 and none in 1961, thus providing 100% of the objective for this modern item.

1963 procurement includes 6,334 of the AN/PRC-38 tactical radio. This will be the initial procurement of this newly-developed item and will provide about 50% of the objective. Stocks of older radios now on hand are adequate to carry us until the remaining quantity of the new model can be delivered. The 1963 budget provides $27.5 million for support vehicles, compared with about $22 million in 1962 and about $12 million in 1961. A considerable portion of the 1963 procurement is for replacement of over-age and worn-out vehicles. 197 M-48 tanks will be modernized in 1963 compared with 200 in 1962 and none in 1961. 156 heavy M-103A2 tanks will also be modernized with 1963 funds. No heavy tanks were modernized in either 1961 or 1962. The 1963 program will complete the Marine Corps modernization program for these combat tanks.

h. Navy reserve components

The Naval Reserve will continue to provide a number of trained and ready combat units as well as individual replacements to fill out the regular Navy in time of war or periods of heightened tension. The forces to be maintained in 1963 include 40 destroyer-type ships and 11 mine warfare vessels. The reserve ASW aviation forces will be composed of 87 units flying various types of ASW patrol and attack aircraft.

The Marine Reserve is trained and manned to be able to fill out the 4th division/air wing in a period of only one month.

3. Air Force General Purpose Forces

a. Active forces

The general purpose forces of the Air Force include the tactical fighters, bombers and reconnaissance aircraft and missiles, and interceptors deployed overseas. The force projections through 1967 are shown in Table 14. Through fiscal year 1965 we have also included the KB-50 propeller-driven tankers. These will gradually be replaced with KC-135 jet tankers which are included in the Strategic Retaliatory Forces since they will be managed with SAC tankers as part of a single tanker fleet.

Our principal objective here is to build up the air support for the Army forces. There are now about 1,800 tactical fighters and bombers in the general purpose forces of the Air Force. This is about 600 more than we had before the Berlin crisis and reflects the call-up of reserve units. We propose for end 1963 a total of about 1,600 tactical fighters and bombers, retaining some of the aircraft in the reserve units called up for the Berlin crisis.

[redacted]

By retaining these aircraft, we will be able to maintain a force of 21 tactical fighter wings compared with only 16 wings before the beginning of the Berlin buidup. All of the tactical bombers will have been phased out by end fiscal year 1965 and replaced with tactical fighters, thus continuing the force at about 1,600 aircraft through fiscal year 1967. The introduction of the new fighters will provide a marked increase in capability.

(1) Tactical fighters

In order to modernize these forces over the next few years we will have to buy substantial numbers of new tactical fighters. There are two high performance fighters suitable to Air Force needs now in production, the F-105 and the F4H. (The Air Force will designate this aircraft the F-110.) The latter is a newer design and enjoys an over-all performance advantage in most respects. Therefore, F-105 production will be gradually tapered off in favor of the F4H. Specifically, we are proposing the procurement of 30 F4H's for the Air Force from fiscal year 1962 monies (using reprogrammed funds for this purpose), and 231 F-105's. In 1963, we are proposing the procurement of 280 F4H's and 122 F-105's. The procurement of additional F4H's is planned in 1964 and 1965.

In 1964, we expect to begin the procurement of the TFX, the follow-on tactical weapon system planned for use by both the Air Force and the Navy. This high performance versatile fighter is scheduled to become operational for Air Force use in 1967 and for Navy use in 1969. Utilizing a variable geometry wing and powered by turbofan engines, the TFX should be capable of speeds of Mach 2.4 at altitude, as well as low-level supersonic bombing operations. This fighter should be highly efficient in all the tactical and air defense missions for either limited or general war and because of its long ferrying range and refueling capability, it can be rapidly deployed to all parts of the world. $40 million is being devoted to the development of the TFX in the current fiscal year and the 1963 budget request includes $123 million. Industry proposals were recently submitted to the Air Force and Navy on the TFX and we hope to select a contractor and get the development effort under way within the very near future.

(2) Tactical reconnaissance

The tactical reconnaissance force now numbers about 325 aircraft, about 75 more than the pre-Berlin number. During the coming fiscal year the RF-84F's called up to meet the Berlin crisis will be returned to reserve status, reducing the force to about 250 aircraft. By the end of 1963, the tactical reconnaissance force

[redacted]

[redacted]

will consist of about 150 RF-101's and 100 RB-66's. Under our longer range plans, the latter would be phased out of the force by 1966 and replaced with the Air Force reconnaissance version of the Navy's F4H. We also plan to develop a reconnaissance version of the TFX, to be available in the late 1960's.

(3) Interceptor aircraft

The general purpose forces of the Air Force also include about 275 interceptors deployed overseas. Except for a few F89-D's, all of these aircraft are now F-102's. We plan to continue this force through fiscal year 1963, gradually reducing it to about 150 aircraft by 1967 as high performance multipurpose fighters are phased into the force.

(4) Tactical missiles

In Europe, we now have 2 operational MACE-A tactical missile squadrons and 1 MACE-B squadron for which hardened facilities are under construction. Two MACE-B squadrons are also under construction in Okinawa and will be operational by the end of this year. We plan to maintain all the MACE squadrons in Europe through fiscal year 1966. While these early model air-breathing missiles are vulnerable to the large Soviet IRBM forces in Europe, they do provide a potentially important nuclear delivery capability and at very little additional cost.

Nevertheless, in view of Soviet developments in mid-range ballistic missiles and our own increased requirements in this area, we have included funds in the R&D program for the development of a new mobile, quick reacting, medium-range ballistic missile to meet the requirement for a tactical missile in the NATO area. This would fill the "range gap" in our present missile programs between the PERSHING, with a range of 400 miles, and our ICBM's, with ranges in excess of 5,000 miles. Our plans for employment of this missile are still highly tentative.

(5) Air Force ordnance procurement

In context with the over-all buildup of tactical air strength, it is also necessary to correct a deficiency in procurement of conventional ordnance which has resulted from the pressure of higher priority programs in past years. In order

[redacted]

to eliminate this deficiency, we are planning a closer relationship between Air Force conventional ordnance requirements and the logistics support requirements of the ground forces with which they will be operating. I have directed the Air Force to attain a minimum on-hand objective of [redacted] days by the end of fiscal year 1963.

For fiscal year 1963 we are recommending about one-quarter of a billion dollars for Air Force non-nuclear munitions. This is about the same level as that programmed for the current fiscal year, which as you know was substantially increased in the fiscal year 1962 budget amendments. It is about five times the amount programmed for this purpose in fiscal year 1961.

The major increase is for bombs, particularly the new family of modern munitions. The 1961 program included only $18 million for this category of munitions compared with $185 million proposed for the coming fiscal year and $137 million in the amended 1962 program.

Substantial increases have also been made in the BULLPUP air-to-surface missile program. The 1962 procurement has been increased from about 1600 in the original budget to about 10,000. Another 4400 missiles are proposed for procurement in 1963. These numbers compare with about 1100 BULLPUP's procured in 1961. Procurement of BULLPUP trainer missiles has also been greatly increased. The 1963 budget includes about 8400 of these missiles, compared with 5000 in the amended 1962 program and about 1250 in the 1961 program.

b. Air Force reserve components

An important tactical air capability is incorporated in the Air National Guard forces. Before the call-up occasioned by the Berlin crisis, the Air National Guard had 22 squadrons of tactical fighters. Eighteen of these, plus 3 F-104 fighter interceptor squadrons are now on active duty. As I pointed out earlier, because of the need to augment the close air support capabilities of the active Air Force, 12 squadrons of F-84F aircraft will be retained in the active forces. The remaining Guard aircraft and all of the personnel will be returned to reserve status by the beginning of fiscal year 1963.

The Guard units that were called to active duty will be reconstituted in 21 squadrons by redistributing the F-86, F-100, and F-104 aircraft currently in the inventory. These units will, initially, operate with considerably reduced U.E.'s. However,

the personnel who return to Guard status will have sufficient aircraft to maintain their combat readiness. As F-100's, F-104's and, starting in 1964, the early models of F-105's are phased out of the Air Force, the Guard squadrons will receive additional aircraft. The F-84F's that are to be retained will also be returned to the Air Guard starting in 1964, in phase with the delivery of the F4H's the Air Force is now procuring. The 21-squadron force including interceptors will be maintained through 1967.

The Air National Guard also has 5 squadrons of RB57 and 7 squadrons of RF-84F reconnaissance aircraft. Four of the seven RF-84F squadrons are currently on active duty but will be returned to reserve status. The 7 squadrons of RF-84F's and the RB57's will be maintained in the Guard through 1967, and 3 KC-97 squadrons will be formed by end fiscal year 1963. The 3 KC-97 squadrons will ensure that the Air National Guard units are proficient in air refueling so they can be quickly deployed overseas, should they again be called to active duty at some future time.

G. GENERAL PURPOSE FORCES - FINANCIAL SUMMARY

The General Purpose Forces I have outlined will require total obligational authority of $18.4 billion for fiscal year 1963, compared with $18.2 billion for fiscal year 1962. Tables 16 - 18 contain a breakdown of total obligational authority for fiscal years 1962 and 1963 by program element and by research and development, investment and operating costs.

As you can see on the bottom of Table 18, page 142, research and development and investment for General Purpose Forces will rise in fiscal year 1963 reflecting the increased emphasis now being given these forces. Operating costs show a small decrease, reflecting the anticipated release of reserve component forces now on active duty.

* * * * *

V. AIRLIFT AND SEALIFT FORCES

A. THE PROBLEM

Our policy of deterring or confining limited wars requires not only combat ready General Purpose Forces but also the ability to move them promptly anywhere in the world. Aside from the political complexities involved, the sheer logistics task of projecting U. S. military power to the far corners of the earth is a staggering one.

Generally speaking, we have two ways in which to do this: we can station large numbers of men and quantities of equipment and supplies overseas near all potential trouble spots, or we can maintain a much smaller force in a central reserve in the United States and deploy it as necessary to meet situations dangerous to our security.

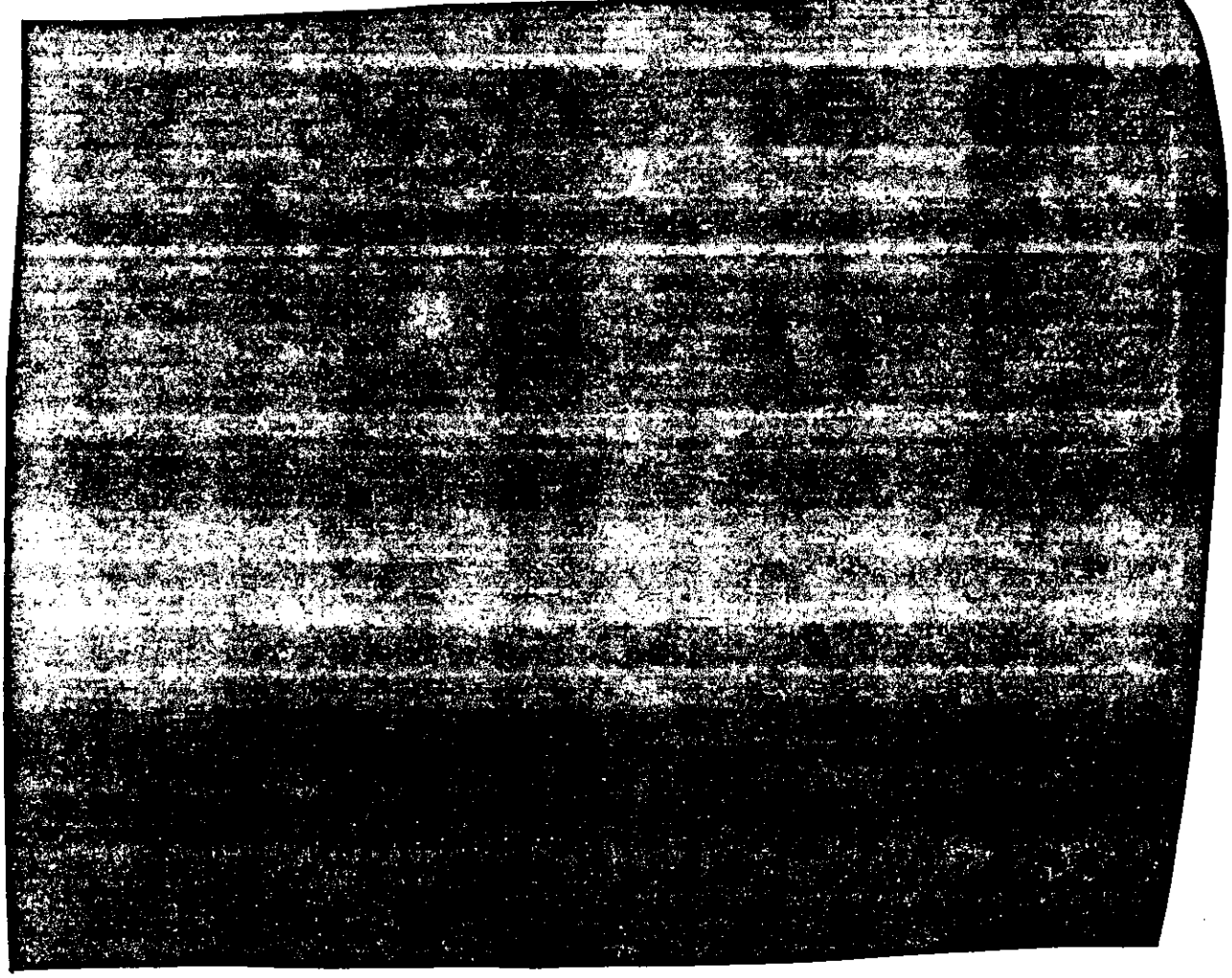
Both approaches have their advantages and disadvantages. If large forces are deployed in forward areas they can respond quickly and the need for long-haul transportation is reduced. The drawbacks to this approach are that it requires very large numbers of men, great quantities of equipment, long periods of overseas service, and involves all of the uncertainties and difficulties associated with foreign bases, such as base rights, status of forces, etc. It also reduces the flexibility of our military posture and considerably increases Defense expenditures abroad.

On the other hand, a mobile "fire brigade" reserve, centrally located in the United States and ready for deployment to a threatened spot anywhere in the world, is basically a more economical and flexible use of military forces. Fewer men and less equipment can do the job and most of the problems involved in stationing large U.S. forces in foreign countries in peacetime could be avoided. However, to move the forces required with all of their heavy equipment from the continental United States and then to support them overseas would require an enormous transport capacity. Furthermore, movements by sea from the continental United States [redacted] Therefore, the forces and their essential support during the first thirty days would have to come by air.

[redacted]

To move such a force over [redacted] in a short period of time would require a fleet of transport aircraft perhaps three or four times greater than the one we have now. It would require a very large investment as well as heavy operation and maintenance costs. And to maintain the ability of the force to perform its wartime mission we would have to operate it at a level which would generate, even on a minimum training basis, peacetime passenger and cargo capabilities so large that there would be no justification for procuring commercial airlift services. This would be an undesirable consequence as it is in the Defense Department's own interest to stimulate the growth of cargo-carrying capabilities in the civil airlines.

Thus, there is no simple black or white solution to this problem. The program we have adopted draws upon elements of both approaches. We plan to increase substantially our rapid response airlift capability; we also plan to maintain our theater forces and to build up their stocks of prepositioned equipment. (This has already been done in Europe and more will be done in the Mediterranean.



We are currently undertaking a field test to determine whether we can man the airlift squadrons so as to permit all units to surge to the high wartime utilization rates while actually operating them in peacetime at the lowest rates consistent with the required amount of training. No matter what this minimum flying hour program turns out to be, I am sure you appreciate that by the mid '60's our peacetime capabilities will begin to mount rapidly as the new and more efficient airlift aircraft are delivered. We intend to use these gains prudently: to increase the number and scope of joint Army-Air Force deployment exercises; to move more high value cargo by air and thereby save procurement and warehouse costs because of the smaller inventory; and to make a greater part of our troop movements by air rather than surface--thereby saving both dollars and time.

We do not intend, however, for the Military Air Transport Service (MATS) to take on any domestic passenger airlift operations. Quite the contrary: we fully intend to continue the gradual withdrawal of MATS from so-called scheduled passenger service on the overseas routes and continue concentration on the troop and cargo lift mission. At the same time we will endeavor to direct as much routine cargo traffic to eligible civil carriers as is practical under the circumstances. The Defense Department has every reason for wishing to see a healthy commercial cargo airlift industry develop in this country since it represents, from the Department's viewpoint, the most economical form in which to maintain an emergency capability.

B. ANALYSIS OF AIRLIFT REQUIREMENTS

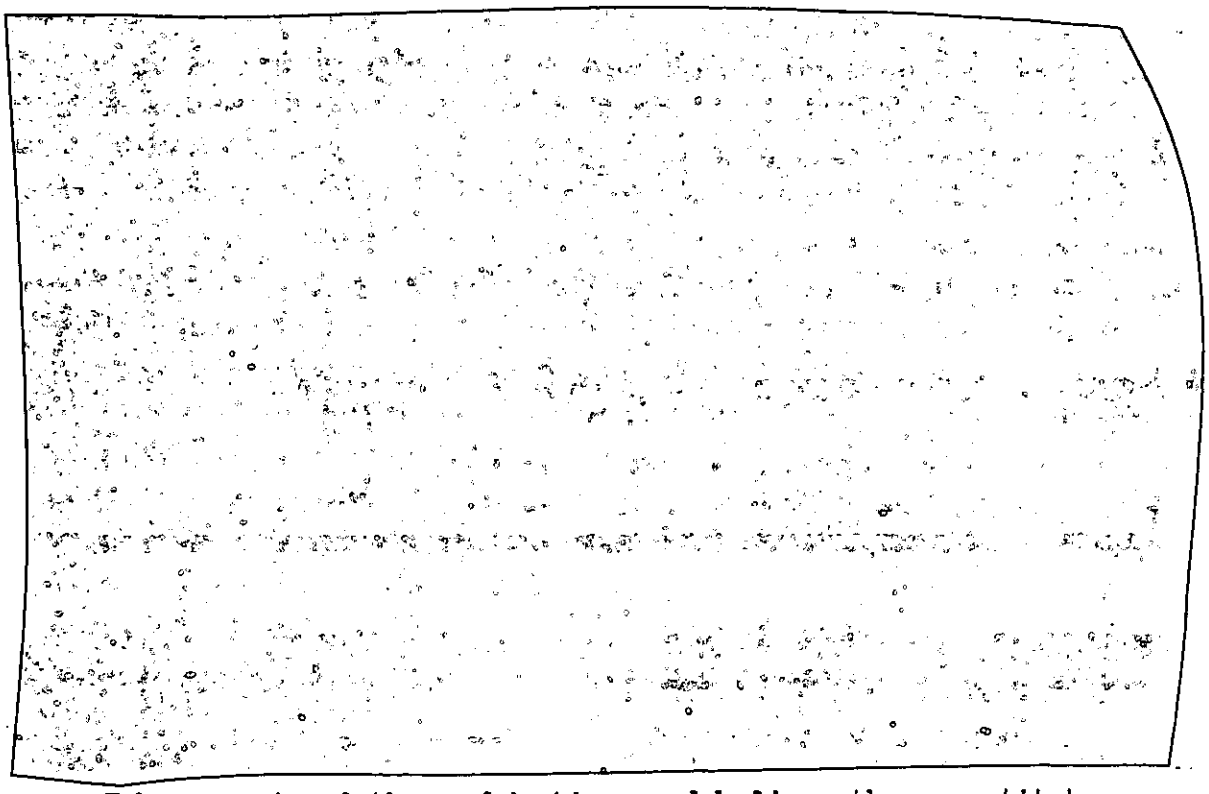
As in the case of the General Purpose Forces, the requirements for airlift and sealift, and particularly airlift, do not lend themselves easily to precise calculation.

First, there is the almost infinite variety of circumstances, political as well as military, which could call for forces of various sizes and kinds, ranging from a simple show of force to large, heavily equipped combat forces.

Second, we may be confronted by more than one aggression at the same time, and in different parts of the world.

Third, we now count on the use of U.S. overseas bases for staging our airlift fleet. Yet, if for some reason we were to be denied the use of any one of the key bases, [redacted] Wake or Guam, our ability to airlift troops and equipment would be severely curtailed. Most of our current fleet could not fly the requisite longer distances with significant payloads and even the C-141 would have its potential maximum load cut roughly in half.

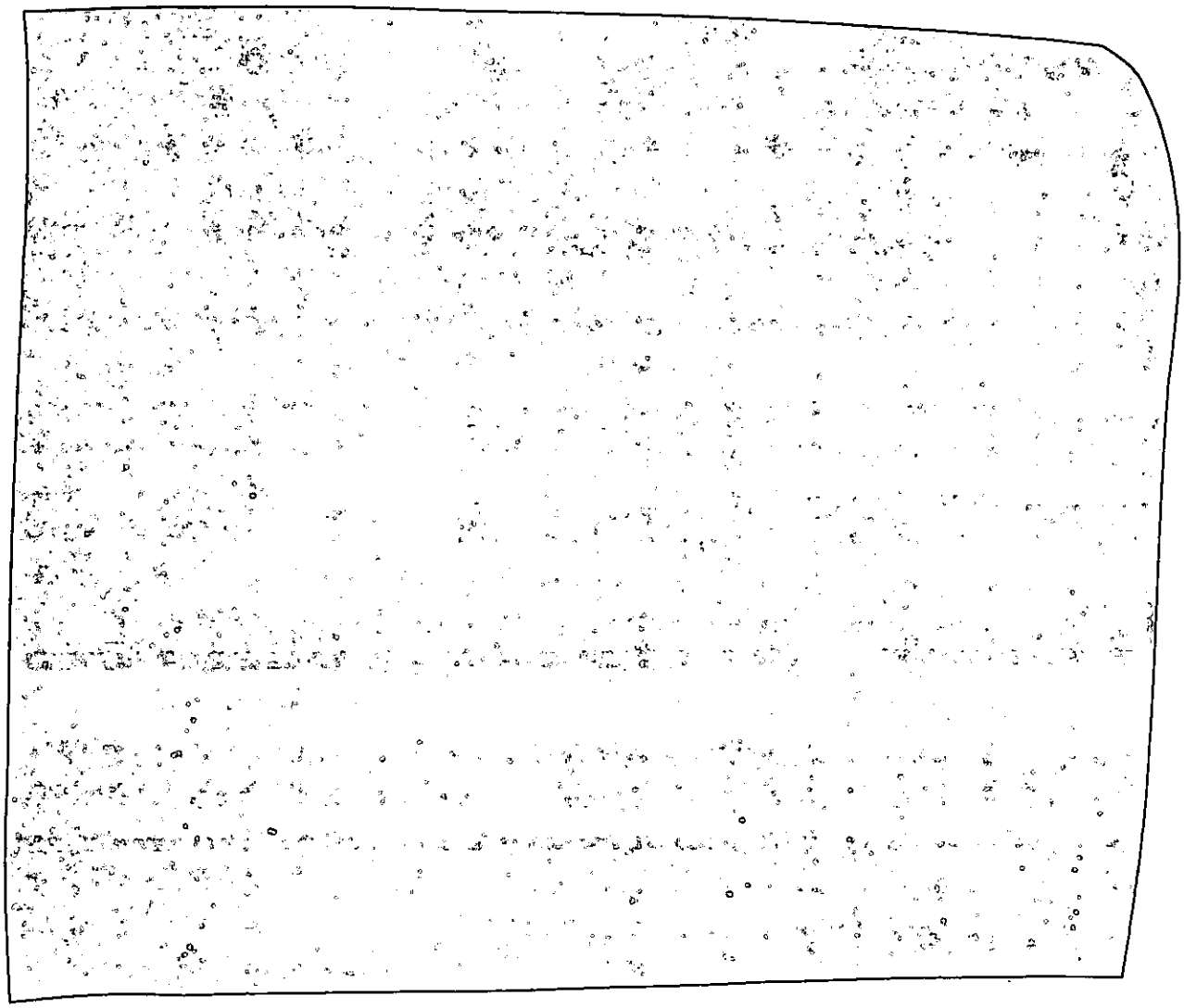
Nevertheless, the Military Departments have developed a series of general objectives for deployments to meet limited war contingencies. They are as follows:



I have reviewed these objectives and believe they constitute, at the present time, a reasonable basis for mid-range planning by the Services.

To determine the lift requirements to meet them, we have used a "building block" approach. That is, we have asked: What does it take to move the men, equipment, and supplies of one division to Southeast Asia in thirty days? With this requirements unit or building block in hand, we can then estimate roughly the requirements imposed by the need for more divisions, for a faster deployment, for areas in less distant parts of the world, and for multiple crises.

In terms of deployment area, the reason for choosing Southeast Asia is obvious: it is both a likely contingency area and the distance is near the maximum. The size, weight, and composition of the building block "division" to be deployed, however, present problems.



These tonnages, of course, represent just the bare minimum for the combat elements involved. More personnel, and vastly heavier weights of equipment and supplies of all kinds would be necessary to round out and support the division force in sustained operations. These greater weights, as a practical matter, would have to be moved by ship and therefore constitute a sealift requirement.

C. AIRLIFT AND SEALIFT FORCES

Table 19 shows the active airlift and sealift forces projected through fiscal year 1967.

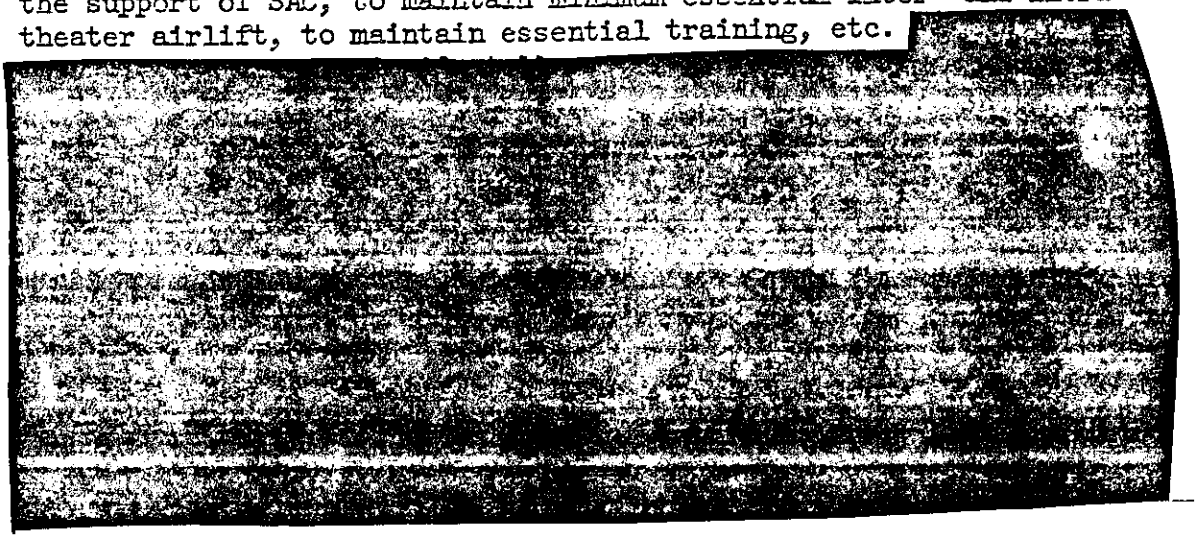
These active forces are supplemented in the case of the airlift by the Air Force Reserve and Air National Guard and the Civil Reserve Air Fleet (CRAF); and, in the case of sealift, by the very large dry cargo and tanker capabilities of the U. S. civil merchant marine.

1. Airlift Forces

a. Present airlift capabilities

By end fiscal year 1962 we will have 921 airlift aircraft in the active forces, including those called up from the Air Force reserve components. However, not all of these aircraft would be available for the deployment of STRIKE COMMAND forces in an emergency.

Some of the airlift aircraft would have to be withheld for the support of SAC, to maintain minimum essential inter- and intra-theater airlift, to maintain essential training, etc.



CRAF capabilities while not explicitly included in the calculated tonnage capabilities are, nevertheless, reflected indirectly in the estimates. Most of CRAF's capability is in a passenger configuration and what cargo capacity it does have is pretty well limited to small high density items. Thus the CRAF contribution to the initial deployment effort -- with its very heavy emphasis on outsize items such as vehicles and guns -- would be quite small.

However, CRAF's substantial passenger capability is counted on for the purpose of bringing in the follow-up rear echelon personnel --

CRAF would also be expected to ease somewhat the follow-on resupply situation where packaged high density items would be a large share of the load; it could also fill the gap in maintaining routine overseas logistic support in other theaters.

There is perhaps one other important qualification to be kept in mind in evaluating tonnage capabilities against requirements: a ton of requirements is not necessarily the same as a ton of capability.

About 70% of the weight of a division force in the initial deployment phase is accounted for by vehicles and heavy guns. Because of their size and shape, aircraft such as the C-118 and C-121 simply cannot carry any significant load of such equipment.

[redacted] In the later years when the force is composed largely of C-130, C-133, and C-141 aircraft which have large efficient cargo envelopes, this problem pretty well disappears, except for some truly outsized pieces of equipment.

b. Airlift aircraft procurement

Our airlift procurement program is directed at three main objectives: short range solutions, interim modernization, and long-range improvement.

The first step to increase our immediate capabilities was taken in the July Amendment to the FY 1962 budget. We proposed then to delay the deactivation of certain C-124 and C-118 squadrons. We now propose, as Table 19 shows, to delay their phaseout still further, and to retain in the active forces some of the Reserve's C-124's brought on to active duty. This was necessary since the C-124 has particularly good vehicle hauling characteristics and this need is, as I explained earlier, quite urgent over the next few years. We have also squeezed every possible strategic airlift aircraft out of the supporting commands and into the strategic airlift fleet.

We got a good start on our interim modernization needs in the amended 1962 budget. We considered procuring two additional squadrons of C-135's in this budget (above the 45 aircraft already funded and due for final delivery by July 1962) but decided that these first 3 squadrons had met our needs. Deliveries from a 1963 buy would only be completed in 1965 and by that time we will be getting the first of the C-141's. Furthermore, while the C-135 is a vast improvement over the C-118's and C-121's in terms of range, speed, and gross load, it suffers from some of their same shortcomings. The C-135 has a relatively long takeoff and landing distance, it has no airdrop capability, and does not have truck-bed height loading. Moreover, its restricted cargo cross section limits severely the size of the vehicles it can carry. These considerations made it appear unwise to attempt further interim modernization with the C-135.

The C-130E, on the other hand, can carry about the same cube-limited payload as the C-135 (although over shorter ranges and not nearly so swiftly) but virtually all of the airborne division's

vehicles can be accommodated. In addition it has good short field characteristics, truck-bed height loading, and an air drop capability. We intend, therefore, to continue the interim modernization effort based on the C-130E and will build the total C-130 force up to 28 squadrons (448 U.E. aircraft) by the end of FY 1964. We will then hold that level throughout the rest of the period.

To accomplish this we plan to procure 136 C-130E's in the 1963 budget and will complete the program with a small buy of advance attrition aircraft in 1964.

The long-range improvement of our capabilities is centered on the C-141. This aircraft, while conservative from an engineering-development point of view, promises to provide a real breakthrough in airlift performance compared to anything previously available. It should be able to lift up to 45 tons over short distances, and carry 20 tons nonstop out to 5,500 nautical miles. Its cruise speed of 440 knots coupled with its heavy cargo capability make it more than four times as productive as our present prop-driven cargo planes such as the C-118 and C-121. It has excellent performance off short and lightweight runways -- as good as the C-130E in fact -- and has the same cargo compartment cross section. It also features truck-bed height loading, an airdrop capability, and very low direct operating costs. In short, this is the airlift aircraft we have been waiting for and we intend to standardize on it for the heavy lift requirement.

The present program looks forward to an operational squadron (16 aircraft) by the end of FY 1965, a force of 10 squadrons (160 U.E. aircraft) by the end of 1967, and an ultimate total of 13 squadrons (208 U.E. aircraft) by June 1968.

This year we are requesting funds to procure the first 16 aircraft and to complete development, test, and evaluation. Additional procurements will be made in subsequent years.

c. Airlift capability at end FY 1967

By the close of 1967, the active airlift forces would consist of 738 aircraft -- 48 C-124's, 448 C-130's, 40 C-133's, 42 C-135's and 160 C-141's. With these forces we could expect to deliver a light airborne division force to Southeast Asia in [redacted] a medium-weight airborne division force in [redacted] and the air echelon of a ROAD infantry division force in about [redacted] This would represent a vast improvement over our present capability to airlift a light airborne division in [redacted]

[redacted]

2. Sealift Forces

a. Sealift capabilities

With respect to sealift it appears that our combined military-civil capabilities are generally adequate to meet the present requirements. As a matter of policy the Defense Department does not try to duplicate the general cargo and POL capability available in commercial bottoms; there is no good reason to undertake such a costly program. The ships in our military sealift forces are there because they provide special capabilities not ordinarily available and because we need at least a nucleus fleet instantly and wholly responsive to military needs. As a case in point, the tankers we have in the sealift force are much smaller than the supertankers now being built for commercial operators. The smaller tankers, however, are very necessary in getting into the restricted, shallow ports and approaches that are characteristic in the remote areas of the world. For example, all ports in Southeast Asia and at the head of the Persian Gulf have controlling depths of less than 30 feet.

Similarly, the cargo ships in the Military Sea Transportation Service (MSTS) fleet have special wide hatches and extra heavy cargo booms to transfer outsized pieces of military equipment. Each MSTS troop transport has a much greater troop capacity than any commercial passenger vessel except the liner UNITED STATES.

In the case of the MSTS troopships, however, we feel that by the end of FY 1964 we will have sufficient military and civil air deployment capability for personnel -- both in peace and war -- that the MSTS troop transports can be placed in some form of reduced operating status. Air movement of personnel, of course, is much faster, but for the present, at least, it appears prudent to retain them in service.

b. Sealift shipbuilding program

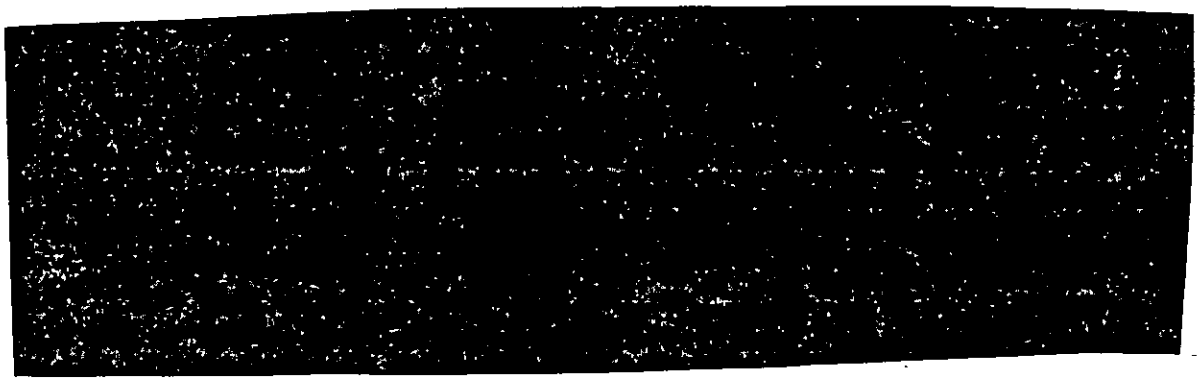
The sealift program presents less of a picture of change since there are no large unmet needs. The only significant changes in the force structure -- as shown in Table 19 -- are the addition of the Forward Floating Base ships and the possible phaseout of the 16 MSTS troopships by the end of FY 1964. Our capability to deploy personnel by air at that time should be sufficiently assured that we can safely deactivate the troopships. They would, in any event, be maintained in a condition so that they could be brought into use relatively quickly if a requirement for heavy sustained movement of personnel did develop.

[redacted]

The balance of the force meets our current and prospective needs fairly well. With but one exception we see no near-term need for a replacement shipbuilding effort. Various replacement programs have been considered, but their high cost -- about half a billion dollars over the 5-year period -- plus the very limited gain in effectiveness have made it clear that they would not be a sound use of our resources. To the extent that modernization of this fleet does become necessary, we expect to achieve it by means of major rehabilitations. These would be similar to the FRAM program for extending the useful life of destroyers.

The one area in which replacement ships will be procured is in the general cargo fleet. Here we propose to build a Comet roll-on/roll-off vessel each year for the next five years, beginning in 1963. When delivered, they will replace a like number of the oldest general cargo vessels.

The roll-on/roll-off type ship greatly reduces loading and unloading times for vehicles. The 5 new ships together with the two we already have will give us a capability to move one whole armored division overseas and get it into action considerably sooner than if the vehicles had to be hoisted in and out of the holds of conventional cargo ships. Furthermore, these ships eliminate the need for special booms and cranes and enable the heavy tanks and other vehicles to be put ashore at relatively primitive port facilities.



D. AIRLIFT AND SEALIFT FORCES - FINANCIAL SUMMARY

The airlift and sealift forces will require $1,298 million in total obligational authority in FY 1963. This compares with $1,117 million for FY 1962.

These figures do not include most of the direct operating costs of these forces. Except for the troop carrier squadrons of the Tactical Air Force, the airlift aircraft in this program are in the

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Military Air Transport Service, and the ships are managed under the Military Sea Transportation Service. Both of these, as you know, are industrially funded organizations. This means that almost all of the direct operating costs of MATS and MSTS are paid for by the military customers who utilize their services. Thus the TOA required for airlift and sealift operating costs are included in other programs, notably in General Purpose Forces.

However, if separately identified these so-called funded costs for airlift and sealift services would amount to $329 million in FY 1963 for MATS and $374 million for MSTS.

The unfunded costs for which obligational authority must be provided directly to the airlift and sealift forces in FY 1963 are as follows:

a. Research - $68 million for completing the development, test, and evaluation of the C-141.

b. Investment - $585 million of which $570 million is for the C-130E and C-141 aircraft and the COMET cargo ship.

c. Annual operating - $645 million, principally for military personnel, and for certain spares and replacement equipment.

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[redacted]

VI. RESERVE AND NATIONAL GUARD FORCES

A. GENERAL

I have already discussed most of the issues involved in the Reserve and National Guard programs, but I think it would be useful at this point to summarize the numbers on pay status and the costs of these programs. Table 22 shows the numbers of Reserve and National Guard personnel engaging in regular paid training for the fiscal years 1961, '62, and '63. Table 23 shows the total costs of these programs for fiscal years 1962 and '63, including those portions of the costs financed in appropriations for the active duty forces (e.g. active duty military personnel assigned to support the reserve program, and procurement for the reserve forces).

We have not, in Table 22, projected the Reserve and National Guard programs beyond fiscal year 1963. As I indicated earlier, these programs need a great deal more study before we will be in a position to project them out to fiscal year 1967. Our fiscal year 1963 budget proposals essentially continue the drill pay strengths originally planned for the end of the current fiscal year, except for the Army reserve components which I have already discussed in considerable detail.

As shown at the end of Table 22, we plan a total of 1,044,000 Reserve and National Guard personnel on paid status at the end of fiscal year 1963. This compares with 971,000 at end fiscal year 1962 and about 1,086,000 at end fiscal year 1961. The 1962 figure, of course, does not include the reservists ordered to active duty last fall. As I pointed out at the beginning, for purposes of preparing the fiscal year 1963 budget we arbitrarily assumed that the Berlin crisis would terminate by July 1, 1962, the beginning of fiscal year 1963. Therefore, the 1962 figures for Reserve and National Guard personnel on paid status do not include any of those ordered to active duty. If the Berlin crisis should abate to a point where we can begin to release reservists from their active duty before the end of the current fiscal year, we have the funds required to reinstate them on paid status in their reserve units.

A total of 973,000 personnel would be receiving paid drill training at the end of fiscal year 1963 compared with 901,000 at the end of 1962 and 1,005,000 at end 1961. The reduction from end 1961 reflects the proposed reorganization of the Army reserve components during the coming fiscal year.

[redacted]

B. ARMY RESERVE COMPONENTS

Because our plans for the Army reserve components have not advanced to a point where we can precisely allocate the proposed 670,000 paid drill strength between the Army Reserve and Army National Guard, we show, in the 1963 column of Table 22, combined figures for both components. Of the 670,000 planned for end 1963, 445,000 would receive 48 regular paid drills per year and 15 days of summer training; 138,000 would receive 24 drills and 15 days summer training; and 87,000 would be receiving 6 months training with the active Army on June 30. (A total of 172,500 would receive 6 months training during the year.) We have substantially increased the input of 6-month trainees to help rebuild the Army reserve components during the coming fiscal year. I might point out that 73,000 reservists formerly on drill pay status are now on active duty. If we would add this 73,000 to the drill pay strength shown for end 1962, the total would come very close to the 700,000 figure for which funds were appropriated by the Congress last year. This result is not accidental since each of the Services has been directed to keep open, during the current fiscal year, the drill pay spaces vacated by the reservists ordered to active duty. The figures shown for "other paid status" are, for the most part, reservists receiving only 2 weeks annual active duty training.

C. NAVY RESERVE

The proposed 1963 budget will provide paid drill training for 125,000 Navy reservists, the same number originally planned for end fiscal year 1962. Of these, 121,000 would receive 48 drills per year and 15 days summer training; 3,000 would receive 24 drills and 15 days summer training; and 1,000 would be undergoing 6 months training at the end of the fiscal year. (A total of 1,500 would receive 6 months training during the entire year.) In addition, 4,000 reservists would receive two weeks annual training. About 7,900 Navy reservists formerly on drill pay status are now on active duty.

D. MARINE CORPS RESERVE

The budget provides paid drill training for a total of 45,500 Marine Corps reservists, the same number planned for the end of the current fiscal year. No Marine Corps reservists have been ordered to active duty involuntarily. Of the 45,500, about 42,000 will receive 48 drills and 15 days summer training; 400 will receive 24 drills and 15 days summer training; and 3,000 would be receiving 6 months training on June 30, 1962. (A total of 7,320 would receive 6 months training during the entire year.) In addition, 3,000 will be provided 2 weeks summer camp.

[redacted]

E. AIR FORCE RESERVE

The 1963 budget provides paid drill training to 61,000 Air Force reservists compared with 60,000 planned for the end of the current fiscal year. Four thousand reservists formerly on drill pay status are now on active duty. Of the 61,000 on paid drill status, 39,000 will receive 48 drills and 15 days summer training; 21,000 will receive 24 drills and 15 days summer training; and 1,000 would be receiving 6 months training at the end of the fiscal year. (A total of 1,969 would receive 6 months training during the entire year.) In addition, 11,000 Air Force reservists will receive 2 weeks summer training.

The technological changes I spoke about earlier have an important impact on Air Force reserve requirements, particularly for non-flying units. In recognition of these changes, the Air Force, within the last few years, has sought to reorient its individual reserve program into base support and recovery unit programs. Under these programs, reserve base support units would augment the disaster control capabilities of Air Force bases in the event of an enemy attack, while recovery units would enhance the Air Force capability for aircraft dispersal and recovery at non-military airfields. The requirements for this activity have not been worked out in sufficient detail to provide a sound basis for determining the number of units and personnel needed. Therefore, we are recommending that these units be maintained at about their current level through the coming fiscal year.

F. AIR NATIONAL GUARD

The budget provides 48 drills and 15 days summer training for 68,000 Air National Guard personnel at the end of fiscal year 1963, and 4,000 would be receiving 6 months training (a total of 8,500 would receive 6 months training during the year), for a total of 72,000 on paid drill status. This compares to a total of 51,000 planned for the end of the current fiscal year. However, 22,000 Air National Guard personnel formerly on drill pay status are now on active duty. Thus, this particular reserve component will be maintained at about the same strength originally planned for 1962.

G. RESERVE AND NATIONAL GUARD FORCES - FINANCIAL SUMMARY

The Reserve and National Guard forces I have outlined will require total obligational authority of $1.9 billion for fiscal year 1963, compared to $1.8 billion for fiscal year 1962. Table 23 shows a further breakdown of the total obligational authority for the Reserve and National Guard forces into investment costs and operating costs; and by individual reserve component.

* * * * *

VII. RESEARCH AND DEVELOPMENT

In my discussion of the first three major programs I touched on a number of projects which are included in the research and development program. This program includes all the research and development effort not directly identified with elements of other programs. Table 24 shows a breakdown of the fiscal year 1963 research and development program compared with fiscal year 1962.

A. BASIC RESEARCH

This area includes all exploratory-type effort in the physical, environmental, mathematical, psychological, social, and medical science fields. A steadily increasing amount of funds has been devoted to basic research over the last several years. For fiscal year 1963 we are proposing $191 million for this particular area of research, about $20 million more than fiscal year 1962. The funds proposed for the coming fiscal year will continue approximately the same over-all level of effort provided for 1962 since increasing costs for both scientific personnel and the more complex and costly research equipment required will tend to absorb a substantial portion of the additional funds provided for fiscal year 1963.

B. APPLIED RESEARCH

Included in this area of research are programs which apply presently available scientific knowledge to the solution of military problems. In effect, these programs bridge the gap between basic research and development of particular weapon systems. They include research in such fields as fuels, explosives, power sources, weather phenomena, communications, navigation, and components for aircraft, guided missiles and space systems. Amounts for each Service are shown in Table 24. Also included in this category is most of the effort of the Advanced Research Projects Agency (ARPA).

1. Project DEFENDER

ARPA's Project DEFENDER is a program of research aimed at providing the basis for future systems of defense against ballistic missiles. We propose to continue the DEFENDER program at $110 million in 1963 - about the 1962 level. The large initial investment costs associated with the measurement of missile phenomena have already been funded, for the most part, but funds will be devoted in 1963 to a continuation of work in this field and to the analysis and evaluation of data collected from previous experiments. Emphasis will also be placed on the development of measurement devices and measurement experiments looking toward the definition of a weapons system concept.

Two new problem areas were also recently added to the DEFENDER program:

1. Research in penetration aids beyond those being developed for our present ICBM systems; and

2. Hard-point defense systems.

The penetration aid program will be chiefly concerned with the study of phenomena associated with the re-entry of missile warheads. This data will be of value both for our own ICBM programs and for defense against enemy ICBM's. The hard point defense system studies I have already discussed in connection with the defensive forces.

2. Project VELA

Also in ARPA is Project VELA, the national program for developing a capability to detect nuclear explosions underground and at high altitudes. The major effort to date has been devoted to underground test detection techniques. As a part of the seismological research program, a world-wide network of standardized seismographs is being installed with the cooperation of approximately 140 research stations in many countries. In addition, a prototype network of stations specifically for detecting, identifying, and locating underground nuclear detonations is being constructed and is expected to be fully operational in FY 1963.

During the current series of nuclear explosions at the Nevada Test Site, sensing equipment is being emplaced at a wide range of distances from the center of the explosions to obtain data to improve techniques for the detection and identification of nuclear explosions. An underground nuclear explosion in an active seismic area and one or more nuclear explosions in large underground cavities will also be required to provide additional data for the verification of existing theories.

The high altitude test detection program consists of ground-based instrumentation for detecting light emitted from detonations, changes in the atmosphere induced by the radiation or debris from a detonation, and for detecting electromagnetic waves produced by nuclear detonations. With regard to space-based detection, instrumented low altitude flights of the DISCOVERER satellite series and an environmental test satellite program will be essentially completed by the end of fiscal year 1962. During fiscal years 1963 and 1964, five fully-instrumented launches using the ATLAS CENTAUR booster will be conducted. Existing launch facilities and ground support equipment, as well as tracking and data acquisition stations, will be utilized. $63 million is requested in the Defense budget for Project VELA in fiscal year 1963, compared with $60 million in 1962.

Agree

3. Project AGILE

This project is designed to apply research and development methods to those problems of counter-guerrilla warfare which indigenous, as well as U. S. troops must face in remote areas. The objectives are: to achieve a better understanding of the special conditions prevalent in specific areas; to identify the related research requirements; and from these to arrange for the research, development, test, and evaluation activities necessary to provide appropriate weapons and military material to defeat an enemy under such conditions. Projects currently under way include work in such fields as mobility, communications, firepower, materiel and equipment, logistics, and environmental conditions.

This research operation is directed by ARPA with the full cooperation and participation of the three Military Departments and the Joint Chiefs of Staff. The establishment, staffing and support of the necessary test centers will be a cooperative effort by the United States and the participating countries. The increase in funds from $11 million in FY 1962 to $18 million in FY 1963 is due to the planned buildup of the effort which was initiated in the current fiscal year, including an additional development and test center.

4. Propellant Chemistry

This project is devoted chiefly to increasing substantially the specific impulse of fuels used in missiles. Major emphasis has been placed on the laboratory synthesis of new families of chemicals, including both solids and liquids, which show potential as propellant fuels or oxidizers. A recent specific accomplishment has been the use of beryllium in the solid fuel for the fourth stage of the Air Force BLUE SCOUT. An increase of almost $5 million to a level of $23 million is requested for this program in FY 1963.

5. Other ARPA Projects

Command and Control Research, Materials Sciences, Weather Physics, Energy Conversion, and Technical Studies are other areas in which ARPA is doing work in support of its activities and those of the Director of Defense Research and Engineering - either because of their interservice scope, or to provide centralized direction.

C. ADVANCED TECHNOLOGY AND EXPLORATORY DEVELOPMENTS

The efforts included in this category are a step closer to the final development of usable military end-items and are directed toward the solution of specific military problems.

[redacted]

1. Army

The Army's ZMAR and SPRINT projects, which I discussed earlier, are in this category.

2. Navy

Navy programs in this area include improvements to the reliability and operational performance of existing radar, radio equipment, missiles, and aircraft, as well as the development of new components and techniques for surveillance, command and control, weapons, aircraft, ships and submarines, logistics and other naval applications.

Forty-five percent of the work being done in the Navy's ASW R&D program falls under the heading of Advanced Technology and Exploratory Developments. Also included within this field are projects for large ocean area surveillance capability; Project TRIDENT; hydrofoil applications; nuclear propulsion; radar surveillance techniques; communications experiments such as LOFTI (the VLF satellite); surface, subsurface and airborne sonar techniques for the detection, classification and localization of submarines; mines; development of an ASW aircraft engine; and numerous other programs.

3. Air Force

Air Force projects include similar types of items, a number of which I would like to discuss more fully.

The first item on the Air Force list is the Very Large Solid Rocket Motor for which $50 million was appropriated last year in the RDT&E account to initiate work. We are requesting another $40 million for 1963 to continue this effort. You may recall that this project was designed as a backup for the NASA manned lunar landing program as well as to develop the capability for large boosters for possible military uses. It provides the fundamental technology on which to base the production of large, solid, first-stage rockets for launch vehicles. The first major step involves the development of a 120-inch diameter, segmented, solid fuel, test vehicle motor which in addition may also be adapted for use with TITAN III. The 1963 program is also expected to provide a feasibility demonstration of a 156-inch diameter rocket-motor technology directed toward the possibility of a 240-inch diameter, or even larger, motor.

The next item, Space Booster Building Block, for which a total of $174 million is requested in 1963, involves the modification of the TITAN II ICBM to a TITAN III in order that it may be used along with 120-inch solid fuel boosters as well as a variety of upper stages. We visualize this TITAN III standard launch vehicle as a work-horse booster to place

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in orbit payloads ranging from 5,000 to 25,000 pounds. It could also be used to place a communications satellite in a 24-hour synchronous orbit, or to launch a DYNASOAR vehicle.

The next item, Standardized Upper-Stage AGENA, for which we are requesting about $5 million, will provide an upper-stage vehicle compatible with the TITAN III configuration, which I just discussed, as well as other primary boosters.

The Aerospace Plane Components project for which we are requesting $19 million in 1963, represents a prudent approach to the development of an aerospace plane. What we are attempting to do here is to solve the basic problems first, including the development of the necessary components, before we decide whether to begin the very expensive system development phase of this project. The components might be useful in other applications as well.

The $10 million shown for the X-15 is to continue this highly useful test project.

PLUTO, for which we are asking $24.0 million, is a nuclear ramjet propulsion system directed toward providing sustained power for a Mach 3 or 4 unmanned vehicle. The military requirement for a system incorporating such an engine has not been fully defined and cannot be until engine characteristics and performance parameters are better determined. Therefore, the PLUTO program is currently being directed toward feasibility demonstrations involving ground tests only. This is a joint DOD-AEC program and the AEC is programming $26.5 million for it in 1963.

The next item, Stellar Inertial Guidance, for which we are requesting $15 million, is designed to increase the accuracy and reduce the reaction time of ballistic missiles, particularly mobile systems, by incorporating an improved star-scanning capability to augment the inertial guidance systems. This project is of critical importance to the mobile medium range ballistic missile, which I will discuss a little later, and possibly to other advanced missile systems.

Remote Detection of Missile Launch, for which we are requesting $10 million, involves such projects as the over-the-horizon radar project which I discussed in connection with the defensive forces.

D. NATIONAL RANGES AND MANAGEMENT AND SUPPORT

The next two categories - National Ranges, and Management and Support - include what we call the "in house" effort of the Department of Defense.

[redacted]

The National Ranges are the White Sands, Pacific, and Atlantic Missile Ranges. We are requesting a total of $445 million in 1963 for these ranges - almost 50% more than 1962. The principal increase is in the Atlantic Missile Range, primarily for increased ground instrumentation and instrumented ships. The increased capability is needed, in part, to extend the range coverage for the penetration aids program.

The national ranges are important facilities which support the DOD guided missile and space programs as well as the national space programs. Test and evaluation work related to such systems and their major components requires complex, costly and widely dispersed land, sea, and air facilities and instrumentation, as well as the work area and community accommodations for large numbers of highly skilled people. These ranges are admittedly costly to operate and new requirements are constantly arising. But they are essential to our missile and space programs.

Management and Support includes the balance of the Department of Defense-operated laboratories, testing facilities, ranges, and field activities engaged in research, development, test and evaluation effort. We are requesting a total of $649 million in fiscal year 1963 - an increase of about $50 million over 1962. Most of the laboratory and test services provided are closely oriented to military requirements which cannot be readily met by private industry. Examples include work on explosives, engine test facilities, and aircraft ranges. These "in-house" facilities also provide a capability for testing and evaluating new material to determine its military usefulness. Services provided under contract from organizations such as RAND Corporation, Aerospace Corporation, and Space Technology Laboratories are included in this category. At the direction of the President, the entire subject of non-profit organizations is now being studied with a view to establishing a government-wide policy.

E. WEAPON DEVELOPMENTS

1. Army

We come now to specific weapon developments. The first item in the Army list is NIKE-ZEUS. The $235 million requested for 1963 is to continue the evaluation of the tactical configuration of the missile, and for the accelerated development of all the associated ground equipment, radars, computers, data links, and display aids required for the complete system. The reduction from 1962 to 1963 reflects the fact that funding of a substantial part of the test facilities and target missile requirements was completed in the 1962 budget. Excluding these two items, the amount requested for NIKE-ZEUS RDT&E is almost $30 million greater in 1963 than in 1962.

[redacted]

The sharp increase for MAULER - $50 million in 1963 compared to $28 million in 1962 - reflects the increased effort needed as the development of this missile reaches an advanced stage. This ground-to-air missile will have a range between REDEYE and HAWK and will be a mobile self-propelled system capable of engaging targets, ranging from short range tactical ballistic missiles and rockets to low flying subsonic aircraft.

MISSILE B, for which we are asking $8 million, is intended as the eventual replacement for HONEST JOHN and LACROSSE, the Army's present shorter range rockets and missiles. A number of possible approaches are under consideration.

The Heavy Assault Anti-tank Weapon, for which we are requesting $15 million, is designed to provide a significant advance in our capability to detect and kill all known enemy armor out to battlefield ranges of 2,000 meters.

The New Surveillance Aircraft for which we are requesting $8 million is intended as the eventual replacement for the MOHAWK. We intend to explore in this project a number of different configurations, including the work the British are doing in this field, before we commit ourselves to a final design.

The next item, the Tri-Service VTOL aircraft, is quite significant from a management point of view. It represents an attempt to develop an aircraft to meet a mission rather than an individual Service requirement. The $12 million shown for the Army in 1963 represents just one-third of the funds we are requesting for this project. The same amount is also included in the Navy and Air Force budgets, bringing the total to $36 million in 1963 compared to $18 million in 1962. The objective of this program is to develop two different types of flyable research VTOL aircraft taking advantage of all the various approaches previously made in this area. What we hope to get out of this effort is an aircraft which can take off with a substantial payload from unprepared locations having little or no runway facilities.

The next item, UNICOM, for which we are requesting $12 million, is for the development of improved switching equipment required for the Army's long haul communications network.

The next two items are related to new developments for Army tactical communications.

$100 million is requested for ADVENT, the Army's communications satellite program. This is the principal Department of Defense effort to achieve an operational communications satellite system at an early

[redacted]

date. The ultimate objective of this program is to maintain a communications satellite in a 24-hour synchronous orbit; in other words, a satellite which can maintain a constant position relative to the surface of the earth. A system of such satellites would provide a significant element of a highly flexible and dependable world-wide communications network.

The next three items, for which we are requesting a total of $45 million, are all developments involving improvements in our battlefield surveillance capabilities.

The $1 million requested for the main battle tank is for studies to determine the characteristics which should be incorporated in a large battle tank of the future.

A number of other items are listed on Table 24, bringing the total requested for Army weapon development to $892 million.

2. Navy

The first system on the Navy list is TYPHON for which we are requesting about $60 million. This is the new air defense missile system being developed for naval ships; it may be the eventual successor for TALOS, TARTAR, and TERRIER. However, the TYPHON system promises to be very expensive and we will want to know considerably more about it before we commit it to production. Meanwhile, as I pointed out earlier in my discussion of the Navy shipbuilding program, new frigates will be designed to accommodate the TYPHON system without any commitment at this time actually to install the system aboard the new ships.

The next item of $15 million is for the Advanced Sea-based Deterrent which I discussed in connection with the strategic retaliatory forces. This is not a definitized weapon system but rather a program of investigation and applied research focused on possible configurations of future sea-based strategic systems from which an advanced weapon system may eventually evolve.

$25 million is requested for TRANSIT, the all-weather satellite-borne navigation system. This is an extremely accurate navigational system and is expected to be of great value to our POLARIS force as well as other forces requiring precise navigation data. In fact, during fiscal year 1963 the system will be primarily oriented to meet the needs of the POLARIS force.

About $9 million is being requested to continue the development of the Mark 46 Torpedo. This active-passive acoustic homing torpedo is specifically designed for use against submarines by surface ships and aircraft. It could also serve as a non-nuclear warhead for the ASROC weapon system.

The $12 million shown for the Tri-Service VTOL aircraft is the Navy's share of this joint program.

The $22 million for Marine Corps R&D covers a wide range of equipment development such as lightweight long-range early warning radar, amphibious vehicles, tactical data systems, etc.

A number of other items are listed on Table 24, bringing the total for Navy Weapon Development to $262 million.

3. Air Force

The first item on the Air Force list is the B-70 which I have discussed in considerable detail in connection with the strategic retaliatory forces. The $171 million requested for 1963 will continue that program. Some additional funds will be required in subsequent years, but we still plan to keep the total cost of this development program to the $1.3 billion I discussed with you last year.

The next item is the Air Force's share of the Tri-Service VTOL aircraft.

We are requesting $100 million to begin the development of a new Mobile Medium-Range Ballistic Missile. This missile, when developed, could be deployed on trucks or ships. As I pointed out earlier, the improved stellar inertial guidance system development is of critical importance to this missile system because of the essential requirement for quick reaction time and for great accuracy without the need for extensive ground support equipment.

The [redacted] requested for [redacted] would continue this program which encompasses the development, testing, launching, tracking and control of large satellite vehicles, and the ejection and recovery of payload capsules from orbit. The results of the [redacted] program are directly applicable to many of the Air Force space programs and contribute also to NASA space programs.

$100 million is requested for MIDAS which was discussed in connection with our Continental Air and Missile Defense Forces. This is an early warning system of orbiting satellites designed to detect hostile ICBM's during the launch phase by means of infrared sensors. The results to date have clearly indicated that a substantial revision of this program is required. All preproduction work has been dropped and most of the effort has been shifted to simplifying the design, and increasing emphasis on basic research and measurements. Much work has to be done on the development of this system before we can think about its production and operational deployment.

[redacted]

$115 million is requested for DYNASOAR in 1963 and $100 million has been programmed for this project for fiscal year 1962. You will recall that the Congress last year added $85 million for this project after we already added $30 million to the original 1962 budget request of $70 million. After a careful review of this program, we believe that the level of effort we are recommending is all that is required and all that can be effectively utilized. As you may know, last month we reoriented the entire program, eliminating the suborbital flight phase which would have involved the use of a modified TITAN II booster. This intermediate step is no longer necessary inasmuch as we are now proposing very substantial investments in the TITAN III booster program. This new and more powerful TITAN, when developed, would loft the DYNASOAR directly into orbit. The DYNASOAR program, therefore, can now go forward much more rapidly than had been originally planned. The cost of the booster development will be charged to the TITAN III program.

$40 million is requested for the Satellite Inspector project and $21 million for SPADATS. I discussed both of these projects earlier in connection with the Continental Air and Missile Defense Forces.

A number of other items are listed on Table 24, bringing the total for Air Force weapon development discussed in this section to $1,019 million.

F. OTHER R&D SUPPORT

To round out the full cost of the R&D program, we have also included other support costs such as the pay and allowances of military personnel assigned to R&D functions, construction costs of R&D facilities, operation and maintenance costs associated with ships and aircraft used to support RDT&E programs, procurement costs of administrative and support-type aircraft used in conjunction with the test programs, and standard types of electronics and telecommunications equipment required for the support of the research and development program.

G. DOD EMERGENCY FUND

$150 million in appropriations and $150 million in transfer authority are requested for the DOD Emergency Fund, the same as appropriated in previous years.

[redacted]

H. RESEARCH AND DEVELOPMENT - FINANCIAL SUMMARY

Thus, taking all of these into account, the total cost of that part of the R&D program not directly identified with elements of other programs is estimated at $5,667 million for fiscal year 1963, $940 million more than for 1962.

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VIII. GENERAL SUPPORT

The next major program, which we call "General Support," is in the nature of a residual or "all other" category. It includes all support activities of the Military Services which are not directly allocable to the other major programs, and the various Defense agencies which serve the entire Department such as the Defense Communications Agency, the Defense Supply Agency, and the Defense Atomic Support Agency. Among the activities included under this heading are recruit, technical and flying training; professional education and the Service academies; the operation and maintenance of depots and supply systems; the operation and construction of other military installations; communications and intelligence activities; medical services; military retired pay; contingency funds; claims; Loran stations; command and general support; and certain classified projects.

Total obligational availability allocated to the Support program in the fiscal year 1963 budget amounts to $12.8 billion, about $770 million more than fiscal year 1962. The major items of increase are intelligence, communications, retired pay, Defense Atomic Support Agency, (for nuclear testing), and certain classified projects.

In developing the fiscal year 1963 budget, we have made a major effort to hold to a minimum -- consistent with the proper support of the combat forces -- the funds devoted to activities included in the Support program. In all, a total of about $700 million was deleted from amounts requested by the Services for General Support. Although this reduction may not appear large in relation to the total for this program, large portions of General Support are pretty much in the nature of fixed charges, particularly such items as retired pay, classified projects, DASA, etc. In those areas in which some flexibility exists, we have borne down hard. Among the budget categories particularly affecting General Support, reductions were made in the following:

A. MILITARY PERSONNEL ACCOUNTS

Reductions made in the military personnel accounts were, in almost all cases, "across-the-board" -- affecting all major programs. The following are a few examples:

1. Highway mileage rather than railroad mileage was used in the computation of travel pay by all Services -- a reduction of $6 million.

2. Estimates for basic pay and quarters allowances for the Navy were recomputed -- a reduction of $20 million.

3. Air Force over all military personnel estimates were recomputed to reflect reduced officer ratios and anticipated personnel savings from base closings -- a reduction of $7.3 million.

[redacted]

There is one item of military personnel costs which we in the Department of Defense can do very little about, and that is Retired Pay. The number of military personnel on the retired rolls has been increasing steadily over the years and is expected to reach 388,000 by the end of fiscal year 1963, compared with 331,000 now estimated for end 1962 and 293,000 at end 1961. The current estimate for end 1962 is 15,500 lower than originally estimated in January 1961 -- a result of the extension of the terms of service of enlisted personnel and the retention of officers who otherwise would have retired during fiscal year 1962.

By the end of fiscal year 1967, the number of retirees is expected to reach 572,000 and by 1970 will probably exceed 725,000. The 1,000,000 mark will probably be reached by 1979.

The 1963 budget request for retired pay totals $1,059 million, including $30 million for proposed legislation, which would authorize military personnel retired prior to July 1, 1958 to receive benefits consistent with higher rates of pay provided by the Military Pay Act of 1958. Even without the proposed legislation, retired pay in 1963 will, for the first time, exceed $1 billion. Barring changes in pay scales, retirement laws, retention rates or active duty strength levels, the cost of retired pay could rise to nearly $1.5 billion by 1967, and to over $2 billion by 1972.

Another legislative proposal concerning personnel is the proposal to amend the Career Compensation Act of 1949 to increase the basic allowance for quarters (BAQ) of members of the uniformed Services. No adjustment has been made in the basic allowance schedule since 1952. A careful study of this problem by a special Advisory Panel indicates that a sizable increase is required to compensate for the substantial rise in housing costs since 1952. Accordingly, we are proposing selective increases in the allowance structure, averaging about 18-1/2%. The allowances for each grade are based on current rental costs paid by civilians of comparable income levels. Included in the 1963 budget for later transmittal, is $150 million for this purpose, based on the assumption that the increases would become effective January 1, 1963. The first full-year cost is estimated at $300 million.

B. OPERATION AND MAINTENANCE ACCOUNTS

The largest savings in the General Support program were made in the Operation and Maintenance accounts. The following are just some examples of the very large number of specific reductions:

1. A proposed expansion of the Air Force's college training program was rejected -- a reduction of $900,000.

2. Navy and Air Force pilot and navigator training programs were reduced to the level deemed to be required -- a reduction of $17.5 million.

3. Army school cost estimates were reduced -- a reduction of $5.5 million.

4. The Navy's training support program was held to the current year's level -- a reduction of $3.6 million.

5. The Army's cataloging and standardization activities were limited to the fiscal year 1961 level -- a reduction of $2.8 million.

6. The establishment of alternate inventory control points for the Army supply system was deferred -- a reduction of $4 million.

7. The Army's world-wide logistical services, other than operating depots, were held to levels consistent with our 1961 experience -- a reduction of $7.4 million.

8. The Air Force's flying hour program for mission support aircraft was held to the level provided by the Congress for the current year -- a reduction of $13.5 million.

9. Estimates for non-scheduled ship repairs were cut -- a reduction of $5.2 million.

10. Caretaker maintenance at certain Army industrial reserve plants was cut to the most austere levels -- a reduction of $20.2 million.

11. Inspection and preservation of Army materiel in storage was reduced to the 1962 level -- a reduction of $19.3 million.

12. Civilian personnel and support costs for materiel management functions at major Air Force materiel areas and depots were held to fiscal year 1961 levels -- a reduction of $24.2 million.

13. The Navy's non-combatant aircraft inventory was held to the end fiscal year 1961 level and fuel and rework estimates cut accordingly -- a reduction of $17 million.

14. Operation and maintenance funds for departmental headquarters and certain field headquarters were cut -- a reduction of $31.6 million.

15. Certain communications circuits in Europe leased by the Army and Air Force were eliminated -- a reduction of $5.4 million.

16. The Marine Corps request for major repairs and minor construction was held to those projects related to combat capability and combat training -- a reduction of $1.3 million.

17. Civilian staffing at Army hospitals was held to levels consistent with 1961 experience -- a reduction of $1.4 million.

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18. Estimates for the operation and maintenance of Army and Navy hospitals were cut -- a reduction of $5.1 million.

19. Credit was taken for estimated savings resulting from increased use of automatic data processing machines -- a reduction of $12.5 million.

20. Premium jet travel was sharply restricted -- a reduction of $2.3 million.

21. The procurement of furniture for military family quarters in the United States was deferred -- a reduction of $1.8 million.

22. Reductions in temporary duty travel costs -- a savings of $23.1 million.

C. PROCUREMENT ACCOUNTS

Most procurement is associated with the other programs, particularly the Strategic Retaliatory Forces and General Purpose Forces. Included under the General Support program are such items as training and support aircraft, materials handling equipment, certain communications and intelligence equipment, etc. The following examples will illustrate the type of reductions made in this area:

1. In consonance with the reduction in Navy and Air Force pilot training programs, fifty T-37 primary jet trainers and 50 T-39 crew readiness trainers were deleted -- a reduction of $50 million.

2. Sixty-one Air Force and Navy support-type aircraft were deleted -- a reduction of $91.4 million.

3. Regulations will be revised to direct sale or exchange of old vehicles when replacements are purchased -- a savings of $8 million.

4. The procurement of communications security equipment was reduced -- a savings of $7.8 million.

5. The large display boards for the new Air Force intelligence data system were eliminated as being of marginal value -- a reduction of $4 million.

D. CONSTRUCTION ACCOUNTS

In terms of dollar value, about one-third of the construction projects requested by the Services in the General Support program were deleted or deferred. The following are some examples:

1. Construction of new administrative and support facilities at the Army and Air Force Academies was deleted -- a reduction of $8.2 million.

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2. New school buildings at several Service schools were deleted or deferred -- a reduction of $11 million.

3. New troop housing facilities at certain training centers were deferred -- a reduction of $17 million.

4. Additional Army, Navy, and Air Force communications facilities were deleted or deferred -- a reduction of about $18.3 million.

5. The construction of a number of new overseas community type facilities was denied -- a reduction of $3.6 million.

6. A revision was made in the design and standards for bachelor officer quarters (BOQ) -- a savings of $4.7 million.

7. The construction of a number of commissaries in the United States was denied -- a reduction of $2.2 million.

8. A new audiology and speech facility at the Walter Reed Medical Center was deleted -- a savings of $1.7 million.

9. The size of the Navy's new School of Aviation Medicine building was reduced -- a savings of $1.4 million.

10. A number of proposed barracks and personnel support facilities in the Washington, D. C. area were deferred -- a reduction of $9 million.

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IX. CIVIL DEFENSE

I believe it is quite clear from what I have said earlier, in my discussion of the Continental Air and Missile Defense Forces, that a 100% effective system of military defense against ICBM's and submarine-launched missiles is technically impossible. At least during the period 1963 through 1967 we will have to rely for our survival on a combination of military and civil defense measures. Last year President Kennedy announced a new national program for civil defense and transferred primary responsibility for the Federal Government's share of that program to the Department of Defense. He pointed out at that time that appropriations for civil defense in 1962 would have to triple the level of prior years and would increase sharply thereafter. This, indeed, has been the case and we are now asking for this purpose in fiscal year 1963, a total of almost $700 million.

We believe that a sound civil defense program for the years ahead should provide:

1. A system of shelters, equipped and provisioned to protect our population from the fallout effects of a nuclear attack.

2. Organization and planning of emergency actions to carry out decontamination, firefighting, rescue and reconstruction necessary to restore a functioning society. An essential part of such a program is a warning and alerting system to alert the civilian population to imminent attack.

A. FALLOUT SHELTERS

It is highly unlikely that we could ever provide protection against all the effects of a nuclear detonation, and certainly not in the impact area. Blast shelter in and around potential target areas for any significant number of people would not only be extremely expensive but would only be effective if people had adequate warning of the attack. But even without ruling out that possibility, we should first provide fallout shelter. That is certainly within our means and it would protect a considerable part of our population against a major danger of a nuclear war.

Because most of our working population must be provided protection both at work and at home, it is estimated that complete protection for our entire population of 180 million people would require about 220 million shelter spaces today, rising with population increases at the rate of about 3 million a year.

The Federal portion of this program consists of three parts: (1) The Federal Shelter Survey -- the identification, marking, and

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provisioning of shelter spaces in existing buildings; (2) the Federal Shelter Incentive Program -- the creation through an incentive program of additional shelter space by means of new construction and alteration or modification of existing structures; and (3) the stimulation of private individual, business, and community shelter construction by example and technical assistance

1. The Federal Shelter Survey

The first phase of the Federal Shelter Survey is now under way and is expected to identify approximately 50 million shelter spaces in existing buildings, tunnels, subways, etc. Identification and marking of these shelters should be completed by July of this year, six months ahead of schedule. but stocking them with food, water, first aid supplies and radiation detection meters will continue into fiscal year 1963.

The second, or continuing, phase of the program will involve the marking and provisioning of shelter spaces in suitable new construction over the coming years. Since this is the least expensive way to provide fallout protection, we intend to exploit it fully. In addition, we intend to make the necessary technical information available to local and State civil defense organizations so that they can identify and mark smaller structures with a capacity for less than fifty people. Most of this space is not expected to be open to the general public and we are not planning on Federal stocking and equipping.

2. The Federal Shelter Incentive Program

To assure the early availability of the greatest number of shelters at an early time and at reasonable cost, we are proposing a new Federal Shelter Incentive Program. This part of the National Shelter Program is intended to obtain additional fallout protection in schools, hospitals and community welfare facilities and institutions by adding to or modifying existing structures and by incorporating shelter into new construction.

Accomplishment of this portion of the program will require financial grants from the Federal Government. We propose that these incentives take the form of an allowance, based on the usable square footage provided for shelter space. In order to get this incentive program under way, it will be necessary to amend the Federal Civil Defense Act of 1950. The proposed legislation is being separately transmitted to the Congress.

As I pointed out earlier, the shelter obtained from the survey program is relatively cheap -- costing less than $4 per space including stocking and equipping. However, we know that the cost of providing additional community shelter through new construction or major modification will be much more expensive.

We estimate that the average incremental cost of such shelter will amount to approximately $40 per individual space of 10 square feet or $4 per square foot. Of this amount, we propose that the Federal Government pay as an incentive an amount not to exceed $25 per space, or $2.50 per square foot or actual cost, whichever is less. For example, it is estimated that modifications in eligible buildings having substantial basements would average about $1.75 per square foot or $17.50 per shelter space. In this case, the cost would be below the Federal maximum of $25 per space and the Federal Government would pay the actual cost.

The total cost of this program over the next four years is estimated at about $3.3 billion, of which the Federal Government's share would be about $1.8 billion. For fiscal year 1963, we are requesting $460 million as the first annual increment. From this first step we hope to obtain about 20 million spaces.

3. Private Shelter Effort

Assuming the continued stimulus of strong Federal leadership and example and the impact of a Federal shelter program, we expect a significant amount of the national shelter requirements to be met by families, business firms and other private organizations without cost to the Federal Government. To this end, the Federal Government has prepared plans for low-cost basement or backyard home shelters. In addition, technical assistance and advice will be made available to private business firms and organizations. As a by-product of the shelter survey, large numbers of architects and engineers will receive Federal training useful in shaping designs for new construction towards low-cost shelter protection.

4. Federal Buildings and Military Facilities

During fiscal year 1963, it is also proposed to continue the programs now under way to provide shelters in existing Federal buildings. For non-military buildings, $10 million was provided from the 1962 Civil Defense appropriation, and $20 million is requested for fiscal year 1963.

In addition, $15 million is included in the fiscal year 1963 Defense budget to begin a program to provide shelters in existing military structures such as schools, hospitals and barracks, etc. By undertaking this program, the Department of Defense will be setting an example for the Shelter Incentive Program and, at the same time, will be gaining valuable experience in the design and cost control of shelter modification in existing buildings.

B. EMERGENCY OPERATIONS

1. Warning

The present Federally-operated warning system carries the signal to State warning points, which in turn are responsible for alerting local communities and thence the general public through sirens, local radio stations, etc. With the increasing ICBM threat and relatively short warning, an improved system is required.

What is needed is virtually instantaneous warning so that the vast majority of our people would have the maximum time to seek protection. We believe that the National Emergency Alarm Repeater system offers the best means of providing such warning. $25 million is included in the 1963 budget for warning and alert.

2. Other Emergency Operations

Finally, the Civil Defense program must include the information, training, leadership, and equipment necessary to use properly the warning and shelter provided by the other elements of the program. To this end, the emergency operation segment of the Civil Defense program provides for:

a. Radiological fallout protection and monitoring.

This includes such projects as the provision of equipment for about 150,000 surface monitoring stations, aerial monitoring equipment, dosimeters for civil defense workers, etc.

b. Communications and control.

This includes the telephone, teletype and radio links needed to provide command communications and warning for the national civil defense system. These national communications networks will, to the extent practicable, be integrated with military systems and operated by the Defense Communications Agency.

c. Education and public information.

In addition to the normal job of keeping the public informed, this part of the program includes the support of adult education, the training of civil defense workers, the preparation of instructional materials, and the provision of technical assistance.

d. Research and Development.

This includes research projects in such areas as shelter design, support systems and post-attack operations.

e. Matching contribution to the states.

This part of the Civil Defense program provides for the Federal Government's part of the cost of (a) certain survival supplies, equipment and training; (b) the development of emergency operating centers in every State; and (c) the personnel and administrative expenses of State and local civil defense organizations.

C. CIVIL DEFENSE - SUMMARY

In summary, the Civil Defense program should provide over a period of years: fallout shelter space for the entire population, an effective and timely warning and alerting system; and a well-integrated system for post-attack survival action. The fiscal year 1963 increment of $695 million is expected to develop about 35 million shelter spaces, substantially advance the warning system, and significantly advance our capability for emergency action. The details of the 1962 and 1963 programs are shown in Table 26.

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X. ORGANIZATION AND MANAGEMENT OF THE DEFENSE DEPARTMENT

True economy and full operational effectiveness in the Defense effort depends not only upon a well-conceived force structure and a careful scrutiny of our budget requests but also upon the efficient organization and management of the resources placed at our disposal. Therefore, no presentation of the Defense program and budget could be considered complete without a discussion of the actions taken to improve the organization and management of the Defense establishment.

In my appearances before the Congressional committees last year, I stated:

> "The efficient management of so large an organization as the Defense establishment is a formidable undertaking. I and my associates will need some time to acquaint ourselves with all the problems involved. With this experience behind us, we shall then be in a better position to determine the changes in organization, methods, and procedures which may be desirable to improve the unity and efficiency of the Defense effort."

To this I would now like to add that the efficient organization of the Defense establishment is a never-ending task. Defense is a dynamic and not a static endeavor. The size and character of the Defense effort is subject to constant change with shifts in the international situation and progress in military technology. And the way in which the Defense establishment is organized to carry out its missions must be constantly adjusted to cope with these changes. To assist me in this task, I have established a small Organizational and Management Planning group in the General Counsel's office to devote full time to the study of such matters.

In dealing with this problem of organization and management I have tried to avoid a doctrinaire approach. I am sure that there are several good ways in which to organize the efforts of the Defense establishment, each with its own peculiar strengths and weaknesses. What I have tried to do during the last year is to deal with this problem on a case-by-case basis, correcting organizational arrangements and management methods and procedures wherever I was convinced that there was a better way of getting the job done. Each change was considered on its own merits and each was adopted only after the most careful analysis and review clearly demonstrated that an improvement should and could be made.

Fortunately the Congress has provided the Secretary of Defense with a great deal of flexibility in the exercise of his duties. By utilizing the authority vested in the Secretary by the National Security Act of 1947, as amended, we have made quite a sizeable number of rather important organizational changes in the Defense Department during the last year, among which are the following:

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A. MAJOR ORGANIZATIONAL CHANGES

1. Strike Command

The recently created Strike Command -- composed of units from the Strategic Army Corps and the Tactical Air Command -- is intended to provide an integrated, mobile, highly combat-ready force which has trained as a unit and is instantly available for use as an augmentation to existing theater forces under the unified commanders, or as the primary force for use in remote areas such as Central Africa or the Middle East.

2. Organizational Changes in the Air Force

Within the Military Departments, steps are being taken to bring their internal structure into line with present day needs. In the Air Force the arbitrary distinction and divided responsibilities in the life cycle of a weapon system between development and production have been abolished. Weapon systems, from their inception through delivery to the using combat organization, are now managed by the new Systems Command. This combines the functions of the old Air Research and Development Command, the procurement elements of the Air Materiel Command, and the Air Force proving grounds. On the other hand, logistical support of the combat forces has now been concentrated in the new Air Force Logistics Command. This incorporates principally the supply and maintenance functions of the old Air Materiel Command.

3. Organizational Changes in the Army

A similar reorganization of the Army's Technical Services is proposed. While the organization of the Army General Staff in recent years has been improved, the Technical Services have largely retained their traditional independence. Each has its own R&D, production, training, personnel, supply, and other functions, thus compounding the possibilities for duplication. Whatever reasons may once have existed for the division of responsibilities among them and for their quasi-autonomous status, they no longer correspond with the organizational requirements of a modern Army.

Under the proposed reorganization, the Department of the Army, other than the Army forces assigned to unified commands, would consist of three major commands and the departmental headquarters. The three major commands are the Materiel Development and Logistic Command, the Continental Army Command, and the Combat Developments Command.

The proposed Materiel Development and Logistic Command will place under a single command the materiel functions currently assigned to the Technical Services -- which will then, in effect, be disestablished. (The Surgeon General will, however, retain responsibility for research

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and development of specialized medical materiel.) The Materiel Development and Logistic Command will consist of five subordinate commands responsible for the development and production of materiel, a Test and Evaluation Agency, and a Supply and Maintenance Command. The structures of the five subordinate development and production commands are subject to modifications as those commands are activated and experience is gained. At present it is proposed that they include a Missile Command, a Munitions Command, a Weapons and Mobility Command, a Communications and Electronics Command, and a General Equipment Command.

The proposed Continental Army Command (CONARC) will be the present CONARC with its functions somewhat changed.

Responsibility for schools, individual training, and unit training is at present divided between CONARC, the Technical Services and other Army agencies. Under the proposed organization, CONARC will be assigned the entire responsibility for these functions, with minor exceptions.

CONARC's present responsibility for service (user) testing of materiel developed by the Technical Services, prior to its acceptance by the Army as standard, will be transferred to the Materiel Development and Logistic Command.

CONARC now has a part of the responsibility for "combat developments," which is the term applied by the Army to the research, development, and early integration into the Army of new doctrine, new organization, and new materiel to obtain the greatest combat effectiveness. This function, including the responsibility for preparation of field manuals and tables of organization and equipment, will be transferred to the new Combat Developments Command.

CONARC now commands the six Zone of the Interior Armies and the Military District of Washington, whose areas together encompass all the 48 contiguous states. This function will be unchanged.

The proposed Combat Developments Command will consolidate the combat development functions now assigned to CONARC, the Technical Services, and other agencies.

Concurrently with the establishment of the new commands, the headquarters establishment of the Department of the Army will be adjusted to accommodate the new command structure and the changes made in the Technical Services. These adjustments will relieve the Army General Staff of operating functions and permit greater emphasis on planning, programming, policy-making, and general supervision of the over-all effort.

I am very keenly aware of the extensive scope of this proposed reorganization and of the need for an orderly transition which will insure that effective support is rendered to the field Army during the transition

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period. The Army has prepared a phased transition plan and has deliberately adopted a new organization which regroups existing field activities with, in most cases, no change in mission. It should therefore be possible to minimize the impact to both troops and communities at the local level. We are confident that the combat effectiveness of the Army will not be impaired during the transition period.

The necessary legislative modifications for the accomplishment of certain aspects of the reorganization will be accomplished through a Department of Defense Reorganization Order, which I have issued pursuant to the provisions of Section 202 (c) of the National Security Act. On January 16, 1962, this order was transmitted to the Armed Services Committees of the House and Senate in accordance with the provisions of Section 202 (c).

4. Establishment of New Defense-Wide Agencies

To insure greater effectiveness and economy, two Defense-wide agencies were created during the past year -- the Defense Intelligence Agency and the Defense Supply Agency.

a. Defense Intelligence Agency

In the intelligence field, a large number of organizations have been doing similar or parallel work, and unified direction of the Department's total intelligence activities was lacking. It was clear that the situation had to be improved. Because of the critical and sensitive nature of the work, however, we proceeded very carefully to consider the changes which might be made. By last August our studies were completed and the new Defense Intelligence Agency (DIA) was established.

DIA reports to me through the Joint Chiefs of Staff and is under their immediate supervision. It already is integrating the current intelligence activities of the Joint Staff and the three Military Departments; it has also made possible the elimination of the Office of Special Operations on my own staff.

Ultimately DIA will furnish all DOD current operations intelligence, assemble, integrate, and validate all DOD intelligence requirements, and produce all DOD intelligence estimates. It will also supervise Defense noncryptologic intelligence collection activities and will submit a consolidated DOD budget request for all intelligence activities [redacted] In this way, we hope to strengthen and unify the Department's activities in this field and at the same time make the most efficient use of the intelligence resources at our disposal.

b. Defense Supply Agency

One of the most productive fields for the economic application of centralized management is in the provision of common supplies and related services to all the Military Departments.

After a rather comprehensive study of this entire problem, we came to the conclusion that considerable economy and efficiency could be gained, if all the common supply management activities were consolidated in a single agency. Accordingly, a new Defense Supply Agency was established last year and placed directly under the Secretary of Defense.

This new agency was given responsibility for:

1. All the commodity Single Manager Operating Agencies previously under the Secretary of the Army and the Navy. (These, in effect, are large buying and inventory management offices, located in various cities around the country.)

2. The Military Traffic Management Agency, previously under the Secretary of the Army.

3. The Consolidated Surplus Sales Offices, previously operated by the three Military Departments.

4. The National Surplus Property Bidders Control Center, previously operated by the Air Force.

5. The Armed Forces Supply Support Center (including the Federal Catalog and Defense Standardization Activities) which previously reported to the Secretary of Defense through a Council of General and flag rank officers of all the Military Services.

DSA will also administer the Surplus Property Disposal Program and the Coordinated Procurement Program, and is now activating a new subordinate agency to take over management at the wholesale level of common electronic supplies now managed separately by each of the Military Departments. We will also study the feasibility of integrating the management of industrial equipment, chemical supplies, and aeronautical spare parts under the new agency.

DSA will direct and control all functions involving the procurement and use of commercial freight and passenger transportation service in the United States, including emergency planning. However, our current view is that the Military Air Transport Service (MATS) and the Military Sea Transportation Service (MSTS), because their operations are oriented toward our overseas requirements, should not be included within DSA's responsibilities.

The Defense Supply Agency will operate primarily as a wholesale supply management organization under a Revolving Fund -- buying from suppliers and selling to the military consuming organizations. The Military Departments will distribute the supplies acquired from DSA to their own using organizations in the United States and to the component forces of unified commands and specified commands, both overseas and in the United States.

By and large, DSA will use existing facilities and operate them under its own direction or through the Military Departments. Its headquarters will be in Washington, D. C. The Director of DSA has already assumed direction and control of the Single Manager Operating Agencies for Subsistence, Clothing, and Textiles, General Supplies, Medical Supplies, Petroleum, Construction Supplies, and Traffic Management, the Consolidated Surplus Sales Offices, and the National Surplus Property Bidders Control Center. Funds to cover DSA's operations and maintenance expenses for fiscal year 1963 have been included in this budget.

This new organization has a big job ahead of it. I am sure that it will encounter some difficulties during its first year of operation, but I am equally confident that in the long run it will improve supply support of the operating forces while materially reducing the cost to the taxpayer.

5. Military Family Housing

Another important management innovation which has been recently implemented is the establishment of a central Family Housing Office in OSD, under a Deputy Assistant Secretary of Defense (I&L). Similar centralized offices will also be established within the Military Departments. These offices will be responsible for the effective management of all aspects of the military family housing program.

Parallel with this action, we are proposing for inclusion in the Military Construction Act of 1962 new provisions which would authorize the establishment of a "Military Family Housing Fund" to finance new construction and improvements in existing housing. This Fund would derive its income primarily from forfeitures of the housing allowances of all military personnel occupying public quarters. The quarters allowances (BAQ) for such military personnel would be included in the Military Personnel appropriations and transferred to the Fund.

The Fund would pay the cost of all construction of new family housing units as specifically authorized by the Military Construction Acts, as well as the cost of improvements to existing family housing units. The Fund would also pay all acquisition costs of Wherry and Capehart housing, reimburse the Commodity Credit Corporation for housing financed by the sale of agricultural surpluses, pay any amounts due under the rental guarantee program, etc.

I am sure that the members of this Committee will immediately recognize the similarity of our proposals to those which have been suggested in the past by various members of the Congress. Our own conclusions are based on a very thorough study by my Advisory Panel on Military Housing Policies and Practices, a group of civilian housing experts.

We now have almost 400,000 military family housing units, in being or under construction, valued at over $5 billion. Of these, over 200,000 units valued at more than $3 billion have been added to the Department of Defense inventory during the past 10 years. However, there is still a sizeable world-wide requirement for new construction, amounting to over 70,000 additional units over the next five years. This continuing deficit is primarily due to the constantly increasing percentage of married personnel in the Armed Forces, as well as to the increasing size of the average military family. For example, in 1954, 37% of our military personnel were married and the average number of dependents per military man was .8. In 1961, the latest period for which data are available, the percent of married personnel had increased to 52% and the average number of dependents per military man to 1.5.

Construction authorization is needed this year at 133 installations in the United States and possessions where there are now 72,000 eligible families who are not adequately housed. Against this need we have proposed about 15,000 units for FY 1963 authorization (21%). Of these, over 12,000 are for senior enlisted personnel -- the most critical group; the balance are for officers, with the exception of a few units for key civilians. The 15,000 units will be applied to cure the following types of problems: reunite separated families; replace inadequate on-post housing; provide housing to those who must live an excessive distance from the base; provide housing to those living in substandard quarters off-post; and provide housing to those paying excessive rentals off-post.

In addition, authorization is being requested for 1352 units at 8 foreign locations. These units will permit the reunion of many separated families and assist families now occupying substandard housing in the area.

I believe that it is generally agreed that military personnel must be provided adequate family housing if they are to make the Armed Services a career. High turnover of military personnel is very costly, not only in lost skills and experience but also in the cost of training new personnel. I know that this Committee is fully aware of the many techniques that have been employed in the past to provide adequate family housing and that none of them have been entirely satisfactory. We believe the Military Family Housing Fund proposal will avoid most of the shortcomings of existing legislation in this field.

B. PROCUREMENT MANAGEMENT

The Defense Supply Agency, as I indicated earlier, will manage common items of supply on a Department-wide basis. Weapon systems and other major items of equipment, on the other hand, are extremely diverse in nature and reflect the highly specialized requirements of their using Service. They, therefore, are not candidates for management by a single Defense agency, but will be developed, procured, stored, and distributed by the Military Departments concerned. Nevertheless, improved supply procedures for these items -- and most particularly their procurement -- are a major challenge to any Secretary of Defense. The annual dollar value of this procurement alone would give it a top priority for critical attention.

Yet this area is one of the most difficult to deal with. The weapons themselves require lengthy periods of development during which many essential, highly specialized skills and knowledge are acquired solely by the developing contractor. They are exceedingly complex and costly to manufacture, and are subject to endless engineering changes. Furthermore, because most of these items involve techniques, processes, and materials at the outermost reach of current technology, it is frequently difficult for either the Defense Department or the producer to estimate even reasonably precisely what the costs will be.

All of these conditions make normal procurement practices very difficult to apply. In addition, some of our objectives while desirable in themselves may be at odds with each other. In these cases compromises must be reached and these typically are not wholly satisfactory from the standpoint of any one objective.

Over the last 14 years the Department has attacked these problems and has made steady but relatively slow progress in improving its procurement practices. Unfortunately, in some cases conditions have changed faster than the improvements and our current performance, from some points of view, may look worse than it was some years ago. This is true, for example, in the percentage of our total contract placements awarded on a formally advertised bid basis.

I am thoroughly in agreement with your insistent request for a sharp increase in the effectiveness with which we conduct our procurement business. I am equally sure, however, that a piecemeal approach, confined to nibbling around the edges of the problem, is not going to give us the improvements which will produce significant economies. What is required is a frontal assault on the procurement problem -- and indeed on the whole logistics problem.

This is a very large assignment: it is a bigger challenge than that posed to any other government agency or private corporation. And it has at least two prerequisites for success: a fresh approach and the best application of our management talents.

1. The New Approach

Accordingly, we have established a new comprehensive Logistics Management Program under which many of the basic problems of logistics which have troubled the Department for so long will be intensively studied. To assist our own staff in this urgent work, we have sponsored the establishment of a non-profit research and fact-finding organization known as the Logistics Management Institute. The Institute is being staffed and administered by leading management experts from private industry and universities and has already been awarded a contract to undertake the study of some of these basic problems.

Some examples of the areas which will be studied under this program are:

Requirements planning, where emphasis is being placed on developing a system for rapid determination of procurement objectives, analysis of assets, ways to reduce the initial procurement of spares and repair parts, and means of cutting the variety and cost of engineering and technical data acquired.

Simplification of specifications, standards, and designs, where we are developing a program to eliminate unnecessary specifications and excessive quality standards, and improving methods to control engineering and design changes.

Increasing competition in defense buying, both in the purchase of production quantities of new military equipment and in the purchase of components and parts.

Procurement procedures and practices, where we are seeking to improve our performance in selecting and training personnel, evaluating contractor qualifications, reducing proposal costs, pricing spare parts, simplifying purchasing procedures, and awarding a "fair proportion" of defense contracts to small business.

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Contract performance, where we are strengthening our controls over schedules, costs, and technical performance and making more effective use of contract incentives.

We intend to continue to take every step feasible to simplify, unify, and speed up our procurement procedures and to analyze and control more rigorously our procurement costs.

a. Increased use of incentive type contracts

Increased emphasis will be given to the use of contracts which encourage good performance (in terms of better cost control, better equipment performance, and earlier deliveries) and which penalize substandard performance. It is anticipated this shift in emphasis will result in more firm fixed-price type contracts and fewer cost-plus-fixed-fee contracts.

Realistic cost estimating will be rewarded. Wide profit ranges will be possible when related to the contractors' efficiency in controlling costs and meeting required standards of performance, reliability, quality,and delivery. In research and development cost-plus-incentive-fee contracts, fees may go as high as the statutory limitation of 15% of estimated costs if performance is outstanding. In such cases the contracts will also provide for corresponding reductions of fees if performance is substandard or poor. Furthermore, past performance will be considered in the award of new contracts.

Performance incentive provisions in contracts will be encouraged as soon as performance goals have been clearly identified in the development phase of major weapons and equipment. In such cases, careful analysis will be required of each weapon including the weighting of pertinent cost and performance factors.

b. Increased competition

Competition in defense procurement will be increased by:

(1) Advance planning - Detailed planning is being initiated during the early design and development of an item to assure that the prerequisites for competition are anticipated and fully provided for. Steps have been taken to prevent noncompetitive procurement resulting from failure to contract for the timely delivery of technical data, failure to enforce such contract provisions, failure to inspect the data furnished and assure that it is of suitable quality, or failure to make appropriate use of the data now being furnished or which the Government already possesses.

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(2) Review of contracts and planned procurements - Proposed noncompetitive contracts are being subjected to more stringent review at higher levels to determine whether the lack of competition is justified and, if so, to ascertain whether the factors responsible can be eliminated in time to permit competition for subsequent orders.

(3) Breakout - Increased emphasis is being placed on breaking out from weapon systems those individual components and parts that can be bought competitively.

(4) Publicity - We have revised our regulations to require all procurements over $10,000, with very few exceptions, to be summarized in the Commerce Business Daily. This gives interested firms who might otherwise not be known to us an opportunity to learn of these procurements and to participate.

(5) Limitation of quantity on initial production - In early production contracts in which competition is determined to be impracticable, we are stressing the purchase of the minimum quantity consistent with economy and military necessity (including test, evaluation, and standardization of design) in order to maximize the size of subsequent quantities purchased competitively.

(6) Improved statistical reporting - We have revised our statistical reporting system to give more and better data on the trends in competitive and noncompetitive procurement. This information will help us identify the causes of noncompetitive procurement and enable us to take the necessary corrective action.

(7) Special attention to procurement of repair parts - A special effort is being made in the procurement of aeronautical replacement spare parts. If our goal of 30% competitive procurement can be attained, a savings in the order of $50 million annually is anticipated. A test of new procedures is now under way at three of our major inventory control points which manage aviation spare parts. After adequate testing these procedures will be applied throughout the Department.

(8) Competition in subcontracting - Much of industry, perhaps to a greater extent than Government, has traditionally relied on sole-source rather than competitive subcontract procurement. By means of subcontract reviews, approval of make-or-buy programs, and surveys of contractors' purchasing systems, we are closely scrutinizing industry practices to ensure that competitive subcontracting is utilized to the maximum practicable extent.

Very substantial savings can be achieved by increasing competition In addition, more competition will provide small business a greater opportunity to obtain defense contracts. It will also broaden the

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industrial base and make available a larger portion of the nation's industrial facilities, experience, and ingenuity to meet the needs of the Defense Department. While some noncompetitive procurement is unavoidable in defense purchasing, very large opportunities exist for profitable expansion of competitive procurement. We are endeavoring to exploit these to the utmost.

C. OTHER ORGANIZATIONAL CHANGES

In addition to the organization changes and the improvements in supply and procurement management I have just discussed, we have undertaken a number of other important steps to consolidate or harmonize activities of the Department in which more than one Service is concerned. One such technique is to assign responsibility to the Service with the predominant interest. Military space projects were obviously eligible for this treatment; accordingly, last Spring the Air Force was designated to be the Department's primary agent in the research and development of space programs and projects -- except when special circumstances dictate otherwise.

In the case of geodesy, mapping, and charting, each of the Services have had substantial interests and capabilities in the field. While a single Service assignment would have been highly impractical, steps could be taken to eliminate unnecessary duplication. What we did was to define clearly the tasks to be accomplished and assign the appropriate pieces to each of the Services. In this way coordinated accomplishment of the total job is assured, but inefficiency and overlapping efforts are eliminated.

Within my own staff I have made a large number of less sweeping changes all designed to clarify and clearly assign responsibilities, to consolidate natural groups of functions, abolish time-consuming and outdated procedures and committees, provide personnel and increased attention for new functions, and finally, to provide for a systematic approach to the continuing problem of adapting the organization of the whole Department to changing needs and conditions.

With this in mind, I have taken the following actions, some of which have been reported to you before:

1. Consolidated the offices of the Assistant Secretary of Defense Manpower, Personnel, and Reserve and the Assistant Secretary of Defense Health and Medical into a single office, the Assistant Secretary of Defense, Manpower.

2. Consolidated the offices of the Assistant Secretary of Defense Supply and Logistics and the Assistant Secretary of Defense, Properties and Installations into a single office, the Assistant Secretary of Defense, Installations and Logistics.

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3. Established a new office, the Assistant Secretary of Defense, Civil Defense.

4. Created an Assistant Secretary of Defense to be a deputy to the Director of Defense Research and Engineering.

5. Created within the Comptroller's staff a new office of Programming.

6. Expanded the Policy Planning Staff of the Assistant Secretary of Defense for International Security Affairs.

7. Created an office of Economic Adjustment within the staff of the Assistant Secretary for Installations and Logistics.

8. Realigned the responsibilities of the Assistant and Under Secretaries in the Military Departments to correspond more closely with my own staff.

9. Provided an additional Deputy for the Director of the Joint Staff, and organized a Requirements Division under the Office of Plans and Policy, Joint Staff.

10. Abolished or transferred the functions of over 500 boards and committees.

As problems in the organization and management of the Department continue to emerge, they will be studied and whatever management improvements are necessary will be made. If it is found that existing statutory limitations on the management and organization of the Department inhibit or otherwise encumber the proper and effective administration of the Department, the Congress will be so notified and provided with all the facts which justify a statutory change. But no such request will be made unless it is absolutely necessary.

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XI. FINANCIAL SUMMARY

The programs proposed for fiscal year 1963 including Military Assistance, Military Construction and Civil Defense, aggregate $53,876,700,000 in total obligational authority. A summary by major programs, for fiscal years 1962 and 1963 is shown in Table 1.

Of the $53,876,700,000 in obligational authority required to finance the 1963 program:

$1,440,300,000 would be obtained from prior year funds available for new programs, including balances brought forward and recoupments anticipated during the year (assuming that the Congress will remove the limitation on the use of the $514,500,000 appropriated last year for the procurement of B-52's).

$445,000,000 would be obtained by transfer from the working capital funds of the Department of Defense in lieu of new appropriations, and

$351,400,000 would be obtained from anticipated reimbursements which would be available to finance new programs, leaving

$51,640,000,000 of new obligational authority which is the amount requested in the President's fiscal year 1963 budget. A detailed tabulation relating the appropriation accounts to the major program accounts, and the Total Obligational Authority to the New Obligational Authority requested of the Congress in the 1963 budget is shown on Table 28. (Comparable data for 1962 are shown on Table 27.)

Of the $51,640,000,000 of new obligational authority requested:

$1,500,000,000 is for Military Assistance which will be presented separately.

$1,318,000,000 is for Military Construction which will be presented separately.

$695,000,000 is for Civil Defense which will be presented separately, and

$220,000,000 is associated with proposed legislation and is being transmitted separately. This amount includes $30 million for Military Retired Pay, $150 million for Basic Allowances for Quarters, and $40 million for military personnel per diem travel allowances.

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Thus, the bill now before this Committee would provide $47,907,000,000 in new obligational authority and $445,000,000 to be derived by transfer from working capital funds.

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Mr. Chairman, I realize that this has been an unusually long statement and I appreciate the patience and courtesy of this Committee in allowing me to present it in full. I hope it has made some contribution to a better understanding of the Defense program and budget.

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