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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1961

HEARINGS BEFORE THE SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES EIGHTY-SIXTH CONGRESS SECOND SESSION

SUBCOMMITTEE ON DEPARTMENT OF DEFENSE APPROPRIATIONS

GEORGE H. MAHON, Texas, *Chairman*

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SAMUEL W. CROSBY, Staff Assistant to the Subcommittee

PART 1

**SECRETARY OF DEFENSE
CHAIRMAN, JOINT CHIEFS OF STAFF**

Printed for the use of the Committee on Appropriations



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II

DEPARTMENT OF DEFENSE APPROPRIATIONS, 1961

WEDNESDAY, JANUARY 13, 1960.

WITNESSES

HON. THOMAS S. GATES, JR., SECRETARY OF DEFENSE
GEN. NATHAN F. TWINING, CHAIRMAN, JOINT CHIEFS OF STAFF
HERBERT F. YORK, DIRECTOR OF DEFENSE RESEARCH AND ENGI-
NEERING
FRANKLIN B. LINCOLN, JR., ASSISTANT SECRETARY OF DEFENSE
(COMPTROLLER)
JOHN M. SPRAGUE, DEPUTY ASSISTANT SECRETARY OF DEFENSE
(COMPTROLLER)
MAJ. GEN. R. S. MOORE, SPECIAL ASSISTANT TO THE COMPTROL-
LER
CAPT. L. P. GRAY, USN, MILITARY ASSISTANT TO CHAIRMAN,
JOINT CHIEFS OF STAFF
H. R. LOGAN, DEPUTY COMPTROLLER FOR BUDGET, OFFICE OF
THE ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)
HENRY GLASS, DIRECTOR OF ECONOMICS, OFFICE OF THE ASSIST-
ANT SECRETARY OF DEFENSE (COMPTROLLER)
M. H. LANMAN, ASSISTANT GENERAL COUNSEL (FISCAL MATTERS),
OFFICE OF THE GENERAL COUNSEL

Mr. MAHON. Gentlemen, we began our hearings on Monday, January 11, 2 days ago, with the appearance before the committee of Mr. Allen Dulles, Mr. Robert W. Omory, and other representatives of the Central Intelligence Agency, who gave the committee an intelligence briefing of 2 days duration. Of necessity that testimony was highly classified and will not be included in the printed record of the hearings. Therefore, to all intents and purposes, this is the beginning of the hearings on the 1961 defense budget.

I think it fitting to pause a moment to pay tribute to the memory of our departed colleague who served so loyally and faithfully on this committee, the gentleman from Illinois, Charlie Boyle. He was able, efficient, alert, constantly in attendance, and he did a good job. The full Committee on Appropriations has adopted appropriate resolutions, but I think it proper to make some reference here to our able and good friend who has so recently passed away.

Mr. Secretary, this is your first appearance before the committee as Secretary of Defense. This is the first time we have had Mr. Lincoln, who succeeds Mr. McNeil as Comptroller, here. Is this not a first for you, Mr. Sprague?

Mr. SPRAGUE. It is.

Mr. MAHON. Of course, this is not the first appearance of Secretary Gates before the committee. He has been before us many, many times over the past 5 or 6 years, but it is his first time to appear as Secretary of Defense.

Mr. Secretary, we are well aware of your serious and dedicated approach to the problems of national defense. You are a demonstrated

friend of the cause of adequate national defense of the country. You have a hard job. We all have hard jobs. Reviewing the budget programs totaling \$39.3 billion, which this committee will consider, will require many weeks of effort. We will work with you to the best of our ability and in the best interests of the United States regardless of political considerations, or any other considerations.

This is serious business in which we are engaged. I know you weigh your words carefully in your statement, and you will do so in your testimony in answer to questions.

Now, General Twining, we, of course, are going to rely very heavily upon you, as in previous years, to give us advice and counsel and information that might be helpful to us in our work.

I suggest now that we proceed with the presentation of the Secretary. Are you ready to proceed, Mr. Secretary?

Secretary GATES. Yes, Mr. Chairman.

Mr. MAHON. You may proceed and take whatever time you may need to present your views to the committee.

GENERAL STATEMENT OF THE SECRETARY OF DEFENSE

Secretary GATES. I would like to thank you for your remarks, and I hope I continue to justify your confidence.

Mr. Chairman and members of the committee, this opportunity to present and discuss the defense program and budget proposed for fiscal year 1961 is greatly appreciated. Although I have appeared before this committee on many occasions, this is my first appearance as Secretary of Defense. I never fully appreciated the burdens of the Secretary's Office until I assumed the post of Deputy Secretary last June. After almost 7 years in the Pentagon I find there is still a great deal to learn. Every new responsibility is different and poses new problems.

I count myself fortunate to have had the opportunity to serve under Secretary Neil McElroy. Fully mindful of all the problems confronting any man taking over these duties, he made every effort to effect the transition smoothly. He gave unstintingly of his counsel and experience. He also arranged our joint participation in the review of this budget.

The defense program and budget cannot be formulated in isolation. It must be dealt with in the context of the entire national policy. It may be useful, therefore, to review some of the major factors which were considered in developing this budget.

First, the threat to our national security, and indeed the security of the entire free world, is not only military. It is also political, economic, and psychological. To cope successfully with this total threat the United States must have a total strategy within which all elements—the military, the political, the economic, and the psychological—are closely coordinated and, most important, are in proper balance. Thus, the military program is and must be consciously integrated with all elements of national policy.

Second, we cannot assume at this time that negotiations with the Soviets will result in agreements that will ease our defense problems. There is nothing to justify a belief that the Soviets will make substantive concessions which will reduce our security requirements. In fact, the Soviet Union is increasing its military capabilities, especially its missile delivery systems.

Third, we have adopted the principle of collective security as a basic tenet of our foreign policy. We no longer think in terms of our national defense alone but rather in terms of the total defense capabilities of the free world. Our strategy, therefore, requires that we sustain and strengthen the integrity of our alliances and contribute our fair share of forces to these alliances. Our overseas deployments, though costly, are critical in maintaining, in conjunction with our allies, the many outposts of freedom around the world.

Admittedly, there are problems in an alliance of free sovereign nations held together by ties of mutual interests rather than by bonds of fear. We have strong partners. We do not seek subservience or dependency on the part of our allies, but rather equal partnership in the struggle toward common goals. We want partners who share with us the same objectives and who work toward them not simply because the United States favors these objectives but because they themselves believe in them and want them.

Looking back over the past decade, I believe it can be fairly said that the United States and the cause of freedom have made distinct progress in the struggle with communism for the hearts and minds of men. One has only to consider the warm response to President Eisenhower's recent journey abroad to realize that a great reservoir of friendship for the American people exists in the Free World today.

There is no question that the Soviet Union is a formidable power. It has made tremendous progress since the end of World War II in developing not only its military but also its economic strength, and will make continued progress in the future. But the impression in some quarters that the Soviet Union has overtaken or even outdistanced the United States in military power is simply not supported by the facts. General Twining will present to this committee a highly classified and detailed analysis of comparative military strengths. Some conclusions, however, should be placed in the public record.

Our retaliatory forces are capable of carrying out their assigned missions. Manned bombers are still, for both ourselves and the U.S.S.R., the primary means of delivering heavy nuclear weapons in the volume and with the accuracy needed to strike a decisive blow. In this category the United States far excels the U.S.S.R. We have several times more intercontinental jet bombers and more medium jet bombers. We enjoy a marked qualitative advantage and can claim credit for the most experienced bomber crews in the world. We are well ahead of the U.S.S.R. in air-to-air refueling capabilities, air-to-surface missile development, and other important air warfare techniques.

I understand you have already received a report from Mr. Dulles which, among other matters, covered the Soviet ICBM test program, their production capability, and the estimated pace of their deployment preparations.

During the past year we have continued to acquire information which has enabled U.S. intelligence, for the first time, to estimate the probable Soviet ICBM inventory and its expected buildup with time. We also have an informed estimate of the performance of the Soviet ICBM.

We have gained in experience with our own missile programs. We have been able to measure the accuracy of ATLAS missiles with

greater precision than heretofore and have conducted many full-scale guided flight tests. The accuracy attained by this missile has surpassed our highest expectations.

If we compare the estimated Soviet ICBM and sea-launched missile programs with plans for deployment of U.S. ICBM's and POLARIS missiles, we note that the Soviets may enjoy at times a moderate numerical superiority during the next 3 years. This difference in numbers appears to peak during the 1962 period. Our estimates indicate that both before and after mid-1962 the numbers are closer together.

Whether or not this numerical calculation, which deals exclusively with the long-range missile aspect of the defense problem, comprises a "deterrent gap" which is the real threat to national security is a question which has been studied in considerable detail. It is the conclusion of those who have analyzed this matter that even a surprise attack by all the missiles the Soviets could muster would not suffice to destroy enough of our retaliatory strike forces to enable him to make a rational decision to attack.

We have estimated the performance characteristics—such as accuracy, reliability, warhead size, etc.—which Soviet missiles may be expected to exhibit during the period. While in many respects Soviet missiles have characteristics similar to our own, the analyses indicate that their accuracy will be inferior to ours. The significance of this simple numerical comparison to our deterrent posture depends greatly upon the accuracy which the Soviets may attain with their missiles. This is so because the number of relatively inaccurate missiles required to destroy a hardened military target, such as an ICBM emplaced in a concrete silo buried in the ground, is considerably greater than the number of highly accurate missiles required to do the same job.

We have examined the relative positions that would exist if the Soviets were to develop missiles which would exceed the performance we expect them to have. It is also possible that the Soviets might elect to produce and deploy missiles in larger quantities than is presently estimated. Our analyses show that even under such circumstances the resulting difference in numbers, in itself, would not enable the Soviets to gain a strategic posture which might tempt them to initiate a surprise attack.

This conclusion is based on the knowledge that our overall deterrent posture depends not only on our long-range missile capability but also upon the continued success of other strategic weapons development programs, including those for mobile systems; upon the continued evolution and refinement of our capability to mount a sustained air alert on short notice; upon our ability to bring advanced early warning systems into operation; and upon our continued vigilance in detecting and reacting to improvements or changes in the Soviet posture, intentions, and weapon developments.

The present Soviet lead in very large rocket engines does not alter this appraisal. As President Eisenhower pointed out in his State of the Union message, our military missile program does not suffer from our present lack of such engines. The thrust of our present missiles is fully adequate for our defense requirements today.

▶ Our air defense system against manned bombers, partly due to geography, is more comprehensive and concentrated than that of the

U.S.S.R. We have more high performance, true all-weather interceptors armed with air-to-air missiles in operational units today than the U.S.S.R. We also have first rate ground-to-air missiles in the NIKE-HERCULES, operational in large numbers in our defense system today, and BOMARC, soon to be operational in quantity.

Our seapower, as a whole, is clearly superior to that of the U.S.S.R. The fact that the U.S.S.R. has more submarines in operation than the United States is in large part a matter of differing requirements, but it does pose a threat of significance. We have no need for large numbers of antishipping submarines inasmuch as the seaborne commerce of the U.S.S.R. is limited. The U.S. Navy is clearly ahead technologically. We have 9 nuclear-powered submarines already in commission and 23 under construction or conversion. The Soviets are estimated to be in the process of achieving their first operational capability with nuclear-powered submarines.

The United States is also more advanced in nuclear-powered surface ships. We have under construction a nuclear-powered carrier, a nuclear-powered cruiser which will join the fleet next year, and a nuclear-powered frigate. Our first nuclear-powered merchant ship was launched last summer. The only known Soviet surface ship with nuclear power is an icebreaker now in shakedown status.

You are, of course, aware that the Soviet Union has no aircraft carriers, while the United States is in a position to deploy several powerful task forces built around aircraft carriers. These carrier task forces are equipped to participate in situations of limited conflict by applying the appropriate degree of air power and, if necessary, furnishing close air support to landing operations. In addition, they constitute a sea-launched nuclear retaliatory contribution unique to the United States, and one which is in the process of being augmented by POLARIS submarines. The tactical air forces of the United States and its allies, deployed throughout a wide area around the Soviet periphery, contribute importantly to our overall retaliatory power and deterrent posture and also provide a strong limited war capability.

With respect to ground forces, the Soviet Union clearly outnumbered the United States, but a comparison of the ground forces of the Sino-Soviet bloc with those of the free world allies, including the United States, is more favorable.

It is not necessary to match the ground forces of the opponent on a unit-for-unit basis. Our Army and Marine Corps make substantial contributions to our deterrent strength. The Army furnishes an important part of the shield forces in Europe and Korea which, with U.S. air and naval units in such oversea areas, provide ready evidence of our willingness to contribute our fair share of forces to the common defense and our continued faith in the policy of collective security.

We must be ever cautious not to underestimate the military strength of possible opponents, but it does not contribute to our national security to overestimate their military strength. It can be dangerous to our national security and our position in the world to allow a false impression to gain ground that the United States is second to the Soviet Union.

The same holds true with respect to our relative economic strengths. While the Soviet Union since the end of World War II has made great progress in developing its economy, the United States is still far ahead by virtually any measure of economic strength. The gross

national product of the United States is more than double that of the U.S.S.R. We have more than double their steel capacity, three times their oil and electric power production, and many times their production of motor vehicles and consumer durable goods. In the production of chemicals, especially petro-chemicals, the Soviets are, by their own admission, far behind the United States.

Also, the economic strength of many of our major allies has grown at a rapid rate. Thanks to our system of voluntary alliances, this free world strength is a major asset to our security—an asset which has been built up to a considerable extent by our wise investments in military and economic assistance to these countries.

Even if the Soviet Union successfully completes its new 7-year plan, which would represent a great step forward, in many important areas Soviet economic capacity in 1965 will still be significantly below that of the United States in 1959. Of course, our economy by 1965 will also be much larger.

The continued expansion of Soviet economic strength would not, in itself, be a threat to the United States or to the free world if it were used to enhance the welfare of the Soviet people. Unfortunately, Soviet economic progress is exploited for propaganda purposes. The 7-year plan is being presented to the world as proof positive of the superiority of the Communist system over a free enterprise system. There should be no question that a free enterprise system is inherently more productive and more efficient than a government planned and controlled economic system.

The strength of our economy is important to our military strength. It is imperative that the United States continue to maintain a sound economy. We must show the world what a free people can accomplish when the proper economic environment is provided and, at the same time, make certain we are prepared to meet the economic and military challenge which faces us, perhaps for many years to come.

We have been aware in framing our defense proposals for 1961 that our country has dedicated itself, in conjunction with its allies, to continue its unremitting search for lasting, sincere disarmament and for a lessening of international tensions. But as President Eisenhower pointed out in his state of the Union message:

No matter how earnest is our quest for guaranteed peace, we must maintain a high degree of military effectiveness at the same time we are engaged in negotiating the issue of arms reduction. Until tangible and mutually enforceable arms reduction measures are worked out, we will not weaken the means of defending our institutions.

The two principal objectives of our defense program continue to be: first, to deter the outbreak of general war by maintaining and improving our present capability to retaliate with devastating effectiveness in case of a major attack upon us or our allies; and second, to maintain, together with our allies, a capability to apply to local situations the degree of force necessary to deter local wars, or to win or contain them promptly if they do break out.

I have no doubt that today our defense forces can accomplish these major purposes. However, the problem of maintaining our capability to deter general war has become complicated and costly because of the rapid progress in military technology. These changes are coming fast and are drastic. The defense program must be kept under continuous review. Programs which looked promising only a short

while ago have become marginal in importance in the light of technical advances. This compels a continued shift in emphasis and resources from older to newer programs, and the outright termination of some programs.

In an organization as complex as the Defense Establishment, it is not always easy to make the necessary shifts as quickly as desirable. We must avoid being carried away by the glittering promise of the future at the expense of present military strength—hastily discarding proved and effective weapons we actually have now for developments which may become reliable weapons in the future. Undoubtedly, we have overstayed our time on some projects, but considering the program as a whole, the rate of adjustment to technological progress has been rapid and remarkable.

The most important military development in recent years has been the nuclear-armed intercontinental ballistic missile. It has produced a weapon of tremendous speed and destructiveness against which no sure method of defense has yet been devised. This development is profoundly altering the nature of the military problem confronting the Nation.

A great deal of thought and study has been given to these changing circumstances in the formulation of the 1961 defense program and budget. Plainly stated, our first concern is how best to assure our continued capability to retaliate effectively to surprise attack, at a time when the U.S.S.R. could have in its possession a large number of intercontinental ballistic missiles in addition to a significant number of manned bombers.

Just matching our competitor, missile for missile, is not the answer. The simple piling up of ever larger numbers of a single weapon, without regard to their ability to survive a surprise attack or to perform effectively under a wide range of conditions, would not only be enormously costly but would not assure our security.

The solution lies in a whole complex of related measures each of which in various degrees contributes to the establishment and maintenance of an assured retaliatory capability. These are improved warning against both missile and aircraft attack, reduction of reaction time, dispersal, protective hardening, concealment, and mobility for our weapon systems; and, as soon as practicable, an effective active defense against ballistic missiles as well as aircraft.

Our deterrent posture is strengthened by a variety of types of weapon systems. Each weapon system has its own particular characteristics, its own strengths and weaknesses both with respect to its vulnerability and effectiveness. For example, one B-52 on target could deliver the destructive potential of several ICBM's, and with greater accuracy. It is, of course, more susceptible to enemy interception than an ICBM.

Again, the manned bomber is a much more flexible weapon system than the ICBM. For obvious reasons, missiles should not be launched unless the warning of attack is unmistakable. In contrast, the manned bomber forces on ground alert can be airborne within 15 minutes of any kind of warning, can proceed to their targets under positive control, and can be recalled if necessary.

On the other hand, the ICBM lends itself much better to protective construction or "base hardening." But again the vulnerability of the

manned bomber can also be greatly reduced by keeping it in the air on a continuous airborne alert status during periods of international tension.

I have not mentioned carrier-based attack aircraft, submarine launched POLARIS missiles, deployed tactical aircraft and missiles, or other weapons. The point is variety in weapons systems, in itself, reduces the vulnerability of our retaliatory forces and adds to their offensive potential by vastly complicating the enemy problem—both in attacking our forces on their bases and in defending against our retaliatory forces as they launch their counterattack.

We must be certain that an attacker cannot knock out at one blow the major part of our retaliatory forces. This is the surest deterrent, since an attacker can hope to win only if he can be almost certain of destroying virtually all of our retaliatory power before it can be applied. We believe the program proposed for the coming fiscal year supports that objective.

While we are steadily shifting the emphasis in the program to the more advanced weapons—the strategic missiles—we are continuing to improve the tried and proved weapons—the manned bombers. Included in this budget are additional B-58 supersonic medium bombers and B-52H heavy bombers with the new turbofan engine, together with the associated KC-135 jet tankers. HOUND DOG air-to-ground missiles and QUAIL decoy missiles, both to be carried by the B-52's, are also provided in this budget to improve the penetration capabilities of the manned bomber force.

The large ballistic missiles will in 1961 take an increased proportion of the funds devoted to strategic weapon systems. Funds are provided for additional ATLAS and TITAN ICBM's, and to prepare for production of the MINUTEMAN solid-fuel ICBM. We are continuing both ATLAS and TITAN because the ATLAS program provides the means of achieving an earlier operational capability, while the TITAN offers certain operational advantages and greater growth potential. The planned programs for both of these missiles have been substantially increased over those presented to the Congress last year.

The presently planned THOR-JUPITER program has already been fully funded. Four THOR squadrons and three JUPITER squadrons are being provided through the military assistance program to England, Italy, and Turkey.

As you know, the ATLAS is now operational at Vandenberg Air Force Base. Additional ATLAS missiles will become operational within the next several months. Notwithstanding some present difficulties of the type usually experienced in the development of new missiles, we expect the TITAN to become operational in the summer of 1961. The MINUTEMAN is scheduled to be operational by the middle of 1963. The THOR in England is now operational. The JUPITER squadrons in Italy and Turkey will become operational over the next year or two.

In addition to these land-based missiles, the Congress has authorized the construction of nine POLARIS submarines and associated missiles and provided funds for the long leadtime components for three more. We are requesting funds to complete the construction of the 10th through the 12th submarines and for the advance procurement of long leadtime components for 3 more, making a total of 15.

The POLARIS system promises to have vital advantages. We plan to continue a "three-a-year" rate until this weapon system has been better tested. Progress has been satisfactory, and, if the POLARIS proves out sooner than expected, a reconsideration of the program would be undertaken. Four submarines have been launched and testing of the missile is progressing on schedule. By December 1960, the first submarines should be operationally deployed and on station with missiles aboard. Additional submarines should be at sea by the end of fiscal year 1961.

General Twining will discuss in considerable detail the operational status of all these missile programs.

Thus, we now have four strategic ballistic missile systems in various stages of production or development. Before 1965, these systems will have been tested and their reliability established. The expected availability of these weapons raised a serious question as to the wisdom of continuing the development of the costly B-70 long-range supersonic bomber. This aircraft was programed to become available in operational quantities in 1965 when it is expected that all four strategic missile systems will have been in operation for some time.

Even though the B-70, designed to fly at Mach 3, is not as sure of penetrating enemy defenses as a ballistic missile, it does offer some unique operational characteristics. Therefore, we are requesting funds to continue development work on the B-70 airframe, engines, and certain critical subsystems so that two prototypes of this advanced bomber can be made available for flight testing. By next year we should be in a much better position to determine the future course of its development.

We have given great attention to improving the safety and readiness of all our retaliatory forces. The original program for the dispersal of Strategic Air Command aircraft and the construction of alert facilities has been substantially completed, and the necessary facilities for the additional heavy bomber wings, bringing the total up to 14, will be virtually complete by the end of fiscal year 1961. These measures will permit a large portion of our manned bombers and supporting tankers to be airborne within 15 minutes after receiving warning of an attack.

To further insure the safety of this force we are developing an airborne alert capability as recommended by this committee last year. We are not now operating an airborne alert of any significance because we do not believe it necessary. However, SAC does have a present capability to place a sizable portion of the B-52 force continuously in the air for brief periods during times of tension.

By reprogramming available funds the Air Force has begun the acquisition of a more extensive "on the shelf" alert capability for the heavy bombers. Funds are included in the 1961 budget to expand this program—to purchase extra engines and spare parts, and to train heavy bomber wings in the conduct of an airborne alert. This capability would be exercised if, when, and as needed.

We are also pursuing a number of different techniques to protect the land-based strategic ballistic missiles against surprise attack. Except for the first several squadrons, all ATLAS and TITAN missiles will be dispersed in hardened underground sites. We cannot have all our strategic ballistic missiles fully dispersed and in maximum hardened sites without delaying the operational dates of the first

ICBM squadrons. The MINUTEMAN squadrons coming later are planned to be dispersed and hardened, or else deployed in a mobile configuration. The POLARIS, because it will be carried in submarines at sea and because it is designed to be launched while the submarine is submerged, inherently possesses the advantages of concealment and mobility, and will have a very high degree of survivability.

Measures are being taken to shorten the reaction time of liquid fuel missiles. These involve the development of storable fuels, and facilities for in-silo launch. Both MINUTEMAN and POLARIS, because they are solid fuel missiles, can be more easily maintained at a high level of readiness.

The safety of our retaliatory forces is heavily dependent on the efficiency of our warning systems. Our warning network for the detection of manned bomber attack is already well developed. It now extends from Midway Island in the Pacific, around the northern perimeter of the North American Continent, and across the Atlantic approaches. The ballistic missile early warning system (BMEWS), designed to detect ballistic missile attack by means of long-range radars, is under construction. The first station is expected to become operational this year and two other stations will follow. We recognize that for a period of time there may be uncertainty as to the adequacy of warning against a surprise ballistic missile attack, and this is a significant reason to develop an "on the shelf" airborne alert capability.

We are also pursuing, through research and development, additional means of detecting ballistic missile attack. One such system, which would augment BMEWS, is MIDAS, a warning satellite which would give us a complementary and earlier warning. Other means of detecting ballistic missile launchings are also under intensive study.

We are most conscious of the great need to develop an active defense against ballistic missile attack. During the last 2 years we have greatly accelerated the research and development effort on the NIKE-ZEUS antimissile missile. The work is proceeding in a satisfactory manner, but the technical problems involved in detecting, tracking, and computing the course of an incoming ballistic missile and guiding the intercepting ZEUS missile to its target—all within a period of minutes—are staggering. Our knowledge of ballistic missile defense is still limited and we are not sure that we have identified all of the problems which such a system would have to solve.

No single project in the defense program has been and is being given more study by as many highly competent minds than the NIKE-ZEUS. After the most painstaking review, it was decided to press forward rapidly with the research, development, test, and evaluation of this system, but not to place it into production. Accordingly, funds are requested to provide the necessary radars, computers, target missiles, defense missiles, test-range facilities, and other equipment required to carry out a full-scale test program. Pending the completion of the necessary tests, the \$137 million authorized last year for the design and manufacture of special production equipment and for other preproduction steps will be carried over into fiscal year 1961 and held in reserve.

During the past year we have stepped up our basic research and development effort in this field through a project named "Defender." The purposes of this project are (a) to explore all of the phenomena

associated with missile flight which might be useful in solving the defense problem, and (b) to examine the possibilities for applying other techniques to the problems of detection, discrimination, interception, and kill of enemy ballistic missiles. In Defender we seek to find means for making an interception of an ICBM during any phase of its flight.

The emphasis is shifting to ballistic missiles and defense against them, but the manned bomber remains an important threat to our security. As long as the Soviets maintain a significant manned bomber force, this Nation must provide a defense against it.

Last year the Department of Defense presented to this committee an integrated plan for continental air defense. The funds requested in this budget for air defense reflect, with some modifications, the programs outlined in that plan. The 1961 budget will complete the last major elements of the NIKE-HERCULES program for continental defense. For BOMARC the funds requested will provide the initial complement of missiles for the planned number of squadrons, and maintain the production leadtime into fiscal year 1962 in the event it should be decided next year to increase the number of BOMARC missiles per squadron. This budget will also permit us to continue the equipping and modernization of the related radar warning, electronic control, and communications systems.

As you know, the F-108 long-range supersonic interceptor was canceled last summer. This aircraft would have become available in operational quantities by the mid-1960's. Since the substantial progress being made in ballistic missile technology is shifting the main weight of the threat from manned bombers to missiles, the need for the F-108 in that time period became questionable. Considering, also, its high cost, estimated at over \$4 billion for the relatively small force that had been planned, the continued development of the F-108 was not considered justifiable in relation to the needs of higher priority projects.

In these ways we have sought to strike a balance among all the various factors bearing on this ever-changing problem of air defense.

In addition to the specialized strategic and air defense forces, we are continuing to provide modern naval forces, and mobile ground and tactical air forces, suitably deployed for immediate action, particularly in limited war situations.

I would like to take a few moments at this point to discuss the question of "general war" versus "limited war" forces. Actually there is no clear line of demarcation between these two types of forces. All forces are a deterrent to and would be employed in a general war. Most of our forces could be employed in a limited war, if required. For example, air defense aircraft and antiaircraft missiles can be, and in fact are, deployed overseas. The aircraft of the Strategic Air Command could also be used if needed.

The effort to categorize our forces becomes particularly arbitrary in the case of the Navy and the tactical air forces. Certainly, the carriers with their embarked attack aircraft and the Air Force's tactical aircraft have a significant general war capability. But they also have an important limited war capability.

So, as a practical matter, there is no simple way to divide our forces or our budget into general war and limited war categories. Simply for discussion purposes, we can consider all forces except the

Strategic Air Command of the Air Force, the POLARIS submarines and the forces specifically assigned to the continental air defense mission, as particularly suitable for limited war use.

The so-called limited war forces of the United States, together with the forces of our allies, properly trained and equipped, provide the means of deterring or rapidly defeating or containing local aggressions.

As an essential element of our collective security system, and in our own interests as well as those of the entire free world, it is necessary that the United States maintain certain forces deployed in critical areas of the world, together with a capability to reinforce these deployments. It is equally important that we help our allies to develop their own forces to maintain internal security and to withstand the threat of aggression against their territories. Few uses of the defense dollar provide a greater return than those spent for this purpose. That is why we feel so strongly that the military assistance program should receive the continued support of the Congress and the Nation.

To emphasize the interrelationship of our own military programs and those of our allies, funds for the military assistance program in fiscal year 1961 are also included in the defense chapter of the budget. We will be prepared to discuss the latter program at the appropriate time.

NAVAL FORCES

Our naval forces during the coming fiscal year will be considerably strengthened even though the number of active ships will be reduced below the present level. An unusually large number of ships, financed in prior years, will be delivered to the fleet during fiscal year 1961. Included are the fifth and sixth *Forrestal*-class attack carriers, the first nuclear-powered cruiser, 16 guided missile destroyers and frigates, 3 POLARIS fleet ballistic missile submarines, and 6 other nuclear-powered submarines.

For the coming fiscal year we are recommending 20 new ship starts and 15 conversions or modernizations.

The budget request for the 1961 shipbuilding program reflects a change in the method of pricing ships. Because of a number of factors, among which design changes are probably the most important, there has been a tendency in recent years to underestimate the ultimate cost of ships. This has necessitated going back to the Congress each year for additional funds to complete programs already started.

As a matter of policy we have decided to reprice all ship programs to completion. Part of the additional money required to fully fund the shipbuilding program to completion will be made available by dropping four new ships and one conversion from the 1960 program. The balance is included in the 1961 request.

Included among the new ships is a conventionally powered attack carrier. Last year the Congress appropriated advance procurement funds for a nuclear-powered carrier. These funds, with the approval of the Congress, will be applied to the new carrier.

It is generally agreed that a nuclear-powered attack carrier has certain definite military advantages, such as extended range and endurance at high sustained speeds. But these advantages are not overriding as in the case of a submarine. In a submarine, nuclear power provides the critical advantage of almost unlimited operation, submerged, at high speeds. This enables nuclear-powered submarines

to carry out missions which no conventionally powered submarine, no matter how modern, could accomplish.

Such is not the case with respect to the carrier. The advantages of nuclear power, here, are not critical. The primary requirement in a carrier, today, is up-to-date facilities to operate, safely and effectively, the most modern naval aircraft. Use of a conventional power-plant of the most modern design will in no way compromise the ability of a carrier to function as a completely modern and mobile base for fleet aircraft for its foreseeable life. The additional \$130 million which a nuclear-powered carrier would cost can be used to much greater advantage for other currently pressing purposes such as anti-submarine warfare, in which this committee has expressed a great and helpful interest.

The need for this carrier is urgent. If we are to maintain strong carrier task forces, capable of meeting high performance enemy aircraft on equal terms, they must possess the most modern equipment. The *Essex*-class carriers, one of which this new carrier would replace, cannot be further adapted to the operation of such fast, heavy aircraft and should be assigned to other missions as soon as possible. I strongly urge this committee and the Congress to support our request for another conventionally powered attack carrier.

Funds are also included for a second increment of the fleet rehabilitation and modernization program. An additional 14 World War II destroyers will undergo major modernization in 1961 to improve their antisubmarine-warfare capabilities and to extend their useful life. Short of additional new construction, this is one of the most promising methods yet devised to offset the block obsolescence of the fleet and improve its antisubmarine-warfare capabilities.

The antisubmarine-warfare forces of the Navy will be significantly improved in fiscal year 1961 in many other ways. Included in the new ships I mentioned earlier are 22 with antisubmarine warfare as a primary mission. These will be equipped with our latest antisubmarine-warfare systems. Several new items of antisubmarine-warfare equipment will be introduced in the coming fiscal year. ASROC, a rocket-assisted torpedo and depth bomb; several new types of sonar equipment; and DASH, a drone antisubmarine-warfare helicopter, are scheduled to become operational for the first time. In addition, a new all-weather search helicopter, the HSS-2, and a new improved carrier-based antisubmarine-warfare aircraft, the S2F-3, will be introduced into the fleet during 1961. Funds are provided in this budget for the procurement of additional quantities of these aircraft, missiles and equipment.

The overall ASW capabilities of the Navy are still far from satisfactory in view of the magnitude of the threat. As a result of this committee's concern about the submarine threat, the Congress appropriated an additional \$137,300,000 last year for augmentation of the antisubmarine warfare program. This amount, including \$45 million for research and development and \$92.3 million for procurement, has been made available for use by the Navy. If any breakthroughs are achieved, additional resources can be made available from the emergency fund as was done in 1959. The 1961 program will include the development of improved tracking equipment, depth charges, and new antisubmarine missiles, as well as sharply increased research in the vital field of oceanography.

Additional aircraft and missiles for other Navy missions will also be procured in 1961, including the supersonic A3J attack aircraft, the all-weather F8U-2N and F4H interceptors, and the GV-1 tanker-assault transport aircraft (adapted from the C-130). In the missile category, additional TALOS, TERRIER, and TARTAR fleet air defense missiles will be procured, as well as additional quantities of the air-to-air missiles, SPARROW and SIDEWINDER.

GROUND AND TACTICAL AIR FORCES

The major elements of the ground and tactical air forces will be continued through fiscal year 1961 at about their present levels—the Army with 14 divisions and numerous other major combat units; the Marine Corps, 3 combat divisions and 3 aircraft wings; and the Air Force with 33 tactical wings (including 11 troop carrier wings). The overall combat capability of these forces will be significantly enhanced during 1961 through the introduction of substantial quantities of new weapons and equipment. In the case of the Army, for example, the M-60 tank; the 7.62-millimeter family of small arms, the new jeep, and the new armored personnel carrier will all begin to enter the inventory in quantity for the first time. The Army will also receive the first production quantities of the LITTLE JOHN and SERGEANT surface-to-surface tactical missiles, and the man-carried nuclear-capable rocket, DAVY CROCKETT. The Marine Corps, too, will receive its first increment of the 7.62-millimeter rifle and machinegun, as well as DAVY CROCKETT, and additional quantities of BULLPUP air-to-surface tactical missiles.

\$200 million of the \$375 million added by the Congress last year for NIKE-ZEUS preproduction and/or Army modernization are planned for obligation in 1960 for modernization. The balance of \$175 million, including \$137 million for NIKE-ZEUS, will be carried into 1961.

The 1961 budget will provide funds to continue the modernization of our ground forces. Well over 20,000 combat and tactical vehicles of all kinds are planned for procurement in 1961 including additional quantities of the M-60 tank, tank recovery vehicles, air droppable personnel carriers, trucks, jeeps, etc. In addition, the Army will begin the procurement of a new family of self-propelled artillery which will be lighter, more mobile, and will have greater range than the types currently available.

Both the Army and Marine Corps will buy additional quantities of a wide variety of guided missiles and rockets including, in addition to those already mentioned, HONEST JOHN, LACROSSE, HAWK, REDEYE, and a new wire-guided antitank missile. The REDEYE is a new, man-carried, bazooka-type weapon designed for defense of forward combat forces against low level air attack.

Army aviation will be further modernized through the procurement of additional quantities of Mohawk turboprop observation aircraft, Caribou transports, and Iroquois utility helicopters. The first production quantities of the Chinook helicopter will also be bought in 1961.

While the Marine Corps provides much of its own air support, the Army relies on the Air Force for such support. After considerable study we are convinced that this is still the most effective arrangement. We have given special attention in the 1961 budget to the needs of the

Army in this area and have provided for a substantially increased procurement of the F-105 tactical fighter to increase the direct air support available to the Army. The F-105 is a modern, high performance, all weather aircraft with special low altitude handling characteristics and a large carrying capacity for both nuclear and nonnuclear weapons. The F-105 is now entering the inventory in sizable numbers and should contribute significantly to the close air support of Army ground operations.

There is a pressing requirement to initiate the modernization of the MATS fleet. Although now quantitatively adequate, much of the present MATS fleet is obsolescent. Failure to initiate a modernization program will adversely affect the ability of the fleet to meet future military requirements for airlift. Accordingly, this budget provides \$50 million to take the first steps on such a program.

RESERVE FORCES

With respect to the Reserve Forces, we are again recommending a 10 percent reduction in the Army National Guard and the Army Reserve—from 400,000 and 300,000 respectively to 360,000 and 270,000, by the end of fiscal year 1961. However, during 1960, they will be maintained at the levels desired by the Congress. The other Reserve components—the Navy, Marine Corps, and Air Force Reserve and the Air Force National Guard—will remain at about their present levels.

The Army National Guard and the Army Reserve together constitute 70 percent of the number of reservists on drill pay status. The average cost per man on drill pay status for all Reserve components has increased steadily over the years and is now estimated at about \$1,200 per year. One of the most important factors in this increasing cost has been the 6-month active duty training program for reservists. However, all the Reserve components, and particularly the Army National Guard and Reserve, have benefited considerably from this program. By providing basically trained personnel, it has permitted these Reserve components to concentrate on unit training and mobilization readiness. The Army National Guard and Reserve are now better trained and equipped and are at a higher state of readiness than they have ever been before in our peacetime history. We feel that, parallel with the reductions in the size of the Active Forces as new and more powerful weapons have been introduced, a similar shift in emphasis away from mere numbers in the Reserve Forces can be made without affecting their overall combat capability.

It has been some time now since we have had a comprehensive review of the roles and missions of the Reserve Forces. I think we all recognize that if the Reserve components are to serve effectively in time of war, their basic organization and objectives must be kept compatible with the organization and objectives of the Active Forces. During the next several months the Defense Department will reexamine the roles and missions of the Reserve components in relation to those of the Active Forces and in the light of the changing character of warfare.

Mr. Chairman, the rapid pace of science and technology has greatly complicated the task of planning and formulating the annual defense program and budget. The costs of developing new weapons systems

are now so large and the risk of obsolescence so great that sound experienced technical judgment has assumed a place of key importance in the entire military planning, programing, and budgeting process. This fact has been recognized by both the military and civilian officials of the Defense Department.

STRENGTHENING OF TECHNICAL ORGANIZATIONS

During the last year we have sought to find new ways to strengthen our technical organizations. Within the Office of the Secretary of Defense, technical and scientific responsibilities have been brought together under the Director of Defense Research and Engineering. Our latest action was to place the Advance Research Projects Agency directly under his supervision. This completes the program started in 1958, with the aid of this committee, when ARPA was first established to handle those research projects which had not yet developed to a point where they could be assigned, logically, to any one of the services. Now that civilian space projects are being concentrated in the National Aeronautics and Space Administration and the development of military space projects has progressed to a point where they can be assigned to the military services, ARPA will be able to turn its full attention to truly advanced research.

The Director of Defense Research and Engineering, Dr. York, has strengthened his staff in the last year and will continue to improve his organization. Our goal is an organization which can bring to bear experienced and sound technical judgment at each stage of the development of a new weapon system—starting at the beginning with a technical evaluation of the military requirement. In this way we hope to improve and expedite our decision making processes on the choice of new projects and the continuation of old ones.

The proposed transfer of the SATURN project to the National Aeronautics and Space Administration does not mean that the Department of Defense has no further interest in large boosters or the national space program generally. We intend to continue our close relations with NASA in matters of common interest. We shall follow their work very closely so that any new military applications which may flow therefrom can be promptly exploited.

The Department of Defense, however, is not interested in space flight and exploration as ends in themselves. Our space efforts are an integral part of our overall military program and will complement other military capabilities. As space technology expands, new military requirements are very likely to materialize. Our objectives, therefore, are (1) the development, production and operation of space systems which will enhance the overall defense program; and (2) the development of components for systems the need for which cannot be clearly demonstrated at this time, but which probably will become necessary in the future. Thus, considering the nature of our space objectives it is not logical to formulate a long range military space program which is separate and distinct from the overall defense program.

While we are admittedly behind the Russians in the development of very large thrust boosters, the use of IRBM's and ICBM's as first stage boosters for our near-earth satellites provides us with a payload capability adequate for our immediate military needs. Within a year or two we will have considerably more weight-carrying ability with our improved upper stage space vehicles.

DEVELOPMENT OF 1961 BUDGET

Before presenting the usual brief fiscal summary, I would like to outline our general approach to the preparation of the 1961 budget.

It was considered, in the light of the international situation, the state of military technology, and the general economic and fiscal situation, that the 1960 level of expenditures—about \$41 billion—would be a reasonable point of departure for the preparation of the 1961 Defense budget. This was to serve as a general guide and not as a final determination of the 1961 budget—either in total or for the individual services.

In order to assist in bringing the major issues into focus, it was agreed that each of the military departments would use planning objectives aggregating somewhat less than the 1960 level for the development of what we call their basic budgets. It was contemplated that these basic budgets would include the hard core of top priority requirements for combat-ready forces; military hardware; and new weapon systems development; together with the related construction.

In addition, each service was requested to submit up to \$500 million in new obligational authority above the 1960 level for any other desirable programs, bringing the total new obligational authority to about \$43.7 billion and net expenditures to about \$41.8 billion. Furthermore, the services were not precluded from submitting items over and above these limits, and in fact the Army, Air Force, and ARPA did just that.

All the budget requests, totaling \$43.9 billion in new obligational authority and \$42.6 billion in net expenditures, were then reviewed by the staff of the Office of the Secretary of Defense by program—on a defensewide, across-the-board basis.

This year a particular effort was made to assure that all the principal officials of the Department of Defense—the Service Secretaries, the Assistant Secretaries of Defense, and the Chiefs of Staff, both in their individual capacities and in their corporate capacity as the Joint Chiefs of Staff—participated in the review of the annual program and budget. The staff of the JCS was furnished various evaluations, analyses, and data by the Office of the Secretary of Defense to facilitate the examination of the budget by the JCS from a military point of view.

We also had the benefit this year of the active participation of the new Office of the Director of Defense Research and Engineering established by the Defense Reorganization Act of 1958.

The Defense budget developed in this manner was then presented to the President. The major issues relating to the composition and size of our military forces, to the choice of weapons systems, to the timing of procurement, and to the nature of the Defense research and development effort were thoroughly reviewed. The Service Secretaries and the Chiefs of Staff then presented their individual views and comments on the defense program and budget proposed for fiscal year 1961. As a final step in the process, the Defense budget was again discussed with the President in the National Security Council.

In summary, the fiscal year 1961 Department of Defense budget, as approved by the President, provides: (a) For military functions, a total of \$40,577 million in new obligational authority and \$350 million to be derived by transfer from the revolving funds of the Department

of Defense in lieu of new appropriations; (b) for military assistance, a total of \$2 billion in new obligational authority.

Net expenditures are estimated at \$40,995 million for military functions and \$1,750 million for military assistance.

The 1961 budget request includes \$150 million in new obligational authority and \$150 million in transfer authority for the Department of Defense emergency fund, the same amounts provided by the Congress last year. We are also requesting the reenactment of section 633 of the 1960 act, which would provide us with \$150 million in transfer authority for strategic and tactical missiles.

Of the total amount recommended for 1961, \$39,335 million in new obligational authority and the amounts to be derived by transfer are contained in the bill now before you. The \$1,188 million for military construction, the \$24 million for later transmittal (retired pay) and the \$2 billion for military assistance will be presented separately. \$30 million (Wherry Act housing) is for reappropriation.

This budget will provide for a military force structure of about the same size and composition as planned for the end of the current fiscal year. The Army with 870,000 men will support 14 divisions and numerous other major combat units; the Navy with a strength of 619,000 will man 817 ships; and the Marine Corps with 175,000 men will continue to support 3 combat divisions and 3 aircraft wings. The Air Force with a strength of 825,000 will man 91 combat wings at the end of 1961.

Active duty military manpower levels will remain constant during fiscal year 1961 although the planned beginning strengths will be somewhat lower in the case of the Navy and the Air Force than the actual levels on June 30, 1959.

In maintaining a balance in and among all of the forces and programs of the Defense Department, it was felt that a 175,000-man Marine Corps was adequate. Furthermore, during 1961, with improved personnel management and a lower-than-normal loss of personnel, the Marine Corps will be able to allocate a larger percentage of its strength to the combat forces. This will permit the reactivation by the end of 1961 of a number of battalion landing teams without any increase in overall strength. The additional funds provided by the Congress last year to maintain the Marine Corps at 200,000 will, therefore, not be used.

This budget does not provide everything that everyone would like to have, but in my judgment it does provide for those programs which are essential to our national security. The Joint Chiefs of Staff have assured me that they will support this budget.

Mr. Chairman and members of the committee, I appreciate your patience and courtesy in listening to this rather lengthy statement. I felt that it was important to describe the 1961 Defense budget in some detail and to show how our policies and programs related to our total national strategy.

BIOGRAPHICAL SKETCH OF SECRETARY GATES

Thomas Sovereign Gates, Jr., of Philadelphia, Pa., was born in Germantown, Pa., on April 10, 1906. He has been a lifelong resident of the Philadelphia area. He is the son of the late Thomas S. Gates, former president of the University of Pennsylvania.

He attended Chestnut Hill Academy and the University of Pennsylvania, from which he graduated in 1928.

After graduating from the University of Pennsylvania in 1928, Mr. Gates joined the firm of Drexel & Co., investment bankers. In 1940, Mr. Gates was made a partner in this firm. In addition, he has been a director of the Beaver Coal Corp., the Scott Paper Co., and the International Basic Economy Corp.

During World War II, Mr. Gates was commissioned in the Naval Reserve and served on active duty from April 1, 1942, until his release to inactive duty in October 1945. He graduated from the Quonset Point Air Intelligence School, and was then assigned to Commander in Chief, Atlantic, to help in the organization and development of the Naval Air Intelligence Center under that command. In the spring of 1943, he was assigned to the U.S.S. *Monterey* and served in the Pacific for approximately 1 year. In the summer of 1944, he was assigned to the staff of Rear Adm. Calvin T. Durgin (now vice admiral, retired), and served on that staff during the invasion of southern France. Immediately following this, he was sent back to the Pacific where he remained until the end of the war, taking part in the Philippine liberation and the Iwo Jima and Okinawa campaigns. For his war service, Mr. Gates was awarded the Bronze Star and a Gold Star in lieu of a second Bronze Star. In December 1953 he was promoted to captain, USNR, and placed on the retired list.

Since the war, Mr. Gates has kept up his interest in the Navy by being active in the organization of Reserve Officers of the Naval Service; serving as a director and national vice president of the Navy League of the United States and serving as a member of the Naval Advisory Council of the Bureau of Aeronautics. In addition, he is a member of the Pennsylvania Commandery of the Military Order of Foreign Wars of the United States.

Mr. Gates has also been active in civic affairs in the Philadelphia area, having been president of the Associated Hospital Services of Philadelphia; director of the Philadelphia Child Guidance Clinic; director of the Community Chest of Philadelphia and vicinity; director of Health Services, Inc.; a member of the Finance Development Committee of the United Services Organization, and on the Philadelphia Council of the Boy Scouts of America. He is a trustee and member of the executive board of the University of Pennsylvania.

Mr. Gates was appointed Under Secretary of the Navy by President Eisenhower and assumed that office in October 1953. One of the first assignments was as Chairman of the Navy Reorganization Committee. On April 1, 1957, he succeeded the Honorable Charles S. Thomas as Secretary of the Navy. On February 10, 1959, President Eisenhower accepted Mr. Gates' resignation as Secretary of the Navy. Subsequently, on the death of the then Deputy Secretary of Defense Donald A. Quarles, Mr. Gates was nominated to the position and was sworn into that office on June 8, 1959. He became Secretary of Defense on December 2, 1959.

Mr. Gates is married to the former Millicent Anne Brengle. Their children are Millicent Anne (Mrs. Joseph Ponce), Patricia S. (Mrs. William K. Norris), and Katherine.

(Note: See p. 132.)

Mr. MAHON. Thank you very much, Mr. Secretary, for this very helpful statement. We will now proceed with the statement of General Twining.

General Twining, during what period were you Chief of Staff of the Air Force?

General TWINING. 1953 to 1957.

Mr. MAHON. When did you become Chairman of the Joint Chiefs?

General TWINING. August 1957.

Mr. MAHON. When does your present term expire?

General TWINING. August 1961.

Mr. MAHON. Proceed.

General TWINING. Mr. Chairman and members of the committee, I would like to proceed with this presentation as I did last year and have the bulk of it off the record because it is very highly classified. Then we could go as we did last year with questions and answers and prepare those for what kind of release we want.

Mr. MAHON. Will you submit a sanitized statement for the record?

General TWINING. I do not believe it would work, sir, because it would not be very helpful since it is pretty condensed and very highly classified.

STATEMENT OF CHAIRMAN OF THE JOINT CHIEFS OF STAFF

Mr. Chairman and distinguished members of the committee, it is my privilege to appear before you today to present our best estimate of the Communist military threat to our country, together with a review of our capabilities to counter this threat.

Today we hear and read a tremendous volume of material comparing the strength of the United States and the free world with that of the Soviet Union and the Communist bloc.

All too often the writers and commentators are inclined to degrade the capabilities of the American people and the peoples of the free world. At the same time, the efforts of the Soviet Union and the Communist bloc are reported in glowing terms.

The plain and unadulterated truth of the matter is that the moral, military, physical, and economic strengths of our people and of our allies have been adequate to resist and deter Communist aggression. I am confident that this will continue to be the case.

We cannot, however, in this day of exploding worldwide competition on all fronts, be content to maintain the status quo. We must also realize that the preservation of our freedom in the years ahead may require greater sacrifices from us than those made by Americans who have walked before us.

Our Nation is not defenseless. Our Nation is not populated by a people who are ready to knuckle under to a rocket-rattling dictatorship. I am quite certain that the American people will fight with all weapons available in the national arsenal should such a fight be required to preserve our freedom and that of our allies.

(The remainder of General Twining's statement was made off the record.)

Mr. MAHON. We will resume at 2 o'clock.

AFTERNOON SESSION

Mr. MAHON. The committee will come to order. You may proceed.
General TWINING. Very well.

(General Twining continued his classified presentation.)

PRESENT DEFENSE CAPABILITIES

Mr. MAHON. I sympathize with the military in making presentations to Congress. If you seem too satisfied and happy with the situation and seem to think you are absolutely invincible, you are confronted with a problem. If you take a position of timidity and come up here with long faces and say, "Gentlemen, we are in trouble, we want more and more defense dollars," you are confronted with another problem.

In my long period of service on the committee this is the most enthusiastic and rosy and reassuring presentation that we have ever had. I think we will not want to overlook what I assume to be the fact that in the event of an all-out war between the Soviet Union

and the United States today, the destruction which the Soviet Union could deliver upon us and the destruction which we could deliver upon the Soviet Union would be greater than ever before in our history. I think that it would be greater now than it was last year and the year before, and I think when the next year rolls around the capability for mutual destruction will have further increased.

I would like to have you gentlemen comment with respect to this statement I have made

Secretary GATES. I would agree with you.

General TWINING. Yes, that is right.

Mr. MAHON. In other words, we live, as the President said, in an age of peril, and the possibility of destruction—not necessarily the probability—is, it seems to me, increasing with the passing of the years.

Secretary GATES. Yes.

Mr. MAHON. I think it is that fact which causes the President to want to do everything in his power to bring about an atmosphere of peace and good will because this age of peril is quite intolerable from several standpoints.

Now it is obvious to me that in this presentation you have had in mind some of the critical things which have been said with respect to the capability of the United States and the Department of Defense. You have had in mind, I think, various columns in the press and statements made by various political and nonpolitical figures. I think we are all interested in one thing, and that is facing up to the truth and to the facts of life from the standpoint of national defense.

CAPABILITIES OF THE UNITED STATES

Now is there any likelihood, Mr. Secretary, that in your very well prepared statements you have overly reassured us as to our capabilities?

Secretary GATES. I would not have that intention, Mr. Mahon. The intent was to be as factual and as accurate as we knew how to be, and certainly not to be complacent. The efforts we are making are to build as invulnerable a deterrent as possible and as quickly as we can, taking into account our present power vis-a-vis the Russians. If this deterrent ever goes into operation after we are attacked, as you say, worldwide destruction will be enormous and will be increasing. We have not intended to present a rosy picture. We have intended to state the facts as we see them.

Mr. MAHON. General Twining, you spoke very feelingly about our defense capabilities. While you have not said so, I had the feeling as you spoke—and most of your discussion was off the record—that probably you feared that the United States was being sold short in the eyes of the American people and in the eyes of the world with respect to our military prowess.

What is your feeling about that matter?

General TWINING. We are in a position now, as you say, where we can annihilate each other. We must not let that ever happen. That is why we are having all of this business going on—disarmament and all that. The only way we can deal with this fellow is not to tell him how deficient we are today; we are prone to do this at times, because it gets us more money. It is the democratic system and I am

not bucking it, but I think it is very dangerous. We have great strength, we are a powerful country, and I do not think we should downgrade our capabilities as a nation to the Russians. That is what gives me great cause for concern—this downgrading of our capability. It looks like we are going to get licked every day. I am afraid that the public will become frightened some day. It sometimes appears to me that there is an element in the country that thinks, "gentlemen, we better be Red than be dead." It is a serious thing.

My point is, let us not downgrade our capability at a time when we are entering upon negotiations which may lead to peace and disarmament. We want to deal from strength. We have terrific strength in the military and in our country. We know what we have. We do not know what he has, although I believe that our intelligence system is improving all the time.

I did not mean to be complacent at all. I am still concerned by the same possibilities that you are, that an enemy might some day launch an attack and that would be awful. We would take a lot of losses in our population and we would have to strike back and do the same thing to him. I do not think it is going to happen.

Mr. MAHON. You have confirmed to me your feeling that you are deeply disturbed by the possibility that we might convince the opponent that we do not have the fighting strength which you feel we have.

General TWINING. That is right. If he thinks we are not confident of our national capability he may assume that there is an open gate for him. Similarly, we should not build up in our own people this lack of confidence in our national capability.

Mr. MAHON. You do not feel, I assume, that the American people would be in any way disposed to knuckle under to the rattling of missiles as a result of this controversy over the relative strength of the people of the two countries?

General TWINING. Not at the moment, but I am afraid that such an attitude could be generated or could be building up if our Nation is portrayed continually as second best.

Mr. MAHON. Do you have any comment on that, Mr. Secretary?

Secretary GATES. No. I can verify the fact that when we discuss at the summit meeting disarmament questions, NATO problems, security problems generally, we have to deal from a hand of strength. We have to have great military strength to carry out our foreign policy. I subscribe to that statement of General Twining's. I think it is important that the American people realize the fact of what our capabilities are.

There has been some concern, I think, about the propaganda slogan of "The spirit of Camp David," that may tend to make us loosen our guard a bit. I trust we will never be so foolish as to do that.

ADEQUACY OF ICBM PROGRAM

Mr. MAHON. There are those who will say with respect to this budget that we are moving toward dropping our guard because we are not doing more. What is your thought there?

Secretary GATES. We do not share that opinion, Mr. Chairman. We feel we have a good rounded program and a diversified and strong mixture of weapon systems to protect our strength and deterrent capability.

Mr. MAHON. I am not disposed to blame anyone—I suspect there is enough praise and blame for everybody in the picture—but I think we have to agree we have lost a propaganda battle with respect to the conquest of space, and with respect to the ICBM. I do not think that there is any doubt about that.

Secretary GATES. If I may comment, I do not think they ought to be directly related. We are temporarily behind in the space business—for whatever propaganda advantage that may have. That is because they have a larger booster capability than we have.

Mr. MAHON. Yes.

Secretary GATES. Shooting the moon has very little relationship to effective weapon systems as of this generation, or these years that we are discussing. I think that they should be separated. A military weapon system should be separated from a space propaganda question and clearly explained.

Mr. MAHON. When we admit that we are behind in the intercontinental ballistic missile area, of course that has military significance. We have admitted that; is that not true?

Dr. YORK. In terms of numbers of missiles only; not in terms of the status of development.

Mr. MAHON. Not in terms of the status of the development, or the quality of the missile?

Secretary GATES. There was a very significant matter brought out by Mr. Dulles, and it was brought out by General Twining. Heretofore, we have been giving you intelligence figures that dealt with the theoretical Soviet capability. This is the first time that we have had an intelligence estimate that says, "This is what the Soviet Union probably will do." Therefore, the great divergence, based on figures that have been testified to in years past, narrows because we talked before about a different set of comparisons—ones that were based on Soviet capabilities. This present one is an intelligence estimate on what we believe he probably will do, not what he is capable of doing.

Mr. MAHON. That is what you are doing this year?

Secretary GATES. Yes. It is a very significant change.

Mr. MAHON. It is much more helpful.

I will now read from a Washington Post story by John Norris, who is a reputable and able reporter, under date of January 4.

Last winter Neil H. McElroy, then the Secretary of Defense, admitted publicly that if the Russians build all the ICBM's they can and if the United States produces the number it now plans, the U.S.S.R. will maintain a 3 to 1 lead through the early sixties.

I assume he means, though he does not say, 1960, 1961, 1962, and 1963—during that period.

In explaining this unhappy ratio, he said it stemmed from an Administration decision not to try to "match Russia, missile for missile," but to rely on American superiority in Air Force and carried-based bombers, plus available ICBM's, IRBM's, and POLARIS submarines.

Those who argued at that time and since that such a policy was too risky won support from an unexpected quarter, yesterday. Gen. Maxwell D. Taylor, USA, retired, who, while Army Chief of Staff, contended that the United States had too much "massive deterrent" and too little conventional war strength, confessed that he has "reluctantly" come to accept the "reality and significance of the so-called missile gap."

"Somehow it must be made clear to our citizens that the Nation will face a serious crisis beginning about 1961," he said in a just published book. "For a period of years thereafter the balance of military strength will tip dangerously in favor of the Communist bloc unless we take drastic action now."

I read these statements in order to be provocative, frankly, and in order to get your best comment.

Your presentation has shown that in the intercontinental ballistic missile field we will continue to lag behind the Soviet Union during the early years of the 1960 decade. You have argued very eloquently that we must not consider this as being too significant. You talk about the POLARIS and you talk about the carriers and you talk about the bombers. Now let us just face up to it. Is this missile lag worth worrying about too much, or not; and if it is worth worrying about, are we doing enough about it? That is the issue as I see it.

Secretary GATES. Mr. McElroy made such a statement in his testimony last year. He also made that statement on a television program in December. But he was always very careful to say that this would be true only if they do what it is estimated they are capable of doing; and that is the very point that I was talking about earlier. Secretary McElroy was operating on the basis of capability figures that produced, on a theoretical capability basis, something that was like 3 to 1. This new intelligence estimate has narrowed the differences.

(Statement off the record.)

Mr. MAHON. Percentagewise how much have we narrowed that gap in the intercontinental ballistic missiles? I am not speaking of the bombers—other weapons.

Secretary GATES. We have not figured that percentagewise, but we could do it for you.

General TWINING. Could we give it to you for the record? It would be a little trying to do it here.

Mr. MAHON. I am speaking only of the ICBM's and I assume that during part of the period 1960, 1961, and 1962 they will have a substantial superiority. The most critical years are probably 1961 and 1962.

If we are going to bring this issue out on the record, which we probably will have to do before it is all over, we might just as well nail it down now. I do not think that it serves us well to get into a big argument as to whether or not there will be an ICBM gap. It is a question of how much it will be and how significant it will be.

Secretary GATES. You asked if we should just not worry about this point. Obviously we should pay a great deal of attention to it. However, the numbers alone are misleading because we are dealing in a complex situation under changing circumstances. Factors that deal with time of warning, relative hardening, dispersal, mobility, and most important, accuracy must also be considered. If you change any factor in this formula you change the result. You require a great deal more missiles of equivalent yield to knock out a hardened base than an unhardened base. If you have a half-hour warning the factors are a great deal more in your favor than if you have a 15-minute warning. If you have great accuracy you require fewer missiles than if you have missiles with less accuracy. So, necessarily, the numbers cannot be evaluated without evaluating the other parts of the story.

Mr. MAHON. I agree.

Secretary GATES. Most important is the reliability and the accuracy.

Mr. MAHON. But for the purpose of this one question, I am seeking now to evaluate only the matter of numbers in the ICBM field. Of

course, we have had those numbers presented to us here. I do not think that you will want to give the numbers in the record because you have already given them to us off the record, but since you said last year the ratio would be 3 to 1 then I think you are probably going to be compelled during this discussion, sooner or later, to say _____ whatever it might be.

Secretary GATES. I would hope, Mr. Mahon, that we would not continue to discuss publicly these number problems. I would hope we would attempt to inform the American people what the real problem is which brings all these other matters into consideration.

I said in my statement something about the difference of numbers peaking probably in 1962. Really I am not trying to hide anything, or not fully disclosing all facts that should be disclosed. But the numbers are only a part of the intelligence estimate and they do not mean much unless you consider the other factors that I mentioned.

Mr. MAHON. Before we print this testimony make up your mind as to what you are willing to state for the record, and if you are later going to state for the record what the percentage comparison is you might just as well say it now. If you think that you can avoid saying it, it is all right with me. You have given us all the facts. You are not withholding anything at all. I do not want the record to indicate that.

Mr. THOMAS. Could you not work out two formulas? Why not work out the numbers of ICBM's. Then work out another formula putting into effect the other elements involved—the Russians have so many more targets to hit, the time factor, accuracy of the guidance systems, and so forth. Let him work it out on that basis and the probability is it will show that we are 15 or 25 percent stronger.

Secretary GATES. We could make a whole series of statistical estimates, but the trouble is that we do not know exactly what his accuracy is. We do not know exactly how much warning time we are going to have.

Mr. THOMAS. Give him the highest estimate and still you can make a good showing.

Secretary GATES. We are going to stand on our testimony, which is based upon the best judgment in the United States, the national intelligence estimate.

Mr. MAHON. Not for one moment would I urge you to present a picture that sells the United States short and confuses Congress or the country. I think we are entitled to know the facts with respect to all segments of the picture and, insofar as we appropriately can, give those facts to the Congress and the public through this printed record. You do the best you can on this thing.

Secretary GATES. Yes.

(The following statement was subsequently submitted:)

It has been stated on previous occasions that the Soviet superiority in ICBM's could be in the order of 3 to 1 in the period 1960-63. This statement was based upon estimates of what the U.S.S.R. could produce in numbers of missiles and was not an affirmative statement of fact that the U.S.S.R. would produce the number of missiles required to attain this superiority.

On the basis of our current intelligence estimate, which has been presented to the committee by the Director of the Central Intelligence Agency, we do not now believe that the Soviet superiority in ICBM's will be as great as that previously estimated.

RETALIATORY AND DETERRENT FORCES

Mr. MAHON. I do not know that you have made it clear, though you sought to make it clear—in our calculations, among other things, we calculated we might be hit first because we would not be an aggressor.

Secretary GATES. Yes.

Mr. MAHON. Therefore, you argue that the opponent must not only be able to launch a massive attack upon this country, but he must be able to launch an attack upon specific military targets if he is hoping to destroy our retaliatory power?

Secretary GATES. That is correct.

Mr. MAHON. If he fails to destroy our retaliatory power in his first blow, of course—

Secretary GATES. He commits suicide.

Mr. MAHON. He commits suicide. So he has a different problem from us?

Secretary GATES. Yes.

Mr. MAHON. We would not in our retaliation, of course, have to locate and destroy ICBM bases and bomber bases in the opponent's country because our retaliation would be a different type of effort than the original effort made against us; is that about correct?

Secretary GATES. It is hard to say in a situation of this kind, involving world devastation, precisely what we would do, sir. However, it would be correct to say that in order to maintain a valid deterrent we have to maintain a deterrent force capable of knocking out his military power and not just bombing his cities. What we would actually do depends on circumstances, but we are adjusting our power to a counterforce theory; or a mixture of a counterforce theory plus attacks on industrial centers and things of that character. We are not basing our requirements on just bombing Russia for retaliation purposes. Do I make that clear?

The validity of our deterrent must be of such a character—am I doing all right on this, General Twining?—that an enemy will believe his military power will be devastated. What we actually do in this sort of period in a real operation is something else. I do not know for sure.

Mr. MAHON. To some extent you are saying—

Secretary GATES. I am saying it is a very complicated matter.

Mr. MAHON. I am not trying to put words in your mouth, but in a sense you are saying that while we want to be able to inflict massive retaliation, we want and we will have, or must have, more than a massive retaliation capability, and ideally we would like to be able to destroy all his military targets and launching bases in the event of war? What is your comment on that?

General TWINING. That is right. The forces that he will have to hit are deployed worldwide. Our striking forces are deployed worldwide. Theirs are not. Assuming that he does strike first, we are going to take some losses in our striking force, no question.

Mr. FLOOD. The deterrent element is what exists in his mind, not yours. Deterrence is a function of the mentality of the Russians.

Secretary GATES. That is correct.

Mr. FLOOD. After he strikes you first he will give you casualties A. He knows that. Now, you still strike him back. He will take casualties B. What does he think you will have left after he hits you first

to deliver a percentage of casualties on him? If his deterrent is what he is willing to suffer up to point 9 and if you get to point 8, he will hit you. If you get to point 9 on what he has to take, he will not hit you. What does he think? What does he think he is willing to take? That is the deterrent quotient. That is not new. We have been talking about that for 5 years.

You told me that, General Twining, 5 years ago.

Mr. MAHON. You can check the record of last year with respect to what appears on that record with respect to this issue. It does seem a little shocking to be talking about possible operations that could take the lives of tens of millions of people as we smilingly approach the summit, but probably it is best to continue to face the facts of life because only in that way can we successfully approach the summit.

General TWINING. This gets right into our war plans. We have plans for these things.

Mr. MAHON. You have plans for various alternatives in the event we are attacked?

General TWINING. Yes.

EFFECT OF INFLATION ON DEFENSE SPENDING

Mr. MAHON. With respect to the adequacy of our defense—and we seem to feel that we stand on solid ground now—the budget for the last few years in new appropriations and in spending have been approximately at an even level. We all know that defense costs are going up. We have inflation and costs are going up, so you are going to buy less defense next year than you bought last year, and you are buying this year, unless you are able to do a better job of the management of those dollars. This leads to a question as to whether or not, under you, Secretary Gates, and your successor, the defense posture will deteriorate. Will you comment on that question?

Secretary GATES. Well, I would not want to take credit for this because I have not yet been confirmed by the U.S. Senate.

Mr. MAHON. Have no fear.

Secretary GATES. But I would think that the management had improved. I think that the Congress, by passing the pay bill increase for the military people, has increased the quality and stability of the Armed Forces. I think that science and technology have given us ways of making more powerful weapons, and these offset the trends that you referred to.

We believe we have a good well-rounded program and have a number of new, powerful weapon systems coming along, or in being. While we hope that we are managing well, I am sure that we can manage even better than we are now.

Mr. MAHON. Do you have the feeling that for 1960, 1961, 1962, 1963, and 1964, defense spending should be in the general area of \$41 billion?

Secretary GATES. Yes, because I feel we are in a continuous struggle with these people that may last for the rest of your lifetime and the rest of my lifetime. This is going to be the kind of spending that is going to be required to have an adequate defense. Actually, the present level of defense spending is a high one. It is about \$5½ billion higher than what it was in 1955, and, of course, several times what it was before the Korean war. In fact, it is only about \$2½ billion under the Korean war peak.

Mr. MAHON. I think you see my concern as to whether or not we can keep the ceiling constant and level while the price of everything is going up. Do you think that at least for the time being we need not be unduly concerned about that?

Secretary GATES. That is correct.

ADEQUACY OF DETERRENT

Mr. MAHON. I would like to ask you this question which is somewhat repetitious: Do we have a sufficient force today to deter war, and does this budget make sure that we are looking after our future security adequately? That is a question of opinion.

Secretary GATES. In my judgment, we have.

Mr. MAHON. Do you share that view, General Twining?

General TWINING. I do, yes.

Mr. MAHON. You seem to have a very strong conviction that we do have an adequate deterrent at this time, and you realize the difficult period is approaching, but you still have no fear as to our possessing the strength to hold our own in this 1960 decade?

Secretary GATES. If you will couple with that judgment the fact we cannot rest in our easy chairs and that we must continually review the situation, I would say I am confident we are in good shape. We are also in a kind of position in the world, however, where we should not hesitate to come immediately back to the Congress if the circumstances change.

MILITARY USE OF HIGH-THRUST ROCKET ENGINES

Mr. MAHON. I will ask you a few questions more or less at random. I believe the President said in his message, and you said as much in your testimony here, that the high-thrust rocket engines of the Soviets, while helpful to them in the space race, are not significant from a military standpoint. I have the feeling that that statement is probably open to question, and I would like to explore that a little with you.

If we are going to be able to use outer space to undertake to find out what goes on worldwide, through reconnaissance satellites and otherwise, is it not to one's advantage militarily to have the high thrust engine?

Secretary GATES. I will try to give you a lay answer. Dr. York might have a more expert answer.

For the satellites we are working on for reconnaissance purposes, or warning purposes, or other military purposes that we have in mind, we have no requirement for the kind of thrust in rocket engines that is needed to make the type of shot the Soviet Union made to the moon. We have no present military requirement for the use of space that we cannot handle with the present ICBM boosters or a slight augmentation of them—a slight increase in their capabilities. I think that it would be foolish to be backward and turn our eyes from space. I am confident that someday there will be other military requirements in space. This will probably occur, according to my scientific friends, only when man has a place in space.

Now again, space is a confusing issue. We have the capability to do the type of satellite work we feel is required for military purposes.

This was made very clear in the decision we had to make as to where the Saturn project should reside: whether it should stay in the Department of Defense or should be transferred to the National Aeronautics and Space Agency.

We had a review in the Joint Chiefs of Staff, and we had a complete military appraisal of our requirements to date. We decided that we did not have any requirements in space that we could not handle within the present orderly growth of our own engines. Someday, as I say, other military requirements will exist in space.

Mr. MAHON. Dr. York, you are familiar with this question that we are discussing.

Dr. YORK. I am.

Mr. MAHON. I have the feeling space vehicles do have military significance. To what extent is that military significance applicable to the mid-1960's?

Dr. YORK. It is applicable. We have already found four rather specific applications of space vehicles to solving direct defense problems. I am not talking about psychology, or anything of that sort. These are in connection with reconnaissance, early warning, navigation, and communication. The payloads that we presently perceive as required for these are well within what we can get, using the ICBM's and the upgraded forms of ICBM's that Secretary Gates has mentioned. We are talking about requirements of say 2,000 pounds, using the existing boosters or slightly upgraded boosters. We can get 10,000 to 12,000 pounds into orbit, which is five or six times what the immediately foreseen requirement is.

Now this, as Secretary Gates mentioned, is assuming that you do not have to have men aloft in military systems in space. If we do, then we are going to need bigger boosters. For that reason, we are very much interested in the Saturn program, and in our discussions that preceded the transfer we made that clear to everyone concerned—that we were transferring Saturn on the understanding that another big booster of that sort would be continued because, although we foresaw no specific requirement, we could not foreclose on the possibility that one would arise, and lead times are quite long for this kind of equipment.

Mr. MAHON. The Saturn project involves a cluster of engines that would give us a thrust of how much?

Dr. YORK. About 1,500,000 pounds.

Mr. MAHON. I think it is well for us to discuss, and for the President and Secretary of Defense and you to discuss—the relationships between space and the defense program. I think that there is a rather clouded area here that needs clarification.

I have before me an article in the Washington Post of January 3, from which I quote:

More than 2 years have passed since the launching of the first Sputnik and the United States has yet to match what the Soviets did at the very start. Sputnik II, launched November 3, 1957, weighed 1,120 pounds. The largest payloads the United States has placed in orbit are the 440-pound capsules of the military satellite project DISCOVERER.

The Russians have launched three lunar probes weighing respectively 797, 858, and 614 pounds. Each completed its apparently intended mission, the first passing close to the moon and going into orbit around the sun; the second hitting the moon close to the center, and the third going behind the moon to take photographs of the far side.

"The largest lunar probe launched by the United States weighed only 39 pounds and it went only one-third of the way to the moon. A 13.4-pound unit was sent past the moon into orbit around the sun."

"From the timetable announced by the National Aeronautics and Space Administration, this country will not attempt to match the Soviet accomplishments before late 1960. Why is it taking so long?"

"These things are having their impact upon the public mind in this country, and no doubt abroad. How do you interpret this condition in relation to our defense posture, and how do you relate the statement that I read to your statement here today, Mr. Secretary?"

Secretary GATES. "I attempted to answer that before when I said we had no real military requirement for large payloads and large boosters at this time."

Mr. MAHON. "We will not belabor it."

"No military requirement, is that your answer? Will you supplement that, Dr. York?"

Dr. YORK. "That is right. In the case of our SAMOS and MIDAS programs, the bottleneck is not rocketry, but the payload development itself and the ground equipment that goes with it."

ANTIMISSILE PROGRAM, NIKE-ZEUS

Mr. MAHON. "I would like to now discuss the NIKE-ZEUS, our antimissile missile."

General Twining, have we ever been able to provide a perfect and complete defense against a manned bomber?"

General TWINING. "Not complete; no. A number of bombers will probably get through, but the defense is much better than against the missile."

Mr. MAHON. "We can do better defending against the bomber than we can against the missile?"

General TWINING. "Very much so."

Mr. MAHON. "In World War II less than 4 percent of our attacking bombers on the overall, as I understand it, were shot down. Is that correct, approximately?"

General TWINING. "Yes."

Mr. MAHON. "We would hope to knock down a much larger percentage now?"

General TWINING. "Yes."

Mr. MAHON. "Mr. Secretary, in view of the fact that we have never been able to solve, to our complete satisfaction the matter of defense against the manned bomber, do you have much confidence in working out a reliable defense against the intercontinental ballistic missile?"

Secretary GATES. "Mr. Chairman, it is loaded with every known kind of difficulty and problem. This is a strange and fast moving world. I hope some day we will learn more about this problem from the work we are doing in the antimissile field; but what can actually be done, only time will tell."

"The NIKE-ZEUS program was given an enormous amount of consideration by the President's Scientific Advisory Committee, by our Scientific Advisory Committee, by our Director of Research, by the

Joint Chiefs of Staff. It was a very important decision, first from the standpoint of the defense of the United States and, second, financially. The first one is much more important than the financial because an antimissile defense is vital—if it can be successfully developed.

We determined to allocate approximately \$300 million in this budget to carry out a complete full-scale test in the Pacific Ocean area. We will procure the necessary equipment and radars and target missiles to test the NIKE-ZEUS system out.

Mr. MAHON. You would not have to use an atomic warhead?

Secretary GATES. No, we would not. The NIKE-ZEUS system has serious problems about it. One is that it is a point-defense system. It is an extension of what might be called the NIKE-HERCULES type system. You have to put a lot of them around the United States, around SAC bases, or around cities at a cost of maybe \$14 or \$15 billion. You might be able to protect, if it worked, a certain percentage of the population of the United States.

(Discussion off the record.)

We will find out more when we test it. I do not want to downgrade it before we give it its fair chance because it is the only antimissile system we have that looks promising. I am encouraged to recommend the allocation of \$300 million again this year by the scientific advice I get, which is that we will gain valuable knowledge in the whole field of antimissile work through these experiments. This will be highly useful whether or not NIKE-ZEUS ever goes into production.

Mr. MAHON. Is it true that to some extent we are spending these vast sums on the NIKE-ZEUS because we feel that we cannot fail to try to come up with a defense to the ICBM and we feel that for public relations and propaganda purposes with our own people, if for nothing else, we must undertake this difficult task? To what extent does that element enter into this picture?

Secretary GATES. I am not in the propaganda business. I think we must try to find an antimissile defense for the security of the United States by whatever means we can. In addition to the NIKE-ZEUS we are carrying on other programs, mostly research programs, in a wide field of endeavor. I do not know what they would amount to—perhaps about a hundred million dollars—in addition to what we are spending in tackling this NIKE-ZEUS problem. This is a military problem.

Mr. MAHON. In your statement you made reference to another approach to the NIKE-ZEUS.

Secretary GATES. We call it the Defender project. We are doing really basic research to come up with ideas on this whole area. This ballistic missile defense is something we just do not know how to do in a truly effective way at the present time.

Mr. MAHON. Hitting one bullet with another bullet is not easy.

Secretary GATES. No, sir.

Mr. MAHON. Tell us whether or not this year's expenditure will provide us with information as to whether or not we should continue with the NIKE-ZEUS technique.

Secretary GATES. This year's money, as I understand it, will pay the costs of the full-scale tests that we envision conducting in the Pacific. That will give us a great deal more technical data for where

we go from there. I think by that time we will have enough information to make up our minds whether or not to go into production.

Mr. MAHON: Is it true the Joint Chiefs of Staff are split on this issue, the Army wanting to go ahead with construction and an attempt at operational capability?

Secretary GATES: I would think that the Army had a great pride, and deservedly so, in the NIKE-ZEUS. They have done a great deal of competent work on it. However, General Lemnitzer has accepted this decision.

Mr. MAHON: I would not think the head of the Research and Development in the Army would be satisfied. Do you know?

Secretary GATES: I don't know.

BMEWS PROGRAM

Mr. MAHON: Is the BMEWS program—by which we do not combat the ICBM but by which we are able to track it—coming along on schedule?

Secretary GATES: Yes, sir; one station will be in operation this calendar year and one next year. The third, in northern Scotland, which is delayed on account of international negotiations, et cetera, will not come in until later.

COST OF NUCLEAR CARRIER

Mr. MAHON: Mr. Secretary, we have had thousands of pages of printed testimony in recent years on the issue of the carrier.

Secretary GATES: Yes, sir.

Mr. MAHON: We have discussed the desirability and effectiveness of the carrier and whether or not the carriers should be atomic powered or nonatomic powered. I do not want to get into those issues at this time. I do not think you could say anything new on it. You have said a great deal in the past.

My only question now is this: Approximately how much is the nuclear carrier which is now under construction going to cost us, according to the latest figure?

Secretary GATES: I believe the figure is \$444 million for the *Enterprise*, which is now under construction.

Mr. MAHON: I thought that had been revised upward again. It has been revised upward several times. I understand it is probably up \$10 million from a few weeks ago.

Secretary GATES: You may be referring to \$27 million additional in development costs.

Mr. MAHON: How long has it been \$444 million? Give us the original estimated costs and the steps of increase which have been calculated by the Navy. Put that in the record.

Secretary GATES: I think we started around \$314 million, if my memory of the old days is correct. It has gone from there to \$444 million, excluding development.

Mr. MAHON: You could put that in the record.

(The information supplied follows:)

Cost of the CVA(N) "Enterprise" as shown in successive budget submissions, 1958-61

[In thousands]

Budget	Construction	Development	Total
1958.....	(1)	(1)	\$314,000
1959.....	(1)	(1)	314,000
1960.....	(1)	(1)	393,167
1961.....	\$444,000	\$27,471	2 471,471

¹ Breakdown not shown prior to 1961 budget.

² 1961 figure shows estimated cost to completion, including anticipated future changes, etc. Prior years' figures reflected only changes, escalation, etc., to date of preparation of estimates.

REORGANIZATION OF DEFENSE DEPARTMENT

Mr. MAHON. Mr. Secretary, are you going to recommend to Congress at this session legislation providing for Defense Department reorganization?

Secretary GATES. No, sir.

Mr. MAHON. Do you have any knowledge that the President will make any meaningful or substantial recommendations with respect to any reorganization bill for the military?

Secretary GATES. My understanding, Mr. Chairman, is that he will not.

Mr. MAHON. What do you intend to do within the framework of present law toward reorganization?

Secretary GATES. Everything I can do administratively to make the place work more efficiently. I have already taken a certain step in connection with my relationships with the Joint Chiefs of Staff. I am sure there are some other management tools that we could administratively put into the Office of the Secretary of Defense that would improve the coordination and the flow of work on the business side of the house. I and my associates, particularly Mr. Douglas, have our eyes on both the military relations and the business management relations. I think there is a great deal we can do administratively, if we have time to do it, and thus leave a good legacy for those who follow us.

EFFECTIVENESS OF JOINT CHIEFS OF STAFF SYSTEM

Mr. MAHON. I should like to put in the record at this point some of the statements contained in the report on our defense bill last year. I think they appear on pages 10 and 11 of the report of last year with respect to the Joint Chiefs.

(The statements referred to follow:)

ATTAINING A BALANCED FORCE

Achieving a proper balance between general war and limited war capabilities without greatly increasing the burden upon the taxpayer and the economy, is one of the most difficult problems confronting the President, the Department of Defense, and the Congress. The President said in his budget message that the 1960 Defense budget contains such a balance. Both Secretary McElroy and General Twining from their overall viewpoints expressed the opinion that the 1960 budget represents such a balance. However, it is obvious from testimony of the respective members of the Joint Chiefs of Staff and other military officers throughout the hearings, previously quoted, that there is considerable difference of opinion in this regard. Differences of opinion are natural and understandable,

but the testimony clearly indicates that there is something wrong in our present military planning. It seems quite apparent that in this regard the Joint Chiefs of Staff, as a corporate body, is not providing the kind of advice and leadership which this country requires. The individual members of the Joint Chiefs of Staff are able and experienced military men. It is not with these individuals but rather with the organization and system of operations that the committee is concerned.

Gen. Maxwell Taylor, the Army Chief of Staff made this situation quite clear in his testimony before the committee this year. At one point in speaking of the work of the Joint Chiefs of Staff, he stated the problem in very definite terms when he said:

"* * * I think that our weakness is in not determining standards of sufficiency—how much is enough for the atomic retaliatory force, for air defense, for limited warfare forces, for strategic airlift and sealift, for reserve-type forces—all of those categories to which several services contribute. We never look at the problem horizontally and determine whether each function is properly supported by the appropriate forces of all contributing services."

This a most serious indictment of the inner workings of our military organization. It makes it easier to understand why there is so much confusion and duplication with resultant waste in the Military Establishment. The President, the Secretary of Defense, the Congress, and the American people have a right to expect a better job from the Joint Chiefs of Staff in the way of military guidance. As a corporate body, the Joint Chiefs of Staff must set up plans for the guidance of the various commands and the respective services. Hard decisions are required, and the President, the Secretary of Defense and the Joint Chiefs must assume the major responsibility for tailoring military forces to requirements. Each year the question which confronts us of "who gets what" is becoming more difficult to cope with.

The Joint Chiefs of Staff should look at what is available for what purposes and attempt to match it with the needs. As an example, the Joint Chiefs should take a look at the combined forces of the Marine Corps and the Army. It is not a question of combining the Army and Marine Corps. It is merely a question of looking at the combined strength and the combined capability of these two great forces in making the final determination as to what our ground force should be in providing for our commitments throughout the world. The Joint Chiefs should take a similar look at the combined airpower capabilities of the Air Force and Navy. Such an approach should be the function of the Joint Chiefs of Staff in connection with preparation of plans for the 1961 budget request. The costing out of such determinations can be done by the respective services and through the usual budgetary process.

Many of the basic military questions which confront the Congress and the country are apparently never discussed by the Joint Chiefs of Staff. For example, the hearings reveal that the Joint Chiefs did not discuss specifically in connection with the 1960 military budget whether the Army should be maintained at 870,000 or 900,000, whether funds should be sought for a Navy carrier, and what should be done with reference to the B-52 bomber program.

Mr. MAHON. I have the most profound respect for the Chairman of the Joint Chiefs and his predecessors in that position and for the members of the Joint Chiefs; but there are many who have felt that the system has not worked very effectively and that that system must be improved.

Do you feel that there can be substantial improvement in the operation of the system of the Joint Chiefs of Staff, Mr. Secretary?

Secretary GATES. Mr. Chairman, I believe in the Joint Chiefs of Staff. I believe it is a system that has been successful in two wars. I am not afraid of divided opinions. I believe they are healthy. I think the problem arises on how decisions are made as a result of these divided opinions.

It is my understanding that, in a sense, two men ran World War II—Mr. Winston Churchill and Mr. Franklin D. Roosevelt. Both used the Joint Chiefs of Staff system in a civilian-military relationship, which validated the effectiveness of this system. They were able to make timely decisions when it was critical to make them.

I have believed most of my time in Washington that the Secretary of Defense had a great deal of authority. I thought he had a great deal of authority when Secretary Johnson canceled an aircraft carrier before I ever came down here. I thought Mr. Wilson had the authority to do almost anything he wanted to do by ordering me to do it when I was in the U.S. Navy Department. The President requested the Congress in 1958 for further authority for the Secretary of Defense, and the Congress gave it to him. So it seems to me that, if there was any question about authority before, there is no question about it now.

If civilian control is to be meaningful—and it is meaningful because the President is Commander in Chief—then civilians must take the responsibility for making the decisions, and they can only do this on an informed basis. An informed basis to me means working closely with the Joint Chiefs of Staff so that the civilians can be educated and properly informed. They should not exclude themselves on the basis that they are not wise enough to make military decisions.

I intend to work that way and I hope it will prove to be constructive. I do not subscribe to the "cure-alls" that are suggested, such as a single Chief of Staff. I do not know what good that does. That ends up in a single opinion. We do not always want a single opinion. We want good working relations, and I think we have got them now to a very high degree in the Pentagon.

Mr. MAHON. Certainly, neither you nor I would want to try to enforce unanimity of opinion among the members of the Joint Chiefs; but what I have read in the press indicates to me that you are taking a more aggressive attitude than has ever been taken toward utilizing to the maximum the Joint Chiefs in the operation of your office as Secretary of Defense.

Secretary GATES. I have had several private talks with some of the members of this committee and other people in the Congress. I have been told they want to find out when the authority that was given under the Reorganization Act of 1958 is going to be exercised to a greater degree than it has heretofore.

I am sure Mr. McElroy tried to do this. It is not easy to do. I intend to make decisions as best I can by sitting in and getting in at the beginning of discussions where there are strong differences of opinion on important subjects.

Mr. MAHON. We have gone along, in my opinion, in the past with a lot of delay as a result of split decisions and opinions in the Joint Chiefs. Do you think there is a way to overcome that difficulty?

Secretary GATES. I hope so, Mr. Chairman.

Mr. MAHON. You are taking steps toward that end, I believe.

Secretary GATES. Yes, sir. The Chairman of the Joint Chiefs of Staff is in complete accord with this arrangement.

Mr. MAHON. Do you feel that way about it, General Twining?

General TWINING. Yes, sir; I feel definitely we can make a lot of headway, better than we have done. The question is to make the decision promptly and get on with the next job. It is difficult to do. Whether a single Chief of Staff or Secretary of Defense, one man has to make the decision. I think it is better for the Secretary of Defense to do it because of the civilian control aspects.

Mr. MAHON. I read in the New York Times a statement about the position which you are taking with respect to this problem, Mr.

Secretary. I must say I was very much encouraged and pleased with the statement. I have before me, a statement I have not read completely, which appeared in the Washington Post of January 7, 1960, by John Norris, which reads:

Defense Secretary Thomas S. Gates has directed that he be notified immediately whenever differences arise in the Joint Chiefs of Staff so that he may sit in and help settle them promptly.

I do not think it is necessary to read more of the story. Here is the point. Do you think that it will be possible for you to see to it that the Joint Chiefs discuss and hammer out as best they can their own opinions with respect to basic and important questions which must be acted upon by you and probably which must be acted upon by Congress?

Secretary GATES. Yes, I do, Mr. Chairman.

Mr. MAHON. I have the feeling that the Joint Chiefs have not always in the past really faced up to a forthright hammer and tongs discussion of these issues. I have felt—and this committee has so said—that these things should be discussed and hammered out, not that they would have to agree but they should be discussed, and that the Secretary of Defense and perhaps the Congress should be able to derive all possible benefit from the procedure.

Secretary GATES. I think the Joint Chiefs have been hammering quite a while. I think it has been the question of participation—and it is a very difficult job because there are many distractions—of civilians in the hammering at early enough stages so that the civilians will be informed and can make an intelligent judgment.

Mr. FLOOD. Mr. Chairman, that is not the point. The point is this. You have stated very well your conclusion—and I admire you for it, if and when that happens. If there is a dispute about an important thing, then you want to sit in with them and settle it. That is not our problem. Our problem is that for several years we have testimony from each member of the Joint Chiefs of Staff of five or six fantastically important matters of policy that they did not make decisions on. How can you settle that one? They just sit down, agree on it, and it will never get to you because they never argue about it themselves.

Secretary GATES. I do not know what they would be, Mr. Flood.

Mr. FLOOD. We will show them to you. For example, B-52 bombers, POLARIS submarines, aircraft carriers, things we thought were of tremendous importance.

Mr. MAHON. The size of the Army.

Mr. FLOOD. They made a deal on it. You will never get in on that.

Secretary GATES. Yes, I will.

Mr. FLOOD. You must be Houdini.

Secretary GATES. When we review the budget, we review by programs, not by service budgets.

Mr. FLOOD. My point is this, which is what is worrying us.

Secretary GATES. The B-70, the NIKE-ZEUS, other controversial issues in this budget, about which you will hear more, including an aircraft carrier, were reviewed on a program basis by all parties concerned; so that I knew about them and we made decisions on them.

Mr. FLOOD. You missed the point altogether. Perhaps I have not stated it properly. The only thing we are worried about the Joint Chiefs of Staff is when they come in here—we never knew this, Mr.

Mahon conducted the examination, we sat here open-mouthed 2 years in a row when Arleigh Burke and Taylor and Tom White told us this. Mr. Mahon said, "Did you talk about this problem in the Joint Chiefs of Staff? Did you debate it? Did you fight about it?" Each one of them said, "No." I almost fell off the chair, and so did Mr. Mahon. He has never been the same since.

Secretary GATES. I know what you are referring to—the participation of the Joint Chiefs of Staff in the budget formulation.

Mr. FLOOD. This was not budget.

Secretary GATES. These figures come up with the budget.

Mr. FLOOD. This was not that kind of thing. This is long before that. This is a very fundamental problem.

Mr. MAHON. Please give your best statement on it.

Secretary GATES. I do not think the Joint Chiefs of Staff up until recently had a very great participation in the determination of the programs which were financed in the annual budgets.

Mr. MAHON. This is the first year you have really done this.

Secretary GATES. This year they have had a comprehensive participation.

Mr. MAHON. Did each service feel free to criticize, evaluate, and discuss the whole program and not just its own program?

Secretary GATES. Yes, and so did the Service Secretaries, and they were very frank in what they said.

Mr. MAHON. We have not had that before.

Secretary GATES. As Secretary of the Navy I never participated in it to that extent.

Mr. MAHON. I think this is a good thing. I wonder if you think as a result of your experience with it that it may be a good thing.

Secretary GATES. It is an excellent thing.

Mr. MAHON. Will you put in the record at this point some directive or letter you may have put out on this subject of better participation with respect to this matter? I believe it has been in the press.

Secretary GATES. I did put out a letter on it and we will put it in the record.

Mr. MAHON. I may want to put in other statements with respect to this matter. I am not complaining, I am pleased.

(The information requested follows:)

THE SECRETARY OF DEFENSE,
Washington, December 29, 1959.

Memorandum for the Chairman, Joint Chiefs of Staff.

Subject: Organization of the Joint Chiefs of Staff and Relationships with the Office of the Secretary of Defense.

Reference: (a) Department of Defense Directive No. 5158.1.

You will recall that reference (a) assigns the responsibility to the Chairman of the Joint Chiefs of Staff for "Keeping the Secretary of Defense informed on issues upon which agreement among the Joint Chiefs of Staff has not been reached, and forwarding to the Secretary of Defense the recommendations, advice, and views of the Joint Chiefs of Staff, including any divergencies."

It is logical to assume that occasional divergencies in views will continue to be experienced within the Joint Chiefs of Staff. In view of the fundamental nature of matters which come before the Joint Chiefs of Staff for study, such divergencies are understandable. It is important, however, that such problems be resolved promptly in order that orderly planning may proceed and, where required, prompt action taken.

It is requested that I be promptly informed regarding any issue on which a difference of opinion is developing within the Joint Chiefs of Staff. I intend that either the Secretary of Defense and/or the Deputy Secretary of Defense will

promptly meet with the Joint Chiefs at such times as they consider the issue in question. This procedure will insure that I am fully informed on the problems involved with a view to effecting their resolution in the most expeditious manner possible, and, where necessary, bringing the matter to the attention of the President for his decision.

I would like to emphasize, however, that the above procedure should not be interpreted as precluding any member of the Joint Chiefs of Staff from bringing to my personal attention any matter affecting the Joint Chiefs of Staff or an individual service. I look upon such discussions as matters of the highest priority within the Department of Defense and will gladly make time available in my schedule for such meetings regardless of any other schedule I may have.

THOMAS S. GATES.

Secretary GATES. Mr. Flood is correct in this sense. The Joint Chiefs, as a corporate body—going back to my service experience—have been loath to discuss the other fellow's program.

Mr. MAHON. It is understandable.

Secretary GATES. They could not avoid it this year.

General TWINING. As we all know, no member of the Joint Chiefs of Staff is bashful or timid. They say what they want to say when they want to say it. Now, here is an example of what may happen on some occasions. The Secretary of Defense may decide he is going to put in a program. I think he can do it by law. I think he is entitled to do it. Say he puts in a carrier. Maybe he does not consult the Chiefs. The Chiefs know it is in there. If they do not like it, why not talk to the Secretary of Defense? They take it. That means tacit approval to me. They know the program is there, they do not like it, they say nothing until they get here and complain to you. The same thing may occur if a service program of one kind or another is involved.

They know these things are going on, but they do not feel strongly enough about it to go and fight to the Secretary of Defense or to the President if they do not like it, although that is their privilege. They are supposed to do that. They do it on occasion, and with regard to some programs on which they have very strong feelings they fight to the last man, but some they do not fight on until they get here and you ask a question and they say, "No, I didn't know, they didn't ask me about the carrier."

Mr. MAHON. We may wish to put in the record further clarification of this issue at this point.

Mr. FORD. It is your impression that this new system will obviate that problem?

General TWINING. It will help a great deal.

Mr. OSTERTAG. Will it overcome interservice conflict or rivalry?

General TWINING. I think so. I think decision making is the important thing. The Secretary receives a JCS paper and he makes a decision; bingo, we move to the next problem. A lot of those have not been made.

Mr. MAHON. In other words, this is not just a matter for the Joint Chiefs, but a matter also for the Secretary of Defense?

Secretary GATES. Yes; this is fundamental to the whole Defense organization, Mr. Chairman.

Mr. MAHON. The Secretary of Defense cannot have his cake and eat it, too. He must take the responsibility for the terrific power he has.

Secretary GATES. That is correct, sir.

Mr. MAHON. That is very interesting and encouraging.

B-70 PROGRAM

We have been talking about the B-70, not so much about the B-70 as the B-52 and B-47. In your statement you said you would be better able next year to make certain basic decisions on the B-70, the proposed follow-on bomber. This is a very hot and important issue and I want to explore it fully.

Secretary GATES. Mr. Chairman, like the NIKE-ZEUS, the B-70 program was discussed at great length with a great many people, technical people. Naturally the U.S. Air Force, and most everybody I know, had an opinion on the B-70. The program for the B-70, as outlined by the Air Force, was for an operational capability in certain numbers—I forget the exact numbers—by 1965 at a cost, according to the Air Force, of \$5.5 billion.

This is a Mach-3 airplane—a whole new “state of the art”—Mach-3 most of the way from here to target, after it attains altitude. It involves components, some of which I believe are nonexistent, and materials that must be researched.

It is a very expensive and very important question. There are a good many people who doubted that we would have numbers operational as early as 1965, and there are other people who doubted that it could be done for \$5.5 billion. Some figures ranged considerably higher.

There are some people who believe that even a Mach-3 airplane of this size would be an easy radar-identifiable object. The B-70, if it comes in the late sixties at a cost of \$5.5 billion or higher, comes into direct competition with the four intercontinental ballistic missile systems which we have been discussing. I include the POLARIS, since it is hitched to a submarine, as an intercontinental ballistic missile. They will all be operational by that time.

The B-70 is a retaliatory bombing system. It is true that it is the next big jump in the state of the art of manned aircraft. We were loath to ignore completely an advanced-state-of-the-art manned aircraft at this time, so we have put a modest sum of money—\$75 million—in this budget to carry out the research and development to produce two prototype airplanes. This is a highly emotional subject, as you have noted, Mr. Chairman.

Mr. MAHON. Why is it so highly emotional?

Secretary GATES. Because it is related to perhaps the last step in the advancement of the art of aviation, manned aircraft. It is very logical that it would be emotional.

General TWINING. It would have a great impact on the course of airplanes in the future and on U.S. prestige.

Secretary GATES. It has a lot to do with the future of manned aircraft, whether to stop with the B-58, which also has growth possibilities—or to go into a whole new advance in the art of aviation.

Mr. FLOOD. Military aviation?

Secretary GATES. Military aviation. There are those who believe, Mr. Flood, that it is possible that a cargo or commercial airliner could come out of this development also, but we do not consider that the business of the Department of Defense. So we have gone ahead with the prototype development of the aircraft and stopped its development as a complete weapon system.

Unfortunately, everything we do now is so complicated we need thousands of contractors and a tremendous amount of money to develop a weapon system. We are not going to develop a weapon system at this point.

Mr. MAHON. Is it true, as reported, that you are doing this for budgetary reasons rather than for defense reasons?

Secretary GATES. No, sir. Everything has a budget significance, and this has a big impact on the budget because it is a lot of money, but this is not wholly the point. This is a question of priority, a question of where you put your resources. It is also a technical question.

Mr. MAHON. Within the framework of the budget of about \$41 billion there just is not room for the development of the weapon system at this time of the B-70?

Secretary GATES. If the B-70 was important to have as a retaliatory weapon system and was not in competition with these four other missile systems and the growth potential of the B-58; I think we should go ahead and purchase it regardless of what it costs. But it is in competition with these other systems.

Mr. MAHON. I read here in the press that the Chief of Staff of the Air Force, General White, made a talk this week and I quote the following:

His statement on the B-70, together with his renewed advocacy today of a plan to place all strategic weapons under a single command, appeared to presage a Defense debate along the lines of the controversy 10 years ago—

and so forth. That quote does not bear on the point I want to raise.

Secretary GATES. I would like to comment on that article. That is in the New York Times, is it not?

Mr. MAHON. Yes.

Secretary GATES. It is quite an unfair article to General White. General White did not start any controversy. General White said he would support the decision or he would not be before the Press Club in uniform. However, he said he would state his private opinion, private convictions, to the appropriate authorities, which means this committee and other Members of Congress who interrogate him.

General White, himself, would prefer to develop the B-70 airplane, but he did not talk at all in the vein that that article depicts him, and showed absolutely no disloyalty in any way, shape, or form.

Mr. MAHON. My only interest here is in exploring the B-70 problem.

Secretary GATES. I have the transcript of exactly what he said.

General TWINING. I was there, and I would like to concur in what the Secretary just said.

Mr. MAHON. In other words, while General White would have preferred to go further—

Secretary GATES. And still does.

Mr. MAHON (continuing). With the B-70, he still does, he is not crusading for it?

Secretary GATES. No, sir; he is not crusading for it.

Mr. MAHON. He accepts the decision that has been made?

Secretary GATES. He will testify, I am sure, to this committee that his conviction is we should proceed with the B-70.

Mr. FORD. Will the chairman yield?

Mr. MAHON. Mr. Ford.

Mr. FORD. What would have been the alternative in money in fiscal 1961 if we had followed the recommendations of General White?

Secretary GATES. 1961 money would have been \$463.9 million compared to the \$75 million with which we are maintaining the program on a development basis.

Mr. MAHON. What is the eventual cost of this system in order to have it in meaningful and adequate numbers?

Secretary GATES. The Air Force figure is \$5.5 billion. There are those who believe it would be higher than that. That is for _____ airplanes.

Mr. MAHON. We are paying \$2 or \$3 billion for about _____ B-58's, are we not?

Secretary GATES. Yes, sir; we are paying a great deal for B-58's— even more than you indicated. I have those figures if you want them.

Mr. MAHON. It is not necessary to go into detail on it. General White apparently said, and I will quote from the newspaper story:

He made plain the tenor of these convictions by pointing out that the B-70 could be an "all-purpose" craft that would make it possible to deliver "three score troops anywhere on the globe in 5 hours." The B-70 would be capable of hauling five or six HONEST JOHN Army rockets with their firing crews to Taiwan in 4 hours, General White remarked.

Is it contemplated this weapon would be desirable from other standpoints than prestige purposes and bombing purposes?

Secretary GATES. We consider it our responsibility, Mr. Chairman, to review it from the standpoint of the military requirement. It is possible that this big jump in the state of the art of aviation could be used for other purposes, but we did not let that influence our decision.

Mr. MAHON. Do you feel that Congress ought to undertake, despite the recommendations of the Executive to accelerate the B-70 program?

Secretary GATES. No, I do not, Mr. Chairman.

Mr. OSTERTAG. Will the chairman yield?

Mr. MAHON. Mr. Ostertag.

Mr. OSTERTAG. Mr. Secretary, there is money in the budget and you have not abandoned the program?

Secretary GATES. That is right, sir; \$75 million in this budget.

Mr. OSTERTAG. Is it correct to say you have not abandoned thought or consideration of the B-70?

Secretary GATES. No; we changed its character from a complete weapon system development to a more limited research and development matter.

Mr. MAHON. Of course, I anticipated that your answer to the question which I have just asked would be as you answered it. We do want to get all the reassurance we can with respect to these issues which will be before us, these controversial issues.

Secretary GATES. Certainly. Dr. York was informing me of the spending rate in answer to Mr. Ostertag's question.

Mr. MAHON. Proceed.

Dr. YORK. In conjunction with the decision on the 1961 program for the B-70, adjustments were made in the 1960 program. Thus, while NOA in 1960 was reduced considerably, there was only a slight decrease in expenditures from the original program. In 1961, however, NOA is down to about one-sixth and expenditures to about one-fifth of the prior program, that is to about \$75 million each in fiscal year 1961.

Mr. LAIRD. Will the chairman yield?

Mr. MAHON. Mr. Laird.

Mr. LAIRD. The fact that the decision was made to put in the \$75 million and to carry the B-70 in research and development in fiscal year 1961 does not mean that the Air Force program necessarily is postponed by the 12 months until the 1962 budget period; is that not correct? Does it not mean only a 6-month delay if you were to go into production rather than a 12-month delay?

Secretary GATES. I think you are right, although it would be difficult for me to say for certain. The Air Force might testify differently because I am not sure what is involved in the lead time of these very difficult components.

Mr. MAHON. Thank you very much, gentlemen, and we will see you tomorrow at 10 o'clock.

THURSDAY, JANUARY 14, 1960.

Mr. MAHON. We will resume our hearings.

I have a few more questions, some relating to the cancellation of contracts; some relating to antisubmarine warfare; perhaps some relating to some allegations made in the book by former Army Chief of Staff, General Taylor, and the last questions will relate to what was announced in the morning press about the military plans of the Soviet Union.

CANCELLATION OF CONTRACTS

First, let us talk about contract cancellations, Mr. Secretary. Can you defend the cancellation of hundreds of millions of dollars worth of contracts? Does that indicate poor planning? Is that a reflection on Congress and/or the military? What are the implications of the cancellation of contracts involving many millions of dollars? Give us your philosophy on that problem.

Secretary GATES. Well, Mr. Chairman, as you know, we are living in a period of great technical transition, the greatest, I suppose, we have ever seen in our history. We make some good plans based on sound ideas but they do not always prove to be the proper thing to have done at the time. They go along for a couple of years and then are overtaken by events. The seaplane would be a good illustration of that.

Mr. MAHON. The SEAMASTER?

Secretary GATES. The SEAMASTER. The Navy put a great deal of stock in the philosophy of having a mobile overseas base for a bomber. It looked like an extremely attractive military idea, but then it became difficult to do technically. It became more costly than we estimated in the beginning and we were disappointed in the performance of the airplane. Things moved so quickly in the world of missiles and military technology that the SEAMASTER was overtaken by events. So it looked as though the intelligent thing to do was to cancel the contract. The SEAMASTER was a good concept at the time that it was conceived. I think, in general, that statement is applicable to most of the important cancellations that we have made.

The F-108 last summer is an important cancellation.

Mr. MAHON. The F-108 was to be a supersonic fighter aircraft which would cost a few billion dollars, be built by North American,

and in which the Air Force was very much interested. It was canceled last fall. How do you defend that?

Secretary GATES. Well, the F-108 was, as you say, sir, a high-speed, long-range interceptor.

Mr. MAHON. A plane designed to intercept bombers?

Secretary GATES. Yes. To intercept bombers.

Mr. MAHON. And not intercept missiles?

Secretary GATES. No. Not to intercept missiles. It was designed to intercept bombers out in the forward area. It looked as though the F-108 was going to be an extremely expensive venture. Also, it looked as though this mission could be done better with missiles than by this airplane. Fortunately, we had not got down the road into production on this airplane.

Another idea that was very highly endorsed by the Navy and the Air Force was the high-energy chemical fuel for aircraft. We call it "ZIP" fuel, a sort of a code name. We built an experimental plant to produce research amounts of this fuel for high performance bombers. Two contracts were involved. The Navy had one and the Air Force had another with Olin Mathison Co. working with sort of a different approach to the boron derivative problem. This was considered to be a very important thing because it was intended to improve the performance of airplane engines. However, it got to be complicated. It had technical difficulties. It was terribly expensive, and it looked as though it was not a wise thing to pursue. More important, the benefits it would have given were achieved by other means. I think, Mr. Chairman, the technical changes are so great in this period, that time catches up with some of these programs.

Mr. MAHON. Do we often spend money on these programs after they should be canceled?

Secretary GATES. Probably, Mr. Chairman, in some cases. We are not always intelligent enough to act quickly enough.

Mr. MAHON. As Secretary of Defense, you will have a particular responsibility; and those who work with you, as I see it, in that field.

Secretary GATES. Yes.

Mr. MAHON. Are there any weapons in various stages of research and development, or production, that you think may later be canceled—as you look into the future?

Secretary GATES. I am sure history will repeat itself in some of the things we are doing now and we will not carry them through on the currently contemplated plan. One very helpful thing, I think, is the establishment of Dr. York's office with direct legal responsibility and power for decisionmaking in the research, development, test, and evaluation field. We are moving a great deal of money that used to be carried in the "Procurement" accounts over into the "Research, development, test, and evaluation" accounts where Dr. York has the responsibility. This permits a much more authoritative and competent technical evaluation of these programs beginning with a technical review of the military requirements by the technical people and the Joint Chiefs of Staff. With such a review at an early stage, I think that our performance will be better.

Mr. MAHON. What do you think about it, Dr. York?

Dr. YORK. I hope it will be so.

Mr. MAHON. You have a very great responsibility here. We do not want to cancel projects that should be continued, but on the other hand we do not want to throw good money after bad.

Dr. YORK. Right. A few of our big projects are projects where we are really trying to keep a decision open, because doing the development costs only something like 5 percent of what it would finally cost to make a system. I am sure we have more alternatives in development in the category of strategic deterrence than we will build. We are not going to want to pick up all of these development options and carry them into production. When we drop one of these options in favor of another, it will be called a cancellation.

Mr. MAHON. Can you foresee such a project as the NIKE-ZEUS being canceled out?

Dr. YORK. There is always such a possibility.

Mr. MAHON. Are there other cases? I think of that first. Can you think of any other project?

Secretary GATES. The B-70 decision is, you might say, a compromise.

Mr. MAHON. Would you say, Dr. York, you have a decision option on the B-70?

Dr. YORK. Yes. If we had dropped it that would have been pretty final. Keeping a development program going at the level we are—and we are still, incidentally, reviewing the situation with regard to what subsystems must be kept going—keeps the decision open.

General TWINING. I think that is important in connection with the B-70. The decision has not been made to cancel it. I think that that is very important.

Mr. MAHON. Are there some other areas of special importance?

Secretary GATES. There is the highly controversial and difficult area of the nuclear-powered airplane which we are still carrying on in the sense that we are working on developing the components for the reactor. The nuclear-powered airplane may or may not be built.

Mr. MAHON. What does your present budget do for the nuclear-powered airplane?

Secretary GATES. I think we have about \$150 million in total.

Dr. YORK. The fiscal year 1961 budget estimate for the ANP program is \$79.7 million for the Atomic Energy Commission and \$75 million for the Air Force.

Mr. MAHON. In other words, you are not pressing this with all of your might?

Secretary GATES. We are pressing the important part of it with all our might, which is to find out how to get a reactor that will do the job.

Mr. MAHON. But the actual development and production of the airframe is not being pressed?

Secretary GATES. No, sir.

Mr. MAHON. We may be beaten to the draw on that by our competitor?

Secretary GATES. It is possible, Mr. Chairman.

Mr. MAHON. Now we spent about \$600 million or \$700 million on the NAVAHO project which was begun a long time ago. It was a long-range nonballistic missile. When we speak of cancellation, that is just about the biggest one that I can think of.

Secretary GATES. That was a very large one, Mr. Chairman.

Mr. MAHON. The Air Force claimed that many lessons were learned from it and that the money spent was not all money down the drain. What do you say?

Dr. YORK. That is definitely true. This weapon's development played a very important part in the development of the guidance system now used on our ballistic missiles.

Mr. MAHON. Will you enlarge that answer for the record?

Dr. YORK. It contributed to our knowledge of rocket engines also. (The requested information follows:)

(d) SM-64 NAVAHO: This program was commenced in March of 1946 and canceled in July of 1957. The operational missile was to be a ramjet-powered, supersonic, high-altitude cruise type, launched by a liquid fuel rocket booster, and delivering a thermonuclear warhead over a range of 5,500 nautical miles. Its guidance was to be nonemanating pure inertial. The NAVAHO development program produced a number of highly significant advances. Notable among these were high thrust, liquid-fueled rocket engines, since employed in the ATLAS, THOR, and JUPITER; the inertial guidance system employed in long-range submarines and elsewhere; and aerodynamic parameters of the high supersonic regime, exploited in design of the GAM-77 HOUND DOG, the F-108 and B-70. Total funds authorized for expenditure on this program were \$679.8 million. An indeterminate but very substantial portion of these funds would have had to be expended on other programs, had there been no NAVAHO program. A prime example among many is the development costs for the engines later to power ATLAS, THOR, and JUPITER.

Mr. MAHON. I think that most of the cancellations have been more or less money down the drain. The NAVAHO seems to be not quite that?

Secretary GATES. There has been some financial recovery involved in the cancellations.

Mr. MAHON. I understand.

Secretary GATES. But there has also been money down the drain. We have learned something, I hope, from most of the things we have done.

It is also interesting to note the Russians cancel things too, and so do our allies. We have instances where Canada and England and other countries have canceled programs. Mr. Khrushchev canceled a lot of cruisers and he said that it was a terribly expensive thing to do. Some were 90-percent complete. That is what he said. We have not verified the statistics.

This seems to be something that is inherent in the business of defense. We would like to do it better. We would like to make the decisions earlier. Sometimes these decisions are very difficult to make and, as Dr. York said, you must carry certain things along even when better alternatives seem to be emerging so as to ensure that the proper avenues of scientific research are kept open.

Mr. MAHON. If you think of any other cancellations that have taken place in the last 10 or 15 years which you think are significant you can make a reference to them in the record.

Secretary GATES. I have a list of them here that could be put into the record.

PROCUREMENT CONTRACTS CANCELED SINCE JULY 1, 1957

Mr. MAHON. I wish that you would spread on the record at this point the list of cancellations, the amount of money involved and a brief sentence or two as to why the cancellation took place.

Secretary GATES. Yes.

(The requested information follows:)

Major Army procurement contracts ¹ canceled since July 1, 1957

[Millions of dollars]

Program	Name of contractor	Date canceled	Amount spent ²	Estimated recovery at time of cancellation	Reasons for continuing project up to time of cancellation
PEMA (motor generators only for NIKE-HERCULES)	John R. Hollingsworth.	July 7, 1959.....	10.0	0.16	Required number of units were obtained.
PEMA (CORPORAL)	Firestone Tire & Rubber Co.	Aug. 24, 1959.....	3.1	.75	Project continued until revised requirements were met.
Air Force production fund (TALOS)	RCA Defense Electronic Products.	May 2, 1958.....	(?)	(?)	Pending decision as to standardization of system.
P. & P.A. (DART)	Curtiss-Wright Utica Division.	Sept. 15, 1958.....	10.3	2.4	Development continued until it was clear another weapon offered superior advantages.

¹ Defined as having a cost of \$10,000,000 or more.
² Including termination costs.

³ This contract had a face value of \$57,600,000. Only the TALOS portion was terminated. The amount actually spent for TALOS and the recovery thereunder is being calculated.

(Continued on next page)

Major Navy procurement contracts ¹ canceled since July 1, 1957

[Millions of dollars]

Program	Name of contractor	Date canceled	Amount spent ²	Estimated recovery at time of cancellation	Reasons for continuing project up to time of cancellation
Aircraft: P6M	Martin	August 1959	387.0	54.0	Large investment and promising potential of jet seaplane concept warranted continuation. Overtaken by other weapon systems.
	Chance Vought	December 1958	136.5	75.0	
F8U-3					Continued until completion of evaluation between F8U-3 and F4H-1 all-weather fighter aircraft. Selection of F4H-1 resulted in cancellation of F8U-3.
Missiles: REGULUS II	do.	do.	120.0	140.0	Greatly improved range, speed, accuracy over REGULUS I. Canceled because of acceleration of POLARIS program and its relatively high cost effectiveness.
	McDonnell	October 1956	3.0	3.0	
TRITON	Applied Physics Laboratory, Johns Hopkins	September 1957	3.7	.3	Development effort supposedly to be follow-on of REGULUS II. Improved components were incorporated in REGULUS II. Marginal gains in TRITON did not warrant continuation beyond study and research phase.
		June 1957	1.5		
		September 1957	9.0	.1	
Ships: AV conversion (seaplane tender).	Philadelphia Naval Shipyard	Aug. 21, 1959	1.0	18.6	Part of approved shipbuilding program in support of P6M SEAMASTER program.

¹ Defined as having a cost of \$10,000,000 or more.

² Including termination costs.

Major Air Force procurement contracts¹ cancelled since July 1, 1957

[Millions of dollars]

Program	Name of contractor	Date canceled	Amount spent ²	Estimated recovery at time of cancellation	Reasons for continuing project up to time of cancellation
1. SM 63-RASCAL.....	Bell.....	November 1958.....	448.0	7.0	Requirement existed for operational air to surface missile. Program continued until development delays threatened operational reliability and technological advances made it feasible to cancel in favor of GAM 77-HOUND DOG ASM.
2. SM 73-GOOSE: Missile development.....	Fairchild.....	December 1958.....	78.5	70.0	Requirement existed for operational long-range decoy to improve penetration capability. As changing concepts made this system marginal in compatibility with the bomber fleet it was designed to protect, the program was canceled.
Engine development.....	do.....	do.....	58.0	20.0	
3. SM 64-NAVAHO.....	North American.....	July 1957.....	679.8	134.0	Requirement existed for long range strategic missile. As the accelerated ICBM program progressed it became apparent that this earlier "state of the art" system would be overtaken and its usefulness limited.
4. F-103 experimental fighter.....	Republic.....	August 1957.....	104.0	0	This system was developed as an experimental aircraft. Designed to meet an operational requirement it was cancelled when tests findings with other aircraft under development made continuation unnecessary.
5. High energy fuel.....	Olin Mathison.....	August 1959.....	55.0	28.0	Requirement existed for high energy fuel for advanced aircraft and missile systems. As the development progressed it became apparent that the potential increased performance afforded by the high energy fuel did not warrant the investment required.
6. J-93-5 engine.....	General Electric.....	do.....	9.0	9.0	Requirement existed for advanced powerplant for supersonic aircraft requiring high energy fuel. Decision to cancel tied in with high energy fuel program discussed above.
7. B-58-B.....	Convair (Fort Worth).....	do.....	17.0	49.0	Requirement existed for improved capability in speed and range in strategic bomber fleet. Priority of this system in competition with other high priority items in current programs required cancellation.
J-79-9 engine.....	General Electric.....	do.....	27.0		
8. F-104 fighter.....	Lockheed.....	August 1957.....	668.0	379.0	Operational requirement existed for supersonic day fighter. Requirements review resulted in decision to limit program to 2 wings.

9. F-108/GAR 9: F108.....	North American.....	September 1959.....	159.8	167.0	Requirement existed for long range supersonic fighter interceptor. Priority of this system in competition with other high priority items in current program resulted in cancellation. The GAR 9 development is being continued on a reduced scale to complete the development phase for possible use with other fighter interceptor aircraft.
GAR-9.....	do.....	do.....	30.9	28.8	
10. ALQ-27 electronic countermeasure system.	Sperry.....	December 1959.....	182.6	127.2	Requirement existed for improved electronic counter measure system to increase penetration capability. Priority of this system in competition with other high priority items in current program resulted in cancellation.
11. T-61 engine.....	Allison.....	do.....	37.4	17.0	Requirement existed for turbo prop engine for long range airborne early warning and control aircraft. Aircraft abandoned as it would not be available in time period needed to meet existing threat. Engine development canceled in favor of turbo fan for use on advanced cargo aircraft.
12. Q-4b target drone.....	Radioplane.....	do.....	25.4	40.0	Requirement existed for supersonic target drone. Priority of this system in competition with other high priority items in current program required cancellation.

¹ Defined as having a cost of \$10,000,000 or more.
² Including termination costs.

B-58 PROGRAM

Mr. MAHON. I want to mention the B-58 again. We have discussed the B-70, but the B-58 we have not covered as well as I would like.

From what I have heard, in the preparation of your budget the B-58 was somewhat like "on again off again Finnegan." You had it in the budget for 1961, you had it out, but as I understand it, your total proposed purchase of B-58 is less than ——— and I mean for all time, the total production.

General TWINING. That is right.

Mr. MAHON. Can you comment on that, Dr. York?

Dr. YORK. I do not know that I can add anything especially pertinent. It was something which was studied quite a bit, as you said. There was not much of an issue from a technical point of view. The question involved was—are these kinds of strategic weapons that we need at this time?

Mr. MAHON. This was not really your baby?

Dr. YORK. No.

Mr. MAHON. I see the point.

Secretary GATES. The B-58 was given a very careful review along with the other big programs. One of the reasons that it was given a review is that it is a terribly expensive program. The number of aircraft is relatively small. I think the decision to go ahead with it was largely based on the fact it is almost immediately available. Therefore, it does not come into competition during the same time period with those other strategic systems that we talked about yesterday in connection with the B-70. The B-58 is operational and it is flying. It is a good airplane. We propose to buy ——— airplanes at a cost of \$3,097 million. That is a production rate plan of ——— per month increasing to ——— per month in January, 1961.

Mr. MAHON. Is that the whole buy out program for the B-58 as now planned?

Secretary GATES. Yes. However, there is some small amount of work being done, if my memory is correct, on an improvement of the B-58. The B-58 has some growth potential in it, and there is some paperwork and ideas being reviewed—I think in your shop, Mr. York.

Dr. YORK. And there are some company funds going into it.

Secretary GATES. It looks as though the B-58 can be an improved airplane, and we are looking at that carefully.

Mr. MAHON. I think that it just shocks you to the marrow of your bones to contemplate we are spending over \$3 billion for ——— airplanes.

If you spend \$3 billion for ——— airplanes and then go ahead with the purchase of 500, that would be more sensible, but to spend such a vast sum of money to get so little in production just shocks me.

General TWINING. That is what we hoped to do, but times have changed like the Secretary said. The B-47 is approaching obsolescence now and the B-58 would normally have taken its place if things had gone along normally. Things have changed and I think the smart thing to do is what was done to get something out of this. It is a very good airplane. It will help our offensive effort quite a bit, although I realize that the cost is terrific.

Mr. MAHON. ——— for \$3 billion is really high.

General TWINING. Otherwise we would not have any if we had not done this, but I think of having ——— as better than having none at all.

Mr. MAHON. I realize it is made in Texas. Texans have a special interest in it, but I have no special interest other than that of national defense. You ought to weigh very carefully whether or not you are following the right course.

Secretary GATES. Of course we should. We have made a decision not to cancel. We made the decision, as of this time, to put sufficient money in the program to buy ——— airplanes. That does not mean that we cannot buy more, Mr. Chairman.

Mr. MAHON. You do not now plan later to buy more?

Secretary GATES. No; we do not at the moment. This can change. Also, as I mentioned, there is this growth possibility.

ANTISUBMARINE WARFARE

Mr. MAHON. I would like to discuss antisubmarine warfare with you a bit. There was a time when the submarine was somewhat inadequate. It was much slower than a surface ship. There was a time when the submarine was only a threat to other ships, but we are moving into an entirely different field. This committee has tried to alert the people that we have a serious problem here. So we have been pounding the desk and talking in very loud tones about this threat. We do not claim we are the only ones aware of it, but we want to make sure that the Pentagon is aware of it.

There has been a tendency in all the services for certain elements of the services to be more or less in control—the battleship admirals and the field generals, and so forth. I think there has been a tendency to submerge the importance of the submarine through the years. I think the day of the submarine is dawning and the NAUTILUS is but the morning star of a much bigger day for the submarine.

Mr. FLOOD. My, my.

Mr. MAHON. With apologies to David Thoreau.

I think that we must face up to this. I do not believe the Navy is facing up to it adequately now, though I think the Navy is increasingly more concerned.

I do not claim to be an expert, but the handwriting on the wall is too plain for anyone to overlook. We are coming to the time when the submarine is not only a threat to our shipping but a threat to our shoreline and a threat to our interior by reason of the missiles which the submarine can launch. You have given us information about the possibilities. Admiral Burke said last year that we have increased our submarine capabilities in this country, but the defense against the threat of the submarine is lagging, or words to that effect.

We, as you know, put some additional funds above the budget in the bill last year in order to accelerate antisubmarine warfare efforts. With these deep-diving atomic submarines that can throw missiles about, we are faced with a very serious situation, as I see it. We do not have anything approaching an adequate defense against the submarine. Of course, the Soviet Union does not need the freedom of the seas as we do in the event of an emergency. This is a serious thing.

I want to know, Mr. Secretary, is the Department of Defense—and this is a Joint Chiefs of Staff problem, too—facing up adequately to this issue?

Secretary GATES. We agree with your analysis of the question. We think that it is serious. We think it is vital. We think that we have a long way to go to solve the problem. As a matter of fact, the environment of the ocean is about as mysterious as the environment of space. Perhaps even more so, because we have a lot to learn about the temperatures, the depths, the structure of the ocean floor.

In many ways what we found out in our antisubmarine warfare effort has been what we do not know. Then we move on to find out more about that. The important part of the antisubmarine effort is really in improved research. It is improved research that will provide better identification, better detection, better communications, and all the aspects that go with commanding, controlling, and operating the systems for detecting, identifying, and destroying enemy submarines. The Navy does take it very seriously.

I have some figures this year that say \$1.370 billion of the Navy's procurement and research, development, test, and evaluation appropriations will go into antisubmarine warfare. This excludes the costs of military personnel and operations and maintenance.

Mr. MAHON. Will you list at this point in the record an identification of this money?

Secretary GATES. Yes.

(The requested information follows:)

ASW portion of Navy budget

[NOA, in millions]

Navy appropriation	Fiscal year 1959	Fiscal year 1960	Fiscal year 1961
Research, development, test, and evaluation.....	¹ \$202.7	² \$225.3	\$180.5
Shipbuilding and conversion.....	1,012.6	485.7	762.3
Aircraft and related procurement.....	266.3	476.8	345.2
Procurement of ordnance and ammunition.....	54.1	50.2	55.2
Major electronics procurement.....	60.1	37.9	27.6
Total, all appropriations.....	1,595.8	1,275.9	1,370.8

¹ Includes \$20,500,000 DOD emergency funds.

² Includes \$45,000,000 Congress add-on.

Secretary GATES. However, it is not all inclusive because we have hunter-killer task forces and carriers and helicopters, surface ships, shore-based air, various detection equipment, early warning lines, and so forth, all tied in together into this overall antisubmarine warfare picture.

I was very pleased to see that the Secretary of the Navy has recently established an antisubmarine warfare committee and made himself chairman of it, which is a little out of channels in the Navy. I think that shows he is now taking an active part in the direct leadership of the antisubmarine warfare effort along the lines we did with the POLARIS some years ago. This is a new thing. I am sure he will testify to it when he appears here.

I went out with Admiral Thach's task force in the Atlantic for 3 days and I think the Navy is making the most constructive approach to this whole question. They had in being what you might call a

laboratory, to develop doctrine and to put on requirements for additional research. At the same time they had operating units of all components under direct command of the admiral of this group who commanded helicopters, destroyers, submarines, and so forth. So I think the problem is by no means being neglected, either financially or in any other way. As a matter of fact, I think it intrigues the scientific fraternity more than any problem they have.

We got enormous support from Dr. Killian, when he was here, and now from Dr. Kistiakowski in helping us with special research in connection with submarine warfare.

However, like space, it is dealing in the unknown. We have a long way to go.

Mr. MAHON. I believe you said yesterday you were utilizing the additional funds for antisubmarine warfare which were provided last year.

Secretary GATES. Yes, the extra money has been made available for the Navy.

Mr. MAHON. Does it seem to you that what we need to do is to stress, as you have mentioned, research and development in this field, plus perhaps an acceleration of our submarine construction program? There used to be a time when our military did not think much of using one submarine to combat another submarine, but is not the picture changing somewhat to where you need a submarine to combat a submarine more so than you formerly did?

Secretary GATES. I think this is a part of the doctrine being developed. I am not an expert on the subject, but I think it is true that a submarine against a submarine is becoming a more effective part of the kill capability than we ever thought it was before. Maybe it is the most important part.

Mr. MAHON. In the old days, the submarine could lie in wait, but the ships of the sea could outrun the submarine. Now the submarine can outrun the ships of the sea. This is a place where we really ought to splurge, in my opinion, in order to get an answer.

We had a study group of Mr. Laird and Mr. Lipscomb who made a study of this, and when we have the Secretary of the Navy and the Navy people before us we will want to go into this in more detail. Mr. Sam Crosby, clerk of this Subcommittee on Defense Appropriations, worked with Mr. Laird and Mr. Lipscomb on the study.

ADEQUACY OF AIR DEFENSE PROGRAM

Now, I would like to quote from the hearings of the report of last year with respect to air defense. We said something like this in the report: We have spent about \$30 billion in the last 10 years on air defense and some plans now would run this figure up to about \$50 billion—or words to that effect. The latter figure is not firm.

Now, Mr. Secretary, I believe we are continuing with the NIKE-HERCULES and the BOMARC missile.

Secretary GATES. On the basis of the plan that was presented to you last summer.

Mr. MAHON. The Soviet Union, which is the principal military threat to our security, apparently is not pushing forward very rapidly with manned bombers.

"Do you think the air defense program is now probably in proper focus or not? I would like to have both you and General Twining comment on that.

Secretary GATES. Well, the people that are responsible for it just met with the unified command and the unified commander responsible for it thinks that it should be increased. He thinks that the level of effort is not sufficient. I think General Twining agrees the balance is about right on the basis of the decisions and studies we made last summer. You will recall, Mr. Chairman, this decision greatly reduced the plan for BOMARC, for NIKE-HERCULES, and for the very extensive SAGE system. It also reduced the number of control centers. It reduced the number of BOMARC sites and we came down to a reduced, but what we considered an entirely satisfactory, package commensurate with the threat. This is supported by the Joint Chiefs of Staff, but there are military people who believe that it should be increased even now.

You know this morning Mr. Khrushchev said he is stopping manned bombers. That was in a radio speech. It is not in the newspapers.

Mr. MAHON. Yes.

Secretary GATES. He said, "I am cutting out 1,200,000 people."

Well, this is going to be a game. We are going to listen to the record, first soft and then harsh, for the next few years. You do not know whether he is doing this or not doing this. Again, we go by the national intelligence estimates that General Twining and Mr. Dulles have given you.

I think that the air defense program is in good shape. I think that it, like other programs, ought to be under continuous review.

Mr. MAHON. General Twining.

General TWINING. I will concur in what the Secretary said. General Kuter feels very strongly we are not devoting enough of our time or effort to air defense. I feel—and the other chiefs go along with me—this is a pretty good balance that we have now, but we should keep watching it. Maybe the Russians will eliminate their air threat completely. We do not know. We certainly ought to keep watching this and not spend money on air defense unnecessarily.

SOVIET ARMS REDUCTIONS

Mr. MAHON. I think that it might be helpful to the committee for me to read a press statement. We may delete some of it. This is from the United Press International, dated today.

Moscow.—Khrushchev says Russia has greatest nuclear rocket striking force in the world.

Moscow.—Premier Khrushchev said today, Russia has built up the greatest nuclear rocket striking force in the world and will cut its conventional armed forces one-third as a result.

The Soviet Army wields such means of warfare and such firepower as no other army has ever had, he said.

We possess formidable weapons, but those in a state of development are more formidable still, which is quite incredible.

Khrushchev said Russia had maintained large armies after World War II only because of "atomic bomb blackmail" by the West but now it had outstripped the West and was "several years" ahead in the designing and production of inter-continental ballistic missiles.

Khrushchev said nuclear weapons would continue to be produced until the Western Powers agree to a ban. In the meantime the rocket-striking force is taking the place the air force and the production of some bombers has been discontinued, he said.

Khrushchev set present strength of the Soviet armed forces at 3,623,000 men and said they could be slashed by 1,200,000 because of what he called Russia's growing rocket superiority.

He made the statements before a joint session of the Supreme Soviet, the Russian Parliament, meeting in its first session of 1960.

The Supreme Soviet unfailingly approves proposals put forth by Khrushchev. He suggested that the cuts be made "in the course of 1 or 2 years."

He told the Supreme Soviet, Russia would make the troop reduction irrespective of any action taken by a forthcoming 10-nation Disarmament Conference in Geneva.

The two houses of the Supreme Soviet met briefly and adopted today's agenda "Disarmament—a way to strengthen peace and insure friendship between nations." Then they met in joint session to hear Khrushchev.

He gave the key to the arms cut when he stated, "We are several years ahead of all other countries in the designing and production of intercontinental ballistic missiles of all sizes."

Khrushchev said the numerical strength of the Soviet armed forces would be lower than the level proposed by the United States, Britain, and France in 1956 when it was suggested the East-West armed forces be fixed at 2,500,000 each.

Khrushchev said Russia was "several years" ahead of the United States in rocketry and would strive to maintain the lead.

Khrushchev also outlined a new concept of warfare for the Soviet with the air force eventually abolished in favor of rockets, with the navy built around a powerful submarine force and the army made up of small units armed with nuclear weapons.

Could this mean, if we are given assurances that what is proposed is done in the Soviet Union, that we might change our own defense program as contemplated in the 1961 budget which is now before us, and which is now being presented to us by you, Mr. Secretary?

Secretary GATES. I do not believe we would change the 1961 budget. But I believe we would change some of the ideas of the 1962 budget, if this were verified by national intelligence and turned out to be so. I do not think people are going to take very seriously the idea that the Russians are going to throw away all their arms and have a foreign policy based on no military strength. We are not taking it very seriously in the Department of Defense.

Mr. MAHON. I do not think that he said he is going to throw away his arms. He is going to keep his missiles.

Secretary GATES. In his disarmament conversations he is saying that. In the disarmament proposal he made to the United Nations it was a pretty blanket elimination of every bit of military power. I think this is only a tactic and that the long-range objective remains unchanged.

USE OF ADDITIONAL FUNDS PROVIDED BY CONGRESS

Mr. MAHON. If the record does not show it, will you have the record show at this point what is being done, or what will be done, with certain additional funds which we provided last year above the budget? In your statement, Mr. Secretary, you gave us an account of what was being done with some of the special money provided last year.

Secretary GATES. Yes.

Mr. MAHON. And we were very grateful to you for that very comprehensive and helpful statement. Last year Congress provided \$172 million over the 1960 budget for acceleration and augmentation of the ICBM program. More specifically, we gave the Defense Department

\$85 million for additional squadrons of ATLAS. I would like for you to make clear at this point in the record what is being done toward providing these additional squadrons of ATLAS. We provided for the beginnings of 17 rather than 9, as presented in the fiscal budget before us last year. Make that clear for us at this point in the record.

Secretary GATES. I have two pages which analyze the total question, Mr. Chairman. We will put it in the record.

(The information requested follows:)

DEPARTMENT OF DEFENSE

Analysis of planned utilization of additional appropriations provided by the Congress over budget request, fiscal year 1960

[Thousands of dollars]

Item and appropriation title	Additional appropriation provided by the Congress	Applied to add-on programs	Not applied to add-on programs	
			Savings in 1-year accounts	Applied to finance fiscal year 1961 program requirements
Maintaining Army Reserve strength at 300,000 and Army National Guard strength at 400,000.	147,200	140,200	7,000	
Reserve personnel, Army.....	29,700	29,700		
National Guard personnel, Army.....	43,000	43,000		
Operation and maintenance, Army.....	48,800	41,800	7,000	
Operation and maintenance, Army National Guard.....	5,700	5,700		
Procurement of equipment and missiles, Army.....	20,000	20,000		
Maintaining Marine Corps strength at 200,000.	43,100		43,100	
Military personnel, Marine Corps.....	32,700		32,700	
Operation and maintenance, Navy.....	5,900		5,900	
Operation and maintenance, Marine Corps.....	4,500		4,500	
NIKE-ZEUS anti-ICBM and/or Army modernization: Procurement of equipment and missiles, Army.....	375,000	200,000		¹ 175,000
Increase in ASW capability.....	137,300	137,300		
Aircraft and related procurement, Navy.....	21,300	21,300		
Shipbuilding and conversion, Navy.....	64,200	64,200		
Procurement of ordnance and ammunition, Navy.....	6,800	6,800		
Research, development, test, and evaluation, Navy.....	45,000	45,000		
Advance procurement for nuclear-powered carrier: Shipbuilding and conversion, Navy.....	35,000			35,000
Downpayment on additional ATLAS missiles: Missile procurement, Air Force.....	85,000	² 85,000		
MINUTEMAN solid-propellant ICBM program.....	87,000	87,000		
Missile procurement, Air Force.....	77,000	77,000		
Research, development, test, and evaluation, Air Force.....	10,000	10,000		
National Guard construction: Military construction, Army National Guard.....	12,219			12,219
Total, Department of Defense.....	921,819	649,500	50,100	222,219
Recapitulation by service:				
Department of the Army.....	534,419	340,200	7,000	187,219
Department of the Navy.....	215,400	137,300	43,100	35,000
Department of the Air Force.....	172,000	172,000		

¹ Related to \$137,000,000 add-on for NIKE-ZEUS and \$38,000,000 of the add-on for other modernization; currently unprogrammed and applied as a general offset to appropriation requirement for Army's 1961 programs.

² Applied to ATLAS-TITAN.

AUGMENTATION OF ICBM PROGRAM

Mr. SHEPPARD. With due respect to the courtesy of adding to the record, I think that this should be touched upon. I am interested in seeing what has happened to these funds so that I will have something to predicate my question on. When we wait to get it in the record we get the results too late.

Mr. MAHON. Mr. Secretary, I will say again what I was in the process of saying a while ago. More specifically we gave the Defense Department \$85 million for additional squadrons of ATLAS, and/or TITAN, and \$87 million for the acceleration of the MINUTEMAN. Will you tell us what was done with these additional funds in each case, and what was the effect of the action of the Congress last year with respect to this \$172 million?

Secretary GATES. The money for the ATLAS missile, the \$85 million, has been applied to the ATLAS-TITAN program. We changed the mix of the program. You know that the original TITAN program was 11 squadrons. Your committee discussed 17 ATLAS squadrons last year. The program is now 13 ATLAS and 14 TITAN squadrons. We moved ahead with the TITAN missile because of its growth potential, because it could be made to use storable fuel, and because its sites could be hardened better. Therefore the program we are submitting in this budget—which we discussed yesterday and which I discussed in my statement—is 27 ICBM squadrons. The money has been used for the same objective, not for 17 ATLAS squadrons, but rather for the mix.

Mr. MAHON. Last year we said we wanted you to go up to 17 ATLAS squadrons, or TITANS. We wanted that increase. How many TITANS were in the picture in the 1960 budget?

General TWINING. Eleven.

Secretary GATES. Eleven.

Mr. MAHON. So you have gone up from 11 to 14?

Secretary GATES. Yes.

Mr. MAHON. TITANS, and you have gone up from 9 to 13 ATLASSES?

Secretary GATES. Yes.

Mr. MAHON. Are you doing that at this time, or will you await the 1961 budget funds?

Secretary GATES. This is the 1961 program. We are submitting it at this time. We are putting the money toward this plan.

Mr. MAHON. You are using funds that we provided for the fiscal year 1960 in the fiscal year 1960 to carry out a program which you are projecting into 1961?

Secretary GATES. That is correct.

Mr. MAHON. In other words, we did not provide that money to actually finance the whole program, but we tried to provide the impetus for the acceleration?

Secretary GATES. The MINUTEMAN money was your next question, Mr. Chairman. That was \$87 million; \$77 million has been applied to the missile procurement program of the Air Force and \$10 million has been applied to research, development, test, and evaluation.

MACE PROGRAM

Mr. MAHON. If you have not covered the MACE, please do so. We did not give you any new money last year for the MACE, which

is a nonballistic missile. We cut out the money for it, but it was agreed in conference with the other body, the Senate, that if you felt the MACE was imperative, or the continuation of the MACE program was imperative, then we would not object if you used some of the procurement funds for that purpose that had been provided otherwise.

Secretary GATES. We used a limited amount, Mr. Chairman, on a reprogram basis for missiles for NATO and for missiles to go, I believe, to Okinawa, and that is all of it. That is the end of the program.

Mr. MAHON. That is the end of the program. How much money did you require, and where did you get it? You did it through reprogramming, but what was the reprogramming that was done in order to acquire the money?

Secretary GATES. Unprogramed funds from the old account "Aircraft, missiles, and related procurement" were transferred to "Missiles procurement." It looks as though we spent \$125 million in 1960 and will request \$39.8 million in 1961.

That will produce operational MACE missiles in Germany and in Okinawa by December 1961. As I understand it, this is the end of the MACE program.

Mr. MAHON. Do I understand that you secured certain funds through reprogramming and that you have in your present budget some funds for further funding of the MACE?

Secretary GATES. Yes, sir; \$39.8 million.

Mr. MAHON. We can discuss that matter with the Air Force?

Secretary GATES. Yes, sir.

Mr. MAHON. Off the record.

(Discussion off the record.)

Mr. MAHON. On the record.

Mr. Sheppard?

Mr. SHEPPARD. I do not have very many questions to ask, Mr. Chairman. I think you have brought out a large portion of the policy aspects which, to me, are the criteria for all of the expenditures having requirements, basically speaking.

I do want to compliment you on the presentation of your statement, Mr. Secretary, both you and General Twining. It is one of the most clarifying statements I think I have heard in a long time.

As I interpret your responses to Mr. Mahon, and I want to put the whole picture together, the actual stress of requirements is definitely a research, development, and fabrication of results of research and development in the missiles field; is that a correct assumption?

Secretary GATES. Yes, sir; overall, that is correct.

Mr. SHEPPARD. How much will the missile when it comes into operation of being to a reasonable degree more than perhaps at present, leapfrog our present concepts of military functions?

Either you or General Twining may answer the question, but, to me, there is a very definite relationship and I say here because of the fact that we are going from one extremity in our phasing to another.

What is the downgrading of the conventional aspect, proportionately speaking, to the innovations of incoming missiles from the military functional requirement?

Secretary GATES. I would say, Mr. Sheppard, when we develop mobile, relatively invulnerable, satisfactory operational missiles, that we will put more money on them and we will buy more of them, be they POLARIS, MINUTEMAN, or the TITAN, which I imagine we will always keep in our inventory. That is, the big, liquid fuel

missiles are a piece of the total strategic deterrent. But I think it would not be wise to go too far with those because we are moving toward, as you state, the more advanced aspects of the missile age.

However, I would also hope that we would be mindful of the fact that hopefully we will never fight this war. We may have to meet other kinds of problems, worldwide, so we would not do this at the expense of keeping ready deployable forces for limited situations.

I think that answers your questions, sir.

Mr. SHEPPARD. Yes, it does.

I note that in response to interrogation from Mr. Mahon, our chairman, that closer relationship presently exists between your Office and the Joint Chiefs of Staff, which I interpreted to mean the Joint Chiefs of Staff actually make a greater contribution to the composition of the budget than has been heretofore the case.

Secretary GATES. That is correct.

Mr. SHEPPARD. In other words, by creating that closer relationship, it expedites determinations or decisions?

Secretary GATES. It should, Mr. Sheppard.

Mr. SHEPPARD. So far, it has, has it not?

Secretary GATES. I think it has.

Mr. SHEPPARD. In the discussion just recently, somebody addressed himself to the cancellation of contracts. I think the experience heretofore would indicate that where contracts are canceled that we have had additional cost factors due to the delay of having that decision transmitted out to the cancellation aspect of the contract; I mean its functional aspect.

Secretary GATES. Yes.

EXPEDITING DECISIONS

Mr. SHEPPARD. In your present conclusions of expediting—on the whole picture, if possible—is it contemplated that you can foresee the cancellation of those contracts for the preservation of funds as compared with the experience we have had in the recent past? Is that a part of the procedure?

Secretary GATES. Yes, sir, I think so.

Secretary McGuire who is in this whole procurement area as the Assistant Secretary of Defense (Supply and Logistics), works very closely with the Materiel Assistant Secretaries of the services. He is instituting improvements to expedite decisions in all kinds of matters on the purchasing side of the business as well as the cancellation side. I think he has made some constructive progress.

I understand your question is: After we make decisions to cancel, do we not move fast enough?

Mr. SHEPPARD. That is exactly my point.

Secretary GATES. If we do not, we ought to.

Mr. SHEPPARD. I agree with you, Mr. Secretary.

There recently was a contract canceled in one of the military branches in which—using my terminology, the heat was turned on—and it took just 12 hours and 30 minutes before it was effected in the field. To me, that was an outstanding example of efficiency.

When you take that and use it as one parallel for evaluating purposes, as against 60 days in others, it is rather a good time element?

Secretary GATES. Yes, sir. We ought to shoot for the 12 hours.

Mr. SHEPPARD. I do think we could pick up some of these time elements and it would be very helpful. Of course, I can see no logical reason why it should not be done because all of you gentlemen heretofore have very definitely indicated that you are operating under a tight budget and certain shiftings of expenditures which I think has been due to the fact that you are operating under a tight budget.

In other words, you have reduced requirements in this field where, under normal circumstances, and if possible larger budgeting, you might have pursued it differently.

It depends on the ultimate future.

UTILIZATION OF AIRCRAFT CARRIERS

What is your projected thinking at the moment as to the ultimate utilization of carrier operations for the Navy? Good, bad, or indifferent? Are we going to get rid of them, are they passé operations, or what?

Secretary GATES. Mr. Sheppard, you are an expert on this yourself and I have testified for a good many years before this committee on the same subject. I really doubt if anything new could be said. We do not believe the carriers are obsolete. We believe that, in many respects, they are probably the country's best limited war capability initially because they are deployed in the world's trouble zones and they have on-the-spot ability to react. I would visualize this would be their primary use. They can, of course, make a contribution, to the strategic offensive or retaliatory forces in time of general war.

The aircraft carrier, deployed and ready, is a very important and effective cold war instrument. It provides a very effective limited warfare capability in places where overflight rights for aircraft are often unobtainable and in places where landing fields often do not exist.

I think this has been said before, but we feel the same way about it. I have often wondered why the carrier was so controversial because its worth seems so obvious to me in cases like Lebanon, Quemoy, Indochina and various other spots in the world where military force was required to be present, if not actually fighting.

In those instances the carrier demonstrated its real value and this I visualize as its primary mission. Of course, the smaller carriers and the older carriers are indispensable to antisubmarine warfare.

Mr. SHEPPARD. The situation that is rather unpleasant so far as I am concerned, is that your entire program so far is, in other fields of procurement, definitely of the ultramodern concept. That goes for your planes, tanks, and everything else. You are shooting at the modern concept and yet we find you here going to what? A reverse progression concept. I do not understand it.

I am not trying to sell a carrier as against anything else; first, we establish, is it necessary? Does it have its required functions? If it does, why do we find ourselves backing away to a semistatus of obsolescence if it is, as compared to the concept over here?

I cannot make those two things meet. Maybe you can tell me where they should meet.

Secretary GATES. It is a perfectly understandable concern, Mr. Sheppard. However, the specific kind of propulsion plant is not vital

to the successful operation of the carrier. The carrier, with a conventional propulsion system, can do almost everything that the nuclear carrier can do except cruise for as long a time. Of course endurance is an advantage.

There are some other tactical advantages, as you well know, in the case of nuclear-powered carriers which have been made a matter of record before this committee.

I think we have been talking a good deal about the ultramodern here because we have been talking mostly about missiles, but we are not giving up the Marines and we are not giving up ground forces. We are still using rifles, better rifles, than we had before.

Mr. SHEPPARD. The most modern ones.

Secretary GATES. The most modern ones.

The carrier is a modern concept because most people would believe, I think, that, because of the resulting holocaust, general war is less likely to happen than lesser conflicts which may arise in the world where we will be called upon to participate with limited war forces.

I would say the carrier contribution to limited war—which I consider very, very great—is a modern concept fitting well into the foreign policy objectives of the United States.

Mr. SHEPPARD. Then we take the present appraisal, insofar as the modern aspect is concerned, and apply it to the future. In other words, I understand you are going to need other carriers for replacement purposes in order to keep your carrier force up?

Secretary GATES. Yes.

Mr. SHEPPARD. If that is true, then am I to assume at this time that you are setting the pattern in the so-called modern, conventional, and not the nuclear pattern for the incoming carriers beyond that we are presently discussing?

Secretary GATES. I would not be completely certain about that, but I think that you would probably be correct. I think we would know more about the nuclear carrier when it is operational than we do now. The advantages may be so great that, if we ever build another carrier, we might want to build a nuclear one. I believe that the role of a carrier in the future—being more and more related to limited war requirements and less to its strategic contribution—would be along the lines that you have stated. That would be a personal opinion.

Mr. SHEPPARD. Speaking of the temperament of some of our congressional friends, who have the right to their opinions as well as anyone else, and I respect them, I ask you this question: If the situation involved this particular consideration and determination, rather than going to a modern carrier or no carrier, what would your answer be then?

LONG LEADTIME FUNDS FOR NUCLEAR CARRIER

Secretary GATES. I think my answer then, on the basis of the difficult situations we have faced, would have to be that we would have no carrier because the Congress, last year, gave us some money for long leadtime components for nuclear reactors, and we have not spent that money.

Mr. SHEPPARD. Just a moment.

The reason you have not spent it is what?

Secretary GATES. Because we have decided not to go ahead with the request for a nuclear-powered aircraft carrier in the 1961 budget.

Mr. SHEPPARD. Is that the factor or was there some other consideration other than the need?

Secretary GATES. As I told the chairman yesterday, Mr. Sheppard, everything is related to money in a sense. Actually, the Navy felt, along with the Joint Chiefs and the rest of the people who reviewed the programs, that a conventionally powered carrier would meet the purpose. They have a good use for the difference in cost between nuclear and conventional power in their antisubmarine warfare program.

Mr. SHEPPARD. During the interrogation by the chairman yesterday, the question was directed to you, as I recall it, relative to the additional cost factor of the nuclear carrier. As you have given the answer, it is the increased price.

I would like to ask you in your general procurement in all fields of military requirements, have or have not the increased cost factors been semiparallel to the increased cost factors here, such as planes and everything?

Secretary GATES. Yes, they have, Mr. Sheppard.

Mr. SHEPPARD. Insofar as the cost factor is concerned as one part of our basic evaluations, there is practically no difference in the concept or if there is, a minor one?

Secretary GATES. There would be a difference depending upon the weapons system you are talking about.

The general concept that you outline is certainly correct.

COMMENDATION OF SECRETARY OF DEFENSE

Mr. SHEPPARD. Mr. Secretary, I am personally very much intrigued with the manner you have taken over your position and the manner in which you are beginning to cut out some paperwork, lost-time elements, and so on. I am very much interested in that. I want to compliment you accordingly, and I hope as time goes on, and as exposure to your present position becomes more evident that you will make that more of a major requirement and accomplish more.

That is all.

Mr. MAHON. Mr. Sikes?

Mr. SIKES. Mr. Secretary, you have one of the most difficult jobs in the world and one of the most important. This Congressman thinks that job is in very good hands just now.

Secretary GATES. Thank you, sir.

Mr. SIKES. I want to compliment you on the statements you have given us and the answers you have given to questions asked. It is a very fortunate thing for us that we in America have you in the position that you occupy.

You have had a very fine background with which to prepare for the exceedingly difficult work you are doing. That, Mr. Chairman, I would like to say is an important thing in itself because many men come here to assume work at some secretarial level, highly qualified, conscientious, and dedicated people; but they do not stay long enough to more than find their way in and out of the building.

Mr. Gates has been here long enough to be prepared for his work and with the ability he possesses, I think we are going to have in him an outstanding Secretary of Defense. We are fortunate also in having the team of Secretary Gates and General Twining to cope with the defense problems of our Nation.

Mr. Gates, you have placed additional emphasis in the 1961 budget on missiles, antisubmarine warfare, and Army modernization, among other things, and you are proposing a new, conventional-powered carrier.

This committee felt last year that additional emphasis was needed in these same fields and appropriated additional money to provide more defense and greater progress in these fields. Apparently the thinking of this committee and the thinking of the Department of Defense run closely parallel at this time.

ADDITIONAL FUNDS FOR ANTISUBMARINE WARFARE

You indicated to the chairman the way in which the additional missile money is being spent. Would you tell me what disposition is being made of the additional ASW money the committee appropriated last year?

Secretary GATES. Of the \$137.3 million of additional appropriations provided by the Congress, \$21.3 million was applied to aircraft and related procurement, Navy; \$64.2 million, shipbuilding and conversion, Navy; \$6.8 million procurement of ordnance and ammunition, Navy; \$45 million for research, development, test, and evaluation, Navy.

Mr. SIKES. Did you use all of the additional ASW money that Congress provided?

Secretary GATES. Yes, sir.

Mr. SIKES. What emphasis do you now give in comparison with other activities to the ASW field in this budget? Do you consider it among the first, second, or third in importance?

Secretary GATES. I certainly do consider it very important.

USE OF ADDITIONAL ARMY MODERNIZATION FUNDS

Mr. SIKES. Tell me what you did about Army modernization.

This committee has been concerned by the fact that our Army has had little real modernization since World War II and it appropriated about \$200 million to stimulate modernization. In your statement you make some reference to this subject.

What was done with the additional Army modernization money which this committee provided in the 1960 budget?

Secretary GATES. There was money added by both the House and Senate.

Mr. SIKES. That is correct.

Secretary GATES. That money totaled, after conference, \$382.6 million. Of those funds, \$137 million related to the production of the NIKE-ZEUS, as I said in my statement, and was held in reserve; \$38 million was applied to finance the fiscal year 1961 Army procurement programs.

Mr. SIKES. Do you mean that amount of money is going into hardware for the Army?

Secretary GATES. Yes; into hardware.

Mr. SIKES. Modern hardware?

Secretary GATES. Yes, sir. The rest of the money—

Mr. SIKES. Have you provided for the record—I presume you do not have it at this time—information showing where that \$38 million would be used?

Secretary GATES. No, sir; we do not have it programed as yet. It will be programed in 1961.

Mr. SIKES. Is it not being used in the 1960 programs?

Secretary GATES. No, sir; \$43.4 million was used to increase modernization in the Army over and above the program and \$164.2 million was applied to the Army procurement account for the 1960 program.

Mr. SIKES. Let me see if I understand.

Secretary GATES. Of the total money, \$175 million is held in reserve at the moment.

Mr. SIKES. Is that money for Army modernization or the NIKE-ZEUS account?

Secretary GATES. \$137 million was for NIKE-ZEUS.

Mr. SIKES. So that only about \$38 million of the money that was scheduled for Army modernization is not being used?

Secretary GATES. That is correct, \$38 million.

Mr. SIKES. Of the amount that is being used, how much is being used in 1960 and how much is held over for 1961?

Secretary GATES. All will be used in 1960 except the \$38 million and the \$137 million which was made available to finance NIKE-ZEUS production in fiscal year 1960. These amounts will be carried forward to finance the fiscal year 1961 program.

Mr. SIKES. Is it being used for the procurement of the type of weapons and equipment that this committee felt was in shortest supply?

Secretary GATES. Yes, sir; I think it is, Mr. Sikes.

Mr. SIKES. Have you submitted for the record a statement showing that?

Secretary GATES. We have submitted a list of the items for which Congress added funds.

Mr. SIKES. I would like to have such a list placed in the record.

(The list referred to by the Secretary may be found on page 56.)

Secretary GATES. Yes.

Mr. MAHON. Would you yield?

Mr. SIKES. Yes.

Mr. MAHON. Off the record.

(Discussion off the record.)

Secretary GATES. I think the answer to the question, Mr. Chairman, is that you are correct. I think \$189.6 million was applied to the Army procurement program to make it whole, you might say, to purchase the modernization equipment that was required and the \$18 million I referred to was for an increased program.

Mr. MAHON. As I understand it, Mr. Sikes having yielded here, last year there was an accounting error in the budget. The Army did not actually request in the budget for fiscal 1960 all of the funds necessary to finance the programs submitted in the fiscal year 1960 programs?

Secretary GATES. That is my recollection.

Mr. MAHON. This was an accounting error and there are many complications involved, but the truth is that, as I understand it, you

used most of this money to finance the accounting miscalculation and that actually no substantial funds were applied for Army modernization beyond the Army modernization program which was presented in the fiscal 1960 budget?

Secretary GATES. I am informed that that is correct, Mr. Chairman, with the exception that in addition to straightening out the financial business, the cutback of \$76.8 million in the NIKE-HERCULES continental defense program was reprogramed and applied to Army modernization.

Mr. MAHON. You can clarify for the record, if you wish, any further technical complications involved here.

Mr. SIKES. Then is it the case, Mr. Secretary, that your choice was to use this money to correct the account in which there was a shortage rather than to come back to Congress for additional funds? Was that the dilemma proposed to you?

Secretary GATES. I think it was, Mr. Sikes.

I think we carried out the 1960 program and, as I understand it, there was a deficiency, but we carried it out by the money supplied by the Congress.

Mr. SIKES. Had the money not been used for this shortage, is it your belief that this would have been expended as Congress desired for additional Army modernization?

Secretary GATES. Yes, it is.

LONG-LEAD TIME ITEMS FOR NUCLEAR CARRIER

Mr. SIKES. With reference to the money which was appropriated for long-lead time items on the nuclear carrier, is it true that this money has been carried over, and that no use has been made of it?

Secretary GATES. It has been applied to the requested cost of the shipbuilding program in the 1961 budget. No use has been made of the money.

Mr. SIKES. Was it applied against the 1961 shipbuilding program?

Secretary GATES. Yes, sir.

CONVERSION TO CONVENTIONAL CARRIER

Mr. SIKES. Would it have been possible with the authorization that you possess to begin the long-leadtime items on a conventional-powered carrier with that money and thus to save some time?

Secretary GATES. I do not think so, Mr. Sikes.

Mr. SIKES. Is it necessary that you come back to Congress for authorization and funding?

Secretary GATES. I would think so. I thought it was quite specifically identified with long-leadtime components of nuclear reactors.

MAINTENANCE OF NUCLEAR-POWERED SHIPS

Mr. SIKES. We have not discussed in any detail the problem and cost of maintenance on nuclear-powered ships. It is my understanding that there have been new developments which indicate that this is

a much more significant matter than had been previously anticipated and that the cost of maintenance of nuclear-powered ships is going to be very high, and this may lessen their desirability, particularly as to surface ships. Is that correct?

Secretary GATES. I cannot answer the question, Mr. Sikes. I do not know.

Mr. SIKES. Is there anyone here who knows?

Secretary GATES. We have no nuclear-powered surface ships in operation yet. I do not think the cost has been excessive in submarines, considering the advantages gained. I have never been informed so and I doubt if we know the answer to the question yet. I doubt if anyone knows the answer to the question.

General Twining says this is one of the reasons, one of the many reasons, that we want to be sure that we know what we have got in the nuclear-powered carrier.

COMPARISON OF 1960 AND 1961 BUDGETS

Mr. SIKES. This budget is very much in line—costwise—with last year's budget. Costs, of course, are continuing to go up and that means program reductions are to be made somewhere in the Department of Defense.

Where, in the main, will those reductions be?

Secretary GATES. There was some reduction in the personnel account. There was a reduction in Air Force personnel, and a reduction in Navy personnel.

There is no reduction in the Marine Corps or the Army.

Of course, we have mentioned the cutback in the continental air defense program. We have mentioned the cancellation of the F-108. We have mentioned the cutback in the B-70 program. I would imagine the B-58 program was a year ago, or the year before, planned at a larger rate.

General TWINING. That is right.

Secretary GATES. We have closed installations and will close more as we go along. I think those were the major operating areas where the reductions have been made.

SAVINGS FROM REDUCTION IN NUMBER OF AIRCRAFT

Mr. SIKES. Do you propose there will be a reduction in the number of operating aircraft in the Air Force and the Navy during fiscal year 1961?

Secretary GATES. I am sure there will be in the Navy; yes. There will be in the Air Force, also.

Mr. SIKES. What will be the number of planes by which each service is reduced?

Secretary GATES. Can we supply that?

Mr. SIKES. Yes.

Secretary GATES. I do not have it in my head.

Mr. SIKES. Please supply also some information about the anticipated savings as a result of that reduction, and the net effect on our defense program.

Secretary GATES. Yes, sir.
(The material referred to follows:)

ACTIVE AIRCRAFT INVENTORY (1959-61)

The numbers of operating aircraft in the Air Force and Navy decrease by 578 and 61 respectively during the period June 30, 1960, to June 30, 1961. The aircraft inventory of each of the services is listed below.

	Actual, June 30, 1959	Planned, June 30, 1960	Planned, June 30, 1961
Army:			
Active aircraft inventory	5,199	5,663	5,791
Active Army	4,318	4,806	4,913
National Guard, ground	843	807	807
Army Reserve	38	50	71
Navy and Marine Corps:			
Active aircraft inventory	9,649	8,657	8,348
Operating	7,562	6,852	6,791
Regular Navy	5,474	4,898	4,846
Marine Corps	1,234	1,157	1,161
Navy and Marine Corps Reserve	854	797	784
Logistical support (nonoperating)	2,087	1,805	1,557
Air Force:			
Active aircraft inventory	20,890	19,005	18,346
Operating active	18,260	17,692	17,114
USAF	15,276	14,631	14,063
Air National Guard	2,253	2,301	2,275
Air Force Reserve	731	760	776
Nonoperating active	2,630	1,313	1,232

As a result of the decrease in the aircraft inventory indicated above, there are reductions in those operations and maintenance accounts wherein direct costs are related to the inventory. Fuel and consumable parts for example, have been adjusted for the decrease in inventory and related flying hours. One of the major costs associated with these reductions—depot level overhaul—would not be realized until late in fiscal year 1961 and primarily in fiscal year 1962.

The directly identifiable savings for fiscal year 1961 are estimated by the military departments as follows:

[In millions]

Air Force	Regular	MATS	Air National Guard
Fuel and oil	\$24.0	} \$6.8	{ \$0.2
Unit maintenance	5.0		
Total	29.0	6.8	0.5
Navy	Regular	Naval Reserve	
Fuel and oil	\$5.5	\$0.3	
Consumable material	1.2	0.1	
Total identifiable savings	6.7	0.4	

REDUCTION IN BASES

Mr. SIKES. You mentioned a reduction in bases. Is it anticipated that there will be further elimination of bases in fiscal year 1961?

Secretary GATES. Yes, sir.

Mr. SIKES. Each of the services, I believe, are continuing to build new bases. I presume that this committee can be assured that you are screening very carefully the construction of new bases and new facilities in order that you do not continue to build on the one hand for activities which you are cutting back on the other hand?

Secretary GATES. I think that I can assure the committee that we are on top of this situation and gave it a very careful going over, not only in that respect but also in respect of having interservice use of bases.

RUSSIAN REDUCTIONS IN MILITARY STRENGTHS

Mr. SIKES. Earlier this morning we had quotations read from proposals by the Russians for reductions in their military strength. If, in fact, we should find that they are carrying out disarmament, how quickly will we react by reprogramming our own military requirements?

Secretary GATES. I would hope we would not react too quickly, even though it might be a little more expensive. I would hope we would make certain that we had a verification of actual performance on the part of the Russians.

Mr. SIKES. Even if we had a verification of actual performance, would that be a clear indication that we have a justification for cutting back?

Let me give you an illustration of what I am talking about? Mr. Khrushchev was quoted as saying that he is going to materially reduce the size of the Russian Army. If he were to reduce materially the size of his army, he could still have a superiority in strength, insofar as numbers and equipment are concerned, over our own forces.

We must accept the fact that most of the Russian forces and some of the satellite forces have been completely reequipped with new, post-World War II equipment and that our forces and the allied forces have not.

We must recognize the fact that our ground forces have been heavily outnumbered from the beginning. If in fact there should be a cutback of one-third in the Russian Army, our forces still would be outnumbered and I fail to see that there would be any justification for any substantial cutback on our part.

Secretary GATES. I will agree with you, sir. The only basis—

Mr. SIKES. The ground forces would simply be a little more in balance.

Secretary GATES. That is correct. Under the policy of this country the only basis that I could see for a reduction would be if we make progress toward a controlled disarmament program. Perhaps there would be some basis under any type of treaty the Senate would ratify along those lines, but short of that, I do not foresee it.

PROBLEM OF BALANCE WITHIN BUDGET

However, there is one thing that does worry me in this budget, and I think this committee should look at this. There is around \$22

billion of the total budget going for the pay of people, and for the maintenance and operation account.

This means that less than half of the budget is going for what we call our capital accounts—about \$13 billion is going to procurement, \$4 billion for research, and something over \$1 billion for construction. When you consider the importance of the research and development effort and the need for weapons in being versus the pay of people and increased operating costs it begins to be something to keep an eye on in the future. It seems to me we may get to the point where we are not buying enough bullets in relation to the number of people. Either we have to have less people or an increased budget in the future.

I think we are all right this year, but I think it is something to watch.

Mr. SIKES. I approve of that. I am very glad to hear you say that you do not propose to have our defense policies made a weather-vane; to be shifted back and forth by each passing statement from the Kremlin.

Secretary GATES. I most certainly do not, sir. I have the complete support of everyone I deal with in that position.

Mr. SIKES. General Twining, would you like to add anything to this conversation?

REACTION TO RUSSIAN STRENGTH CUTS

General TWINING. I do feel that anything that Khrushchev announces requires a great deal of study before we can accept it. For instance, we have been concerned because he has not come down to the figure of 2,500,000 already. We do not like the idea of negotiating in a disarmament conference with him when we are down to 2,500,000 and he is not. He has the edge on this. We feel he should come down to that and then we are ready to go to conference with him. You cannot tell what his cuts mean in the case of a powerful nation like that, where it is controlled practically by him. He is the field marshall and he decides where things are built, why they are built, and how the money is spent. He runs it. He can change the titles of these soldiers. He can do anything he wants with them and say that he is reducing, but we have to make sure he is. He is a tricky fellow and you know him better than I do. We have to watch him very carefully but it certainly looks like a good trend if he is honest. But we must first study it.

DISARMAMENT

Mr. SIKES. This Nation will welcome any genuine proposals for disarmament, but, as you stated, we want to be sure they are genuine and to see something done, not just to hear about it.

Secretary GATES. We want to be sure that there is an enforceable control and monitor it.

Mr. SIKES. Exactly.

Mr. MAHON. Off the record.

(Discussion off the record.)

UTILIZATION OF IRBM'S IN FAR EAST

Mr. SIKES. I noted in yesterday's discussion that there are no plans for the utilization of IRBM's in the Far East. Is that to be modified? Is there not a plan to base IRBM's to the Far East, possibly in Japan and in Korea?

General TWINING. No, sir; we do not.

Mr. SIKES. Why not? We hear the Reds have them in that area.

General TWINING. We will have used all of the IRBM's in our oversea deployments to allied countries. That is the last of them.

Mr. SIKES. Would it not be desirable to have them there?

Secretary GATES. No, sir. I think that the Far East is protected the same way as the State of Pennsylvania is protected. It is protected by the Strategic Air Command and our other strategic weapons systems wherever they happen to be based. Also, we are getting increasingly worried about the vulnerability of exposed missiles. We are not developing mobile IRBM missiles, unless you include the POLARIS—which I would not when it is hitched to a submarine.

General TWINING. The MACE missile will go to Okinawa.

Secretary GATES. You were probably reading about MACE as a replacement for the MATADOR.

Mr. SIKES. Why would you use the MACE in that area if you do not need IRBM's?

General TWINING. An IRBM would be all right if we had a military requirement for it there. We do not want to go ahead and procure them.

SECOND GENERATION IRBM FOR NATO

Secretary GATES. There is some talk about evolving a second generation IRBM for NATO. This gets extremely complicated because, under U.S. law, it involves the matter of controlling the warheads. We have some proposals under study that might lead to the development of such an IRBM. It might be a land-based, mobile, POLARIS-type missile which we would deploy in Europe. General Norstad has the military requirement for this. If this type of weapon were developed I would assume that we might consider using some of them in the Far East, also.

Mr. SIKES. Is it a matter of policy that you think the area is adequately covered by other weapons and IRBM's as such are not required there? Certainly there would be no disposition on the part of this committee to deny them if you feel they are needed there.

Secretary GATES. As a matter of policy, that is correct.

IRBM'S IN GREECE AND TURKEY

Mr. SIKES. What about whether or not we will have IRBM's in Greece?

Secretary GATES. Turkey, yes, but Greece, no. There were, at one time, some planned for Greece.

Mr. SIKES. Has the plan to base IRBM's in Greece been given up?

Secretary GATES. Yes, we have gone to Turkey instead of Greece.

REDUCTION IN NUMBER OF MISSILE SHIPS

Mr. SIKES. There has been a reduction in the number of missile ships that were scheduled for the 1960 program. Since this is the

missile age, and we are going to have to fund additional ships in the 1961 program, why was there a cutback in the 1960 missile shipbuilding program?

Secretary GATES. I presume that this is part of the repricing of the Navy shipbuilding program to place it on a fully funded-to-completion basis.

Mr. SIKES. Is it a matter of money, making the dollars cover the job to be done?

PRICING OF SHIPS

Secretary GATES. Yes. We have been a little disappointed—and I take some blame for this and I am disappointed personally—in the record we have been making in our ability to correctly price our ships. We have been running over, way over, what we have been telling the Congress.

Mr. SIKES. Do you consider that you need those ships that had to be canceled?

Secretary GATES. Yes, we will be buying the equivalent kind of ships as we go ahead.

Mr. SIKES. Will they come in a later budget?

Secretary GATES. Yes, sir. However, I think there is something else we should take a more exhaustive look at. Some people are getting concerned about the level of effort we are putting into fleet air defense. It is a very large effort when you consider the fighter planes on the carriers, the missile ships that you referred to, and air defense missiles.

Mr. SIKES. Is it true then at the moment there is not a certainty that the problem is a lack of money but instead there are questions as to whether there is actually a requirement for the canceled ships?

Secretary GATES. Yes, sir; whether we need that much fleet air defense.

AIR ALERT PROGRAM

Mr. SIKES. You mentioned ground alert but very little was said about an air alert. What will be the place of an air alert in the 1961 program?

Secretary GATES. Expenditures for the air alert are, as I understand, \$20 million in 1960 and \$90 million in 1961. This is to purchase the capability—you might say to have an “on the shelf” capability for an air alert. It is principally for spare parts.

Mr. SIKES. Will we, in fact, have any air alert in 1961?

Secretary GATES. This gets into a question of what you want to do and for how long you want to do it, Mr. Sikes. You can have an air alert tomorrow morning. You cannot have it for too long a time or you will wear out your capability. A continuous air alert for some numbers of aircraft could be had.

Mr. SIKES. Is the Department of Defense satisfied that the amount of money which is being requested in 1961 is all that is needed at this stage for air or ground alerts?

Secretary GATES. Yes, the Department of Defense is satisfied. The Joint Chiefs are satisfied. The Strategic Air Command—General Powers, who has the Strategic Air Command, is not satisfied.

Mr. SIKES. How much does General Powers want?

Secretary GATES. I have heard everything from \$600 million up, for one-quarter of the force on a continuous airborne alert. There is no military requirement at this time to do this. This is insurance that we are buying here in the 1961 program. We are not now making the decision to do it.

Mr. FORD. Would the gentleman yield?

Mr. SIKES. Yes.

Mr. FORD. It is my recollection that in fiscal 1960, possibly during part of fiscal 1959, you were going to do some experimental work with an airborne alert. Was that done?

Secretary GATES. Yes, it is being done and the crews are being trained. The techniques of an air alert are being worked on and exercised.

Mr. SIKES. Will the results of that exercise be reflected in recommendations to Congress to supplement this budget if it appears desirable to have an air alert?

Secretary GATES. I am informed we have 12 B-52's right now in the air on a test.

Mr. SIKES. Will the results of these tests possibly result in a change in your recommendation to Congress on this budget item? Or do you think your present recommendation is firm for 1961?

Secretary GATES. 1961 is a long time ahead in calendar months. If the threat increased and it looked as though we had to fly an actual air alert, we would probably come back and ask for more money to do this.

MOUNTING OF MISSILES ON RAILWAY CARS

Mr. SIKES. That is what I thought you would say.

There was some talk of putting missiles on railway cars to reduce their vulnerability. Are there provisions for such steps in the 1961 budget?

Secretary GATES. Yes, sir. There is some money for the mobile MINUTEMAN concept in this budget.

Dr. YORK. It is a part of the MINUTEMAN program.

I could not identify offhand how much goes for that concept in the MINUTEMAN program.

Secretary GATES. It is in the study and research phase—understanding the problem. We even have a miniature, scale-model train, and that kind of thing. There is some money being spent, and some programed to be spent, because we definitely plan—as of this time—to do this.

CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL WARFARE

Mr. SIKES. What is the current emphasis in the 1961 budget on chemical, biological, and radiological warfare as contrasted with the emphasis in previous budgets? Is it greater or less?

Secretary GATES. It is increased.

Mr. SIKES. Will you spell out for the record in what general ways this emphasis on CBR is being increased?

Secretary GATES. It is being increased, but I would get into a question that is very much in the research and development phase; it is a very delicate subject.

(The information is classified and was separately furnished to the committee.)

AIRBORNE ALERT

Mr. SIKES. I would like to ask what kind of additional training is necessary and what other increases are necessary to develop an off-the-shelf airborne alert capability.

Secretary GATES. That is exactly what we are doing. It is a matter of degree how much you do. We are spending money for the necessary training and for the spare parts that will give us an on-the-shelf capability.

Mr. SIKES. It would be helpful if you would expand your answer for the record.

(The information is classified and was separately furnished to the committee.)

Mr. MAHON. Mr. Norrell.

COMMENDATION OF SECRETARY OF DEFENSE

Mr. NORRELL. Mr. Secretary, I have enjoyed very much your remarks. I want to agree with Mr. Sikes and others in complimenting you. I think, as they do, you are going to make a very fine Secretary of Defense. We have had other Secretaries of Defense and we have had other generals and admirals who have testified before us. Sometimes when they get in private life I have discovered that they evidently change their minds a little bit.

I realize that as far as our country is concerned, the President, under our Constitution, has the responsibility for protecting our Nation. However, the Congress of the United States has the power to appropriate money. I want to urge all of you, when you are testifying, not to testify to something just because the President wants it. I think you ought to testify to us as to what you really think.

I have in mind several who have been high up in our defense forces. When they get in private life, they evidently change their minds to some extent. We want to appropriate as a Congress what you need to take care of our country. Whether it is used or not is up to the President of the United States. I want to say that I think Congress has always appropriated all the money you say you need. I am not going to ask you a lot of questions. I have never done that. I have taken the position that the defense of our country is necessarily up to the ones who know something about what to do when the chips are down.

However, I do know that there are a lot of people in this country who are disturbed. They think that we are now possibly No. 2. I do not think so. I think we are still No. 1 and I want us to stay No. 1. At least, I will do what is needed to be done for the United States of America to always be the No. 1 nation of the world.

Secretary GATES. I would like to say, Mr. Chairman, I share that point of view and I would also like to confirm the fact that we recognize the responsibilities of the Congress and always feel we should deal frankly with you. Of course, I work for the President. If I disagreed with the President, I would not be here. However, I am personally convinced that we are on the right track.

Mr. Norrell, I think it is a very fine statement. We want to be first, too, and stay there.

Mr. NORRELL. Mr. Secretary, thank you.

Mr. MAHON. Mr. Whitten.

Mr. WHITTEN. Mr. Secretary, I am deeply interested in the various aspects of our military defense. There is no point in my duplicating earlier questions.

I would like to say that in my service on this committee we have dealt with a number of Secretaries of Defense. Without exception, they were able men and devoted public servants, in my opinion. I do feel, however, your handling of this Defense Department is now and will be compared most favorably with your predecessors. I think we have an excellent Secretary of Defense.

Having made that statement, I would like to get into one issue that through the years I have frequently raised, not because it is the only aspect in which I am interested, but apparently I have more fears in this field than some of my colleagues.

DEFENSE SPENDING AND INFLATION

That is the overall place in our economy of spending more than half of our national budget on defense. Whatever our military needs are, we must meet them. But I think any man who gives even a little attention to economics will realize, other than some benefits perhaps from research, that that which you have to spend on defense, which is not producing any consumer goods, is of its very nature inflationary.

That in turn leads to the belief that any needless spending, for which we do not get real defense, is one of the basic causes of the inflation with which we are faced in this country. In other words, when defense takes people out of the normal activities—schoolteachers, scientists, instructors, laborers—to that extent you create a shortage, and to the extent you create a shortage others have to try to raise pay to try to get employees. Defense industries in turn increase pay—and here we go.

VESTED INTEREST IN DEFENSE SPENDING

The other worry I have in that field is that so many vested interests get involved in this situation that it is mighty hard to make military decisions completely objectively. I am sure I do not as a member of this committee get one one-hundredth or one one-thousandth of the pressure you do, but with military spending in every State and in nearly every district, with the immediate economy of that area wrapped around it, a great problem is presented. I do not have any military installations in my district, so I do not have the problem, but I did have, and if you set out to close such an establishment, I am sure I, too, would have many of the people there wanting to continue it.

Since over half the national budget is involved and since the Defense Department makes the determination as to what facilities are going to be closed and which major companies are going to get contracts, it becomes highly imperative, if I am right about the inflationary results of defense spending—and particularly that expenditure for which we get no real defense—that these things be looked at completely objectively.

Last year the committee called on the Department to supply to the committee a list of retired officers, colonel and above, who were working for defense contractors. I would like for the record to carry the exact language which appears on page 42 of last year's report.

(The language of the report follows:)

The committee is seriously concerned over problems which arise as a result of the acceptance by retired senior officers of employment in responsible executive positions with defense contractors. The problem has been discussed within the committee over a period of years. Hearings before the House Armed Services Committee in previous years have been consulted. The committee is advised that further hearings before the House Armed Services Committee are scheduled for the near future. As a prelude to further analysis of this problem, the Office of the Secretary of Defense is requested to supply the committee, prior to the 1961 appropriation hearings, with a list of retired officers of or above the rank of colonel, or the equivalent, employed by persons or firms having contracts with the Department of Defense or any of its agencies.

Mr. WHITTEN. Has that information been supplied to the committee?

Secretary GATES. Yes.

Mr. WHITTEN. Mr. Chairman, I would like that list to be included in the hearings so that it will be made a matter of public record rather than something that is private, perhaps to be forgotten.

Mr. MAHON. Without objection, the request of Mr. Whitten will be complied with and the information will be placed in the record at this point.

(The list referred to follows:)

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense

<i>Company</i>	<i>Officer</i>
1. American Bosch Arma Corp., 320 Fulton Ave., Hempstead, N.Y.	None.
2. American Telephone & Telegraph Co., 195 Broadway, New York, N.Y.	Capt. Forest M. Price.
3. Asiatic Petroleum Corp., 50 West 50th St., New York, N.Y.	None.
4. Avco Corp., 750 3d Ave., New York, N.Y.	Maj. Gen. Herbert M. Johnes, USA. Lt. Gen. C. S. Irvine, USAF. Brig. Gen. Monro MacCloskey, USAF. Rear Adm. Edward L. Woodyard, USN.
5. Bath Iron Works Corp.,* Bath, Maine.	Adm. Robert Bostwick Carney, USN. Col. Harry Beahan Carney, USAF.
6. Beech Aircraft Corp., 9709 East Central Ave., Wichita, Kans.	Capt. James O. Taylor, USNR. Col. Cliff K. Titus, USAF.
7. Bell Aircraft Corp., ¹ Post Office Box 1, Buffalo, N.Y.	Col. William I. LeVan, USA. Col. Stuart G. McLennan, USAF. Maj. Gen. George Olmsted. ²

Affiliates:

Bell Helicopter Corp.
Hydraulic Research &
Manufacturing Co.
Wheelabrator Corp.

* Company personnel records do not list military rank attained.

¹ Lt. Gen. William E. Kepner, USAF, acts as consultant to Bell Aircraft. He is currently employed by Radiation, Inc., Orlando, Fla.

² Member, board of directors.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
8. Bendix Aviation Corp., Fisher Bldg., Detroit, Mich. Affiliates: Bendix Westinghouse Automotive Air Brake Co. Sheffield Corp.	Col. A. L. Baylies, USA. Capt. U. S. Brady, Jr., USN. Col. C. P. Burton, USA. Rear Adm. W. E. Cleaves, USN Capt. E. R. Dare, USN. Col. W. J. Darmody, USA. Col. G. W. Dauncy, USA. Col. E. J. Dorsey, USMC. Col. E. S. Matthews, USA. Col. G. A. Morgan, USAR. Col. J. H. O'Malley, USA. Capt. G. H. Richards, USN. Capt. C. H. Shildhauer, USNR. Col. F. R. Swoger, USA.
9. Bethlehem Steel Co., Inc., Bethlehem, Pa. Affiliate: Bethlehem Pacific Coast Steel Corp.	Capt. E. C. Burchett, USN. Rear Adm. H. L. Collins, USN. Rear Adm. W. R. Dowd, USN. Capt. G. W. Dick, USCG. Rear Adm. R. B. Goldman, USN. Rear Adm. W. T. Johnes, USN. Capt. A. L. Mare, USN. Capt. H. C. Nichols, USNR. Capt. A. G. Schnable, USN.
10. Blue Cross Association, 55 E. 34th St., New York, N.Y.	None.
11. Boeing Airplane Co., Seattle, Wash.	Col. Charles Armstrong, USA. Col. Leo W. Bagley, USA. Col. Robert V. Bowler, USA. Capt. Portus D. Boyce, USN. Capt. John L. Brown, USN. Col. George A. Corneal, USAF. Brig. Gen. Jack C. Crosthwaite, USAF. Col. Ralph A. Dutton, USA. Col. Archie C. Edwards, USAF. Col. Wendell C. Fields, USA. Rear Adm. Gerald Galpin, USN. Capt. James A. Haley, USN. Capt. Richard D. Harwood, USN. Col. Theodore Hikel, USA. Col. Lauri S. Hillberg, USA. Col. Francis R. Hoehl, USAF. Col. Arthur L. Logan, USAF. Capt. Henry M. Marshall, USN. Col. Ned Joseph Martini, USAF. Col. Paul B. Nelson, USA. Maj. Gen. Homer Oldfield, USA. Capt. James C. Partington, USCG. Col. Orville Rehmann, USAF. Capt. Herbert G. Sheplar, USN. Col. William J. Simons, USAF. Capt. Riley Site, C&GC. Col. Harry G. Spillinger, USA. Col. Fred L. Thorp, USA. Capt. Warren Vincent, USN. Capt. Charles S. Weeks, USN.
12. Brown-Raymond-Walsh, ³ 207 W. 24th St., New York, N.Y.	None. ⁴

³ Joint venture consists of Brown & Root, Inc., 4100 Clinton Dr., Houston, Tex.; Raymond International, Inc., 140 Cedar St., New York, N.Y.; Walsh Construction Co., 711 Third Ave., New York, N.Y.

⁴ Applies to the joint venture.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
13. Burroughs Corp., Detroit, Mich.	Lt. Gen. R. J. Canine. Brig. Gen. Lawrence J. Carr. Adm. H. D. Baker. Rear Adm. Stanton B. Dunlap. Col. R. V. Fite. Col. C. L. Register.
14. California Institute of Technology, Pasadena, Calif.	None.
15. Cessna Aircraft Co., ⁵ Wichita, Kans.	Capt. Richard J. Greene, USN.
16. Chance Vought Aircraft Inc., Dallas, Tex.	Col. H. R. Jordan, USMC. Rear Adm. A. H. Perry, USN. Adm. H. B. Sallada, USN. Vice Adm. H. Sanders, USN. Capt. C. A. Briggs, USN. Col. E. F. Klinck, USA. Col. Gervais W. Trichel, USA. Col. Wm. J. D. Espinosa, USA. Capt. Wm. J. Hickey, USN. Col. John L. Hornor, Jr., USA. Brig. Gen. Joseph W. Horridge, USA. Rear Adm. Duncan C. MacMillian, USN. Col. Joseph A. McNerney, USA. Col. Samuel F. Silver, USA. Col. Horace F. Sykes, Jr., USA. Col. Wm. M. Talbot, USAF. Rear Adm. Rutledge B. Tompkins, USN.
17. Chrysler Corp., 341 Massachusetts Ave., Detroit, Mich.	Col. G. H. McCullagh, USAR. Col. W. R. Boyd, III, USAFR. Rear Adm. Janes Ross, USNR. Col. Wilmer G. Wilson, USAR.
18. Cities Service Co., 60 Wall Tower, New York, N. Y. Affiliates: Cities Service Petroleum, Inc. Cities Service Oil Co. (Delaware). Arkansas Fuel Oil Corp.	Col. G. H. McCullagh, USAR. Col. W. R. Boyd, III, USAFR. Rear Adm. Janes Ross, USNR. Col. Wilmer G. Wilson, USAR.
19. Collins Radio, 855 35th St. NE., Cedar Rapids, Iowa.	A. S. Born. L. R. Heron. E. J. Beller. R. L. Fulcher. Charles Kissner.
20. Continental Motors Corp., 205 Market St., Muskegon, Mich. Affiliates: Continental Aviation & Engineering Corp. Gray Marine Motor Co. Wisconsin Motor Corp.	Capt. C. C. Busenkell, USN. Col. Harrison H. Hiberg, USA.
21. Continental Oil Co., ⁵ Houston, Tex.	Col. E. R. Baker, USA. Col. R. W. Hird, USA.
22. Curtiss-Wright Corp., ⁶ Wood-Ridge, N.J.	Capt. R. J. H. Conn, USN. Capt. Robert F. Jones, USN. Capt. A. R. Sanborn, USN. Capt. H. M. Sartoris, USN.

⁵ This only includes employees within knowledge of correspondent and does not include a canvass of 9,000 employees.

⁶ Time did not permit a review of personnel records.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
23. Defoe Shipbuilding Co., Bay City, Mich.	None.
24. Douglas Aircraft Co., Inc., Santa Monica, Calif.	Lt. Gen. Ira C. Eaker. Rear Adm. E. H. Ekelmeyer. Brig. Gen. O. F. Carlson. Brig. Gen. S. L. McCroskey. Capt. Maurice Kauffman. Capt. J. R. Ruhsenberger. Capt. J. E. Baker. Capt. J. O. Bigelow. Col. A. D. Dugan. Col. J. L. Elwell. Col. A. C. Miller. Col. J. W. Leonhardt. Col. R. A. Gardner. Col. Jerdon Coleman. Col. S. H. Hankins. Col. M. B. Chatfield. Col. L. L. Sailor.
25. E. I. du Pont de Nemours & Co., ⁷ 1007 Market St., Wilmington, Del. Affiliates: Remington Arms Co., Inc.	Col. Douglas G. Ludlam, USA.
26. Eastman Kodak Co., Rochester, N.Y.	Maj. Gen. Edward P. Curtis, USA. Col. Arthur W. Fuchs, USAR. Col. J. B. Langby, USAR. Col. J. D. Peet, USA. Capt. K. D. Gallinger, USN. Col. Rufus Wesson, USAR. Col. Philip Foss, USAR. Col. Frank N. Gunderson, USAR. Col. B. M. Prince, USAF. Col. J. J. Griffith, Jr., USAF. Col. Werner Zugschwerdt, USA. Brig. Gen. Charles W. Shelburne, USMC.
27. Fairchild Engine & Airplane Corp., Hagerstown, Md. Affiliate: Joneco Aircraft Corp., Shawnee, Okla.	Adm. Robert D. Carney, USN. Gen. Jacob L. Devers, USA. Brig. Gen. James F. Early, USAF. Capt. Grayson Merrill, USN. Capt. Hamilton O. Hauck, USN. Capt. Frank E. Escobar, USN. Brig. Gen. William W. Welsh, USAF.
28. Fairbanks-Whitney Corp. (formerly Penn-Texas Corp.), 745 5th Ave., New York, N.Y. Affiliates: Pratt & Whitney Co., Inc. Chandler Evans Corp.--- Colts Patent Fire Arms Manufacturing Co., Inc. "Quick-Way" Truck Shovel Co. Fairbanks, Morse & Co.---	Brig. Gen. G. H. Drewry, USA. Col. H. Pierce, USA. Brig. Gen. A. M. Prentiss, USA. Rear Adm. Clarence Broussard, USN.
29. Firestone Tire & Rubber Co., 1200 Firestone Parkway, Akron, Ohio.	Col. T. M. Belshe. Col. R. R. Studler. Capt. William White.

⁷ Mall Tool Co. is now a division of Remington.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
30. Food Machinery & Chemical Corp., San Jose, Calif.	Brig. Gen. Clifford Sayre, USA. Col. J. E. Hamm, Jr., USAR. Brig. Gen. Joseph A. Holly, USA. Rear Adm. Harold A. Carlisle, USN. Col. Raymond R. Robins, USA. Col. Benjamin S. Mesick, USA.
31. Ford Motor Co., [§] Dearborn, Mich.	Col. Irving A. Duffy, USA. Capt. Lewis K. Marshall, USNR. Col. Carolus A. Brown, USA. Col. William J. Given, USA. Col. Zachary Moores, USA.
Affiliate: Aeronutronic Sys- tems, Inc.	
32. The Garrett Corp., 9851 Sepulveda Blvd., Los Angeles, Calif.	Vice Adm. Seldon B. Spangler, USN. Lt. Gen. Kenneth B. Wolfe, USAF. Col. W. T. Abbott, USAF.
33. General Dynamics Corp., 445 Park Ave., New York, N.Y.	Rear Adm. E. P. Abernathy, USN. Rear Adm. S. H. Armbruster, USN. Brig. Gen. M. W. Arnold, USAF. Col. S. Baker, USAF. Col. R. T. Bankhard, USAF. Capt. E. L. Barr, Jr., USN. Brig. Gen. W. L. Bayer, USA. Capt. A. H. Bergeson, USN. Capt. W. J. Bettens, USN. Rear Adm. C. Briggs, USN. Capt. A. L. Dunning, USN. Capt. T. H. Dubois, USN. Capt. R. E. Farnsworth, USN. Brig. Gen. H. S. Fassett, USMC. Capt. J. P. Fitzsimmons, USN. Rear Adm. W. O. Floyd, USN. Capt. B. F. Griffin, Jr., USN. Rear Adm. R. Gross, USN. Col. O. B. Hardy, USAF. Capt. Wm. L. Hoffheins, USN. Rear Adm. C. F. Horne, USN. Col. N. H. Jungers, USMC. Rear Adm. J. H. Kaufman, USN. Rear Adm. T. B. Klakring, USN. Capt. C. Van S. Know, USN. Rear Adm. S. Leith, USN. Rear Adm. W. A. Lent, USN. Col. M. R. MacIntyre, USMC. Rear Adm. A. I. McKee, USN. Col. E. E. McKesson, USAF. Gen. J. T. McNarney, USAF. Col. J. P. Mial, USA. Col. J. A. Moore, USAF. Capt. R. J. Moore, USN. Maj. Gen. F. P. Mulcahy, USMC. Capt. R. Noisat, USN. Rear Adm. J. R. Pahl, USN. Brig. Gen. E. P. Pennebacker, Jr., USMC. Col. J. L. Perkins, USMC. Brig. Gen. R. L. Peterson, USMC. Brig. Gen. Wm. J. Piper, Jr., USMC. Capt. J. R. Z. Reynolds, USN. Rear Adm. L. B. Richardson, USN.

[§] Personnel records do not necessarily include positive data to reflect this type of service.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
33. General Dynamics Corp., 445 Park Ave., New York, N.Y.	Col. S. R. Stewart, USAF. Rear Adm. H. F. Stout, USN. Rear Adm. D. J. Sullivan, USN. Capt. H. M. Sumrall, USN. Capt. I. D. Sykes, Jr., USN. Rear Adm. W. V. R. Vieweg, USN. Rear Adm. W. B. Whaley, USN. Col. W. D. Wimer, USAF. Capt. J. E. Wolowsky, USN. Capt. H. Wood, Jr., USN.
34. General Electric Co., ⁹ 570 Lexington Ave., New York, N.Y.	Adair, C. Bennett, Ralph D. Berkley, Joseph B. Cooke, William R. Coulter, Howard N. Davidson, Jr., Charles B. Deyarmond, A. B. Earl, Charles A. Fechteler, Wm. M. Fickel, A. A. Fouch, George E. Hansell, H. S. Hanson, Murray. Harman, Leonard F. Harris, John W. Hoffman, Frank E. Horton, Paul B. Johnson, Douglass T. Kinsella, W. T. Matthews, R. L. Messer, H. G. Messick, Joseph. Montgomery, J. B. Murray, C. B. Paxson, H. O. Roper, H. McK. Root, Willard G. Schmidt, Jr., Louis E. Schanklin, Elliott W. Simpson, Robert T. Smith, Loyd C. Sneeringer, E. A. Thorpe, Harlan M. Watson, Paul W. Young, D. B.
35. General Motors, Detroit, Mich.---	Capt. Clyde V. Hawk. Rear Adm. Truman J. Hedding. Capt. Grant Prue.
36. General Precision Equipment Corp., 92 Gold St., New York, N.Y.	Rear Adm. S. E. Burroughs, Jr., USN. Rear Adm. M. F. Schoeffel, USN. Rear Adm. James A. McNally, USN. Rear Adm. James H. Barnard, USN. Capt. Edward W. Quilter, USN. Rear Adm. George T. Mundorff, USN. Rear Adm. John A. Scott, USN. Maj. Gen. Norris B. Harbold. Col. Joseph B. Duckworth.
Affiliates:	
Kearfott, Co., Inc.	
Librascope, Inc.	
Link Aviation, Inc.	

⁹ Reflects company records since 1945. In view of time limit there may be others not on list.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
37. General Tire & Rubber Co., Akron, Ohio. Affiliates: Aerojet-General Corp. The A. M. Byers Co.	Rear Adm. Calvin M. Bolster, USN. Col. S. J. Zoller, USA. Col. Meryl Munoz, USA. Col. W. R. Stark, USAF. Col. Howard Means, USAF. Col. W. E. Benedict, USMC. Col. Elmore Seed, USMC. Col. R. D. McLeod, USA. Adm. Lowell T. Stone, USN. Capt. Joseph McGoughrem, USN. Gen. W. G. Wyman, USA. Brig. Gen. Harrison Shaler, USA. Brig. Gen. David Van Syckle, USA. Col. Alfred L. Price, USA. Col. E. M. Libershal. Gen. A. W. Vanaman, USAF. Col. Howard A. Moody, USAF. Brig. Gen. R. W. Hayward, USMC. Col. Wm. Frash, USMC. Commodore Archibald Hunter, USN. Rear Adm. R. S. Hatcher, USN. Rear Adm. J. C. Alderman, USN. Rear Adm. L. C. Baldauf, USN. Rear Adm. Robert K. Ashton, USN. Capt. George E. King, USN. Capt. W. L. Tann, USNR. Capt. W. G. Winslow, USN. Brig. Gen. F. F. Hayden, USA. None.
38. Gilfillan Bros., Inc., 1815 Venice Blvd., Los Angeles, Calif.	
39. The B. F. Goodrich Co., ¹⁰ Akron, Ohio.	Col. George H. Donnelly.
40. The Goodyear Tire & Rubber Co., Akron 16, Ohio. Affiliates: Goodyear Aircraft Corp. Goodyear Engineering Corp. Kelly-Springfield Tire Co.	Col. Max Frederic Moyer, USAFR. Rear Adm. Karl L. Lange, USNR.
43. Greenland Contractors, ¹¹ 122 East 42d St., New York, N.Y.	Col. Charles L. Bell. Col. William Joseph Green.
42. Grumman Aircraft Engineering Corp., Bethpage, Long Island, N.Y.	Vice Adm. Joseph F. Bolger, USN.
43. Haves Aircraft Corp., Birmingham, Ala.	Brig. Gen. Walter W. Wise, USAF. Col. C. R. Storrie, USAF. Col. L. Cornell, USAF. None.
44. Joshua Hendy Corp., 612 South Flower St., Los Angeles, Calif.	
45. Hercules Powder Co., Inc., Wilmington, Del.	Col. Robert W. Meals, USA.
46. Hughes Aircraft Co., Culver City, Calif.	Brig. Gen. F. W. Coleman, USA. Rear Adm. N. F. Carton, USN. Capt. G. M. Greene, USN. Col. T. M. Hahn, USAF. Brig. Gen. S. R. Mickelsen, USA. Rear Adm. M. A. Nation, USN. Col. C. H. Welch, USAF.

¹⁰ Records of this type not maintained. The 1 name furnished was known to the correspondent.

¹¹ Joint venture consists of Peter Kiewit Sons' Co.; S. J. Groves & Sons Co.; Al Johnson Construction Co.; Condon-Cummingham, Inc.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
47. International Business Machine Corp., 59 Madison Ave., New York, N.Y. Affiliate: The Service Bureau Corp.	Col. J. D. Lee, USAF. Col. N. M. Martin, USA. Maj. Gen. T. C. Odom, USAF.
48. International Telephone & Telegraph Corp., 67 Broad St., New York, N.Y. Affiliates: Federal Electric Corp. Industrial Products Division. International Standard Electric Corp. Intelix Systems, Inc. Kuthe Laboratories, Inc. Royal Electric Corp.	Maj. Gen. Edmond H. Leavey, USA. Adm. John E. Gingrich, USN. Rear Adm. Frederick R. Furth, USN. Col. O. W. Lunde, USAF. Col. Houston V. Evans, USA. Maj. Gen. Francis H. Lanahan, USA. Maj. Gen. Raymond C. Maude, USA. Col. Alvin T. Bowers, USA. Rear Adm. George K. Fraser, USN. Vice Adm. R. H. Cruzen, USN. Col. Paul H. Maurer, USA. Col. P. O. Vaughn, USAF. Col. Russell A. Baker, USA. Capt. R. F. Pryce, USN. Brig. Gen. Paul M. Seleen, USA. Col. Frank G. Trew, USA. Rear Adm. William Organ, USN. Rear Adm. Jess Sowell, USN. Rear Adm. Robert E. Laub, USN. Brig. Gen. Kenneth E. Fields, USA. Rear Adm. William L. Freseman, USN. Maj. Gen. G. Rodney Smith, USA. Col. C. F. Fiore, USA. Capt. Roy Jackson, USN.
49. The John Hopkins University, Baltimore, Md. Affiliates: Operations Research Office. Applied Physics Laboratory.	Maj. Gen. James G. Christensen USA. Capt. John O. Dorsett, USN. Brig. Gen. Lester D. Flory, USA. Gen. Thomas T. Handy, USA. Maj. Gen. Gerald J. Higgins, USA. Brig. Gen. John G. Hill, USA. Rear Adm. Marion N. Little, USN. Col. Edward M. Parker, USA. Col. Edward K. Purnell, USA. Col. Harry D. Sheets, AUS. Col. W. P. Withers, USA. Brig. Gen. W. R. Currie, USA. Col. Paul Elias, USA. Col. D. H. Hale, USA. Rear Adm. M. R. Kelley, USN. Brig. Gen. W. R. Wendt, USMC. Rear Adm. James A. Thomas, USN.
50. The Kaman Aircraft Corp., Bloomfield, Conn.	
51. Peter Kiewit Sons Co., ¹² Omaha, Nebr.	Col. Charles L. Bell.
52. Lear, Inc., 3171 South Bundy Dr., Santa Monica, Calif.	Lt. Gen. Barney M. Giles, USAF. Col. Kenneth R. Rogers, USAF.

¹² This firm is a member of the joint venture, Greenland contractors, and Colonel Bell is also listed above as an employee of the joint venture.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
53. Lockheed Aircraft Corp., Burbank, Calif.	Col. H. J. Bangs, USA.
Affiliates:	Col. H. P. Becker, USMC.
Lockheed Aircraft International.	Rear Adm. J. F. Beverly, USN.
Lockheed Aircraft Service, New York, Inc.	Brig. Gen. J. S. Blais, USMC.
Lockheed Aircraft Service, Inc.	Rear Adm. W. A. Bowers, USN.
Lockheed Air Terminal, Inc.	Capt. A. E. Buckley, USN.
	Capt. Wm. M. Cason, USNR.
	Col. E. J. Cotter, USA.
	Col. C. F. Damberg, USAF.
	Col. H. O. Deakin, USMC.
	Capt. L. E. Divoll, USN.
	Col. J. R. Donovan, USAR.
	Rear Adm. George B. Dowling, USN.
	Col. Llewellyn G. Duggar, USAF.
	Rear Adm. H. J. Dyson, USN.
	Capt. J. B. Feder, USCG.
	Col. R. L. Finkenstaedt, USMC.
	Col. M. H. Floom, USMC.
	Rear Adm. T. R. Frederick, USN.
	Rear Adm. W. J. Giles, USN.
	Col. B. E. Hall, USAF.
	Capt. Charles C. Hoffman, USN.
	Col. Harold A. Hughes, AUS.
	Col. R. D. King, USA.
	Capt. F. A. Kinzie, USN.
	Rear Adm. W. M. Klie, USN.
	Rear Adm. E. E. Lord, USN.
	Rear Adm. H. B. Lyon, USN.
	Capt. R. H. Maynard, USN.
	Col. Robert K. McDonough, AUS.
	Col. R. C. McGlashan, USN.
	Rear Adm. R. N. Metcalf, USN.
	Col. Andres Meulenberg, USAF.
	Rear Adm. W. E. Moring, USN.
	Capt. J. F. Mullen, Jr., USN.
	Vice Adm. M. E. Murphy, USN.
	Rear Adm. W. H. Newton, USN.
	Col. C. W. O'Connor, USAF.
	Capt. E. B. Patterson, USN.
	Brig. Gen. Hoyt Prindle, USAF.
	Capt. J. F. Quilter, USN.
	Col. E. L. Robbins, USAF.
	Capt. L. P. Scott, USN.
	Col. N. J. Senn, USA.
	Col. Norman M. Shipley, AUS.
	Capt. J. L. Sheenhair, USN.
	Adm. G. E. Short, USN.
	Col. J. E. Shuck, USAF.
	Vice Adm. C. C. Smith, USN.
	Rear Adm. W. R. Smith III, USN.
	Col. W. S. Stephenson, USA.
	Rear Adm. P. E. Summers, USN.
	Rear Adm. W. R. Tagg, USN.
	Capt. A. E. Teall, USN.
	Col. N. M. Towner, USAF.
	Adm. A. B. Vosseller, USN.
	Col. Charles E. Ward, AUS.
	Rear Adm. W. J. Whipple, USN.
	Col. Leroy H. Barnard, USAF.
	Col. Delevan E. Wolters, USAF.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
54. Marine Transport Lines, Inc., 11 Broadway, New York, N.Y.	Rear Adm. William M. Callaghan, USN.
55. Marquardt Aircraft Co., Van Nuys, Calif.	Col. H. M. McCoy, USAF. Capt. A. G. Rejebian, USNR.
56. The Martin Co., Baltimore, Md.---	C. B. Allen. S. S. Ballentine. A. J. Cooper, Jr. L. D. Cooper. E. G. Daly. F. R. Dent, Jr. R. J. Foley. V. Harvard, Jr. S. S. Miller. E. S. Piper. R. S. Purvis. M. C. Reeves. G. D. Stephens. K. E. Tibbetts. A. F. Weirich.
57. Massachusetts Institute of Tech- nology, Cambridge, Mass.	Capt. George Watson, USN. Vice Adm. E. L. Cochrane, USN. Maj. Gen. James McCormack, Jr. USAF.
58. Mathiasen's Tanker Industries, Inc., Philadelphia, Pa.	Capt. J. A. Sweeton, USN.
59. McDonnell Aircraft Corp., St. Louis, Mo.	Rear Adm. Sidney W. Souers, USNR. Rear Adm. Lloyd Harrison, USN. Col. C. M. O'Donnell, USA. Col. R. S. McConnell, USA.
60. Minneapolis Honeywell Regulator Co., ¹³ Minneapolis, Minn.	None.
61. Motorola, Inc., 4545 Augusta Blvd., Chicago, Ill.	Col. Charles Dickson, USAF. Rear Adm. John C. Parham, Jr. USN.
62. Newport News Shipbuilding Dry Dock Co., Newport News, Va.	Rear Adm. N. L. Rawlings, USN. Rear Adm. R. A. Larkin, USN. Capt. D. J. Cracovaner, USNMC. Capt. H. J. Hiemenz, USN. Capt. J. S. Bethea, USN. Capt. L. G. Richards, USN. Vice Adm. E. S. Land. ¹⁴ Vice Adm. E. L. Cochrane. ¹⁴

¹³ Record examination did not include Reserve officers serving on duty in World War II and who, presumably, may be retired.

¹⁴ Serves on board of directors.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
63. North American Aviation, Inc., Los Angeles, Calif.	Capt. Markley C. Cameron, USN. Rear Adm. Stephen W. Carpenter, USN. Col. J. H. Carter, USA. Capt. T. J. Casey, USN. Col. Paul A. Chandler, USMC. Col. Richard W. Faubion, USAF. Col. Wallace S. Ford, USAF. Col. Robert F. Fulton, USAF. Col. James H. Higgs, USAF. Maj. Gen. John H. Hinds, USA. Col. John S. Holmberg, USMC. Col. W. C. Hood, USA. Rear Adm. W. B. Jackson, USN. Brig. Gen. Harold R. Lee, USMC. Capt. William Loveland, USN. Col. Lynn Mapes, USAF. Capt. W. B. Mechling, USN. Vice Adm. John L. Melgaard, USN. Rear Adm. John B. Pearson, Jr. USN. Capt. Fred D. Pfetenhauer, USN. Capt. C. A. Printup, USN. Col. Ben Z. Redfield, USMC. Col. Maurice M. Stone, USAF. Rear Adm. Frank Turner, USN. Col. Ralph J. Watson, USAF. Col. K. M. Welborn, USA. Rear Adm. George A. Whiteside, USN.
64. Northrop Corp., Beverly Hills, Calif. Affiliate: Page Communication Engineers, Inc.	Lt. Gen. Roger M. Ramey, USAR Lt. Gen. Patrick W. Timberlake, USAF. Col. Stewart W. Towle, Jr., USAF. Lt. Gen. Ennis C. Whitehead, USAF. Capt. Thomas F. Darden, USN. Capt. Homer K. Davidson, USN. Col. Paul C. Droz, USAF. Col. Edmund R. Goss, USAF. Col. Ralph G. Lockwood, USAF. Col. Gaspere Frank Blunda, USAF. Capt. Neil E. Kingsley, USN. Rear Adm. Michael P. Bagdanovich, USN. Capt. Robert Conaughty, USNR. Col. Kenneth W. Klise, USAFR. Col. Robert R. Mallory, USAR. Lt. Gen. Joseph Smith, USAF.
65. Olin Mathieson Chemical Corp., 460 Park Avenue, New York, N.Y.	Col. James A. Bonnington, USA. Capt. N. H. Collisson, USNR. Col. Edwin B. Garrett, USAFR. Capt. Harry A. Sosnoski, USN. Capt. Clarence E. Voigeli, USN. Col. Richard W. Weaver, USAR.
66. Oman-Farnsworth-Wright, ¹⁵ 625 Madison Avenue, New York, N.Y.	None.

¹⁵ Joint venture.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued.

<i>Company</i>	<i>Officer</i>
67. Morrison-Knudsen Co. Inc., 319 Broadway, Boise, Idaho.	Col. E. G. Herb.
Affiliates:	
International Engineering Co.	
Morrison-Knudsen-Oman-Farnsworth-Wright-Kaiser.	
Alaskan Plumbing & Heating Co. Inc.	
68. Pan American World Airways System, 135 East 42d Street, New York, N.Y.	Maj. Gen. Thomas O. Hardin. Rear Adm. H. B. Miller. Brig. Gen. Otis Schreuder. Col. W. S. Lee. Col. F. E. Bruhn. Col. C. E. McClure. Col. J. T. Kidwell. Col. J. W. Bowman. Col. J. F. Hart. Col. G. W. Porter. Col. H. H. Jordan. Col. R. P. Alston. Col. W. J. Paul. Lt. Gen. R. E. Nugent. Rear Adm. F. L. Tedder.
Penn-Texas Corp. (See Fairbanks Whitney.)	
69. Philco Corp., Philadelphia, Pa.-----	Col. Thomas C. Brubaker, USA. Gen. M. D. Burnside, USAF. Col. Kenneth I. Davis, USA. Col. Ira P. Doctor, USA. Col. Loren E. Gaither, USA. Col. Francis E. Kidwell, USA. Col. Joseph W. Knighton, USMC. Adm. James Leeper, USN. Col. Milton M. Lewis, USA. Adm. Richard Mandelkorn, USN. Col. James A. Mylod, USA. Col. Samuel Pierce, Jr., USA. Adm. Arthur Radford, USN. Col. Julian E. Raymond, USA. Col. David Schlenker, USAR. Col. Patrick A. Wakeman, USA. Col. Stuart M. Welsh, USA.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued.

<i>Company</i>	<i>Officer</i>
70. Radio Corporation of America, 30 Rockefeller Plaza, New York, N.Y.	Maj. Gen. F. L. Ankenbrandt, USA.
Affiliates:	Col. D. C. Ashdown, USAR.
RCA Service Co.	Col. D. R. Corum, USA.
National Broadcasting Co.	Col. F. J. Darke, Jr., USAR.
RCA Communications Inc.	Vice Adm. E. D. Foster, USN.
RCA Victor Distributing Corp.	Col. A. C. Gay, USAF.
	Col. C. W. Gordon, USAF.
	Col. G. A. Gould, USA.
	Rear Adm. L. M. Grant, USN.
	Maj. Gen. H. C. Ingles, USA.
	Col. C. J. King, Jr., USA.
	Col. E. Knickerbocker, USA.
	Capt. L. R. Lampman, USN.
	Col. J. H. Madison, USA.
	Rear Adm. C. C. Mann, USN.
	Col. J. H. Marsh, USA.
	Col. R. L. Owens, USAFR.
	Maj. Gen. W. L. Richardson, USAF.
	Capt. E. Roberts, USN.
	Col. J. H. Rothrock, USAF.
	Brig. Gen. D. Sarnoff, USA.
	Gen. W. B. Smith, USA.
	Capt. J. R. Stewart, USN.
	Col. J. V. Tower, USA.
	Col. D. C. Wallace, USA.
	Rear Adm. E. K. Wakefield, USN.
	Rear Adm. R. R. Waller, USN.
	Rear Adm. T. P. Wynkoop, USN.
	Capt. J. H. Brockway, USN.
	Brig. Gen. S. P. Collins, USA.
	Col. A. L. Cox, USAF.
	Capt. L. F. Dodson, USN.
	Col. E. B. Ely, USA.
	Rear Adm. H. S. Harnly, USN.
	Col. J. L. Langevin, USA.
	Col. K. F. March, USA.
	Col. A. Marcy, USA.
	Capt. K. M. McLaren, USN.
	Col. M. Moody, USA.
	Rear Adm. J. M. Robinson, USN.
	Col. H. Rund, USA.
	Maj. Gen. R. A. Schow, USA.
	Col. H. N. Sturdevent, USAF.
	Brig. Gen. T. Tully, USA.
	Rear Adm. L. Van Antwerp, USN.
71. The Rand Corp., 1000 Connecticut Ave., Washington 6, D.C.	Maj. Gen. F. L. Anderson, USAF.
	Maj. Gen. H. G. Bunker, USAF.
	Col. G. C. Reinhardt, USA.
	Capt. W. W. Cone, USN.
	Col. J. P. Evans, USA.
	Capt. C. L. Freeman, USN.
	Lt. Gen. G. F. Good, USMC.
	Col. W. H. Hastings, USA.
	Brig. Gen. R. E. Koon, USAF.
	Rear Adm. R. G. Lockhart, USN.
	Brig. Gen. R. G. McKee, USA.
	Adm. S. S. Murray, USN.
	Col. K. C. Strother, USA.
	Col. M. R. Williams, USAF.
71. A System Development Corp., ¹⁶	Col. Thomas A. Holdiman, USAF.

¹⁶ Although corporation has been included as an affiliate of Rand Corp., letter of June 12, 1959 stated that organization commenced operation Dec. 1, 1957 as an independent nonprofit corporation.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
2500 Colorado Ave., Santa Monica, Calif.	Lt. Gen. Donald L. Putt, USAF.
72. Raytheon Mfg. Co., Waltham 54, Mass.	Brig. Gen. Francis A. Kreidel, USA. Col. Mark E. Smith, USA. Adm. Roy W. Graham, USN. Capt. Francis J. Blasdel, USN. Col. Maurice A. O'Connor, Jr., USAF. Capt. Edward L. Robertson, USN. Col. Donald J. Bailey, USA. Capt. John No. Boland, USN. Capt. Marshall B. Gurney, USN. Capt. David R. Hull, USN. Rear Adm. Gill M. Richardson, USN. Capt. Joseph K. Taussig, USN. Capt. Mario G. Vangeli, USN. Capt. Malcolm M. Cloukey, USN. Capt. A. Peter Hilar, USN. Col. Arthur Kramer, USA. Col. Benjamin Whitehouse, USA. Col. Hugh Heiby Bowe, Jr. USAF. Brig. Gen. Charles Pratt Brown, USAF. Capt. Franklin Duerr Buckley, USN. Col. Carver Thaxton Bussey, USAF. Maj. Gen. Alden Rudyard Crawford, USAF. Brig. Gen. Harley Sanford Jones, USAF. Brig. Gen. John Mills Sterling, USAF. Col. Jesse Fuller Thomas, USA. Col. Israel Brent Washburn, USA. Capt. Lester Martin, USN. Col. T. C. Miller, USA. Col. H. W. Schmidt, USA. Capt. J. C. Woelfel, USN. Rear Adm. K. J. Christoff, USN. Col. P. H. Kemmer, USAF. Rear Adm. Leslie E. Gehres, USN. Vice Adm. C. F. Coe, USN. Rear Adm. E. R. Sanders, USN. Brig. Gen. R. L. Schiesswohl, USMCR. Col. Bethuel M. Kitchen, USA. Rear Adm. L. C. Chamberlin, USN. Rear Adm. Harry A. Hummer, USN. None.
73. Republic Aviation Corp., Farmingdale, Long Island, N.Y.	
74. Richfield Oil Corp., Los Angeles 17, Calif.	
75. Ryan Aeronautical Co., Lindbergh Field, San Diego 12, Calif.	
76. Shell Oil Co., 50 West 50th St., New York 20, N.Y.	
77. Sinclair Oil Corp., ¹⁷ 600 Fifth Ave., New York 20, N.Y.	Capt. Carl G. Drescher, USN.
Affiliates: Sinclair Refining Co. Sinclair BP Sales, Inc.	
78. Socony Mobil Oil Co., 150 E. 42d St., New York 17, N.Y.	Rear Adm. Thomas J. Kelly, USN.
Affiliates: Basin Oil Co. General Petroleum Corp. Magnolia Petroleum Co. Mobil Overseas Oil Co. Standard-Vacuum Oil Co.	

¹⁷ Report from survey of payroll applications. One name furnished is President of Sinclair PB Sales, Inc. It is not clear on report whether or not he is still active or retired from that office.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
79. Sperry Rand Corp., ¹⁸ 30 Rockefeller Plaza, New York 20, N.Y.	Brig. Gen. Joseph A. Bulger, USAF. Col. James E. McGraw, USA. Col. T. L. Gaines, USA. Col. W. R. Gerhardt, USA. Lt. Gen. Leslie R. Groves, USA. Col. Ernest R. Miller, USAF.
Affiliates:	
Sperry Gyroscope Co., Div.	
Remington Rand Div.	Capt. Knight Pryor, USN.
Sperry Microwave Electronics Co. Div.	Col. Paul Walker, USAF.
Vickers Inc.	Maj. Gen. Courtney Whitney, USA.
Wright Machinery Co. Div.	Col. E. C. Best, USMCR. Col. Ray Conners, USA. Capt. Gordon Campbell, USN.
80. Standard Oil Co. of California, ¹⁹ San Francisco 20, Calif.	
81. Standard Oil Co. of Indiana, 910 South Michigan Ave., Chicago 80, Ill.	None.
82. Standard Oil of New Jersey, ²⁰ 30 Rockefeller Plaza, New York 20, N.Y.	None.
Affiliates:	
Gilbert & Barker Mfg. Co.	None.
Esso Export Corp-----	None.
Ethyl Corp-----	Maj. Gen. Stephen G. Henry, USA.
Esso Research & Engineering Co.	None.
Humble Oil & Refining Co. ²⁰	
Carter Oil Co-----	None.
83. States Marine Lines, 90 Broad St., New York 4, N.Y.	None.
Affiliates:	
States Marine Corp. of Delaware.	
Isthmian Lines, Inc.	
84. Sundstrand Corp., 2531, 11th St., Rockford, Ill.	Brig. Gen. Robert H. Richard, USMC.
85. Sundray Mid-Continent Oil Co., Tulsa 2, Okla.	None.
Affiliates:	
D-X Sunray Oil Co.	
Suntide Refining Co.	
86. Sylvania Electric Products, Inc., 1740 Broadway, New York, N.Y.	Rear Adm. Frederick J. Bell, USN. Brig. Gen. Wayne H. Adams, USMC. Col. Phillip A. Gugliotta, USAF. Col. Leslie E. Loken, USA. Capt. Edward G. Mason, USNR. Col. Leland Gilliatt, USAF.
87. Temco Aircraft Corp., Dallas 22, Tex.	Col. W. B. Freeman, USMC. Brig. Gen. R. E. Galer, USMC. Col. M. G. Haines, USMC. Rear Adm. A. C. Olney, USN. Brig. Gen. L. S. Smith, USAF. Col. D. W. MacArdle, USA.

¹⁸ General Douglas MacArthur not included.

¹⁹ Information not presently available.

²⁰ Effort made to obtain information through affiliates as indicated. Generally the information is not available from the parent company records of its own employees.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
88. Texaco, Inc., 135 East 42d St., New York 17, N.Y.	None.
Affiliates:	
Caltex Oil Products Co.	
Texaco (Brazil), Inc.	
Texas Co. (Caribbean), Ltd.	
Texas Co. (Puerto Rico), Inc.	
Texas Petroleum Co.	
The Texas Pipe Line Co.	
89. Thiokol Chemical Corp., Bristol, Pa.	Maj. Gen. David F. O'Neill, USMC. Capt. J. W. Antonides, USN. Capt. Albert Joseph Walden, USN. Col. Fulten G. Thompson, USA. Col. Warren C. Rush, USAR. Rear Adm. J. M. Gardiner, USN. Adm. R. E. Davis, USN. Col. Hubert deBois Lewis, USA.
90. Thompson Ramo Wooldridge, Inc., 23555 Euclid Ave., Cleveland 17, Ohio.	Gen. B. W. Chidlaw. Brig. Gen. William M. Garland. Lt. Gen. H. L. George. Maj. Gen. G. P. Saville. Gen. James L. Doolittle. Col. H. K. Gilbert.
91. Tidewater Oil Co., 17 Battery Pl., New York 4, N.Y.	Capt. Creighton C. Carmine, USNR. Col. Daniel Eckerman, AUS.
Affiliate: Seaside Oil Co.	Capt. Geo. Wendelburg, USN.
92. Tishman (Paul) Co., Inc., 21 East 70th St., New York, N.Y.	None.
93. Todd Shipyards Corp., 1 Broad- way, New York, N.Y.	Col. Charles D. McColl, USA. Capt. John A. Hayes, Jr., USN.
94. Union Carbide Corp., 30 East 42d St., New York, N.Y.	Rear Adm. George Madden, USN. Capt. C. R. Watts, USN. Col. G. B. Farris, USA. Rear Adm. W. V. Hamilton, USN.
95. Union Oil Co. of California, 461 South Boylston St., Los Angeles, Calif.	None.
96. U.S. Lines Co., 1 Broadway, New York, N.Y.	None.
97. United Aircraft Corp., East Hart- ford, Conn.	Brig. Gen. Turner A. Sims, Jr., USAF Capt. Albert R. Weldon, USN. Capt. Wendell W. Suydam, USN. Col. Edward J. Hale, USAF.
Affiliates:	
United Research Corp.	Brig. Gen. Edward C. Dyer, USMC. Col. Harry W. Generous, USAF.
United Aircraft Export Corp.	Rear Adm. J. P. W. Vest, USN. Capt. Herbert S. Brown, USN. Rear Adm. Marshall R. Greer, USN. Capt. James F. Byrne, USN. Capt. Frank Curtiss Lynch, Jr., USN. Lt. Gen. Donald L. Putt, USAF. Maj. Gen. Robert W. Douglas, Jr., USAF. Maj. Gen. John M. Weikert, USAF. Col. John B. Jacob, USMC.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
98. Westinghouse Air Brake Co., Pittsburgh, Pa.	Anding, James G.
Affiliates:	Beckley, Stuart.
Melpar Inc.	Beiderlinden, William A.
Le Tourneau-	Bell, Charlie H.
Westinghouse Co.	Bertsch, William H., Jr.
	Bradley, William J.
	Canan, Howard V.
	Cowie, Franklin G.
	Denson, Lee A.
	Elliott, Richard E.
	Gibbs, John S.
	Hastings, Kester L.
	Herring, Lee R.
	Herron, Edwin W.
	Holley, James
	Irving, Frederick A.
	Kastner, Alfred E.
	Kurtz, Guy O.
	Lane, Richard.
	Larew, Walter B.
	Leggett, Aubrey B.
	Lowe, Robert G.
	Maher, Joseph B.
	McAfee, Broadus.
	Menoher, William.
	Morrison, James A.
	Newton, Wallis S.
	Packer, Francis A.
	Pence, William P.
	Pierce, Edward H.
	Ping, Robert A.
	Rehm, George A.
	Riley, Hugh W.
	Rittgers, Forest S.
	Stafford, Laurance F.
	Samouce, James A.
	Sergeant, Russell C.
	Shaw, Lawrence E.
	Sherman, Wilson R.
	Stiegler, Oscar.
	Summerall, Charles P.
	Wells, Lucien F.

Retired officers at or above the rank of colonel, or the equivalent, who are officials or employees of the 100 companies having the largest dollar amount of contracts with the Department of Defense—Continued

<i>Company</i>	<i>Officer</i>
99. Westinghouse Electric Corp., Pittsburgh, Pa.	Adm. Robert B. Carney, USN. Adm. Leonard J. Dow, USN. Maj. Gen. Albert Boyd, USAF. Rear Adm. Wm. V. Deutermann, USN. Rear Adm. Wm. L. Kabler, USN. Rear Adm. E. S. Keats, USN. Rear Adm. H. T. Walsh, USN. Brig. Gen. R. G. Pape, USA. Brig. Gen. Vennard Wilson, USA. Capt. L. M. Cockaday, USN. Capt. Neal Cole, USN. Capt. Ottis Earle, USN. Capt. W. S. Ellis, USN. Capt. C. J. Heath, USN. Capt. R. M. Huebl, USN. Capt. H. B. Hutchinson, USN. Capt. H. J. Islev-Petersen, USN. Capt. J. J. Moore, USN. Capt. C. W. Truxall, USN. Capt. Hugh Webster, USN. Col. E. M. Buitrago, USA. Col. Angelo R. Del Campo, USA. Col. J. L. Dickey, USMC. Col. O. F. Forman, USA. Col. J. A. Gerath, Jr., USMC. Col. J. J. Godwin, USA. Col. C. D. Jeffcoat, USMC. Col. F. B. Kane, USA. Col. George B. Mackey, USAF. Col. P. M. Martin, USA. Col. Francis H. Monahan, USAF. Col. George R. Oglesby, USA. Col. Fred Reiber, USA.
100. The White Motor Co., Cleveland, Ohio.	None.

Mr. WHITTEN. We realize that the legislative committee is also interested in his overall subject, continuously so, and we understand this same subject matter is being handled there. However, my purpose here is that since this matter was supplied in connection with the request of this committee, we, of course, cannot be dependent upon some other committee providing information for our record.

ENTERTAINMENT OF MILITARY OFFICERS BY INDUSTRY

In that connection and since mention has been made of the Committee on Armed Services, I refer back to a report by that committee which reached the press with regard to another matter, the heading of which is, "Top Military Men Feted in Bahamas by Martin Co." The article says that 18 high ranking officers—I will not refer to their names here because it is a matter of public record—were entertained by the Martin Co. in a plush Bahama Island resort in the past 3 years. There was a bill of \$18,000 which the Martin Co. attempted to deduct from its income tax as business expense in 1957 and 1958.

The report says that the Martin Co. attempted to get that charged off as a business expense and was refused. First, do you have any regulations in the Defense Department controlling or attempting to prevent that type of occurrence? Did you have at the time the trips were made?

Secretary GATES. Yes; each of the military departments has regulations. In no case did the men referred to in that article, I believe, have anything to do with passing on contracts.

Mr. WHITTEN. You are volunteering a little information I did not ask for, Mr. Secretary. You are entitled to make any statements you wish, but my question was: Did you have regulations prohibiting that?

Secretary GATES. For procurement officers, yes, sir.

Mr. WHITTEN. Only?

Secretary GATES. Yes, sir.

Mr. WHITTEN. Since this did not cover those who were beneficiaries of this trip, they were not within the regulations prohibiting it?

Secretary GATES. They were not covered by regulation.

Mr. WHITTEN. Since this occurrence have you adopted any new regulations so as to bring these top level people within the purview of such prohibiting regulations?

Secretary GATES. We have adopted them in conversation. We have no written regulations. We have been waiting to discuss this with Mr. Hébert's investigating committee. We have discussed it in relation to the legislation he is about to propose, which will govern the type of regulation we will issue.

Mr. WHITTEN. Mr. Secretary, I wish you would keep this subcommittee informed of the progress that might be made in this particular area.

Could you tell us when these trips were made; at the time that this committee was dealing with the question of whether the MACE program should be continued? That controversy was quite well reported in the press, and in the Congress there was a serious question as to whether procurement contracts should be entered into for this missile. Am I not correct that the Martin Co. had the MACE contract?

Secretary GATES. Yes, sir.

Mr. WHITTEN. Were these trips made in an effort by Martin to prevent the Congress from insisting on putting off procurement contracts until the missile was proved, or do you know?

Secretary GATES. I do not know, but I can find out the relation of the time of the hearings and time of the trips. However, I know that it had no bearing on the MACE contract.

Mr. WHITTEN. That is a matter of opinion, Mr. Secretary. Were you along?

Secretary GATES. No, sir.

Mr. WHITTEN. So you are just exercising your judgment and you do not profess to know personally.

Secretary GATES. I know the people involved, and I have a high regard for their integrity.

Mr. WHITTEN. I know them, too, and, so far as I know, they are outstanding, fine Americans, and I am not trying to indict them. I am talking about a policy. I am also saying when a witness who did not go along says, "I know," he is getting himself out further on a limb than I think the circumstances require. You mean you have confidence in them and you do not believe——

Secretary GATES. That is right.

Mr. WHITTEN. I know that the Defense Department from time to time indicates that a big part of its contracting is on the competitive bid basis. It is my personal view that many of those things that are said to be that way in actuality are not because specifications are so drawn as to fit a certain company or, as in the case of the MACE missile, you give the contract for production and development of a missile to a particular company and then they are the only ones who are in position to carry it on. In many of those areas it does not really end up as a competitive bid.

Now, I ask you this: If the Internal Revenue Bureau refused the Martin Co. the right to charge this off on their income tax, under your contracting procedures could the Martin Co. use this expenditure as a factor in determining the rate the Government would pay them? I have developed this in years past where there was not a cost-plus contract technically, but in effect in many instances there was. Percentage of the cost is frequently the criterion. If this element of cost is a factor, then the profits you may pay would be affected thereby. What is your regulation or rule with regard to counting it in that field?

Secretary GATES. The regulations would not permit it if it was identifiable. We have recently issued through the Office of the Assistant Secretary for Supply and Logistics, Mr. McGuire, some new cost regulations which will determine costs on a much more strict and uniform basis than heretofore. These have only been issued within the last few months. If any contractor tried to do anything like that, it would show up under the new costing regulations. This would be a question of how a man charges his expenses to the Government. We have a uniform formula for reviewing all aspects of cost. This was quite controversial with industry, but I think when the appropriate people come up here, they should testify on it because it is quite important.

Mr. WHITTEN. Mr. Secretary, several years ago—the clerks of our committee will be able to point out the time—I asked the Department to put in the record the 10 leading contractors with the Government and the amount of contracts they had for a 5-year period in total and what had happened to the market value of their stocks during that period. General Moore will be familiar with that. I would like that table brought up to date and inserted at this point in the record.

(The information requested will appear in a later volume.)

CONFLICT OF INTEREST POLICY OF THE DEPARTMENT

Mr. WHITTEN. Mr. Secretary, we find a number of companies have virtually been organized for the purpose of getting defense contracts. I know of at least one top ranking ex-Defense official who heads one of those major companies. Some of those companies have just made such profits that their stocks have greatly increased in value. Somebody lucky enough to have gotten in early may have made a killing in the stock. Do you have any regulation prohibiting the personnel within the Defense Department, or in the services, from buying stocks in companies which do business with the Defense Department?

Secretary GATES. I am not aware of any regulations other than the regulations that apply to myself and other statutory appointees under the conflict-of-interest law.

Mr. WHITTEN. I am familiar with that. I am asking if within the services these procurement officers, and others who are not up at the level where they are faced with the Conflict of Interest Act, may have occasion to know that General Dynamics, for instance, is in line to get a big contract—may I say that I know of no such people, I am not trying to in theory describe a particular individual, I have no such knowledge—but I can readily see that a man in that field, if there were nothing to control it, might in effect get a thousand times more than a trip to the Bahamas by buying stock. That might be done if you have no regulation to prevent it. You have nothing in the field of which you are aware?

Secretary GATES. There is no use of my saying I know; I do not know. I believe—and I will check—that there are strong regulations in this respect and in all other respects pertaining to procurement officers but not to other officers.

Mr. WHITTEN. Not to other officers?

Secretary GATES. That is what I believe, but I will check.

Mr. WHITTEN. I do not want to leave the record without having what you have. I say whatever you do have, that you should feel free to include it in the record at this point.

(The information to be supplied follows:)

DEPARTMENT OF DEFENSE DIRECTIVE

Subject: Conduct of Personnel Assigned to Procurement and Related Activities.

The attached memorandum, which sets forth the policy of the Department of Defense with respect to situations involving conflicts of interest, is issued as a Department of Defense Directive for the information and guidance of all concerned.

For the Secretary of Defense:

G. V. UNDERWOOD, JR.
Colonel, USA
Director
Executive Office of the Secretary.

THE SECRETARY OF DEFENSE,
Washington, January 28, 1953.

Memorandum for The Secretaries of the Military Departments.

The Assistant Secretaries of Defense.
The Chairmen of Boards, Councils and Committees.
The Assistants to the Secretary of Defense.
The Directors of Offices, OSD.

Subject: Conduct of Personnel Assigned to Procurement and Related Activities.

Under the authority vested in me as Secretary of Defense, you are directed to bring to the attention of all personnel the laws applicable to situations involving conflicts of interest. It is the responsibility of each individual officer and employee to comply with the laws of his country. Particular attention is directed to Section 434, Title 18, United States Code.

It is a recognized principle that no Government officer or employee who has the direct responsibility for negotiating and signing contracts or approving the payment of money to contractors, should have any financial interest in any such contractor. No Government officer or employee should permit himself to be exposed to a dual-interest position or to a conflict between self-interest and integrity. He should clearly be in a position to act to the best of his ability without fear or favor in the best interest of his Government.

In any case where an officer or employee of the Department of Defense, including all of its departments and agencies, has any financial interest in any business entity, corporation, or partnership, transacting or contemplating transacting business with the Government that officer or employee is disqualified, and this directive expressly disqualifies him, from having any dealings of any kind for or in behalf of the Department of Defense with such business entity.

While a conflict of interests, as may be defined by the law, is a matter of fact in a particular case, even if a technical conflict does not in fact exist, it is desirable to avoid the appearance of a conflict of interest from a public-confidence point of view. The additional problem is how can officers or employees of the Department of Defense be disqualified in the relatively few cases where they or their superiors think there is or may be some conflict of interest.

In any case where an officer or employee of the Department of Defense, including all its departments and agencies, feels that he should be disqualified from taking action in a particular matter, it is his duty to so inform his superior or department head, and he will be relieved of his duty and responsibility in that particular case. The matter will then be assigned to someone else of equal or higher rank, who clearly has no conflict of interest for decision and action.

In any case where any superior who thinks that an officer or employee reporting to him may be involved in a conflict of interest, or an apparent conflict of interest of importance from a public confidence point of view, he will discuss the matter with the person involved and may relieve such officer or employee of responsibility in the case. He will then assign the responsibility for taking action to someone else of equal or higher rank who clearly has no conflict of interest for decision and action, or he may take the responsibility for decision and action himself.

In any case where any of the Secretaries or civilian departmental officials appointed by the President by and with the advice and consent of the Senate may be so disqualified in a particular case, the matter will be referred for action and decision by the Secretary of Defense, or his Deputy, to another departmental official of equal or higher rank, who has received his appointment from the President by and with the advice and consent of the Senate, or the Deputy Secretary or the Secretary of Defense will rule on the matter himself and take full responsibility for any actions taken.

This directive supersedes any existing departmental directives and regulations applicable to standards of conduct of personnel assigned to procurement and related activities to the extent that they are inconsistent with this directive.

C. E. WILSON.

CC: Joint Chiefs of Staff.

[SECNAV 5371.1A ONM M303A/BGA: alk]

DEPARTMENT OF THE NAVY,
OFFICE OF THE SECRETARY,
Washington, D.C., September 29, 1955.

SECNAV INSTRUCTION 5371.1A

From: Secretary of the Navy.

To: All Ships and Stations.

Subj: Standards of conduct for all personnel having business dealings with representatives of industry.

Encl: (1) Copy of SECDEF memo of 28 Jan 1953, Subj: Conduct of Personnel Assigned to Procurement and Related Activities.

(2) Digest of Applicable Provisions of U.S. Criminal Code, 1948, and Restrictions Contained in the Current DOD Appropriations Act Pertaining to Conduct of Presently Employed Government Officials.

1. Purpose

a. To restate and reemphasize standards of conduct required of all personnel having business dealings with representatives of industry and to direct the use of certain steps to assure compliance.

b. To limit the reporting requirement of paragraph 4c hereof to instances where noncompliance with the provisions of this Instruction has been determined in formal inspections.

c. To require commanding officers to insure that appropriate and prompt disciplinary action is taken whenever it is determined that there have been illegal or improper acts by military or civilian personnel within their commands.

2. Cancellation

This Instruction supersedes and cancels SECNAV Instruction 5371.1 of 30 August 1954.

3. Policy

a. All personnel who represent the Government in business dealings with representatives of industry are reminded of their position of trust and grave

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responsibility. Many practices which may be normal and generally accepted in the private business world are not acceptable for Government officials and employees who are conducting the Government's business. Thus, it is essential that all such persons set for themselves the highest standards of personal conduct in their relations with business firms and individuals, thereby insuring that these relations are above reproach in every respect. Although it is not intended to lay down a hard and fast rule prohibiting social contacts with business firms or their representatives, nevertheless it must be realized by all personnel who conduct the Navy's business that the acceptance of entertainment or gifts or favors of any kind (no matter how innocently tendered or received) from one who seeks or enjoys profitable business dealings with the Government, may compromise and embarrass both the Navy and the Navy personnel concerned to the extent of impairing public confidence in the integrity of business relations between the Government and industry.

b. The general policy with respect to standards of conduct for personnel of the Naval Establishment who represent the Government in business dealings with private firms or individuals, is as follows:

(1) No person shall allow himself to be placed in a position where a conflict of interests might arise, or might justifiably be suspected, by reason of the acceptance of entertainment, gifts, or favors of any kind or by any other action which would result in financial profit to himself or which could influence or be interpreted as influencing the strict impartiality that must prevail in all business relationships where the public interest is involved.

(2) No action shall be taken which might have the effect of conferring special benefits upon particular individuals or firms, such as by giving them information of proposed purchases, unless such benefit is also conferred on other individuals or firms who are justifiably entitled thereto.

c. Enclosure (1) is forwarded for general information and compliance.

d. Although all personnel would be required to govern their conduct by the foregoing standards of conduct even if there were no statutes on the subject, attention is directed to the statutory prohibitions and penalties regarding certain conduct of Government officials as digested in enclosure (2). There are also digested in enclosure (2) the most recent statutory provisions on gratuities which are contained in section 719 of Department of Defense Appropriation Act, 1955, Public Law 458, 83d Congress, 2d session.

4. Action

a. A copy of this instruction and the enclosures thereto shall be kept posted on appropriate bulletin boards normally utilized by persons of the Naval Establishment who represent the Government in business dealings with private individuals or firms.

b. It shall be the responsibility of commanding officers to insure that persons of the Naval Establishment under their command representing the Government in business dealings with private individuals or firms are familiar with the provisions of this Instruction and the enclosures thereto.

c. An examination shall be made in all formal inspections of activities of the extent to which personnel are familiar with the provisions of this Instruction, and so far as can be determined, the extent to which its provisions are complied with, and reports shall be made with respect to all instances of noncompliance revealed by such inspections.

d. In addition, commanding officers and other senior officials should within reason make use of the opportunity offered by conferences, meetings, and visits to subordinate units, to keep the importance of this policy in the forefront.

e. Commanding officers shall insure that appropriate and prompt disciplinary action is taken whenever it is determined that there have been illegal or improper acts by military or civilian personnel within their commands.

C. S. THOMAS.

[Office of the Secretary—Enclosure (2)—SECNAVINST 5371.1A, September 29, 1955]

DIGEST OF APPLICABLE PROVISIONS OF U.S. CRIMINAL CODE (TITLE 18, UNITED STATES CODE, 1948) AND RESTRICTIONS CONTAINED IN THE CURRENT DEPARTMENT OF DEFENSE APPROPRIATIONS ACT PERTAINING TO CONDUCT OF PRESENTLY EMPLOYED GOVERNMENT OFFICIALS

Sec. 216 (formerly Criminal Code Sec. 112)—Procurement of Contract by Officer or Member of Congress

This statute forbids Government officers and agents from directly or indirectly receiving any money or thing of value in return for obtaining or giving any Government contract, or rendering any assistance in that connection, under penalty of a fine of \$10,000 and imprisonment for two years, and permanent disqualification from holding Federal office.

Sec. 281 (formerly Criminal Code Sec. 113)—Compensation to Members of Congress, Officers and Others in Matters Affecting the Government

This statute forbids Government officers and agents from directly or indirectly receiving or agreeing to receive any compensation for services rendered in connection with any Government contract, claim, or other matter in which the United States is interested, under penalty of a fine of \$10,000 and imprisonment for two years, and permanent disqualification from holding Federal office.

Sec. 283 (formerly Criminal Code Sec. 109)—Officers or Employees Interested in Claims Against the Government

This statute forbids Government officers and employees from prosecuting or aiding in the prosecution of any claim against the United States, other than in the proper discharge of official duties, under penalty of a fine of \$10,000 and imprisonment for one year.

Sec. 434 (formerly Criminal Code Sec. 41)—Interested Persons Acting as Government Agents

This statute forbids persons financially interested in any corporation or other business organization from acting as Government officers or agents for the transaction of business with such corporation or organization, under penalty of a fine of \$2,000 and imprisonment for two years.

Sec. 202 (June 25, 1948)—Acceptance or Solicitation by Officer or Other Person

This statute prohibits any Government officer, agent, or employee from seeking or receiving any thing of value with intent to have his decision or action regarding any matter within his official capacity influenced thereby, under penalty of a fine not exceeding three times the value of the thing received and imprisonment for three years, and permanent disqualification from holding Federal office.

Section 719. Public Law 458, 83rd Congress, second session, dealing with the contract provisions regarding gratuities

Hereafter, no part of any money appropriated to the Department of Defense shall be expended under any contract (other than a contract for personal services) entered into after the enactment of this Act unless such contract provides—

(1) that the Government may by written notice to the contractor, terminate the right of such contractor to proceed under such contract if it is found, after notice and hearing, by the Secretary of the military department with which the contract is made, or his designee, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by such contractor, or any agent or representative of such contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing, of such contract: *Provided*, That the existence of the facts upon which such Secretary makes such findings shall be in issue and may be reviewed in any competent court,

(2) that in the event any such contract is so terminated the Government shall be entitled (A) to pursue the same remedies against the contractor as it could pursue in the event of a breach of the contract by the contractor, and (B) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount not less than three nor more than ten times (as determined by the Secretary or his designee) the costs incurred by any such contractor in providing any such gratuities to any such officer or employee.

[SECNAV 5370.1—ONM/MO2/GWC:lp October 2, 1958]

DEPARTMENT OF THE NAVY,
OFFICE OF THE SECRETARY,
Washington, D.C.

SECNAV INSTRUCTION 5370.1

From: Secretary of the Navy.

To: All Ships and Stations

Subj: Code of Ethics for Government Service

1. *Purpose.*—The purpose of this Instruction is to insure that all personnel are aware of the provisions of House Concurrent Resolution 175.

2. *Details.*—The following Resolution establishing a Code of Ethics for Government Service was recently approved by the Congress:

HOUSE CONCURRENT RESOLUTION 175

“Resolved by the House of Representatives (the Senate concurring), That it is the sense of the Congress that the following Code of Ethics should be adhered to by all Government employees, including officeholders:

CODE OF ETHICS FOR GOVERNMENT SERVICE

“Any person in Government service should:

“1. Put loyalty to the highest moral principles and to country above loyalty to persons, party, or Government department.

“2. Uphold the Constitution, laws, and legal regulations of the United States and of all governments therein and never be a party to their evasion.

“3. Give a full day’s labor for a full day’s pay; giving to the performance of his duties his earnest effort and best thought.

“4. Seek to find and employ more efficient and economical ways of getting tasks accomplished.

“5. Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not; and never accept, for himself or his family, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of his governmental duties.

“6. Make no private promises of any kind binding upon the duties of office, since a Government employee has no private word which can be binding on public duty.

“7. Engage in no business with the Government, either directly or indirectly, which is inconsistent with the conscientious performance of his governmental duties.

“8. Never use any information coming to him confidentially in the performance of governmental duties as a means for making private profit.

“9. Expose corruption wherever discovered.

“10. Uphold these principles, ever conscious that public office is a public trust.”

3. *Action Required.*—It shall be the responsibility of commanding officers to insure that persons of the Naval Establishment under their command are familiar with the provisions of this directive. Reasonable use should be made of the opportunity offered by conferences and by visits to subordinate units to keep the importance of this policy in the forefront.

W. B. FRANKE,
Under Secretary of the Navy.

AIR FORCE REGULATION No. 30-30

*AFR 30-30
1-2

DEPARTMENT OF THE AIR FORCE
Washington, 6 January 1960

PERSONNEL

GENERAL STANDARDS OF CONDUCT RELATING TO CONFLICT BETWEEN PRIVATE
INTERESTS AND OFFICIAL DUTIES

	<i>Paragraph</i>
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Use of Military Titles in Connection with Commercial Enterprises.....	10
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1. *Purpose and Scope.*—To prescribe the standards of conduct relating to conflict between private interests and official duties, required of all military and civilian Air Force personnel, regardless of assignment; and to, more specifically, set forth:

a. Prohibitions against certain activities of present and former Air Force personnel, including retired officers, involving a conflict between private interests and official duties; and

b. Rules against acceptance of gratuities by Air Force personnel.
This Regulation also contributes to the purpose described in a above, by insuring that personnel of the Air Force are not knowingly transacting business with persons who are within statutory prohibitions or under circumstances where there may be a possible conflict of interest between Governmental duties and private affairs. It is in consonance with the Code of Ethics for Government Service contained in House Concurrent Resolution 175, 85th Congress, which is applicable to all Air Force personnel. (See attachment.)

2. *Statutory Provisions.*—

a. *Criminal Statutes Relating to Air Force Personnel.* The following activities may subject Air Force personnel to criminal penalty under the statutes cited:

(1) Asking, accepting, or agreeing to receive as a bribe or graft, directly, or indirectly, any money, contract, or other thing of value, either (a) with the intent to have any of their official decisions or actions influenced thereby, or (b) for giving or procuring, or aiding to procure for any person, a Government contract (18 USC 202 and the first paragraph of 18 USC 216).

(2) Receiving or agreeing to receive, directly or indirectly, compensation for services rendered by themselves or another in relation to any proceeding, contract, or claim before any department or agency where the United States is directly or indirectly interested (18 USC 281).

(3) Acting as agent or attorney in prosecuting any claim against the Government or assisting in the prosecution of any such claim otherwise than in the proper discharge of official duties (18 USC 283).

(4) Transacting business as officers or agents of the United States with any corporation, firm, or partnership in the profits of which they are directly or indirectly interested (18 USC 434).

(5) Receiving from any source other than the Federal or any state, county, or municipal government any compensation in connection with their Government services (18 USC 1914). However, any Reserve ordered to active duty and any person inducted into the armed forces under the Universal Military Training and Service Act, who, before being ordered to active duty or inducted, was receiving compensation from any person may, while serving on active duty, receive compensation from that person (10 USC 1033, and sec. 4(f), Universal Military Training and Service Act, as amended, 50 USC App. 454(f)).

(6) Soliciting, accepting, or offering to accept any commission, payment, or gift in connection with the procurement of equipment, materials, commodities,

*This regulation supersedes AFRs 30-30, 19 March 1953, 30-30A, 27 September 1954, and 30-30B, 14 July 1955.

or services under the Mutual Security Act of 1954 in connection with which procurement such personnel are or were employed or performed duty or took any action during such employment (Sec. 512, Act of August 26, 1954, 22 USC 1764).

b. Statutes Relating Specifically to Former Personnel:

(1) It is unlawful for former personnel, within two years after their incumbency, to prosecute or to act as counsel, attorney, or agent for prosecuting any claim against the United States which involves any subject matter directly connected with which such persons were employed or performed duty (18 USC 284). The Attorney General has construed this statute to mean that every person who has been employed in any Government agency, including commissioned officers assigned to duty in such agency, is disqualified for a period of two years after such employment or service has ceased from representing in any manner or capacity any interest opposed to the United States in any matter with which such person was directly connected during the time he was in Government service. No distinction is to be drawn between monetary claims against the Government and nonmonetary claims, nor between affirmative claims and defensive claims. However, the Department of Justice has also advised that the statute was not designed to go beyond specific matters or cases upon which a person worked or concerning which he gained information while employed by the Government. Where a person acquires or expands his professional knowledge in some particular field while with the Government, he is entitled to use such professional knowledge in pursuing his livelihood after he leaves Government service, so long as he does not, within the two-year period specified by the statute, employ such knowledge in connection with a SPECIFIC MATTER with which he became DIRECTLY CONNECTED while in Government service.

(2) Section 113 of the Renegotiation Act, as amended, prohibits any person who has been employed in the Department from prosecuting at any time any claim against the United States involving any subject matter directly connected with which such person was so employed (Sec. 113, Act of March 23, 1951, as amended, 50 USC App. 1223). Although this statute does not prescribe any criminal penalties for violation of this provision, it constitutes a Congressional policy that former personnel should not prosecute any such claims at any time.

(3) It is unlawful for former personnel, within two years after the termination of their employment to solicit, accept, or offer to accept any commission, payment, or gift in connection with the procurement of equipment, materials, commodities, or services under the Mutual Security Act of 1954 in connection with which procurement such former personnel were employed or performed duty or took any action during such employment as an officer or employee of the Government (Sec. 512, Act of August 26, 1954, 22 USC 1764).

c. Statutory Provisions Specifically Applying to Retired Regular Officers:

(1) Regular retired officers are "officers of the United States" for the purpose of bringing them within the statutes cited in a. above. However, 18 U.S.C. 434 relates to representing the Government in transacting business with a private concern, and 18 U.S.C. 1914 relates to receiving compensation from a private source in connection with services performed for the Government. Therefore, neither 18 U.S.C. 434 nor 18 U.S.C. 1914 applies to a Regular retired officer who is not representing or performing services for the United States. In addition, 18 U.S.C. 202 and the first paragraph of 18 U.S.C. 216 do not apply to Regular retired officers who are not representing or performing services for the United States. 18 U.S.C. 281 exempts retired officers not on active duty from its application, but it prohibits a Regular retired Air Force officer from representing any person in the sale of anything to the Government through the Department of the Air Force. 18 U.S.C. 283 exempts retired officers not on active duty from its application, but it prohibits a Regular retired Air Force officer from acting as agent or attorney for prosecuting or assisting in the prosecution of any claim against the Government, within two years after his retirement, involving the Department of the Air Force. It also prohibits a Regular retired officer from acting as agent or attorney from prosecuting or assisting in the prosecution of any claim against the Government, at any time, involving any subject matter with which he was directly connected while on active duty.

(2) Section 1309 of the Act of August 7, 1953 (67 Stat. 437; 5 U.S.C. 59c) prohibits payment from appropriated funds to any Regular retired officer for a period of two years after his retirement, who for himself or for others is engaged in the selling of or contracting for the sale of or negotiating for the sale of any supplies or war materials to any agency of the Department of Defense, the Coast Guard, the

Coast and Geodetic Survey, or the Public Health Service. In 38 Comptroller General 470, the Comptroller General said, among other things, that this statutory prohibition applies to a Regular retired officer whose activities were calculated to induce a nonappropriated fund activity of a military department to purchase supplies from his employer, even though the mechanical act of negotiating or consummating the actual sale was done by some other agent of the retired officer's employer.

d. *Reserve and National Guard Officers.* A Reserve who is not on active duty, and a Reserve who is on active duty for training, is not considered to be an "Officer of the United States" for the purposes of the foregoing statutes solely because of his Reserve status or because of his being on active duty for training. Membership in a Reserve component of the armed forces or in the National Guard does not, in itself, prevent a person from practicing his civilian profession or occupation before, or in connection with, any department (Secs. 29 (c) and (d), Act of August 10, 1956, 5 U.S.C. 30r (c) and (d)).

e. *Other related Criminal Statutes Applicable to Conflict of Interests.* The following activities may subject present and former Air Force personnel to criminal penalties:

(1) Aiding, abetting, counseling, commanding, inducing, or procuring another to commit a crime under the criminal statutes cited above (18 USC 2).

(2) Concealing or failing to report to proper authorities the commission of a crime under any of the criminal statutes cited above, if such personnel know of the actual commission of the crime (18 USC 4).

(3) Conspiring with one or more other persons to commit a crime under any of the criminal statutes cited above, or to defraud the United States, if the person concerned does any act to effect the object of the conspiracy (18 USC 371).

3. *Conflicts of Interest.*—

a. *General.* All Air Force personnel are bound to refrain from any private business or professional activity which would place them in a position where there is a conflict between their private interests and the public interest of the United States and the Air Force. In addition, Air Force personnel will not engage in any private activity which makes possible the improper capitalization of information gained through an Air Force position. Even though a technical conflict of interest, as set forth in the statutes cited in paragraph 2, may not exist, it is desirable to avoid the appearance of such a conflict from a public confidence point of view.

b. *Disqualifying Financial Interest.* In any case where Air Force personnel have any financial interest in any business entity, or have arranged or are negotiating for their subsequent employment by such entity, they are disqualified from representing the Air Force in dealings of any kind with such entity. Personnel charged with the administration of AFR 34-21, who own stock in or are officers of an insurance company, must scrupulously avoid negotiating with such company in respect to granting authorization to solicit sales. The same restriction will apply in the case of personnel having a financial interest in any other business enterprise which deals with Air Force personnel on an individual basis.

c. *Disqualification Procedure.* In any case where, in accordance with b above, Air Force personnel believe that they should be disqualified from taking action in a particular matter, they will so inform an appropriate superior and will thereupon be relieved of their duty and responsibility in that particular case. In addition, where a superior thinks any personnel responsible to him may have a disqualifying interest, he will discuss the matter with such personnel and, if he finds such an interest does exist, he will relieve the personnel of duty and responsibility in the particular case. In cases of disqualification under this paragraph the matter will be assigned for decision and action to someone else of equal or higher rank who clearly has no conflict of interest.

4. *Dealing with Former Military and Civilian Personnel.*—Air Force personnel will not knowingly deal with military or civilian personnel, or former military or civilian personnel, of the Government if such action would result in a violation of a statute or policy set forth in this regulation. For example, Air Force personnel will not at any time knowingly deal with retired officers or with former personnel where such personnel are representing any person in the prosecution of any claim against the United States involving any subject matter with which such personnel were directly connected while with the Air Force.

5. *Retired Regular Officers.*—

a. *Prosecution of Claims.* Under the statutes cited above, a retired regular Air Force officer may not, within two years of his retirement, act as an agent or at-

torney for prosecuting any claim against the Government, or assist in the prosecution of such a claim or receive any gratuity or any share of or interest in such claim in consideration for having assisted in the prosecution of such a claim, if such claim involves the Air Force. Nor may a retired officer at any time act as an agent or attorney for prosecuting any claim against the Government or assist in prosecution of such claim, or receive any gratuity or any share of or interest in such a claim in consideration for having assisted in the prosecution of such claim, if such claim involves any subject matter with which he was directly connected while on active duty.

b. *Selling or Contracting for Sale.* Under the statutes cited above, no retired regular Air Force officer will sell, contract for the sale of, or negotiate for the sale of anything to the Air Force. This prohibition extends beyond the mere bargaining which may precede the execution or the modification of a contract. It includes any activity in a representative capacity on behalf of the prospective contractor which is directed toward forming the basis of a contract with the Government. This regulation should not be construed as prohibiting activities which are only remotely connected with contractual matters. It is not the intent of this regulation to preclude a retired officer from accepting employment with private industry solely because his employer is a contractor with the Government.

6. *Reserve and National Guard Personnel.*—

a. Members of the Reserve components of the armed forces who are on active duty, other than for training, are "officers" or "employees" of the United States for the purpose of bringing them within the statutes cited in paragraph 2a. When members are released from active duty, they become former personnel for the purpose of bringing them within paragraph 2b.

b. Members of the Reserve components, whether in the Ready, Standby, or Retired Reserve, who are not on active duty are not, solely because of their status as Reserves, considered to be officers of the United States for the purpose of bringing them within the statutes cited in paragraphs 2a and 2b.

c. Receipt of retired pay by Reserves or former Reserves does not, in itself, make such personnel officers or employees, or former officers or employees, of the United States for the purpose of bringing them within the statutes cited in paragraphs 2a and 2b. Paragraph 2c does not apply to retired Reserves.

d. Reserves who are on active duty for training do not become officers or employees of the United States for the purpose of bringing them within the statutes cited in paragraphs 2a and 2b, solely because they are on active duty for training. While they are on active duty for training, however, Reserves are subject to the policies prescribed in this regulation. Air Force personnel who are responsible for assigning Reserves for training should make an effort to assign them when they are on active duty for training to duties in which they will not obtain information that could be used by them or their employers so as to give them an unfair advantage over their civilian competitors.

7. *Affidavits.*—

a. *Obtaining Affidavits.* All retired Air Force officers, and former personnel within two years after leaving the Air Force, seeking to do business with the Air Force are required to file an affidavit stating:

(1) Their former connection with the Air Force and the date of termination thereof;

(2) The subject matter of the business they are transacting and intend to transact with Air Force personnel, and whether their duties in their former connection with the Air Force related to the same subject matter;

(3) Whether they gave any personal attention to the matters under consideration or gained any personal knowledge of the facts thereof while connected with the Government.

b. *Filing Affidavit.* All affidavits prepared on AFPI Form 34 will be sent directly to the Commander, Air Materiel Command, ATTN: MCPI, for processing. If, from the statements in such affidavit and from such other information as the Air Force may have in its possession, it appears that a violation of the policy or statutes as set forth in this regulation is not involved, the affiant will be given a statement to that effect. Where a clear violation of the policy or statutes as set forth in this regulation is involved, the affiant will be so advised. In those instances where the Commander, Air Materiel Command, is unable to resolve the issues, the matter will be submitted to Headquarters USAF for referral to the Office of the Secretary of the Air Force for consideration and decision.

8. *Gratuities.*—Air Force personnel will not accept any favor or gratuity, directly or indirectly, from any person, firm, corporation, or other entity which has engaged in, is engaged in, or is endeavoring to engage in, procurement activities or business transactions of any sort with the Air Force, where such favor or

gratuity might influence, or might reasonably be interpreted as influencing, the impartiality of such personnel.

9. *Prohibition of Contributions or Presents to Superiors.*—No officer, clerk, or employee in the United States Government employ shall at any time solicit contributions from other officers, clerks, or employees in the Government service for a gift or present to those in a superior official position; nor shall any such officials or clerical superiors receive any gift or present offered or presented to them as a contribution from persons in Government employ receiving a less salary than themselves; nor shall any officer or clerk make any donation as a gift or present to any official superior. Every person who violates this section shall be summarily discharged from the Government employ (R.S. 1784; 5 U.S.C. 113; see AFBul 9, 1953).

10. *Use of Military Titles in Connection with Commercial Enterprises.*—

a. All military personnel on active duty, officer and enlisted, are prohibited from using their military or position titles in connection with any commercial enterprise. For the purpose of this regulation the term "commercial enterprise" includes any organization other than a nonprofit or charitable organization which is exempt from Federal income taxation because it comes within subsection (1), (3), (4), (6), (7), (8), (9), (10), (11), (13), or (14) of section 501(c) of the Internal Revenue Code of 1954, as amended (26 U.S.C. 501). No member on extended active duty will use his military title or position title in connection with any organization unless he first determines from the organization involved that it is exempt from taxation under one of the above subsections of the Internal Revenue Code. Any member who desires to request an exception to the foregoing limitation will address his request through channels to the Secretary of the Air Force, setting forth detailed information concerning the organization involved.

b. Authorship of any material for publication is exempt from the limitation in a above, subject to existing regulations.

c. Retired personnel of both the Regular and Reserve components, officer and enlisted, who are not on active duty may use their military titles in connection with commercial enterprises.

d. Reserve component personnel, officer and enlisted, who are not on active duty may use their military titles in connection with commercial enterprises.

e. Reserve and retired members and former members who are not on active duty will not use their military titles in oversea areas in connection with public appearances without obtaining the prior approval of the theater commander.

f. When a Reserve or retired member or former member uses his military title in accordance with c through e above, his title must show that he is a Reserve or is in a retired status, or both, as applicable.

11. *Civil Employment of Military Personnel.*—

a. No commissioned officer of the Regular Air Force may be:

- (1) Employed on civil works or internal improvements;
- (2) Allowed to be employed by an incorporated company; or
- (3) Employed as acting paymaster or disbursing agent of the Bureau of Indian Affairs;

if that employment requires him to be separated from his unit or organization, or interferes with the performance of his military duties (10 U.S.C. 8544).

b. No enlisted member of the Air Force on active duty may be ordered or permitted to leave his post to engage in a civilian pursuit or business, or a performance in civil life, for emolument, hire, or otherwise, if the pursuit, business, or performance interferes with the customary or regular employment of local civilians in their art, trade, or profession (10 U.S.C. 8635).

c. Military personnel on active duty will not represent any insurance company in the solicitation of commercial life insurance on a military installation.

12. *Reporting Suspected Violations.*—Any person who has information which causes him to suspect that there has been a violation of a policy or statute set forth in this regulation will promptly report it to the appropriate commander in accordance with the procedures prescribed in AFR 124-8. The commander will promptly refer the matter for investigation to the nearest Office of Special Investigations District Office if he receives a report indicating a possible violation. Any question or doubt on the part of the commander will be resolved in favor of referring the matter to the Office of Special Investigations.

BY ORDER OF THE SECRETARY OF THE AIR FORCE:

THOMAS D. WHITE,
Chief of Staff.

OFFICIAL:

J. L. TARR,
Colonel, USAF,
Director of Administrative Services.

(Attachment to AFR 30-30)

HOUSE CONCURRENT RESOLUTION 175, 85TH CONGRESS, 2D SESSION

Resolved by the House of Representatives (the Senate concurring), That it is the sense of the Congress that the following Code of Ethics should be adhered to by all Government employees, including officeholders:

CODE OF ETHICS FOR GOVERNMENT SERVICE

Any person in Government service should:

1. Put loyalty to the highest moral principles and to country above loyalty to persons, party, or Government department.
2. Uphold the Constitution, laws, and legal regulations of the United States and of all governments therein and never be a party to their evasion.
3. Give a full day's labor for a full day's pay; giving to the performance of his duties his earnest effort and best thought.
4. Seek to find and employ more efficient and economical ways of getting tasks accomplished.
5. Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not; and never accept, for himself or his family, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of his governmental duties.
6. Make no private promises of any kind binding upon the duties of office, since a Government employee has no private word which can be binding on public duty.
7. Engage in no business with the Government, either directly or indirectly, which is inconsistent with the conscientious performance of his governmental duties.
8. Never use any information coming to him confidentially in the performance of governmental duties as a means for making private profit.
9. Expose corruption wherever discovered.
10. Uphold these principles, ever conscious that public office is a public trust.

AR 600-205
*C 2

PERSONNEL

STANDARDS OF CONDUCT OF PERSONNEL, ASSIGNED TO PROCUREMENT AND RELATED ACTIVITIES

CHANGES }
No. 2 }

DEPARTMENT OF THE ARMY,
WASHINGTON 25, D.C., 27 October 1955.

AR 600-205, 3 June 1953, is changed as follows:

1. (Superseded) *General.* These regulations enunciate Department of the Army policy regarding personnel engaged in procurement and related activities and are binding upon all persons, military or civilian, engaged in service procurement and related duties. Related activities include, but are not limited to, development of requirements, development of specifications for procurement, stock control operations, preparation of procurement requests, requisitions, sales and exchanges of Government personal property, and related coordinating activities in connection therewith. All such personnel will familiarize themselves thoroughly with the instructions contained herein in order that they may protect the interests of the Government.

6. *Pertinent criminal code sections.* There are certain * * * are as follows:

* * * * *

*These changes supersede C 1 ,9 June 1955.

m. (As added by C 1, 9 Jun 55) *Disclosure of confidential information generally.*
18 U.S.C. Supp. V, 1905.
[AG 250.1 (27 May 55) (17 Oct 55) LOG/E1]

BY ORDER OF THE SECRETARY OF THE ARMY:

MAXWELL D. TAYLOR,
*General, United States Army,
Chief of Staff.*

OFFICIAL:

JOHN A. KLEIN,
*Major General, United States Army,
The Adjutant General.*

Distribution: *Active Army: C.* To be distributed on a need-to-know basis to all installations, activities located off an installation, and to all units and headquarters down to and including divisions, and units and headquarters of comparable size.

NG: State AG (3).

USAR: None.

*AR 600-205

ARMY REGULATIONS }
No. 600-205 }

DEPARTMENT OF THE ARMY,
WASHINGTON 25, D.C., 3 June 1953.

PERSONNEL

STANDARDS OF CONDUCT OF PERSONNEL ASSIGNED TO PROCUREMENT AND RELATED ACTIVITIES

	Paragraph
General.....	1
Personnel selection and instruction.....	2
Ethics of procurement personnel.....	3
Unauthorized release of procurement information.....	4
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1. *General.*—These regulations enunciate Department of the Army policy regarding personnel engaged in procurement and related activities. They are binding upon all persons, military or civilian, engaged in service procurement and related duties. All such personnel will familiarize themselves thoroughly with the instructions contained herein in order that they may protect the interests of the Government.

2. *Personnel selection and instruction.*—The importance of the procurement function to the Department of the Army makes selection and instruction of procurement personnel a matter of major importance to appointing officials. Selected personnel are not only responsible for protecting the Government's interest but also for maintaining the reputation of the Army Establishment for honesty, courtesy, and fair dealings in all relations with contractors. All procurement and related activities personnel, military or civilian, must comply with the provisions of the Armed Services Procurement Act of 1947, as amended (62 Stat. 21, 5 U.S.C. 219b, 626e; 41 U.S.C. 151-161), the Armed Services Procurement Regulation, the Army Procurement Procedure, and the Department of the Army circulars, directives, and other publications pertinent thereto. Every person engaged upon procurement and related activities must at all times protect the interests of the Government.

3. *Ethics of procurement personnel.*—a. The business ethics of all persons charged with the administration and expenditures of Government funds must be above reproach and suspicion in every respect at all times. The Supreme Court has stated aptly that as a general rule all men have a moral obligation to refrain from placing themselves in relations which excite conflict between self-interest and integrity.

*These regulations supersede AR 600-205, 3 December 1951.

b. The broad policy of the Department of the Army with regard to conflicting private interests of military and civilian personnel assigned to procurement and related duties is set forth as follows: Every member of the service, military or civilian, is bound to refrain from all business and professional activities and interests not directly connected with his duties which would tend to interfere with or hamper in any degree his full and proper discharge of such duties. If a member of the service, military or civilian, has a financial interest in any business entity which manufactures or sells articles of a kind which it is his duty to purchase for the Government, or in any business entity with which he as an officer or agent of the United States in the normal course of his duties transacts or intends to transact business, or if he finds that his duties require him to act as an agent of the United States in a manner from which he may derive financial profit or other benefits, he, or any other member of the service having knowledge of the circumstances, shall immediately report such interest to higher authority, stating whether or not he has divested, or intends immediately to divest, himself of such interest. If he does not immediately divest himself of such interest, or does not disqualify himself from transacting business with the business entity in which he has a financial interest, appropriate steps shall immediately be taken to relieve him from his assignment; provided, however, that a contracting officer having a financial interest in any business entity which manufactures or sells articles of a kind which it is his duty to purchase for the Government shall immediately divest himself of such interest or be relieved from his assignment.

(1) The term "financial interest" shall, for the purposes of these regulations, include but shall not be limited to—

(a) Ownership by the individual of stock, bonds, or other securities issued by, or a partnership interest or an interest in a contract with, such business entity or a business entity which owns or controls it;

(b) Status as an officer, agent, employee, or representative of such business entity;

(c) Any connection with a business entity which would lead a reasonable man to the opinion that the individual concerned might not fully and properly discharge his duties to the United States were he to transact business with such business entity.

(2) The term "transact business" shall, for the purposes of these regulations, include but shall not be limited to—

(a) The negotiation (including preaward surveys and awards board proceedings), execution, or administration of contracts with such business entity;

(b) Advising or deciding upon a claim or request of such business entity for financial or other benefits from the United States, such as V-loans, advance payment loans, hardship claims, use of Government-owned equipment, etc.; provided that participation in a policy decision affecting a class of business entities shall not ordinarily be deemed to constitute the transaction of business with a particular member of such class.

c. Agents of the Government will not accept gratuities from concerns or individuals with whom they have Government business contacts. Furthermore, they will not accept, directly or indirectly, gratuities, gifts or courtesies which influence, or might reasonably tend to influence, the strict impartiality which must prevail in all Government business relations.

4. *Unauthorized release of procurement information.*—It is the individual responsibility of all personnel, both military and civilian, of the Army Establishment to refrain from releasing to any individual or any individual business concern or its representatives any preknowledge such personnel may possess or have acquired in any way concerning proposed procurements or purchases of supplies by any procuring activity of the Army Establishment. Such information will be released to all potential contractors as nearly simultaneously as possible and only through duly designated agencies, so that one potential source of supply may not be given an advantage over another. All dissemination of such information will be in accordance with existing authorized procedures and only in connection with the necessary and proper discharge of official duties.

5. *Unauthorized statements or commitments with respect to award of contracts.*—Only Contracting Officers and their duly authorized representatives acting within their authority are authorized to commit the Government with respect to award of contracts. Unauthorized discussion and commitments may place the Department of the Army in the position of not acting in good faith. Unauthorized personnel will refrain from making any commitment or promise relating to award of

contracts and will make no representation which could be construed as such a commitment. Army personnel will not under any circumstances advise a business representative that an attempt will be made to influence another person or agency to give preferential treatment to his concern in the award of future contracts. Any person requesting preferential treatment will be informed by official letter that Department of Army contracts are awarded only in accordance with established contracting procedures.

6. *Pertinent criminal code sections.*—There are certain statutes which make it a criminal offense for an officer or an agent of the Government to engage in practices or activities which are at variance with the full measure of duty which he owes to the United States as such officer or agent. Applicable criminal statutes are as follows:

a. *Interested persons acting as Government agents.*—18 U.S.C. Supp. V, 434; M.L. 1949, sec. 812. (See also 40 Op. Atty. Gen. 168, 31 March 1942.)

b. *Officers or employees interested in claims against Government.*—18 U.S.C. Supp. V, 283; M.L. 1949, sec. 840.

c. *Procurement of contract by officer or Member of Congress.*—18 U.S.C. Supp. V, 216; M.L. 1949, sec. 841.

d. *Compensation to Members of Congress, officers and others in matters affecting the Government.*—18 U.S.C. Supp. V, 281; M.L. 1949, sec. 842.

e. *Acceptance or solicitation by officer or other person.*—18 U.S.C. Supp. V, 202; M.L. 1949, sec. 846.

f. *Disqualification of former officers and employees in matters connected with former duties.*—18 U.S.C. Supp. V, 284; M.L. 1949, sec. 706.

g. *Taking or using papers relating to claims.*—18 U.S.C. Supp. V, 285; M.L. 1949, sec. 811.

h. *Conspiracy to defraud the Government with respect to claims.*—18 U.S.C. Supp. V, 286; M.L. 1949, sec. 806.

i. *False statements or entries generally.*—18 U.S.C. Supp. V, 1001; M.L. 1949, sec. 806b.

j. *Official certificates or writings.*—18 U.S.C. Supp. V, 1018; M.L. 1949, sec. 839.

k. *Records and reports; concealment, removal, or mutilation generally.*—18 U.S.C. Supp. V, 2071; M.L. 1949, sec. 852.

l. *Salary of Government officials and employees payable only by the United States.*—18 U.S.C. Supp. V, 1914; M.L. 1949, sec. 1627.

APPENDIX

THE SECRETARY OF DEFENSE,
WASHINGTON, January 28, 1953.

Memorandum for:

The Secretaries of the Military Departments
The Assistant Secretaries of Defense
The Chairmen of Boards, Councils and Committees
The Assistants to the Secretary of Defense
The Directors of Offices, OSD

Subject: Conduct of Personnel Assigned to Procurement and Related Activities.

Under the authority vested in me as Secretary of Defense, you are directed to bring to the attention of all personnel the laws applicable to situations involving conflicts of interest. It is the responsibility of each individual officer and employee to comply with the laws of his country. Particular attention is directed to Section 434, Title 18, United States Code.

It is a recognized principle that no Government officer or employee who has the direct responsibility for negotiating and signing contracts or approving the payment of money to contractors, should have any financial interest in any such contractor. No Government officer or employee should permit himself to be exposed to a dual-interest position or to a conflict between self-interest and integrity. He should clearly be in a position to act to the best of his ability without fear or favor in the best interest of his Government.

In any case where an officer or employee of the Department of Defense, including all of its departments and agencies, has any financial interest in any business entity, corporation, or partnership, transacting or contemplating transacting business with the Government that officer or employee is disqualified, and this directive expressly disqualifies him, from having any dealings of any kind for or in behalf of the Department of Defense with such business entity.

While a conflict of interest, as may be defined by the law, is a matter of fact in a particular case, even if a technical conflict does not in fact exist, it is desirable to avoid the appearance of a conflict of interest from a public-confidence

point of view. The additional problem is how can officers or employees of the Department of Defense be disqualified in the relatively few cases where they or their superiors think there is or may be some conflict of interest.

In any case where an officer or employee of the Department of Defense, including all its departments and agencies, feels that he should be disqualified from taking action in a particular matter, it is his duty to so inform his superior or department head, and he will be relieved of his duty and responsibility in that particular case. The matter will then be assigned to someone else of equal or higher rank, who clearly has no conflict of interest for decision and action.

In any case where any superior who thinks that an officer or employee reporting to him may be involved in a conflict of interest, or an apparent conflict of interest of importance from a public confidence point of view, he will discuss the matter with the person involved and may relieve such officer or employee of responsibility in the case. He will then assign the responsibility for taking action to someone else of equal or higher rank who clearly has no conflict of interest for decision and action, or he may take the responsibility for decision and action himself.

In any case where any of the Secretaries or civilian departmental officials appointed by the President by and with the advice and consent of the Senate may be so disqualified in a particular case, the matter will be referred for action and decision by the Secretary of Defense, or his Deputy, to another departmental official of equal or higher rank, who has received his appointment from the President by and with the advice and consent of the Senate, or the Deputy Secretary or the Secretary of Defense will rule on the matter himself and take full responsibility for any actions taken.

This directive supersedes any existing departmental directives and regulations applicable to standards of conduct of personnel assigned to procurement and related activities to the extent that they are inconsistent with this directive.

[AG 250.1 (5 May 53) G4/E1]

C. E. WILSON.

BY ORDER OF THE SECRETARY OF THE ARMY:

J. LAWTON COLLINS,
Chief of Staff, United States Army.

OFFICIAL:

WM. E. BERGIN,
*Major General, USA.,
The Adjutant General.*

Mr. WHITTEN. Even though you cover procurement officers, with their close relationships, I do not know that that is going far enough. Frankly, so far as I am concerned, I would like to see a statute preventing Members of Congress—I do not know of any who have, may I say—from participating in or buying stock in a company with which you deal. I think such action could create a bad situation. I think again we have gotten our immediate domestic activity in the economic field so tied in with defense spending that the power to control these things or to benefit from them requires everybody to be as objective as possible.

Secretary GATES. I agree that the fields are completely intermeshed. I agree with your remarks about keeping in mind the economic and inflationary aspects. I have a personal conviction that you cannot legislate honesty.

Mr. WHITTEN. I thoroughly agree, but I do not know, if there is no rule preventing it and if it is perfectly legal at the moment—

Secretary GATES. It would be awfully poor judgment.

Mr. WHITTEN. I thoroughly agree. I was formerly a district attorney, as were many members of this committee, and we have lots of criminal laws. They do not prevent criminals, but they give the public the ability to do something about wrongful conduct.

The point I make is that regulations in this instance might not prevent things from happening, but might enable you to do something about it, and might enable us to see who may be in this field. It is

just like this information on retired officers with these firms who are in turn contracting with you. We need the information, so we can determine what further to do, because certainly, if you are dealing with a man with special interests, you need at least to know he has this special interest so you can take that into account in your dealing.

I did not mean to lecture, but I do think in this whole field the Department should give attention to regulations—and perhaps the Congress should give attention to legislation—because quite definitely this is an area in which many people have made lots of money. When they get to making lots of money, they put lots of pressure on you not to cancel a contract. That may be costly and it may lead to further inflation.

Secretary GATES. I would agree that constructive legislation might be helpful. I testified as the first witness before this other committee, and I was mindful of the fact that some kinds of legislation could be harmful. I think it would be wrong to exclude fine retired officers from working for industry where they make a unique contribution to industry. I hope any legislation that does come up will not discriminate against retired officers so that they could not be used where they make a contribution, not only to industry, but to national defense indirectly.

Mr. WHITTEN. I think this should go in the record, but if the chairman disagrees, I will take it out. This subject was considered last year. The very thing you mention I think was the determining factor that caused our Committee to ask for the information first and then decide what to do, rather than try to write something to start with which might not fit what we have in mind. In other words, get the facts first and then look at it.

Mr. Chairman, that is all I have.

Mr. MAHON. Thank you very much, Mr. Secretary. We will resume at 2 o'clock.

AFTERNOON SESSION

Mr. MAHON. The committee will come to order and we shall resume.

Mr. Andrews, do you have any questions?

Mr. ANDREWS. Just one or two, Mr. Chairman.

Mr. Secretary, I want to concur in the fine things that have been said about you and the record you are making as Secretary of Defense. I have served on this committee for 7 years and I have enjoyed your testimony more than any I can recall. I think that you know your subject well and are conscientious and a man of action. I predict a very successful tenure of office for you.

Secretary GATES. Thank you, sir. I hope I can continue to justify this confidence.

PRESENT FORCE CAPABILITY

Mr. ANDREWS. I would like to ask you, or General Twining, if you think our forces have the capability at this time of striking the principal Russian targets that you would hope to strike in case of an all-out war?

General TWINING. Yes, we do. We have that capability.

Mr. MAHON. And as the POLARIS system comes into the service you will add to that capability?

General TWINING. Yes. They will be fitted into the whole strategic plan of target attack; that is right.

Mr. ANDREWS. Do you think our retaliatory capability is stronger today than it was last year?

General TWINING. Yes, I do.

Mr. ANDREWS. By comparison, is the Russian capability stronger today, in your opinion, than it was a year ago?

General TWINING. Their capability is growing too, but I think we are still ahead of them.

Mr. ANDREWS. I am sure you know their capability as well as anybody in the country, and you know our capability as well as any person in the country.

What is your opinion about the possibility of an all-out nuclear war between this country and Russia?

General TWINING. I think it is very, very slim.

BOMARC PROGRAM

Mr. ANDREWS. Mr. Secretary, what about your BOMARC program? What progress have you made in the last year and what is the status of the program at this time?

Secretary GATES. The BOMARC program is consistent with the decisions that were made last summer in connection with the review of the total continental air defense picture. At that time we reduced the number of BOMARC squadrons down to a total of 16 for the United States and 2 for Canada based on the periphery concept rather than putting BOMARC in in depth. We have money in this budget for a continuation of that same program. We will be buying the so-called BOMARC B missile.

Mr. ANDREWS. Was there any money in the 1960 bill for BOMARC A?

Secretary GATES. No. I think the last BOMARC A money was in 1959.

Mr. ANDREWS. That program never was successful, was it?

Secretary GATES. Oh, yes, I think it was successful. I think we have BOMARC A's in being that are useful, but they do not have as high a performance as the B's.

Mr. ANDREWS. How many B's have been tested?

Secretary GATES. I do not have the test facts here. I will have to provide them.

Mr. ANDREWS. I suppose there will be some other witnesses who will know about the tests of the BOMARC B; is that right, Dr. York?

Dr. YORK. Yes.

Mr. ANDREWS. How much money is in this budget for the procurement of BOMARC B missiles in 1961? You can supply that for the record later. There is money in the budget for the procurement of the BOMARC B missile?

Secretary GATES. Yes, a lot of it. \$421,500,000.

Mr. ANDREWS. How much is in the budget for the NIKE-HERCULES?

Secretary GATES. \$111,400,000.

Mr. ANDREWS. Have you finished your NIKE installation program?

Secretary GATES. I think not completely.

Mr. ANDREWS. When do you expect to finish the NIKE installation program?

Secretary GATES. All the HERCULES units will have their basic equipment by the end of this calendar year, although some improved equipment will be delivered after this.

Mr. ANDREWS. What about the BOMARC program?

Secretary GATES. The BOMARC program—the whole system—will not be completed until 1963.

Mr. ANDREWS. In your opinion, is there a need for both the BOMARC and the NIKE program?

Secretary GATES. I think our opinion remains unchanged after the very comprehensive study we gave the problem. The intelligence on which this judgment is based has not changed except for Mr. Khrushchev's speech this morning.

Of course, the people responsible for continental air defense feel that this is not sufficient. They would like to have more. The mix of the longer range BOMARC's involving ground environment equipment and radar gap fillers in Canada, and the point defense system provided by NIKE-HERCULES seems to be a good mix. I think until we review the situation on an overall basis again we would leave the BOMARC-HERCULES-SAGE system program about as we have determined it.

Now, it might be well before this budget is spent or committed further—I mean in the course of fiscal year 1961—that we have another reappraisal. Such a reappraisal might change the emphasis on certain factors, in which case there might be a change in the air defense plan. I know there have been some further studies on the air defense problem—not along the lines of the F-108, but along the line of reconsidering the continued use, in numbers, of aircraft interceptors. One of the reasons for this is that the BOMARC sites themselves are vulnerable, as fixed sites, to good accurate missiles. An enemy could put a few missiles on a BOMARC site and thus knock out an important part of our continental air defenses. Perhaps fighter squadrons because they are mobile will continue to have their usefulness as a supplement to BOMARC. The mix we now have, had a very comprehensive examination by the Congress and by the Department of Defense only 4 or 5 months ago. I think we should stand by that program.

Mr. ANDREWS. General, do you know anything about the tests of the BOMARC B, or do you, Dr. York?

Dr. YORK. I am not as much up to date on that as I might be.

General TWINING. We have had pretty good luck with that as far as I know. I do not have the details, but I have seen the results of some of the tests.

Mr. ANDREWS. Do you know how many have been fired, and the type of tests?

General TWINING. I do not know, but we can get that to you for the record.

Dr. YORK. It is not proved in. But where we stand so far is encouraging. It is not discouraging.

Mr. ANDREWS. I would like to know the type of tests, and how many they have had and how successful we have been with them.

[The information requested is classified and was furnished to the committee separately.]

HOUND DOG PROGRAM

Mr. ANDREWS. Mr. Secretary, what about the HOUND DOG program? When do you expect to have this missile operational?

Secretary GATES. The HOUND DOG program is coming in this fiscal year. It is just about fully financed, I think, this year to the extent of \$170 million. At the end of fiscal year 1960 we will have two squadrons and they go on up from there through 1962.

Mr. ANDREWS. General, that will be a great addition to your arsenal?

General TWINING. Yes, and it has been very successful so far in its tests.

Mr. ANDREWS. What range will they have?

General TWINING. Over 500 miles.

Mr. ANDREWS. Are you working on a similar missile with a 1,000-mile range?

General TWINING. Yes. That is way out in the blue. That is a ballistic missile.

Mr. ANDREWS. When do you expect to have it.

General TWINING. That is quite a ways out. That is the advanced ASM, GAM-87.

Secretary GATES. It is a drawing board proposition but there is some research money on it in this budget.

Mr. ANDREWS. It is a bigger HOUND DOG.

General TWINING. It is programmed to enter force in 1964.

Mr. ANDREWS. It will have the same mission as the HOUND DOG?

General TWINING. That is right.

Secretary GATES. I think it is a little more effective than that. I think that it is sort of an airborne ballistic missile type of concept. I think in concept it will have much greater capabilities than the HOUND DOG.

General TWINING. It is to be supersonic and is planned to have a 1,000-mile range.

(Discussion off the record.)

MINUTEMAN PROGRAM

Mr. ANDREWS. What about the MINUTEMAN program? How is it progressing and when do you expect to have it operational?

Secretary GATES. The MINUTEMAN program is progressing well at high priority, and we put into this budget the first money for production facilities and some long leadtime components. It is going to be built out near Salt Lake City.

ARMY NATIONAL GUARD AND RESERVE

Mr. ANDREWS. Now, is the money in this budget for only 360,000 National Guard officers and men for the next fiscal year?

Secretary GATES. Yes, for the end of fiscal year 1961.

Mr. ANDREWS. Do you expect to reduce the strength of the guard below 400,000 prior to next July 1?

Secretary GATES. No, sir.

Mr. ANDREWS. But you do plan, if this budget is adopted, to begin the first of next July to reduce the Guard 10 percent?

Secretary GATES. Yes.

Mr. ANDREWS. And have an end strength of 360,000 at the end of fiscal year 1961?

Secretary GATES. That is right.

Mr. ANDREWS. How much additional money—and you probably will not be able to tell me at this time, but I wish you would supply it for the record—will be needed to keep the guard strength at what it is at present, 400,000?

Secretary GATES. \$72 million.

Mr. ANDREWS. You plan to reduce the Reserve strength by 10 per cent?

Secretary GATES. Yes.

Mr. ANDREWS. I would like to know the cost of retaining the Reserve at the present strength.

Secretary GATES. That figure of \$72 million is for both.

Mr. ANDREWS. \$72 million?

Secretary GATES. Yes. That covers both reductions.

Mr. ANDREWS. The guard and the Reserves?

Secretary GATES. Yes.

Mr. ANDREWS. Thank you again, Mr. Secretary. Those are all the questions that I have.

Mr. MAHON. Mr. Riley.

CLOSER RELATIONSHIPS BETWEEN JOINT CHIEFS OF STAFF AND SECRETARY
OF DEFENSE

Mr. RILEY. Mr. Secretary, I want to add my appreciation and commendation to you and the general for the excellent statements outlined in the proposed military program for 1961, and the frankness and the clarity of your answers.

I was very much intrigued by your statement of the closer workings of the Joint Chiefs of Staff and the Chiefs of Staff with your office. I am of the opinion that this should be a teamwork operation and that assigned missions should be given to each one of the defense forces—the Army, the Navy, and the Air Force. They should be given a mission to carry out and then assigned whatever weapons are necessary to carry out that mission. Then they should develop it, rather than compete, to a certain extent. I know some rivalry probably is helpful. I think that we have had too much of it. I am very much in hopes that between the Joint Chiefs of Staff and your Office there will be closer collaboration and study of each agency's program and that it will be coordinated so that we will have a balanced team. I do not think there is anything secret about that. We do it with our football teams and baseball teams, and the one that does it the best is the one that gets results.

Secretary GATES. As you know, from a practical point of view, we have only had less than a year under the Reorganization Plan of 1958. The operational forces essentially are now assigned to a unified command so the service control of forces is really related to logistics and training. Almost all of the combatant forces are now under a unified commander at one place or another. I think this will shake down to a team type of effort which you would like to see, and so would we.

Mr. RILEY. I am glad to hear you say that. In order for the different commanders to know what is going on, and to be able to cooperate

fully, they have to know what the other fellow's mission is and what he is doing.

Secretary GATES. Certainly.

Mr. RILEY. There has to be a meeting of minds there and a determination—an accepted determination—of these missions:

INCREASED RELIANCE OF SOVIET UNION ON MISSILES

The news this morning would indicate somewhat that the Soviets want us to believe they are placing most of their reliance on missiles. Do you buy that?

Secretary GATES. I think he is moving toward a position of increased strength in intercontinental missiles. In missiles, generally he has a great many IRBM's and a great many anti-aircraft missiles, so he is in the missile business in a pretty big way. He is moving, as the figures General Twining showed you indicate, toward some strength in the ICBM field. Meanwhile he still has in being large ground forces. He has in being a lot of navy, including these 400-odd submarines.

Mr. RILEY. Do you not believe that Khrushchev's statement this morning was an effort to cause us to believe that he is placing his greatest reliance and hope in the missile program and at the same time he is going ahead with these other components of his armed forces? There is no question but that he is building submarines and there is no question but that he will have a big army left with modern equipment.

Secretary GATES. That is correct. I think he is never unmindful of the public relations effect of what he says.

Mr. RILEY. If he depends entirely on missiles, I believe that our people are smart enough, technically and scientifically, to concentrate on such a program and find a deterrent for it.

I am not as pessimistic as some of the others. I believe we will solve the defense against missiles sooner or later.

Secretary GATES. In all history there has always been a counter-measure developed of some character or the other, and sooner or later we will solve it. It looks very difficult at the moment.

Mr. RILEY. Do you not think some of these others looked pretty difficult when they first originated?

Secretary GATES. Yes.

Mr. RILEY. It has been the same thing all through history. There is no mystery about it. It looks dark at the present time, but I have faith enough in our people to believe they will solve it. I know that it will not be done overnight, but I believe it will be done.

I am glad you have set up a program in research and development to try to find the answer. I hope it will be pushed.

AIRCRAFT MODERNIZATION

Now, the modernization of your big bombers to replace the present ones disturbs me. I have heard some intimation that the life of the B-47 is not much longer and that the B-52's will pass out. Are we to have replacements for them?

Secretary GATES. The B-52's that we are buying in this budget are greatly improved airplanes. It is still the B-52, but it is a better airplane, the B-52H.

Mr. RILEY. Does it have any more speed than the present model?

Secretary GATES: I do not think so. More range.

Mr. RILEY: But not more speed?

General TWINING: Maybe a little more.

Dr. YORK: Primarily it is a matter of more range; better acceleration at takeoff and better low altitude capability.

General TWINING: The main thing is the new weapons. It will have the HOUND DOGS.

Mr. RILEY: Sometime last month or so, I heard a program of the Douglas people, father and son, on the development of commercial planes. I believe they have a commercial passenger plane now which has a speed of about mach 1.

Secretary GATES: I think it is the DC-8—their version of the Boeing jet 707, just under mach 1, I think.

Mr. RILEY: Pretty close to the speed of sound.

Secretary GATES: Yes.

Mr. RILEY: The subject they were discussing was that, in their opinion, within the next 8 or 10 years at least, and maybe sooner, they would have passenger planes of mach 3 and 4. If that is the case, and we do not keep up with them in our military equipment, we may get behind the times. I am one who does not think the missiles are going to cure everything in my lifetime. I think that it is going to take a little more than that.

Secretary GATES: We do not know of any information that would indicate they are working on such a plane. The airplane we think that they are working on, if they are working very hard on any, is somewhat comparable to our B-58. It would be a general observation on my part, but I would think the cost of developing a mach 3 commercial transport would be so great that it would probably have to be done in conjunction with some program like the B-70. I doubt if other than a military program could support the kind of effort that would be necessary to develop that type of airplane.

We thought about this in connection with the B-70, but we felt it was not our real responsibility to worry about commercial aviation directly. The B-70 is the only program that would tend to have a possible fallout in the form of a mach 3 commercial airplane.

Mr. RILEY: That is not my concern, Mr. Secretary. It occurs to me if the commercial people have in mind the development of such a plane then the military people certainly ought to have one just as fast and just as modern. I believe the faster they go the harder they would be to handle from a defensive standpoint.

Secretary GATES: I do not think that it makes a very great deal of difference.

Mr. RILEY: If Douglas is contemplating a plane of the speed of mach 3 or 4, I certainly think that our Air Force ought to have military planes comparable to it.

Secretary GATES: They are contemplating it on our money.

Mr. RILEY: They seem to get it when they want it. They have developed one a whole lot faster than I am going to ride in already. But if such a thing is in the mill, I feel very keenly that our defense force ought to have the advantage of it. We should not depend upon these planes of the horse-and-buggy days in comparison with the more modern developments.

Secretary GATES. It would be foolish to estimate a figure because it would be wrong, but I will estimate one anyway, and I will say for \$8 billion and in about 6, 7, or 8 years you might have such an airplane.

Mr. RILEY. They said from 8 to 10 years, if I remember correctly, but somebody has to be working on it in the meantime.

Secretary GATES. Well, the research that we are doing in the B-70 program will at least build two prototype planes that will show some indication of direction in this respect.

SPACE PROGRAM

Mr. RILEY. In the discussion yesterday regarding outer space satellites I was glad to hear you make some difference between the two programs because I think they are decidedly different. I believe that Dr. York told us of several ways that satellites in orbit could be used advantageously. To a layman such as I, the best result that we could get from them would be aerial photography. Some day I think we are going to have some flying around the world so that we see what the country they are flying over looks like. I do not think it is too far away.

Secretary GATES. A reconnaissance satellite is one of the defense requirements that we are working on.

Mr. RILEY. What other advantage would the satellites, or outer space vehicles, have in your opinion?

Secretary GATES. Precise navigation, better communications, perhaps many so fantastic we do not know what they all are yet, and possibly missile warning. They are the four that we are working on. Dr. York has them under his charge because they are all in research and development, but in effect they have been assigned to the services to complete the work.

Mr. RILEY. Those qualities would be of far more advantage to us than shooting the moon or something like that, as glamorous as that may seem.

Secretary GATES. From a present military point of view that is correct. On the other hand, we do not want to be second best in anything.

Mr. RILEY. Of course not, but we want to be practical and get some practical results from our endeavors.

Secretary GATES. That is right.

U.S. MILITARY POSTURE

Mr. RILEY. Do you feel that we have a well-rounded, balanced defense team?

Secretary GATES. I do so very much, Mr. Riley, having spent several months really going over these programs, program by program, with Mr. McElroy, the service Secretaries, the Joint Chiefs of Staff, and various other people in the Department of Defense, and reviewing them up and down. I think that it has been a conscientious and most thoughtful review.

Mr. RILEY. Do you think that we are getting the equipment and materials they need to carry out their assignments as rapidly as they should have it?

Secretary GATES. Yes, I do. As I said in my statement, it does not include everything that everybody wants.

Mr. RILEY. No, you will never get that. But the improvement of the equipment and materials for the services is such as will take care of their needs?

Secretary GATES. Yes, I do.

Mr. RILEY. On the long-range projection?

Secretary GATES. Yes. I have said several times in my testimony that the transition is so great and so rapid that the budget must be reviewed continuously, almost on a month-to-month basis.

Mr. RILEY. Thank you very much.

Mr. MAHON. Mr. Flood.

Mr. FLOOD. Mr. Andrews has asked for information on BOMARC. I saw somebody go out. He came back.

Dr. YORK. We are waiting for the information.

Mr. FLOOD. One thing I think that you would like to understand, and I do not speak for the committee but I certainly speak for myself, and I heard most of our members say so as well, with reference to your reaction to Khrushchev's alleged statement today on unilateral disarmament—and you do not have to say again what you said this morning—but I think that you do have a right to feel that most of us, I believe all of us, were pleased to hear your reaction in that you must not feel, as far as this very important segment of Congress is concerned, that we think any different. We think exactly like you, if that makes you feel any better.

Secretary GATES. It does.

Mr. FLOOD. Certainly, if we did not feel like that you would be unhappy about it. Since we do feel the way you do, and like the way you react to Khrushchev's statement, you have a right to know that, I think.

Secretary GATES. I appreciate that.

Mr. FLOOD. I think so.

Now, I am not going to go into great detail with you, Mr. Secretary, about all this business. I have a library of questions to ask for the next several months when the uniformed fellows come up, and all of these other people.

You have only been in this top slot for a short time. Even though you have been in town a long time, in the rarified atmosphere in which you now sit, I think even now you realize it is a lot different than running some other shop across the street.

Secretary GATES. I certainly do.

Mr. FLOOD. Even with your experience. Imagine these poor jokers who come in here from the airport and sit down. We have been through a lot of that. They come and go like Greyhound buses. You know the old story. You see them come to town and a year later you see their picture at the airport. That has been going on for years.

Now, here is the thing that I am worried about. As Mr. Mahon mentioned to you, I have never heard such a happy crowd as you fellows are on our defense posture. Everything is just, just, too, too ducky. Well, if you are all hopped up about it, that is good, too. But do not get carried away with this enthusiasm under all the circumstances. Actually, I do not think you are, but out of an abundance of caution do not go running around being so happy all over the country about this thing all of a sudden.

IMPORTANCE OF PUBLIC AWARENESS OF REALITY OF POWER

You know you are missing one point in this business. A nation's ability to affect the course of events in the world, a great nation like ours, is dependent upon two things, not just one. You are very bright and gay about the one. I am concerned about the other one. There must be a reality of power in a great nation. You say we have that and General Twining is very happy about it. That is a reality of power. But the second thing you have not talked about, and you do not talk about it. I do not think you are aware of it, and that is there must be, with the reality of power, a public image—general public image in the minds of others as to the reality of that power. Never forget that. That is the big thing.

Now it is my personal opinion that in the United States of America, and throughout the world, there is no public image in the mind of others about that reality of power. That is the catch in this business. It is a close analogy to this concept of deterrence that we discussed yesterday. No matter how good you think you are, it is of no value as a deterrent unless the other guy does the thinking on deterrence. He must think that even though he is wrong.

Secretary GATES. That is correct.

Mr. FLOOD. I think the reason why there is no longer a public image of supremacy in these matters is because of an attitude here in Washington. There has been a preaching of "balanced forces." You say, "Do not get excited." We do not want the people to get excited. Do not worry about this Russian thing; we have balanced forces, and catching up to the Russian missile for missile is not that important." Well, that may or may not all be true. Secondly, you drew yesterday as clearly as I ever heard it drawn a demarcating line between the scientific concept of space and the military concept of space. You made that very clear. But then I was sitting over there in that corner and you were completely satisfied that, because you understood it clearly, had stated it brilliantly, that you were presenting the public image, which you are not presenting. The public has no concept of that whatsoever in this country, in the Belgian Congo, or the mountains of Laos—none, none, none. That is serious.

Secretary GATES. I agree with you. I am concerned about it also.

Mr. FLOOD. This goes back to sputnik. When that sputnik flew around the globe and the desert tribes and the mountain tribes and the coastal tribes—black, white, red, and yellow—all over the world heard about it, all they knew was this was a public image, a public manifestation of the ascendancy and the primacy of Russian military might, not science, not Salk vaccine. They thought, there goes the new day of Russia's primacy over America. And that has not been changed up until noon today, in the jungles, in the mountains, and on the seacoasts of the world. They still think that. So I am unhappy, not with the record as you present it about the reality of power, but a great nation must have the other thing or it is not going to do any good. The mere reality of power in your inventories and arsenals will not do. There must be a public image in the minds of the peoples of the world of that reality of power, and there is no such image. Therefore, we are short one of the two legs that we must have. Placating our people by this "balance of power" assurance and that we are not going to do this and that will not do. I do not know the answer.

I do not know how to do this. I am positive that the administration is unaware of this essential condition precedent, the second leg, the public image of the reality of power.

Secretary GATES. In the first place, I would not want to let stand the impression that we are happy and complacent.

Mr. FLOOD. I overstated that, of course.

Secretary GATES. I have tried to say here throughout the 2 days that we should have continuous reviews; that we cannot simply rely on intelligence estimates that are subject to change. We must be able, when we get breakthroughs in good reliable weapon systems, to move into them quickly, perhaps faster than we planned. We are satisfied that we have a balanced power in the first one of your two legs. We are trying to tell that to you. We are trying to tell it to the country. I agree the country may be confused between these images that you speak of. I agree that a moon shot has a psychological impact on the minds of the people. I think that we have to very clearly separate this somehow from the military realities. I think there is no question about the fact that they are separable, but on the other hand I also think that the United States started behind the Russians in big boosters. We abandoned the big booster program because we found a way to package a smaller warhead. We have made remarkable progress on those programs. We are just behind in big boosters.

Mr. FLOOD. I know. This is the old story of the mailman and the dog, which is pretty moth-eaten: "I know and you know, but does the dog know?" Your trouble is the public does not know this. You are the Secretary of Defense, and in your fantastic lap must sit this business of establishing the two factors of our control of world events, and our own national security, the reality of power, and the fact that there must be a public image of the existence of that reality, and if you do not do both you have not accomplished your purpose. Merely doing the first will not be enough; it will not do. You cannot win that way.

You see, the public goes back 15 years. Russia was devastated; there were 20 million casualties, her physical plant was destroyed; there was chaos and disaster. We had the greatest Air Force in the world, the greatest Army in the world, we had submarines running out of our ears. Their army was shot to pieces. They had no air force worthy of the name compared to ours; they had a few coastal submarines but nothing compared to ours. We had the A bomb; we had the greatest production plant in the world. They had nothing, nothing, nothing. Fifteen years ago the public knew all about that. Now, when you go around saying, "Well, we are only a little bit behind them," that is like being a little bit pregnant. They know that. What is the matter? I am trying to help you. Understand, this is not criticism. It may be a critique, but I want to say out loud that I am not sure what the boys and the girls in the Pentagon say to anybody as important as you out loud. I am trying to help you.

Secretary GATES. I understand.

Mr. FLOOD. All right.

PROMOTION OF OFFICERS

Mr. FLOOD. One of the first orders you issued when you put on this new hat had to do with staff officers, and command officers as a basis for promotion to flag and star rank.

Secretary GATES. That is correct.

Mr. FLOOD. That could be a problem.

Mr. GATES. Yes, sir.

Mr. FLOOD. You know what happened to the German staff. They just got too good. When the staff got too smart, they were dumb. It lacked command. It was all staff, too longhair. The British ran into that for 50 years and after World War I they cut it out. That is where the "brass hat" started, in World War I. It got out of control. It was the British who gave birth to this, I think it was Churchill who said, "Never were so few staffed by so many as the British Army in that war." You are aware of "Parkinson's law" in the armies of the world that "the less you have to do the more people you need to do it." It is a basic law, "Parkinson's law."

Secretary GATES. Where?

Mr. FLOOD. Any army. You have staffs you have to create to take care of the staffs. But that is an organization problem. I am talking about your order on promotion. You say they must have international or national staff work. I am sure you know of this. You indicate from your expression that you do. We are not going to create this clever breed of staff officer now. This thing is going to get out of control. If you were going to be here a hundred years, I would feel better, but this business of official emphasis upon the paper shuffler, official emphasis upon the staff people—they will breed on that now, and I am just saying this out loud again. For heaven's sake, if you have forgotten it since you issued the order, think about it every once in a while. Do not create these staff people. There is nothing wrong with them as a breed, but look out.

Secretary GATES. The purpose of the order is to assure that as part of the career planning for an officer he will have some service or a tour on a staff where the other services are involved. This is needed so that we will be able to carry out more effectively the Reorganization Plan of 1958, which set up the unified command line of operating control under the Joint Chiefs of Staff and the Secretary of Defense.

We are aware of the fact that this order is not popular with everybody. A great deal is going to depend upon how it is administered because there are many good officers who are coming up this year, next year, and the year after who will not have time to take this kind of a tour. It is not intended to increase the paper shufflers or build staffs. It is proposed to expose the Navy to the Army and the Air Force, and vice versa, in the unified command arrangement.

Mr. FLOOD. And at international levels.

Secretary GATES. And at international levels. This is being done anyway. We want to do it a little bit faster and make it a recognizable accomplishment. We made a provision in the order for exceptions and for wise administration to take care of possible inequities.

Mr. FLOOD. I read it. It is good. I am saying this out loud again.

Secretary GATES. The purpose is not what you attribute to it. It may be that someone will be foolish enough to permit superstaffs to develop at the expense of combat officers.

Mr. FLOOD: That is what I am afraid of.

Secretary GATES. I do not think this order in itself will do it.

Mr. FLOOD. No order does anything in itself, of course. We are talking the same language. I want to say this out loud. Did you read this famous crack from the Infantry magazine on what is a staff officer? Did you ever hear that one? It is classical. I am quoting:

The typical staff officer is a man past middle life; spare, wrinkled, intelligent, cold, passive, noncommittal, with eyes like a codfish, polite in contact but at same time unresponsive, cool, calm, and as damnably composed as a concrete post or a plaster of paris cast; a human petrification with a heart of feldspar and without charm of the friendly germ, minus bowels, passions, or a sense of humor. Happily, they never reproduce themselves and all of them finally go to hell anyhow.

Mr. SHEPPARD. Who is the author?

Mr. FLOOD. It came from the Infantry Journal. I found it in Hanson Baldwin's column of December 29, 1959. That is overstating it a little, of course.

DEFENSE IN ALASKA

You know, I spent over 2 months in the Far East and gave it a going over. I am worried about Alaska. You have been talking about the Far East and all over Europe and everything else. I was up there with Gen. Mike Michaelis.

We went into quite a lot of briefings on the Russian posture vis-a-vis Alaska. The Kamchatka Peninsula is loaded to the gunwales with everything, IRBM's over there zeroed on Alaska. We are squeezed into Anchorage and Fairbanks on the littoral shelf. One IRBM can cause a lot of trouble in Alaska. Why would we not put our IRBM's in Alaska if you are going to stay there at all? There is serious doubt whether you could defend Alaska at all, but let us say you can. Why would you not put a couple of IRBM's there?

I saw these wonderful NIKE-HERCULES installations. They are terrific, real Buck Rogers stuff, the whole business; but that is NIKE-HERCULES against aircraft. As to the Russian, I know what he has got on that peninsula. He knows what I have. He will knock my brains out. We are not in the same league.

Secretary GATES. Mr. Flood, Alaska is defended by Omaha.

Mr. FLOOD. I know that.

Secretary GATES. It is defended by all the military power of the United States.

Mr. FLOOD. I know.

Secretary GATES. It is the same as any other American territory. The Unified Commander in Alaska just met with us in Norfolk.

(Discussion off the record.)

Mr. FLOOD. You know, you would not dare strike a match on the whole Kamchatka Peninsula from one end to the other.

(Discussion off the record.)

Mr. FLOOD. I do not know what you mean by big. Kamchatka is farther away than the one to the north.

(Discussion off the record.)

Mr. FLOOD. My opinion would be, without having a photograph in my hand, knowing his potential in being with IRBM's and mobile for 2 years in the field with troops, 2 years—you know, as an old artillery man what it means to have a piece of hardware with troops for 2 years.

(Discussion off the record.)

Mr. Flood. I do not care whether it does or not. This is what I am saying. I have my own intelligence and I have found yours wrong so often that I am not that much impressed, although you are right more often than I am.

You see, there is a clear distinction. This is one on IRBM's, mobility up to a thousand miles in Western Europe and Kamchatka that I made, and I was right in Europe, so I was right in Europe and if I were the Russians, I would have a couple up there. I would have a couple up there without any question. I would have it there just out of an abundance of caution. He has got loads of them. So I think he has got them up there. All right. I think you ought to have a couple. I think Mike ought to have a couple at Anchorage, no question about it.

USE OF KOREAN NATIONALS IN UNITED STATES FORCES

I am a member of the Holy Name Society, as you know, at St. John's Church, so I cannot tell you about what I think of your policy with the 1st Cavalry and the 7th Infantry in Korea or I would have to leave that society. Here are these two great combat divisions of the U.S. Army, no greater in the world—the 1st Cavalry and the 7th Infantry. You cannot beat them—brave and proud and great.

In our table of organization at NATO, our table of organization with our friends in the Pacific, and the report to the Congress of the United States we say we have two divisions in Korea. That is a sham and a fraud. We do not have two divisions in Korea. You have two Headquarters Commands there.

So I went there, talked to the troops, talked to the officers from the top down. I went up with the 34th Infantry in reserve, the first was in the line. I had generals, 40 of them—8th Army, corps, division, brigade, they were all with me—we walked out in the field. I said, "Now, General, will you have Able Company of the 34th come out in that field?" He called them out. I walked around the company and I picked the second platoon on the right flank. I walked down. There was a big kid there. I said, "Where are you from, Mack?" He said, "Oklahoma." He was a lieutenant. "How long have you been here?" He said he had been there 6 months. I said, "General, will you get all this company off this field except that platoon." I picked it out of the air, out of Able Company, 34th Infantry, 7th Division.

They chased them all off except this one platoon. I said, "Lieutenant, will you tell all the Americans in your platoon to kneel down on the ground." The kid thought I was nuts, but he told all the Americans to kneel on the ground.

Then I saw the second platoon, A Company, 34th Infantry, Seventh Division, U.S. Army, was 40 percent oriental mercenaries. The mortar team were all Korean. The second sergeant was a Korean. These are good soldiers, understand that, nothing the matter with the quality of these troops, not a thing, just as good as ours. Nobody raises that question. But I am talking about the U.S. Army. That never happened in the history of this Nation before. I personally do not want it to happen now and never, never, never happen again. If

you want a Foreign Legion, I will introduce a bill for it. It is a great idea. But not my divisions.

Mr. Secretary, I say to you, you know as much about this as I do, if you do not put American troops in those divisions, I want you to pull them out of there, both of them. That is the way I feel about it. No reflection upon our allies. They are good. They have 20-some divisions, two good Marine divisions. I saw the Sixth ROK Division on our left flank in the line, beautiful looking troops, no problem, no question about it.

However, President Rhee, this great old man, is 85 years old. I had a talk with him. He is like this [shaking]. I had dinner with him the next night. He was worse. There is no successor, nobody coming up. I do not know what will happen in Korea if he dies. Neither do you. Nobody does. I do not know what these Korean troops will do in my two divisions, nobody else knows. But that, to me, is secondary. The important thing is—I think—it is an indelible blot upon the escutcheon of the Army of the United States and upon the Department of Defense. If I were in your chair, the first order I would have issued after I was sworn in was: Get those Koreans out of those two divisions tonight or get the divisions out of there.

Do you have any opinion about it? If you have not thought about it, you do not have to say a word.

Secretary GATES. I have not thought about it as much as I will now. I talked about it briefly with the Unified Commander at Norfolk the first week in January. He believes this arrangement is very helpful for training Koreans. He also believes, which is not the principle you are talking about—

Mr. FLOOD. I know that story.

Secretary GATES. He also believes he has made great progress with the Koreans. The Korean army now picks up merchandise around various stores and returns it so it cannot be resold. A lot of this he attributes to the close relationship that exists between the Koreans and ourselves. This is the U.S. Army talking.

Mr. FLOOD. That is all true but completely unimportant; all true but unimportant. If I had that division there, I would come to you and say, "Look, Mr. Secretary, I have to have a couple hundred Koreans. I need them in this foreign country. I need them in maneuver areas; I need them for scouts, for points. I have to have a couple hundred Koreans in my division." I am for that. If he wants 500, give him 500. I am completely for that. But I do not want them shoulder to shoulder in files in my rifle platoons in the line; not in my divisions; no, never.

Secretary GATES. I think this is something that I want to look into further. I think it is something you should discuss with General Lemnitzer when he appears here. General Lemnitzer himself has been in command there and he is now Chief of Staff of the Army, and he obviously does not oppose this program or it would not be going on.

Mr. FLOOD. You understand that does not impress me a bit.

Secretary GATES. I understand.

Mr. FLOOD. I am just stating my position. I have never been so upset emotionally about any one single thing since I have been on this committee as this outrageous situation.

Secretary GATES. I am rather surprised that you are so upset about it and the Army is not. That does not make very good sense to me. If this violates a principle or Army tradition, they should be upset about it also.

Mr. FLOOD. That is part of my program. I did my best to upset the bowels of the State Department yesterday about Panama. All they want to do is let Panama fly the Panamanian flag on the Canal Zone. They say, "What is the matter with you, Flood? Let them fly it; it does not mean anything." Oh, yes, it does.

Thank you, Mr. Secretary.

Mr. MAHON. Mr. Taber.

Mr. TABER. No questions.

Mr. FORD. Off the record.

(Discussion off the record.)

Mr. MAHON. In view of the fact that Mr. Laird will be in attendance at another important meeting involving the Defense program in the morning, we will recognize him at this time to interrogate the witnesses.

Mr. LAIRD. Thank you, Mr. Chairman.

U.S. DEFENSE POSTURE

Mr. Secretary, your statement to the committee is the best and most comprehensive statement we have ever had since I have been a member, from a Secretary of Defense at the start of hearings on a Defense appropriation bill. I intend to use it as my guide during the hearings this year. The intelligence briefing General Twining has given us has certainly been of great help and very reassuring to me as we enter these hearings. I have several questions which I would like to first ask about the statement.

On page 8 of the statement you have one sentence which was of real interest to me. It is in the first paragraph and I quote:

It can be dangerous to our national security and our position in the world to allow a false impression to gain ground that the United States is second to the Soviet Union.

Mr. Secretary, do you think that in view of some of the statements that have been made publicly by certain individuals, a few Members of Congress, that we might mislead the Soviet Union into a position where they might miscalculate our deterrent capabilities?

Secretary GATES. I think it is unfortunate that these statements are made that give the impression that we are helpless, or open, or naked to a surprise attack, or imply that such is true. I have a good deal of respect for the Soviet Union's intelligence because they have most of it given to them for free. I do not think they are going to be misled by these statements. I think they know what our strength is. I do not think such statements would lead to that result. But I do think it is harmful to us in international negotiations, to our foreign policy discussions, to our position in the eyes of the world, to allow individual "horror cases" and false impressions to be circulated.

I do not think it would result in as serious a situation as you think. I think the Russians are just too smart for that, but I think it is very dangerous from the standpoint—

Mr. LAIRD. Just how dangerous is it to national security?

Secretary GATES. I think it is very dangerous from the standpoint of our international relations and from the standpoint of building up the collective strength of NATO and similar organizations. We are engaged in an ideological struggle. Our allies, and even the neutrals need to have confidence in us and our capabilities. I really do not think, Mr. Laird, that our own people believe we are as weak as some people are advertising we are. I do not think they are as concerned as some people are saying. While we could get very complacent, I do not think we should get complacent. This country could possibly move again toward isolationism or a little toward that point of view, and I think that would be dangerous.

It is very dangerous from the point of view of the "image" which Mr. Flood was talking about.

Mr. LAIRD. General Twining, what is your opinion on the matter of this false impression that might be created?

General TWINING. I agree with what the Secretary said and the point Mr. Flood brings out. How do we accomplish the second part? We do not do it by advertising our weaknesses when we do not have them. Apparently, Khrushchev feels from his intelligence sources that this rocket rattling may be scaring our people and I am worried about it.

Sometimes I read these articles myself and I think: What does the layman think when he reads this stuff from some experts in the United States who are supposed to have a great background in a certain area and who are writing these things? We will never build up this second leg Mr. Flood is talking about until we stop this thing. If we have a weakness, let us get on it and straighten it out.

PREPARING OUR DETERRENT CAPABILITY

Mr. LAIRD. Mr. Secretary, as I have listened to the testimony the last 2 days, I have a feeling that we are approaching the period in 1965 where we could very possibly have overprogramed our deterrent capability as far as matching the Russians. There is a question in my mind as to how much retaliatory tracking force you need to deter a big war. Do you give that thought in your military planning?

Secretary GATES. A great deal. Off the record.

(Discussion off the record.)

Secretary GATES. We have not yet established the force levels for the MINUTEMAN. We have not yet established the force levels for the POLARIS. So, we are in the position where we could overprogram if we were unwise, but, at the moment, we probably would hope to program faster in those two weapons if we were sure of them technically. I think from the standpoint of what is required we will just have to review that on an annual basis, watching to see what the Russians really do.

DEVELOPMENT OF RETALIATORY CAPABILITY

Mr. LAIRD. On page 17 of your statement you refer to the great consciousness which you have to the need to develop an "active defense" against ballistic missile attack. It would seem to me the best defense against a ballistic missile attack would be sufficient retaliatory power on the part of the United States.

Secretary GATES. That is correct.

Mr. LAIRD. To develop an "active defense" against a ballistic missile attack would certainly cost many billions of dollars, would it not?

Secretary GATES. That is correct also.

Mr. LAIRD. Do you not see that for the foreseeable future that our retaliatory capability which we have is, in fact, a very positive defense against a missile attack?

Secretary GATES. Certainly.

Mr. LAIRD. But you do feel that it is also necessary to go forward in research and development to develop an active defense?

Secretary GATES. Yes.

Mr. LAIRD. In addition to the retaliatory capabilities?

Secretary GATES. Yes; I think it will be a good many years before one is developed. I think, also, that, during the intervening period, our retaliatory capabilities will be the only real missile defense.

RESEARCH AND DEVELOPMENT FOR ANTISUBMARINE WARFARE

Mr. LAIRD. Mr. Secretary, this is the first year that we have had a Secretary of Defense come before us who has devoted as much time on ASW work in his opening statement as you have. I commend you because I feel this is a much greater danger and a much more current problem than developing an "active defense" against missiles or manned aircraft. I believe the ASW program is with us now and will be with us much longer than an active air defense system.

In your statement on page 24 you state that the \$45 million add-on which this committee made available for research and development in ASW work was made available for use by the Navy. We have had considerable difficulty over this particular point with the Navy. We had an informal hearing a few days before Christmas and the Navy at that time stated the money had not been released for their use. The Defense Department's opinion was they had released these funds to the Navy, but they had used them in different research and development areas and had not used this funding for research and development in ASW work.

I felt this was a high priority item. This committee put it in the budget. I was somewhat disturbed over the fact that the Navy assumed that they should use the money that had been released by the Department of Defense on the basis of the original submission to this committee rather than give consideration to the add-on which we had made.

My question is: The \$45 million as of a few weeks ago was not available to the Navy because they had gone ahead and spent it on other projects. What kind of control do you have as Secretary of Defense, or your Department, over the use of these funds by the Navy?

Secretary GATES. I would like to ask Dr. York how far his review goes on research funds. His office reviews all research programs and releases emergency fund money for research programs, but I do not know whether that review occurs more often than annually.

Dr. YORK. It does, and this is a problem with us, too, as Mr. Laird probably knows. The way it stands right now that additional \$45 million has within the last few days been made available to the Navy. We are in the process of working out with the Navy, considering their expenditure problems as well as their obligational problems, the question of how to make use of this and all the rest of their budget. We hope to have this. This \$45 million is about 20 percent of the total amount of money they would have for ASW R. & D., including the \$45 million. By the end of the third quarter we hope to be firm on how this money will be spent out for ASW.

Mr. LAIRD. Mr. Secretary, my point is this. This committee has authority to make cuts. You follow your cuts. When we make add-ons to the budget in given areas, I do not believe those add-ons necessarily should be placed by the individual service in the lowest priority of their particular budget.

Secretary GATES. I do not, either.

Mr. LAIRD. It seems to me this was the way it was handled by the Navy, and it was not the understanding, I do not think, of this committee that this particular research and development program would be placed at the bottom of their list as far as the use of their funds was concerned.

Secretary GATES. I think if it was going to be placed at the bottom of their list, it ought to be explained to the committee at least and justified on that basis. I agree with you from the standpoint of our joint responsibility.

PARTICIPATION OF JOINT CHIEFS OF STAFF IN PROGRAM DISCUSSIONS

Mr. LAIRD. Last year in the hearings on the 1960 budget it was brought out in questioning which I conducted that the Joint Chiefs of Staff had never passed upon the aircraft carrier, the size of the Army, the additional B-52 procurement, and additional large items. From the testimony you have given us here today, this situation has been remedied in this budget that is before us this year.

Secretary GATES. It has been remedied in that at the same time the data on programs, both as to money and timing and technical capabilities, were presented to the Secretary of Defense they were also presented to the Joint Chiefs of Staff, the same papers virtually on the same days. So the Joint Chiefs of Staff had complete information on all service programs, as did the service Secretaries. They all participated in discussions with the Secretary of Defense on all of the big money programs, all of the important programs. They also had the opportunity to discuss them with the President.

MOBILITY IN THE MISSILE PROGRAM

Mr. LAIRD. Mr. Secretary, I would like to ask you a question or two with regard to the missile program, which is an important part of our deterrent force along with the manned aircraft. It seems to

me that the Russians have given a much greater emphasis to mobility in their missile program than we are giving to mobility, with the exception of our POLARIS program. We have a big request, which will be considered tomorrow, on certain hardening of other missile bases in the United States. It seems to me we are making a target area out of the United States with some of our big missiles.

Is there not any more that can be done to try to get these targets out of the continental limits of the United States?

Secretary GATES. There are people that share your point of view. I think I share it somewhat. On the other hand, there is another strong point of view that says that the United States is a target anyhow, that New York City is a target, Washington is a target. This point of view also says that you cannot remove the threat from the United States by moving our retaliatory force out of the country. The fact that we have missiles based here does not add much to the attractiveness of the United States as a target.

There is no way I know of except accelerating the POLARIS program, which I think we should do when we have it as a more proven weapon system. It would be very expensive and very difficult to maintain an ICBM system on a little island somewhere. I do not think that would be necessarily wise either, because that would be a very easy target in itself. We do not know what the Russians are doing with their ICBM's because we have never seen a site. It is extremely difficult, if not impossible, to make anything like the ATLAS or TITAN mobile. These are enormous liquid-fuel missiles. The next best thing to making them mobile is to make them hard.

We are in favor of the mobility concept and in favor of moving as rapidly as we can toward a relatively invulnerable deterrent, in the belief that is the most effective deterrent. That is one reason why, as soon as we can, we ought to move ahead with more of the MINUTEMAN, rail mobile or hardened, and widely scattered. We should also move ahead with the POLARIS program and not overdo the ATLAS and TITAN programs. On the other hand, the ATLAS and the TITAN programs make a contribution at a most important time and we will long keep them in our inventory.

Mr. LAIRD. They also present a targeting problem that we will long keep in our inventory, too; is that right?

Secretary GATES. What was the first part, targeting?

Mr. LAIRD. Yes; as far as the Russians are concerned.

Secretary GATES. Yes; certainly. I do not think there is any question that they know where our sites are. We put out maps of them in the newspapers.

Mr. SHEPPARD. Will the gentleman yield for one question?

Mr. LAIRD. Yes.

Mr. SHEPPARD. There was a small comment in the paper, I think yesterday's paper, Mr. Secretary, to the effect that the POLARIS had fired successfully over a 900-mile range. Do you know whether that is true or not?

Dr. YORK. That is true. That is the second time.

Secretary GATES. That is true; yes, sir.

Dr. YORK. It was fired from land.

General TWINING. Land base.

Dr. YORK. There have been launchings of dummies from submarines, but the combination has never been done yet.

Mr. SHEPPARD. That was done at Cape Canaveral?

Dr. YORK. Yes.

Mr. SHEPPARD. Thank you, Mr. Laird.

PROGRESS IN THE ANTISUBMARINE WARFARE PROGRAM

Mr. LAIRD. Mr. Secretary, in the discussions with people who have had a basic responsibility for ASW work, some of them seem to be looking for a major breakthrough. My question is: Is the Defense Department holding back on the ASW program in any way waiting for such a major breakthrough?

Secretary GATES. No, sir; there are a variety of scientific and theoretical ideas that you are probably familiar with that might lead to putting alarm systems over wide ocean areas and ocean-bottom areas. But we are not, to my knowledge, holding back in any way, shape, or form, and we believe that, as of now, the antisubmarine business can only be handled by the whole variety of everything we have.

Mr. LAIRD. I think that is quite important that we do go forward and utilize what we have because if we do not, we might be in bad shape.

Secretary GATES. I think it might be helpful if General Twining said something about the attitude of the Joint Chiefs of Staff on anti-submarine warfare, if it is appropriate.

Mr. LAIRD. It certainly would be.

General TWINING. Two or three years ago the Chiefs of Staff expressed great concern about ASW. We had the Navy give us several briefings. They brought us up to date on what they were doing and what the problem was. I can assure you that I personally and the other Chiefs agree that we think this is not only Navy's very important problem but probably their No. 1. I think Admiral Burke will go along with that. We are quite concerned about the ASW program and realize how difficult it is. It is complicated and will take a lot of money but we must do it and the Chiefs are really behind it and very much interested in it.

Mr. LAIRD. Mr. Chairman, that is all I have.

Mr. MAHON. Mr. Ford?

Mr. FORD. Mr. Secretary, as has been said before, this prepared statement by you for this committee's consideration is, I think, one of the very best.

I know that you have spent a great deal of time in its preparation and it is my understanding that you, to a substantial degree, wrote it yourself. I assume that you weighed every word because there are some very significant conclusions, sentences, and phrases in it; is that correct?

Secretary GATES. I would not want to claim a "feather" for writing it myself, because many people worked very hard to prepare various drafts of it, including people in the services and people in the Defense Comptroller's Office. Mr. Douglas and I spent a great deal of time personally changing words and revising sentences and ideas. We ended up with a great deal of our own language. It is a combination effort.

I would not want to claim complete credit for it. We did spend many hours on many drafts.

Mr. FORD. I presume in the preparation of it you did have the benefit of your military advisors from General Twining on down?

Secretary GATES. Yes. They commented on the draft.

Mr. FORD. The import of the crucial statements that are made about military strength did have the approval of your military advisors?

Secretary GATES. Yes. I received the comments and recommendations of all my advisers, but not necessarily their approval of my entire statement.

RELATIVE MILITARY POWER OF UNITED STATES AND RUSSIA

Mr. FORD. On page 3 of the statement, the second full paragraph, you make this statement:

* * * but the impression in some quarters that the Soviet Union has overtaken or even outdistanced the United States in military power is simply not supported by the facts * * *

That is a very strong statement, a very reassuring one.

You personally believe that?

Secretary GATES. That is correct.

Mr. FORD. Would you subscribe to that statement, General Twining?

General TWINING. Yes.

WAR SERVICE OF THE SECRETARY OF DEFENSE

Mr. FORD. I think it might be well at this point, Mr. Secretary, to have you put in the record your own military background which goes back a number of years, a résumé of it. In addition, you might put in the record your service here in the Pentagon in the last several years.

Secretary GATES. Yes, sir.

(The material referred to follows:)

WAR SERVICE OF THOMAS SOVEREIGN GATES, JR., SECRETARY OF DEFENSE

Served on active duty at the Naval Air Station, Quonset Point, R.I., from April 15, 1942, to August 12, 1942. During this period he was under instruction at the Naval Air Combat Intelligence Officers School. He was graduated from class 2-42, and was assigned as officer-in-charge of the Atlantic Fleet Air Intelligence Center, assuming his duties in September 1942. During this period he supervised the activities of the Fleet Air Intelligence Center which furnished intelligence for air operations of the Atlantic Fleet.

Upon completion of this duty in March 1943, Lieutenant Gates was transferred from Norfolk, Va., to Camden, N.J., in connection with the fitting out of the U.S.S. *Monterey*, of which he was to become the air combat information officer.

Lieutenant Gates served aboard the *Monterey* during her shakedown training in the Atlantic in 1943, and later in the Central and South Pacific when the *Monterey* was active in Pacific task forces. He was qualified as officer of the deck, summary court martial officer, and air plot watch officer. The *Monterey* saw action in the Gilbert Islands, New Ireland, the Marshalls, Truk, Tinian, Saipan, and the Palau Islands.

On May 13, 1944, he was assigned to the Naval Air Station, Quonset Point, R.I., as air combat information officer, and was promoted at about this time to lieutenant commander.

In June 1944, he was assigned as flag lieutenant and aide to Rear Adm. C. T. Durgin who was commander of Task Group 88.2. At this time Lieutenant Commander Gates participated in Operation Dragoon, the invasion of Southern France. In addition to his duties as flag lieutenant and aide, Lieutenant Commander Gates was air combat information officer and staff watch officer.

From October 1944 to 1945 he continued in his duties on the staff of Admiral Durgin, who had by this time been designated commander of Carrier Division

29 and Commander of the Escort Carrier Force. At this time Lieutenant Commander Gates was present during the capture of Leyte, the invasion of Luzon, and the capture of Iwo Jima. For his performance of duty at Luzon, Lieutenant Commander Gates was awarded the Bronze Star Medal. He was awarded a gold star in lieu of a second bronze star for his performance of duty at Iwo Jima and at Okinawa. (See p. 18.)

CAPABILITY OF RETALIATORY FORCES

Mr. FORD. There is another sentence on page 3 which I think is very significant. It is the first full sentence in the third paragraph which reads as follows:

* * * Our retaliatory forces are capable of carrying out their assigned missions * * *.

I assume this statement is what you believe even in a period of wartime?

Secretary GATES. Certainly.

Mr. FORD. General Twining, would you agree?

General TWINING. That is correct.

Mr. FORD. That is assuming conditions such as the fact that we may have sustained the first blow?

Secretary GATES. Yes.

Mr. FORD. In other words, there is no doubt that our retaliatory forces can carry out their assigned mission in wartime?

Secretary GATES. Yes.

General TWINING. That is my opinion.

Mr. TABER. Could I put in one word here?

Mr. FORD. Yes.

Mr. TABER. Would you say that what is included in this budget would be sufficient to carry on that position through the coming fiscal year?

Secretary GATES. Yes, I would, Mr. Taber.

General TWINING. Yes, sir.

Mr. FORD. On page 4 of your statement, Mr. Secretary, there is this sentence:

* * * It is the conclusion of those who have analyzed this matter that even a surprise attack by all the missiles the Soviets could muster would not suffice to destroy enough of our retaliatory striking forces to enable him to make a rational decision to attack * * *.

Is there any significance in the fact that you use only the word "missiles"?

Secretary GATES. The airplanes that he has we would probably be able to get warning of, identify, and intercept. The real element of surprise would have to involve his missiles against which—if he has any yet—we do not yet have adequate warning. I think a true surprise attack would have to be a missile attack.

We have a warning capability against aircraft attack with the DEW line and other systems. I would assume, if he was going to attack, he would attack with airplanes as well as missiles.

Mr. FORD. In other words, if you added after the word "missiles" any striking force that he, the enemy, has, you would still subscribe to the statement?

Secretary GATES. Yes.

Mr. FORD. Would you, also, General Twining?

General TWINING. Yes.

Mr. FORD. On page 5 of the statement, the second full paragraph, this sentence is included, and I quote:

* * * It is also possible that the Soviets might elect to produce and deploy missiles in larger quantities than is presently estimated. Our analyses show that even under such circumstances, the resulting differences in numbers in itself would not enable the Soviets to gain a strategic posture which might tempt them to initiate a surprise attack * * *.

You are familiar with, and we have been told, what the National Intelligence Community believes to be their capability in this field. We have been told that there is some difference of opinion, at least as far as the Air Force is concerned. Their estimate of their capability is greater than what the intelligence community believes as a whole. My question is this:

Even if you assumed the Air Force's estimate, is that statement's prepared text true?

Secretary GATES. Yes; that statement would be true assuming the Air Force position, in my judgment.

Now I have to hedge a little bit. This also takes the whole estimate into account, including the circular error probable question. On the basis of both the Air Force estimate and the total intelligence estimate, this statement would be correct as of today.

Mr. FORD. What would your comment be on that point General Twining?

General TWINING. I think so, too. I do not think their planners would feel that they would escape very, very serious damage to Russia, even with that kind of attack, and they would not risk it.

Mr. FORD. Yesterday, General Twining, I thought you made as effective and certainly one of the most vigorous defenses of the total retaliatory forces as I have heard given. I want to commend you for it. You pointed out very vividly that a missile capability for us is but a part, and not the most significant part today, of our total retaliatory, or total deterrent, forces.

FUTURE ROLE OF MISSILES IN DETERRENT FORCES

Is there any way that the public can be told what percentage of our total deterrent force now and in the next 3 or 4 years the missile portion will be of our total deterrent or retaliatory force?

General TWINING. It is pretty hard to tell. If the missiles prove out as we think they will, naturally the deterrent will gradually move over to the missile side and the bomber force will get gradually smaller. I would not want to say when that will be, but that is the natural outcome of this. It will probably be several years before the missile will gradually take over the deterrent role, but I still feel we will always have a need for bombers, but not in the big numbers we have today.

Mr. FORD. That is a part of the "mix" theory?

General TWINING. That is right. I think it gives you flexibility. A missile is very inflexible. Once you push a trigger, it is gone and you cannot stop it and it is going to be a very serious decision to push that button and let this terrible thing go. With bombers, you still have control of them. You can launch them and get them on the way but you have positive control and can get them back if you have made a wrong decision. Once a missile is launched, however, it is really gone. It is very inflexible in that way.

Mr. MAHON. Off the record.

(Discussion off the record.)

Mr. FORD. The point I am trying to make is that I gather, in your mind today, the missile part of our total deterrent is important, but it is not the most significant part?

General TWINING. Not at the moment.

Mr. FORD. Even in the next 2 or 3 years, it is not going to become the most significant part of our total deterrent. The public has the impression that it is today, and will be tomorrow.

Is there any way that we can show, without revealing our top secret military program, just what a relatively small part the missile portion is, so that they can be reassured that we have ample deterrent force in toto?

General TWINING. I do not know how we could make it known to the public. It is pretty hard to explain these things. It is pretty complicated. It would be wonderful if we could.

Secretary GATES. People do not seem to want to believe this. We have been telling them that we have great strength in the Strategic Air Command and have deployed forces all over the world. We have fighter bombers in Europe, fighter bombers in the Far East, carrier planes, and so forth, all atomic-capable, but they want to talk about the difference in numbers of ICBM's.

Mr. FORD. Is there any way that you can take your total payload capacity, including everything, and honestly say that so much of that will be carried by ICBM's?

Under program the rest of the total deterrent payload will be carried on its mission by the remainder of our mixed force?

You are not revealing the specific number of any weapons.

General TWINING. It is telling what you have in the stockpile. That would be pretty difficult.

Mr. FORD. You are saying 100 percent. You are talking percentages, not your inventory.

General TWINING. We can try this: We could take my briefing, the last part I read, and clean it up some way and declassify it. We might have something that you could publicize. I think it might be helpful.

Mr. FORD. I think it is important for our national public opinion. I think if you could do it, the record would be helped immeasurably.

(Information referred to follows:)

STATEMENT BY GEN. N. F. TWINING, USAF

Once again, let me emphasize that we must be cognizant of numbers, but not overawed by them. Numbers alone have not, and never will, reflect the complete picture of capabilities.

The absolute number of missiles possessed by the Soviets is worthy of note only when considered in relation to the targets which must be destroyed in a Soviet attack in order to prevent the Soviet Union from receiving unacceptable damage in return.

In other words, how many missiles must the U.S.S.R. have on launchers in order for Soviet planners to decide that they do have the capability to attack the United States without receiving unacceptable damage in return?

Many factors, other than the absolute number of missiles on hand or on launchers, must enter into the Soviet calculations. Some of these are accuracy, warhead size, reliability, in commission rate, number and type of targets in the United States, degree of advance assurance that a given level of damage will be inflicted on a specific target, and so on.

Our own plans and programs will provide a wide mix of weapons strategically positioned and designed to react from divergent sectors. These will include ICBM's and manned bombers from the United States; manned bombers from oversea bases; IRBM's from overseas bases; deployed tactical missiles of our Army, Navy, and Air Force; missiles from our submarines at sea; and the contribution to be made by our atomic-capable tactical air force units and attack carrier striking forces deployed in strategic areas.

These forces will be able to deliver a powerful retaliatory blow to any aggressor. The punch of these forces must be taken into account by a potential aggressor and do very definitely represent the risk which must be faced by an aggressor in reaching a decision to attack the United States and its allies. Furthermore, these forces, deployed worldwide, constitute widely scattered targets which must be attacked simultaneously with any attack on the United States.

If an aggressor is to succeed in destroying us, or our allies, his plan must be designed to knock out at the first blow, and in one mortal blow, the United States and allied capability to retaliate, or at least reduce it so that his homeland will not receive unacceptable damage in return.

On the basis of all the information available, and in view of the mix and strategic locations of our retaliatory weapons systems, I just do not believe that any nation possesses the ability to destroy us, or attack us, without receiving unacceptable damage in return.

General TWINING. All I am trying to do is the right thing in this defense business. You cannot afford to go overboard either way, too strong or too weak. People have to know the truth about what we have.

Let them make up their minds.

MEANING OF DETERRENT GAP

Mr. OSTERTAG. Mr. Secretary, Mr. Ford referred to a certain part of your statement with regard to, among other things, the deterrent gap. That was quoted from your statement. Would you define what is meant by a "deterrent gap"?

Secretary GATES. Yes.

It is that situation when your total deterrent force ceases to be sufficient to deter a potential enemy, as contrasted with a simple numerical comparison of a single weapon.

Mr. OSTERTAG. Is it a means of comparison with any potential enemy?

Secretary GATES. Yes, it is a comparison with a potential enemy—what he believes your deterrent is. I think Dr. York's shop invented this term and maybe he can give a better definition than I can. The way I understand it is: If you can be satisfied that your deterrent power exists, is real, and will survive a surprise attack, regardless of what force he can attack you with, then you have no deterrent gap.

But if you believe that the numbers and accuracy of his weapons are so great that your survivability becomes so small that you worry about it, then you have a deterrent gap.

Would that be correct?

Dr. YORK. Yes. It was just a term that we invented because of the statements about the missile gap and the fact that this is almost irrelevant in terms of what you really need to have. The question is not whether we have more missiles than they have, but whether our strategic deterrent can or cannot survive the first attack. If it cannot, then you would speak of that as being a deterrent gap. If it can, then there is no deterrent gap.

The conclusion here, which Mr. Ford mentioned in several places, is that there is no deterrent gap. Whether there is or is not a missile gap, there is not a deterrent gap.

Mr. FORD. On page 6 of your statement, Mr. Secretary, the statement is made:

* * * The thrust of our present missiles is fully adequate for defense requirements today * * *

General Twining, do you concur in that statement?

General TWINING. Militarily, yes.

PRINCIPAL OBJECTIVES OF DEFENSE PROGRAM

Mr. FORD. I do not like to read the next statement because it is somewhat lengthy, but on page 10, the first paragraph, the Secretary says that two principal objectives are involved, and so forth.

I would like that put in the record at this point.

(The material referred to follows:)

The two principal objectives of our defense program continue to be: First, to deter the outbreak of general war by maintaining and improving our present capability to retaliate with devastating effectiveness in case of a major attack upon us or our allies; and second, to maintain, together with our allies, a capability to apply to local situations the degree of force necessary to deter local wars, or to win or contain them promptly if they do break out.

Mr. FORD. General Twining, would you concur in that statement?

General TWINING. Yes.

POSITION OF POLARIS IN THE BALLISTIC MISSILE PROGRAM

Mr. FORD. Mr Secretary, on page 14 of the statement, you are talking about POLARIS, and you say

* * * progress has been satisfactory and if the POLARIS proves out sooner than expected, a reconsideration of the program would be undertaken * * *

What do you mean by that sentence?

Secretary GATES. It would be my judgment that, if we had operational success with our test program and were reasonably certain that we had an operational capability, I think from a defense point of view we would recommend a larger program for the POLARIS than the three-a-year proposition.

I think we then would have to face up to what POLARIS force levels would ultimately be required, and where the POLARIS system fits into the total targeting picture. Then we would probably go out and buy as much toward those force levels as we could.

Mr. FORD. The first POLARIS missile systems will be operational during this calendar year?

Secretary GATES. Toward the end of it. They go to sea in the summer, shakedown, and will be operational toward the end of the calendar year.

Mr. FORD. That will be toward the end of the fiscal year covered by this budget presentation?

Secretary GATES. Yes, the middle of fiscal year 1961.

Mr. FORD. Included in this budget presentation we have funding for POLARIS?

Secretary GATES. Through submarine No. 12.

Mr. FORD. Fully funded?

Secretary GATES. Yes, and funding for long-leadtime components for three additional ships, making a total of 15.

Mr. FORD. What is the total included in this budget for the program, just in dollars?

Secretary GATES. \$952,212,000.

Mr. FORD. Do you mean by this statement which I read from your text that in fiscal 1961 such a change in program might take place?

Secretary GATES. It could be possible.

Mr. FORD. There would be no hesitancy on your part, as Secretary of Defense, during the progress of fiscal 1961, to make such a recommendation if you thought it was necessary?

Secretary GATES. No hesitancy whatsoever.

NIKE-ZEUS PROGRAM

Mr. FORD. In your statement you discuss NIKE-ZEUS and the matter has been covered thoroughly and comprehensively by other members of the committee.

You did mention that this problem has been analyzed and re-analyzed by a number of highly competent, qualified committees.

Secretary GATES. Yes.

Mr. FORD. Could you pinpoint what those committees were, when they considered the problem, and what the recommendations were?

Secretary GATES. Yes; we cannot pinpoint it exactly, but sometime during the summer, I would say approximately August, we asked Dr. Kistiakowsky, who is assigned as scientific adviser to the President, to assign a panel of his people to review the NIKE-ZEUS program independently from the review that Dr. York conducts in the Department of Defense, where he also has a highly competent panel of different scientists reviewing the program.

The recommendations of both organizations are those that we are presenting in this budget.

Mr. FORD. Would it be proper to list the names of the members of the several committees that did analyze the NIKE-ZEUS program, one committee under Dr. York and the other under Dr. Kistiakowsky?

(Discussion off the record.)

TRANSFERS FROM REVOLVING FUNDS

Mr. FORD. I notice that apparently in fiscal 1961 you intend to get from the various stock funds and/or industrial funds \$350 million.

Secretary GATES. I think it is all stock funds, and principally the Army stock fund.

Mr. FORD. That seems to be a never ending well of obligational authority.

Secretary GATES. The large bulk of that money—around \$260 million—is the Army stock fund.

Mr. FORD. Last year on page 173 of the hearings you put in a chart showing how much has been taken from the various stock funds and/or industrial funds. I think you should continue that chart and add to it what you are recommending in fiscal 1961.

Secretary GATES. I have it right in my hand, Mr. Ford.

Mr. FORD. Could you tell us out of the \$350 million how that break-down is for fiscal year 1961?

Secretary GATES. It is \$260 million, Army stock fund; \$30 million Air Force stock fund; and \$60 million Navy stock fund—totaling \$350 million.

Mr. FORD. Your statement says \$350 million.

Secretary GATES. That is right; \$350 million.

(Information requested follows:)

Transfers from revolving funds in lieu of new congressional appropriations

Fiscal year and source fund	Amount	Appropriation Account to which transferred	Congress	Public Law No.
Fiscal year 1957:				
Army stock fund.....	\$202,000,000	Military construction, Army.....	84th.....	814
Navy stock fund.....	200,000,000	Military construction, Navy.....	84th.....	814
Marine Corps stock fund.....	35,000,000	do.....	84th.....	814
Total.....	437,000,000			
Fiscal year 1958:				
Army stock fund.....	350,000,000	Military personnel, Army.....	85th.....	117
Army industrial fund.....	50,000,000	do.....	85th.....	117
Navy stock fund.....	100,000,000	Military personnel, Navy.....	85th.....	117
Marine Corps stock fund.....	20,000,000	do.....	85th.....	117
Navy industrial fund.....	70,000,000	do.....	85th.....	117
Total.....	590,000,000			
Fiscal year 1959:				
Army stock fund.....	375,000,000	Military personnel, Army.....	85th.....	724
Navy stock fund.....	120,000,000	Military personnel, Navy.....	85th.....	724
Navy industrial fund.....	15,000,000	do.....	85th.....	724
Marine Corps stock fund.....	25,000,000	Military personnel, Marine Corps.....	85th.....	724
Total.....	535,000,000			
Fiscal year 1960:				
Army stock fund.....	281,000,000	Military personnel, Army.....	86th.....	86-166
Navy stock fund.....	75,000,000	Military personnel, Navy.....	86th.....	86-166
Air Force stock fund.....	50,000,000	Military personnel, Air Force.....	86th.....	86-166
Marine Corps stock fund.....	24,000,000	Military personnel, Marine Corps.....	86th.....	86-166
Total.....	430,000,000			
Total, fiscal years 1957-60.....	1,992,000,000			

NOTE.—No transfers from revolving funds were made during the period fiscal years 1951-56, but during the period 1954-57 the Congress rescinded \$3,400,000,000 for return to the Treasury. Thus, during the period 1954-60 a total of approximately \$5,400,000,000 was realized as a result of the effective management and control of inventories financed by stock and industrial funds. The fiscal year 1961 budget proposes an additional transfer of \$350,000,000 (Army stock fund \$260,000,000, Navy stock fund \$60,000,000, and Air Force stock fund \$30,000,000).

Mr. FORD. As you know, under the space law that was passed by the Congress in 1958, there was to be a joint liaison committee between the Defense Department and NASA. Is that an operating committee at the present time?

Secretary GATES. It is in existence.

Mr. Holaday, who used to be with the Department of Defense, is chairman of it. I would not say it has had to operate too much because most of the work has been done directly by the principals concerned; namely, Dr. York and Dr. Glennan; Dr. Glennan and myself, and so forth.

Mr. FORD. Do I gather from what has taken place practically that the military-civilian liaison committee is not necessary?

Secretary GATES. It may not be essential.

STATUS OF EMERGENCY FUND

Mr. FORD. Could we have a short statement as to what you have done with the \$150 million in obligational authority for the Emergency Fund?

Secretary GATES. Yes; we have that. We have an itemized allocation.

Mr. FORD. Have you used much of it?

Dr. YORK. In 1959 we used almost all of it. In 1960, we have so far not used very much, but that is a typical history of the Emergency Fund. Of course, we are asking for it again in 1961.

Is it 1959 you wanted?

Mr. FORD. Did you use all of it in 1959?

Dr. YORK. Yes. Almost all of it.

Mr. FORD. The \$150 million plus the additional authority of \$150 million, as I recall it?

Secretary GATES. That was on the missile transferability, the other authority.

Mr. FORD. For the record, bring up to date what the status is as of now in the program.

Secretary GATES. Yes.

(The material referred to follows:)

Status of fiscal year 1960 emergency fund as of Jan. 15, 1960

Availability:

Appropriation-----	\$150,000,000
Transferred in (transfer authority)-----	26,000,000
Subtotal available-----	176,000,000
Transferred out-----	35,170,000
Balance remaining available for transfer-----	140,830,000
Details of transfers in:	
From Army-----	(5,500,000)
From Navy-----	(5,500,000)
From Air Force (from prior year unobligated balance)-----	(15,000,000)
	(26,000,000)
Details of transfers out:	
To Army-----	(650,000)
To Navy-----	(0)
To Air Force-----	(0)
To ARPA-----	(34,520,000)
Total-----	(35,170,000)

RETENTION AND REENLISTMENT RATES IN THE MARINE CORPS

Mr. FORD. One of the most significant developments, in my opinion, is the statement made on page 33 of your text, Mr. Secretary, when you said that the Marine Corps, because of a lower than normal loss of trained personnel, would be able to reactivate by the end of 1961 the number of battalion landing teams which were cut out when you reduced from 200,000 to 170,000 or thereabouts without any increase in overall strength. As I recall, there were six battalion landing teams that had to be deactivated at the time the cut was made and from what you are saying here this will be---

Secretary GATES. It was two per division, if my memory is right. I am not sure that they will be able to reactivate the complete six, but they will be able to go part way at least. They have had very good luck with the reenlistments and the retention rate in the Marine Corps. As a matter of fact we have had a marked improvement throughout the Department of Defense in reenlistment and retention rates.

Mr. MAHON. Thank you very much.

We shall adjourn at this time and continue at 10 tomorrow morning.

FRIDAY, JANUARY 15, 1960.

Mr. MAHON. The committee will come to order. I believe Mr. Ford has some additional questions.

PERSONNEL SITUATION

Mr. FORD. Mr. Secretary, as you well know, we have been concerned in both the executive branch and the Congress with regard to personnel problems in the Defense Department. Legislation has been enacted, appropriations have been made to try to remedy some of the problems in that area. I am certain through these combined efforts we have not licked all of the problems.

Would you care to make any comment about the current situation?

Secretary GATES. Yes. I think that it can be stated that the various measures that have been taken by the Congress in the last few years have done a great deal to stabilize our forces and improve the quality of our personnel. We have fewer people in the lower mental groups and we have people of better quality. We have increased reenlistment and retention rates. The reenlistment rates have been extremely encouraging in their trend. As you say, we have not licked all the problems, but in peacetime with the number of men we have, this will always be a difficult thing to do.

The pay bill we all worked on so hard to get enacted has added to the improvement and we see a healthy trend in all of the services.

Mr. FORD. Do you have any chart or other material that could be inserted in the record to show the improvement in retention and reenlistment rates?

Secretary GATES. Yes. I have enlistment and reenlistment data for the fiscal years 1959 and 1960, and planned for 1961 with percentages for first-term enlistments and regular enlistments for each service, the Army, the Navy, the Marine Corps, and the Air Force.

Mr. FORD. Unless there is objection, I think that would be helpful with regard to this point.

Secretary GATES. We will insert it in the record.

(The requested information follows:)

Enlistment and reenlistment data

	Actual, fiscal year 1959		Planned, fiscal year 1960		Planned, fiscal year 1961	
	Number	Percent ¹	Number	Percent ¹	Number	Percent ¹
Army:						
1st term enlistments.....	105,800		80,400		82,400	
Reenlistments, Regulars.....	54,261	52.4	51,800	53.9	65,000	54.0
1st term.....	11,283	21.5	13,200	26.0	16,400	26.0
Career.....	42,978	83.9	38,600	85.0	48,600	85.0
Navy:						
1st term enlistments.....	79,800		82,300		79,000	
Reenlistments, Regulars.....	31,745	34.3	36,172	36.9	41,230	44.1
1st term.....	18,149	23.4	18,838	23.7	16,775	25.6
Career.....	13,596	90.1	17,334	92.8	24,455	87.2
Marine Corps:						
1st term enlistments.....	35,548		39,441		24,971	
Reenlistments, Regulars.....	10,563	31.9	13,072	31.4	9,900	36.7
1st term.....	5,298	20.2	8,048	23.3	5,320	25.2
Career.....	5,265	76.5	5,024	69.7	4,580	78.8
Air Force:						
1st term enlistments.....	62,200		79,200		74,200	
Reenlistments, Regulars.....	70,908	61.5	62,100	53.2	106,700	73.0
1st term.....	34,940	45.7	25,600	32.9	29,950	46.7
Career.....	35,968	92.9	36,500	93.6	76,750	93.6

¹ Ratio of total reenlistments occurring in a given period to total separations, eligible to reenlist, occurring in the same period, expressed as a percentage.

IMPROVED RETENTION HAS REDUCED ENLISTED PERSONNEL TURNOVER

A substantial reduction in required intakes of new personnel has been one of the direct benefits resulting from the uptrend in enlisted retention.

Total new enlisted intakes averaged about 100,000 lower in fiscal years 1958 and 1959 than in 1957. About half of the reduction was due to the strength reduction during this period. However, the remainder, averaging about 50,000 per year, was directly due to the increase in enlisted retention rates since fiscal year 1957.

Similarly, projected intakes in fiscal years 1960-63 are estimated at about 60,000 less per year than would have been required under 1957 retention experience.

These reductions in needs for new personnel are the combined effect of increased reenlistment rates and of longer terms of service.

DISCIPLINARY CASES DOWN SHARPLY

The improvement in personnel quality has contributed directly to a major reduction in disciplinary problems.

Between fiscal year 1957 and fiscal year 1959, absentee and court martial rates in the Department of Defense dropped by about one-fourth, while the prisoner population declined by about two-fifths. These trends are directly related to the elimination of marginal personnel from the force, as well as to improved disciplinary methods.

In addition to direct benefits, such as reductions in disciplinary facilities, the lower rates reflect—in a broader sense—a higher degree of morale and combat readiness in the enlisted force as a whole.

MENTAL QUALITY HIGHER

All services have substantially reduced the percentage of new intakes from mental group IV—the lowest acceptable mental group. These reductions were made possible by enactment of Public Law 85-564 (authorizing increases in induction standards), and by higher standards of enlistment under revised Department of Defense policies.

In addition, intensive efforts have been made to screen out personnel with limited potential for training and performance in required military skills. During fiscal year 1958, over 100,000 low-potential personnel were separated under special early release programs. Standards of reenlistment were also generally tightened, based on aptitude and performance criteria.

The combined result of these measures has been a consistent increase in the proportion of higher quality personnel on active duty.

SUMMARY AND CONCLUSIONS

There has been a substantial improvement in the capability of the armed services to attract and retain qualified personnel. Specifically:

Recruitment capability has improved, as evidenced by the sharp rise in Army enlistments.

First-term reenlistment rates have generally increased, including significant gains in both technical and combat leadership skills.

The enlisted force has become more experienced, with the overall proportion of career personnel rising from one-third to more than two-fifths.

Mental quality is definitely higher in all services, as a result of reduced group IV intakes and more selective retention policies.

And there has been a gratifying reduction in disciplinary rates.

LEGISLATIVE PROGRAM

Mr. FORD. In the past I know the Department of Defense has had what it called its legislative program at the start of each session of Congress. Sometimes we on this committee that have to do with appropriating the money to pay for what the legislative program is do not see it in its entirety when we are considering the budget for the next fiscal year.

Does the Department of Defense have such a legislative program for the fiscal year 1961 for submission to this session of Congress, and if so, could you put it in the record and cost it out for us if enacted into law?

Secretary GATES. I have not reviewed the legislative program in detail. There is not a great deal planned. We will have a legislative item involving some costs. We will provide the details for the record.

(The requested information follows:)

We are supporting a legislative proposal to remove inequities in the pay of certain personnel on the retired list resulting from enactment of the Military Pay Act of 1958. The proposal will authorize those who retired prior to June 1, 1958, to have their pay recomputed on the basis of the higher rates established in that Act. The estimate of the funds to be requested for the fiscal year 1961 retired pay appropriation for financing this legislation is \$24 million.

SOVIET MILITARY POSTURE

Mr. FORD. Yesterday the committee and the American people were told for the first time of some alleged changes that Mr. Khrushchev and the Soviet Union are going to make in their defense setup. Yesterday, the day of this announcement, nobody could have had an opportunity to analyze that speech, or those proposals. This is 24 hours later. Is there any current analysis or evaluation that the Defense Department has made?

Secretary GATES. Yes, there is an evaluation that says in effect—do not dismiss this announcement. Because of the manpower problems in connection with the 7-year plan Mr. Khrushchev probably intends to free up some manpower as he has stated. So the present evaluation is that he probably will reduce his armed forces as he has announced.

Mr. FORD. That reduction being made primarily to help him accomplish his economic program?

Secretary GATES. His economic program under the 7-year plan; yes.

Mr. FORD. Over the last 3 or 4 years it is my recollection that the Soviet Union has made other announcements of proposed manpower reductions. As I have looked at these manpower charts that have been submitted by General Twining and others over the years, I cannot see where there has been any followthrough on those manpower reductions in the past. Is that impression correct?

General TWINING. Generally I think that is correct. He has taken them apparently from places not known to us and we have not indicated a reduction in our reports.

Mr. FORD. This year he would intend to take it out of a place where we do have some information?

General TWINING. I think it interesting because there are a couple of points here. It is early to judge it. He has gone through the same process, practically using the same words, that we used when we went to a new look. Remember our new look about 8 years ago? We justified, and rightly so, a reduction in forces because of these improved weapons. It was a justifiable thing. He is doing that same thing now. He refers back to the fact that he is not weakening his overall forces at all and the military has agreed with him, and all that. He is going through the same process we went through in the new look.

He has been the great advocate of the deemphasizing or doing away with nuclear weapons, and also doing away with testing. He has been preaching this pretty hard, as you know. At the same time he is doing away apparently with his air force and navy, except submarines, and he is concentrating solely, as he said yesterday, on his big weapons. So it looks like there is a little contradiction in there.

Secretary GATES. I have not read the text of the speech, but we have an analysis this morning in which he apparently makes a reference to building his ICBM force as a deterrent force. That is the first time that I have seen that expression, if that is what he really said.

General TWINING. It is early to make a statement like this, but it is interesting to see how he contradicts himself here.

INCREASE IN ICBM PROGRAM

Mr. FORD. Yesterday or the day before we discussed the ATLAS-TITAN program, what it was a year ago, what the Congress did and what now is before us.

To get my own thinking clarified I would like to give you some figures to see whether or not my impression is correct.

A year ago, the Department of Defense submitted a program predicated upon 9 ATLAS squadrons and 11 TITAN squadrons for a total of 20 squadrons; is that correct?

Secretary GATES. That is correct.

Mr. FORD. The Congress in the appropriation bill for the fiscal year 1960 provided partial funding for a revised program which called for 17 ATLAS squadrons and 11 TITAN squadrons, or a total of 28; is that correct?

Secretary GATES. I am quite sure it is.

Mr. FORD. In the budget before us now we have a program for 13 ATLAS and 14 TITANS, or a total of 27 ICBM squadrons?

Secretary GATES. That is correct.

Mr. FORD. In other words, the Department of Defense on its own has in a period of a year gone up from a total of 20 ICBM squadrons to 27?

Secretary GATES. That is correct.

MACE MISSILE

Mr. FORD. The chairman discussed the MACE program. I was not entirely clear as to what you said the operational date would be for the squadrons proposed for Germany and Okinawa.

General TWINING. Off the record.

(Discussion off the record.)

AIR DEFENSE

Mr. FORD. The problem of air defense is one we have been struggling with, and I suspect we may struggle during this session. It has been testified that General Kuter requested more money for air defense than is included in the budget for 1961.

Secretary GATES. That is correct.

Mr. FORD. Do you have an idea or recollection of what he asked for that he did not get, dollarwise?

Secretary GATES. I think that his program—according to his figures which I do not think have been reviewed yet because I think this is a relatively new study on his part—would run to a cost of perhaps \$5.5 billion per year.

Mr. FORD. Through 1964 or 1965?

Secretary GATES. For the 2 or 3 years ahead.

Mr. FORD. It was also testified that in the overall air defense program submitted in the budget there had been reductions made below the levels that were forecast a year ago; is that correct?

Secretary GATES. That is correct, as the result of the studies of last summer. Our totals now run in this budget \$3.9 billion.

Mr. FORD. Is that the package of air defense?

Secretary GATES. The package; all identifiable costs—that is the interceptors, the missiles, the radars, the SAGE, et cetera.

Mr. FORD. I know there have been some revisions downward from the air defense program of a year ago. Could you summarize for the record the changes in that regard for SAGE, NIKE-HERCULES, BOMARC, HAWK, and the interceptors? Give us a very brief summary of what changes or revisions have been made.

Secretary GATES. Yes. Principally some adjustment in some parts of the overall program. The F-108 has been canceled and the production of the NIKE-ZEUS has been postponed.

(The information requested is classified and has been furnished to the committee separately.)

B-58 PROGRAM

Mr. FORD. The B-58 program is another big program. How much is in the budget for the B-58 program for the fiscal year 1961?

Secretary GATES. Something over \$500 million.

Mr. FORD. Were there those who wanted a larger program?

Secretary GATES. Yes.

Mr. FORD. What were the alternatives, dollarwise, in this area?

Secretary GATES. I think the original concept of the B-58 program envisioned a larger number of aircraft and a larger number of wings to be equipped with these aircraft. This program would have added up to a very large figure if it were carried out over the period; \$564.7 million looks like the amount that was requested for fiscal year 1961, which has been reduced to about \$500 million in the review.

OPERATIONS UNDER THE REORGANIZATION ACT OF 1958

Mr. FORD. Mr. Secretary, we have had the Reorganization Act of 1958 on the statute books about a year and a half. Could you summarize for the record how it has been implemented what the impact is, and how it is working at the present time?

Secretary GATES. We got out all of the fundamental directives to implement it by the end of calendar year 1958. This, of course, established an increased staff for the Joint Chiefs of Staff. It established the channel of command from the Joint Chiefs of Staff to the unified commanders and put the operation into motion as far as the orders and instructions were concerned. I think it was almost exactly a year ago from right now this was completed. It took a little longer than that, after the orders were issued, to get the system operating and to complete the augmentation of the Joint Staff. I think we can probably say it has been in operation about 8 months, or something of that nature.

I think it has operated well. We have had two commanders conferences, one at Quantico in June and one in the first week of January at Norfolk, where we brought in all the unified commanders to meet with the Service Secretaries, the Deputy Secretary of Defense, the Joint Chiefs and the Chairman and myself. These conferences were very successful. They were really held without an agenda. We permitted the individual unified commander to discuss his problems in his area, and his problems on the overall working of the system. I think these meetings were healthy.

Meanwhile, Mr. McElroy went on some trips with the Chiefs to various unified commands, and I have been to some of them. We intend to continue these commanders' conferences. We intend to continue periodic visits on the part of myself and the Joint Chiefs to these headquarters. I think there will continue to be some gray areas that will take administrative action to straighten out. But I think everyone is pleased with the operation.

Mr. FORD. Would you care to comment on that, General Twining?

General TWINING. As the Secretary said, we are trying to make this a gradual transition. I would say about April was when the Joint Staff itself was completely integrated and ready to go under the new system. It has not been working under the new system very long.

I think it is going to be a very good setup. It is going to take a little time to work out some of the bugs, but I think we should take that time and not be in too much of a hurry to reorganize again. We should let this thing ride for a while.

Secretary GATES. As I testified I think yesterday, a very fundamental part of this reorganization was the creation of the Office of the Director of Defense Research and Engineering and the assignment of competent people to man it. This has had a great effect on our operations and the preparation of this budget.

PROJECT WAGMIGHT

Mr. FORD. I would like to ask a question about Project WAGMIGHT, which has been in the news and about which some people are apparently concerned. Could we have an analysis?

Secretary GATES. I do not know all the details, but will furnish a statement for the record.

(The requested information follows:)

PROJECT WAGMIGHT

The Office of Naval Research has a contract with Goodyear Aircraft Corp. on the "Inflataplane," a small, slow-speed liaison-type aircraft. Ten of these were constructed under the contract and are now undergoing tests prior to delivery to the services.

In 1958 the Navy asked Goodyear Aircraft Corp. to investigate the feasibility of a project called WAGMIGHT. Goodyear Aircraft Corp. made a study which they voluntarily gave to the Navy for consideration. The study proposed a medium range high subsonic weapon system based on an inflated fabric aircraft.

The Navy carefully reviewed the project. From these studies and reviews it was concluded that the concept of an inflatable airframe "did not lend itself to application in high performance aircraft carrying essential military equipment as envisioned by WAGMIGHT." It was determined that the supposed operational advantages are not technically realizable and it was decided not to pursue the project any further.

Project WAGMIGHT and the Inflataplane are two separate projects; the first a proposal developed initially by the Navy, and the second, the Inflataplane, a contract with the Office of Naval Research.

Mr. FORD. Thank you very much, Mr. Secretary and General Twining.

Mr. MAHON. Mr. Ostertag.

U.S. MILITARY POSTURE

Mr. OSTERTAG. Mr. Secretary, I want to join my colleagues in commendation of your fine presentation to the committee. I think it is one of the finest that has ever been made before this committee. It certainly is an encouraging word, as well as a clear-cut picture of our defense posture and the problems involved.

It certainly is an excellent basis for approach to this budget and the problems this committee faces at this time.

I too am sure you are going to do an outstanding job as Secretary of Defense, and we are proud of your approach and your leadership in this important field.

May I say the field has been well covered. Considerable discussion has been taking place here within the last few days with regard to comparisons of strength and the problems involved in a deterrent or

retaliatory power. I do not want to belabor any of those particular points.

If I analyze the picture correctly, in practically every field of endeavor, whether it be air power or sea power, we are ahead and are not second place in any conceivable way. The only area where there might be some difference, as is pointed out in your statement, is that the Soviets may enjoy at times a moderate numerical superiority in intercontinental ballistic missiles. Is that about the sum and substance of it?

Secretary GATES. That is correct. But they also, of course, have many more submarines than we, although we are ahead in the technology of submarines, especially nuclear types. The other area we have discussed is the big booster problem, where admittedly we are behind.

PROGRESS OF THE MISSILE PROGRAM

Mr. OSTERTAG. The ATLAS missile is operational today; is that correct?

Secretary GATES. That is correct.

Mr. OSTERTAG. Do we have the capability of having a number of ICBM's equal to that of the Soviets?

Secretary GATES. It is a question of forecasting the future. As of now, we have approximately—using the national intelligence estimate—an equal strength. It is a question of judgment where we will be in 1, 2, or 3 years from now. We are going to go ahead with this program of 27 squadrons of the two big missiles, ATLAS and TITAN, and we intend to make the later versions of both missiles better.

In the case of ATLAS, we will harden some of them to ———. In the case of TITAN, we will harden all of them to ——— and introduce an element called the storable propellant. This means that the missile will be simpler and more ready because it will be sitting there already fueled. We will put those into silo launchers. When we get those 27 squadrons in being I think we will always keep them because they are big and accurate and carry large warheads.

However, we are trying as hard as we know how to move forward with the mobile, smaller, cheaper, easier to handle, and easier-to-disperse missiles of the MINUTEMAN and POLARIS types.

Mr. OSTERTAG. Would it be possible for us to have a greater number of squadrons, ATLAS squadrons or more hardened sites for operation of these missiles if we so desired and if we felt it was important?

Secretary GATES. I think from a practical point of view, that is to build the sites correctly, it would be very difficult to go much faster than we now are going. If we went on a complete wartime basis of construction, we could probably accelerate the program, but under present conditions I think it unlikely that we could do very much more.

Mr. OSTERTAG. But our program and our numbers are sufficient to maintain a reasonable balance at this time and yet move forward toward a new family of missiles that might be coming into being?

Secretary GATES. That is correct.

Mr. OSTERTAG. Of course, that difference will only exist perhaps during the next 2 or 3 years?

Secretary GATES. That is correct.

Mr. OSTERTAG. In connection with the space program, the ATLAS is being used in certain aspects of space exploration, for example, the ATLAS-ABLE. The National Aeronautics and Space Administration, as I understand it, contracts with the Defense Department for the procurement of these ATLAS boosters; is that correct?

Secretary GATES. That is correct.

Mr. OSTERTAG. Is there a problem with regard to missile production? Is the Space Agency getting whatever it requires for future tests?

Secretary GATES. No problem has been called to my attention. I don't think there is a problem.

Mr. OSTERTAG. The hardening of sites for missiles is not a problem, is it, from the standpoint of moving ahead? In other words, that is on schedule and there is no need to accelerate that particular phase of the program?

Secretary GATES. That is right, sir.

Mr. OSTERTAG. In that connection, there has been going through my mind the comparative difference with regard to the Soviet system as compared to ours in regard to mobility of ballistic missiles.

(Discussion off the record.)

DEVELOPMENT OF ATOMIC AIRCRAFT

Mr. OSTERTAG. Another thought occurs to me with regard to the question of airpower. If I understand it correctly, Khrushchev and the Soviets are, to a large extent, abandoning the manned bomber.

Secretary GATES. That is what he advertises, as of yesterday morning. Our figures indicate that he has continued a modest production of strategic aircraft—a very modest production.

Mr. OSTERTAG. I think that General Twining or you stated yesterday that it would appear that they are practically abolishing their force; is that correct?

General TWINING. No. He implied that, but he would still have a lot of airplanes left. I do not think he will discard them.

Mr. OSTERTAG. What I was leading up to is this: If that is a part of the air picture that is developing, where would the development, or the potential to develop atomic powered aircraft, fit into their plan?

Secretary GATES. If that proved to be their course of action it probably would not fit into their picture except for some psychological purpose.

DEPLOYMENT OF IRBM'S

Mr. OSTERTAG. I would like to explore for a moment the question of the IRBM and our deployment thereof in other parts of the world.

As I understand it, we have operational IRBM's in England and plans call for similar locations in Italy and Turkey.

Secretary GATES. That is correct.

Mr. OSTERTAG. Has not Great Britain developed an intermediate range ballistic missile which they believe is satisfactory and sufficient for their own use?

Secretary GATES. They have been working for some time on a missile that is somewhere between IRBM and ATLAS. It is more than an IRBM. It is called, I think, the BLUE STREAK. I do not think it is operational. I do not think they have completed their testing, and so forth. They have been developing this system.

Mr. OSTERTAG. Then it is possible that our allies will have on their own volition developed a ballistic missile for their own use?

Secretary GATES. That is correct. Also, there is the unresolved decision on what we call the second generation IRBM's for use by the NATO alliance.

ADEQUACY OF DEFENSE BUDGET

Mr. OSTERTAG. I would like to raise the question about the overall budget for defense purposes. It seems there have been some changes made. You, of course, recognize the terrific cost involved in maintaining our establishment today. Outside of the cost of the development of weapons, everyday maintenance and personnel costs are heavy.

You do believe, do you not, Mr. Secretary, that this is a well-rounded budget and it certainly meets our requirements as they exist today?

Secretary GATES. I do.

Mr. OSTERTAG. And there is reasonable support throughout the services for this budget?

Secretary GATES. There is unquestioned support for the total. As I have testified, everybody would do it a little differently if he were the sole judge.

Mr. OSTERTAG. I thank you, Mr. Secretary. That is all that I have.

Mr. MAHON. Mr. Lipscomb.

MILITARY AIR TRANSPORT SERVICE

Mr. LIPSCOMB. I want to join with my colleagues in complimenting you on your appearance before the committee and the manner in which you have answered the questions.

On page 26 of your statement you refer to the Military Air Transport Service. It is my understanding that the Department of Defense has been working on a study and has prepared a report to be submitted to the President, which contains certain recommendations regarding the Military Air Transport Service policy. Is my understanding correct?

Secretary GATES. That is correct.

Mr. LIPSCOMB. Does this budget contain appropriations to implement any of those recommendations?

Secretary GATES. It contains, if my memory is right, \$50 million for the modernization of MATS, principally along the lines of developing a better cargo capability.

Mr. LIPSCOMB. Was this a recommendation contained in the report?

Secretary GATES. The \$50 million was not contained in the report, but the concept was.

Mr. LIPSCOMB. Is that the only recommendation contained in the report that is reflected in this budget before us?

Secretary GATES. I believe so, with the exception of the fact that the personnel numbers and operating aircraft possibly reflect some of the recommendations of the report. I think the only significant financial items are the ones we have referred to.

Mr. LIPSCOMB. You also mentioned much of the present MATS' fleet is obsolescent. Is it possible for you to point out to us what part of this MATS fleet is obsolescent?

Secretary GATES. I would rather leave the details of that, if it is satisfactory to you, for the experts in the Air Force. I can say in a general way that we are contemplating action after more study on the overall Reserve forces question. We have already made some moves in this respect, moving some of the transport aircraft out of MATS into the Air National Guard. This is the same concept we used with the Navy, remember, when we transferred a part of the wartime antisubmarine warfare mission to the Navy Reserve. This will come up in a more intensive way when we complete the review of the Reserve forces that we have asked the Joint Chiefs of Staff to make. The older transport aircraft still have some usefulness as a mobilization base and, as I said, they have been in a small way transferred to the Air National Guard. I think MATS is contracting out for a great deal of its passenger-carrying capability already. I think the primary deficiency is in cargo lift.

NEW MISSION OF AIR NATIONAL GUARD IN AIRLIFT OPERATIONS

Mr. LIPSCOMB. On January 12 the Department of Defense put out an announcement that the Air National Guard was to receive C-97 4-engine transports. Does this announcement of January 12 mean there is any change in the role of the Air National Guard?

Secretary GATES. Yes; but only to this extent, that—

Mr. LIPSCOMB. What is the effect of converting the Guard, or Reserve, to transport operations on the total air defense posture?

Secretary GATES. The theory would be that the Air National Guard would be an augmenting backup to the airlift capability for military purposes in time of tension. The Air Force Reserve already has a considerable airlift capacity.

Mr. LIPSCOMB. Some of these transports are being transferred to Van Nuys, Calif. The Air National Guard units stationed at Van Nuys have been very proud of their performance in their present mission and have been on 24-hour alert with jet fighters. Of course, this transfer is changing their mission. It appears that there is a change in our posture in ready alert on the coast.

Secretary GATES. It would obviously make a difference in their mission. My understanding from the Air Force is that this concept, to some degree at least, is acceptable to the Air National Guard. Of course, the Air Force has been purchasing relatively few fighters in recent years. Inevitably, you are going to run into a situation where you will have fewer fighter squadrons in being and a lesser requirement to use the Air National Guard in an interceptor role. I do not want to prejudge the pretty important review of Reserve missions that we are talking about here. We are making a few small steps at this point. We are not prejudging the ultimate review.

Mr. LIPSCOMB. Does this changeover mean any difference in the reliance of the military on the aircraft and operators that are in the CRAF program?

Secretary GATES. No, I do not think it does.

Mr. LIPSCOMB. Mr. Secretary, you indicated in your statement that the Department of Defense was going to make a reexamination of the roles and missions of the Reserve components in relation to those of the Active forces in light of the changing character of warfare. I believe this is an excellent proposal. I am wondering how comprehensive this examination is going to be. Is it going beyond roles and missions to include types of training, organization, capability, aircraft, and hardware in use, directives, rules and regulations, and physical qualifications?

Secretary GATES. Yes, it should cover all the things you mentioned.

Mr. LIPSCOMB. I think this is an excellent move to be made.

UTILIZATION OF SAVINGS THROUGH CONVENTIONAL AIRCRAFT CARRIER CONSTRUCTION

When discussing the aircraft carrier, it was stated that by building a conventional instead of a nuclear-powered carrier, the indicated savings would be about \$130 million, which is the estimated added cost of the nuclear-powered carrier.

Secretary GATES. That is correct.

Mr. LIPSCOMB. You indicated this money could be used for other purposes such as ASW. Does this indicate this money could be used in the future and not in this 1961 fiscal year budget?

Secretary GATES. No. The shipbuilding program is fully funded and this money has been applied to the shipbuilding program. It is a question of buying antisubmarine warfare capability instead of buying nuclear propulsion for the aircraft carrier. Actually, the funds would be spent over a leadtime of 3 years on ship construction, but the money is in this budget.

Mr. LIPSCOMB. This indicates that even beyond your budget request, the ASW add-on of last year, that you still have additional money that you can put into the ASW program and intend to.

Secretary GATES. That is right. The principle has been for some time in the Navy that the year you buy a carrier, which is very expensive, you buy fewer ships; the year you do not buy the carrier you buy more ships. You try to get this on a kind of 2-year cycle so that in the end you keep your balance in your requirements for ships.

We have not spent the money the Congress authorized or that this committee gave us, I think \$35 million, for the long leadtime items for the nuclear reactors. We have not spent that money. That money has been held in reserve and will be applied against the cost of the conventional carrier, with the approval of the Congress.

Mr. LIPSCOMB. The thing that concerns me about this is that you mentioned a saving of \$130 million, and you say it can be used to much greater advantage for other pressing purposes such as antisubmarine warfare. I want to be sure that ASW is fully funded in this budget with the necessary appropriation. I do not want it to appear that you have held back on fully funding ASW work because you might use this \$130 million.

Secretary GATES. It is the reverse. The \$130 million has been put into ASW ships.

ADVERTISING BY GOVERNMENT CONTRACTORS

Mr. LIPSCOMB. Mr. Secretary, is there a policy in the Department of Defense regarding advertising by Government contractors in periodicals, trade magazines, and such, and charging this cost of advertising against Government contracts?

Secretary GATES. Yes, there is. I cannot quote it to you accurately, but it is part of the new cost principles that have just recently been issued through a coordinated effort headed up by Assistant Secretary McGuire, Supply and Logistics. As part of this setup of cost principles the business of how you charge expenses—which this would be, is discussed. I think in the free enterprise system it is difficult to be rigid about your rules on advertising.

I might say some of the advertising that has appeared has been pretty emphatically frowned upon and the people involved have been informed of our attitude. This is particularly true when the advertising involves highly controversial and competitive systems.

AIR ALERT

Mr. LIPSCOMB. I believe you covered this, Mr. Secretary, but I was interested in the statement regarding air alert and the on-the-shelf item. Was it my understanding you were going to insert in the record what "on the shelf" meant?

Secretary GATES. It means extra spare parts and special training.

General TWINING. Off the record.

(Discussion off the record.)

Mr. LIPSCOMB. Thank you, Mr. Chairman. Thank you, Mr. Secretary.

Mr. MAHON. Mr. Weaver.

CONTINUED USE OF MANNED BOMBERS

Mr. WEAVER. Mr. Secretary, on page 3 of your statement you say that manned bombers are still for both the United States and the U.S.S.R. the principal means of carrying a heavy nuclear punch with accuracy to the target. Then, as we discussed, we heard Mr. Khrushchev say that the Soviet Union is abandoning its bomber fleet. My question is:

If we were to take the Russian Premier seriously, does this not raise a question in your mind as to whether we are not perhaps wasting time and money in going ahead with NIKE-HERCULES and inaugurating or carrying forward BOMARC? What would be your comment?

Secretary GATES. It will take Mr. Khrushchev quite a long while to implement this speech as far as manned aircraft are concerned—assuming he intends to do so. Meanwhile, he will have in being a significant manned bomber force. I would think that before we completely finish the program for continental air defense, which we have reviewed only within the last 6 months, that we ought to take another look at exactly what he is doing with his manned bombers. But this

study concerned numbers of sites for BOMARC and NIKE-HERCULES and the relationship they have to manned interceptors and the relationship they all have to the SAGE control system. These matters were reviewed in the light of a Soviet Air Force about the size they have today. There has not been any change in this.

He may stop the small amount of production we think he now has, but that would still leave a sizable force in being with a pretty long useful life. He will still be able to use it if he ever intends to attack the United States. It is true our continental air defense system at the moment is essentially for use against the manned bomber. It is a very expensive system but we believe that at this time it is the minimum proper continental air defense system that we should have.

BOMARC

Mr. WEAVER. You feel that even though BOMARC is not perfected, it is well worth our time and money to go ahead in view of the time length it is going to take to put it into operation?

Secretary GATES. Yes, and like everything else, to review it currently.

ATLANTIC BARRIER OPERATION

Mr. WEAVER. Can you tell me a little about the Atlantic barrier operation? It has been my privilege to see it. How soon can this be turned from an air watch into an ASW operation?

Secretary GATES. It is already partially an ASW operation. We have the capability to put in an ASW barrier and have done so in certain periods of international tension to augment the normal warning lines from Argentina to the Azores.

(Discussion off the record.)

Mr. WEAVER. On page 10 of your statement in discussing technological advances you make the statement that in some programs we may have "overstayed our time." Is there any indication now for the guidance of this committee that some of our present programs are getting into this category?

Secretary GATES. We tried to give you our best judgment on what our programs should be. But it is worth saying time and time again that we are living in a world of such great and rapid change that we just have to keep the program under continual review.

REORGANIZATION OF DEFENSE DEPARTMENT

Mr. WEAVER. Mr. Secretary, I am interested in the possibility of saving money and perhaps increasing our effectiveness by creation of a single military service, even with one uniform. Have there been any studies, even minor ones, made along this line during this past year?

Secretary GATES. The last time the whole subject of Defense organization was reviewed was prior to the 1958 reorganization plan submitted by the President in that year. There have been no overall studies of the organization of the Department of Defense since then.

Mr. WEAVER. Do you propose to undertake any such studies in the future?

Secretary GATES. No. "In the future", however, is a long time. I do not propose to undertake any this year. I would like to modify that, if I may. This does not mean we will not do a lot of things administratively. I presume you were talking about reorganization actions requiring new legislation.

Mr. WEAVER. That is right.

DEVELOPMENT OF HIGH-THRUST ROCKET ENGINES

Both you and the President, and yesterday particularly, I believe, General Twining also made the statement that the thrust in these missiles is of no military significance, even though the Russians outperform us in that respect. My question is this: It would seem to me if we are trying for a bigger payload that thrust would be a very significant factor.

Secretary GATES. That is correct. It is significant as far as the prestige of the United States is concerned. We said from the standpoint of military requirement we have the capability we need with the TITAN-ATLAS type of boosters. Taking into account their normal growth potential, we should be able to put into orbit the types of payloads that are required at this time and as far as we can reasonably see ahead.

The bigger payloads would probably be important from a military point of view when we find a way to put a man in space.

PILFERAGE BY FOREIGN NATIONALS

Mr. WEAVER. Mr. Secretary, one of the problems I ran into while in the Far East last fall was that of thievery, mostly by local citizens. I have been told, for instance, that our losses in the Philippines amount to \$1.5 million a year. Has the Department of Defense done anything to correct this sort of situation?

Secretary GATES. Yes. This has been a problem in Korea. It has been a problem in the Philippines. In Korea we made some rather startling progress. I think I testified to it yesterday. The Koreans themselves have taken drastic action. The Korean police and military now enter stores and confiscate U.S. material on sale there. So we have really made rather remarkable progress in Korea.

In the Philippines we have also made some progress. I think the arrangements between U.S. military personnel and the Philippine police have improved. I think the Philippine Government has increased the number of their constabulary. For the moment, we seem to be on the upgrade in this respect.

Most of the problem relating to thieving in the Philippines has been in connection with some Filipinos in our employ who have shot Filipino thieves. Unfortunately, this got into a rather difficult political situation in the Philippines. I would say there has been improvement and we are well aware of the problem. I have never heard a dollar amount tied to it.

Mr. WEAVER. In other words, you have never made or Defense never has made any effort to get a dollar count on perhaps our losses not only in the Philippines but in other places?

Secretary GATES. I am sure it exists, but I have not heard of it. I am sure the people at Clark Field and the other installations would be able to tell you what was involved.

Mr. WEAVER. Would it be possible for the Department of Defense to give the committee in a general way some idea in this respect?

Secretary GATES. I am sure it would be.

(The information will be supplied later for the use of the committee.)

Mr. WEAVER. Last November I issued a statement concerning my trip to the Far East and pertaining to the Philippines, which statement I had cleared with the chairman of this subcommittee. A news report carried a statement from a Pentagon spokesman which said that while I was entitled to my views, they were not shared by the Department of Defense.

I am curious to know why the Department of Defense does not agree with statements made to me by their field commanders.

Secretary GATES. I am not familiar with the statement, Mr. Weaver. It might have been the order of magnitude of the problem that was in disagreement rather than a recognition of the problem, which I am sure we would agree with you on.

SAVINGS THROUGH CONVENTIONAL AIRCRAFT CARRIER CONSTRUCTION

Mr. WEAVER. Turning briefly to the aircraft carrier, you mentioned that a saving of \$137 million could be made by having the carrier a conventional one rather than nuclear. Is that a real saving or is that something designed to sell this committee?

Secretary GATES. That is a real saving, the \$130 million.

Mr. WEAVER. Have you taken into consideration the cost of operating the tanker fleet needed to keep a conventional carrier in operation?

Secretary GATES. No. This \$130 million is a construction differential. The cost of operation has not been included in that comparison.

Mr. WEAVER. How about the fuel consumption of a nuclear carrier compared to a conventional carrier over a period of time? Has that been taken into consideration?

Secretary GATES. Everything has been taken into consideration, but the figure we are quoting is purely the construction cost. I think that the nuclear carrier that we are comparing here is a 4-reactor carrier, rather than an 8-reactor carrier like the *Enterprise*. In that figure we are talking about a carrier using four nuclear reactors for propulsion, compared to a carrier using conventional propulsion.

Mr. WEAVER. I cannot reconcile in my own mind how you can say flatly we are saving \$137 million.

Secretary GATES. That is just the difference between buying nuclear reactors and buying the other kind of powerplants.

Mr. WEAVER. Would it be possible for you to supply us with figures as to what it would cost from a fuel-consumption standpoint and from the standpoint of operating the tanker fleet over a period of time?

Secretary GATES. Yes; we know what a conventionally powered carrier costs to operate on a fuel-consumption basis. We do not know the cost of operating a nuclear-powered carrier because we do not have one.

Mr. OSTERTAG. Which is the most expensive?

Secretary GATES. To operate?

Mr. OSTERTAG. Yes.

Secretary GATES. Well, as I mentioned before, we have not had actual experience upon which to base a comparison. But, based upon

our experience with both nuclear and conventional submarines and leaving aside the question of military advantages, the fuel costs of operating a nuclear-powered carrier will be higher than the cost of fuel for a conventionally powered carrier, although this will be offset somewhat, as you say, if the cost of operating oilers is included.

Mr. WEAVER. That is all I have, Mr. Chairman. I would like to say to the Secretary I certainly appreciate your frank answers and, along with my colleagues, I want to commend you on the fine job I feel you, along with General Twining, are doing.

Mr. MAHON. Mr. Minshall.

Mr. MINSHALL. Mr. Chairman, Mr. Secretary, General, I would be remiss if I did not join my colleagues in saying to you what an outstanding job I think you have done before this committee. Your statements were excellent.

I feel that if you could get to the American public and they could see and listen to you at first hand, a lot of these doubts about our military posture would be cleared up because your candor and forthrightness certainly gets through. You have done an excellent job.

Secretary GATES. Thank you.

Mr. MINSHALL. I have very few questions. Most of my questions will be placed at the proper time according to the services when they testify before the committee.

STATUS OF BOMARC

There was one thing I would like to ask in carrying out Mr. Andrews' request from yesterday. I wondered if we had gotten that report about BOMARC testing program as yet.

Secretary GATES. Yes; we have. We have had five shots of BOMARC-B. The solid fuel booster worked perfectly in all five. The ramjet engine failed on all five. We have identified the problem, which was a problem of a valve functioning. The trouble has been definitely pinpointed and the tests will start again the end of this month.

Mr. MINSHALL. These are all limited operational tests so far, none has been accomplished with a simulated warhead?

Secretary GATES. BOMARC-A only; BOMARC-B has not.

Mr. MINSHALL. Is BOMARC-A in position or on operational site? They hoped to have one at McGuire—I think they emphasized the word “hoped”—by the end of last year.

Secretary GATES. I have the dates of operational units, if I may look at it for a second. On both BOMARC-A and BOMARC-B, four squadrons will be operational in fiscal year 1960. ——— These figures do not count the Canadian BOMARC squadrons.

Mr. MINSHALL. You feel confident that despite the failures in the BOMARC-B testing program to date you will have ——— in 1961 completely operational?

Secretary GATES. These figures that I have are current programs and are supposed to reflect any slippages to date.

Mr. MINSHALL. When will the program be completely finished?

Secretary GATES. Completely in being?

Mr. MINSHALL. Completely in being.

Secretary GATES. By the end of fiscal year 1963.

Mr. MINSHALL. How many squadrons will that be?

Secretary GATES. ———

REDUCTION OF SOVIET ARMED FORCES

Mr. MINSHALL. Mr. Secretary, this morning in response to an earlier query you stated that it was the feeling at the Pentagon that you gave some faith and credit, as it were, to some of Mr. Khrushchev's remarks yesterday. You felt that he would reduce the armed forces of the Soviet Union.

Secretary GATES. I said we should not take it lightly—that it looks, in a preliminary way, as though he may have to do this to accomplish his ambitions in connection with his 7-year economic plan.

Mr. MINSHALL. He also stated in his remarks, which I am quoting now from the New York Times—they have this as a verbatim quote, Khrushchev speaking—

Almost the whole of the air force is being replaced by rocket equipment. We have by now cut down sharply and it seems will continue to cut down and even discontinue the manufacture of bombers and other obsolete machinery.

Would you give that the same analysis you gave the general statement?

Secretary GATES. No.

Mr. MINSHALL. If not, why not?

Secretary GATES. My statement, as a preliminary evaluation, deals with his requirements for manpower in his economic program. It would not deal with just the manpower required to run his air force. We still are going to go on the National Intelligence Estimates and our own estimates, which have been consistent for quite a long time, on the size of his air force until we see some other facts.

Mr. MINSHALL. That is all I have, Mr. Chairman. Thank you.

Mr. MAHON. Mr. Thomson.

Mr. THOMSON. At the outset, I would like to congratulate you, Mr. Secretary, upon your statement presented here, which confirms my feeling of delight when I saw that you had been nominated as Secretary of Defense.

Also, I would like to congratulate General Twining for his presentation. As last year, it was very helpful.

Now as to this statement that was just quoted from the New York Times as to the future disposition of the Soviet as far as aircraft is concerned. That does not differ greatly from the estimates we have had in that it says in effect they are going to quit producing but not quit flying what he already has. Is that not the way you interpret it?

Secretary GATES. Yes.

General TWINING. He has a lot of them, too.

INCREASE IN TITAN PROGRAM

Mr. THOMSON. This committee last year, as set forth in the committee report, provided funds for a certain program insofar as ATLAS squadrons and TITAN squadrons are concerned. I notice a cutback in ATLAS and an increase in TITAN. How many TITANS have been successfully shot?

Secretary GATES. Six shots, with two failures.

Mr. THOMSON. A hundred percent successful, achieving all objectives?

Secretary GATES. No. Four successful and two failures.

Mr. THOMSON. What is the thinking that causes us to cut back on the successful one and to push forward at a greater rate than was recommended by this committee on the unsuccessful one or the one not fully successful even as yet?

Secretary GATES. The hardest kind of thinking in the world has been put on this question because it is a very good and logical, but difficult, question. The primary reason is that the TITAN has a greater growth potential in terms of warhead capability and range. It also has the better potential for the storable fuel which will make it simpler to handle and also make a much more ready missile. When it becomes operationally satisfactory, it will do many things better than the ATLAS. It will just be a better missile in all respects.

Mr. THOMSON. That is on paper that it is?

Secretary GATES. Yes; so far.

Mr. THOMSON. If it accomplishes the objectives?

Secretary GATES. Yes; that is correct.

Mr. THOMSON. It delivers a larger payload, but we have an adequate payload in the ATLAS at the present time as far as defense purposes are concerned, as far as reaction to any potential enemy's move; have we not?

Secretary GATES. Yes, but it is always handy to have numerous strings to your strategic bow and the TITAN will significantly increase the number of megatons you can deliver.

Mr. THOMSON. If there are any places we should go off the record, please say so. Are there any targets you know of at the present time that might interest us which the X megaton load which the ATLAS delivers would not be sufficient to kill?

SECRETARY GATES. Again, this gets into the complicated question of accuracy and what he does with his forces, how much he hardens them, how much he disperses them. Again, it gets into the question of what he believes we have and how effective our deterrent is. The TITAN will give us an improvement in our deterrent posture that will make it more credible than if we just stuck to the ATLAS program. General Twining would probably like to augment my remarks.

General TWINING. Off the record.

(Discussion off the record.)

STORABLE FUELS FOR BALLISTIC MISSILES

Mr. THOMSON. On storable fuel that you mention, this circulating fuel proposition, is that what you mean? I did not have the opportunity to go into the TITAN program as thoroughly as I would have liked—and I will try to get a weekend to do it—but on the ATLAS they are planning on a circulating proposition as far as this liquid fuel is concerned; is that right? You circulate it within the missile; is that right?

Secretary GATES. You are getting over my head technically. What it means to me is that an ATLAS missile must be fueled before it can be fired. A TITAN missile with storable fuels will have its fuel right in the missile and be sitting there with the fuel aboard.

Mr. THOMSON. I think probably we should go into this more with the service involved, but—

Secretary GATES. Particularly with Dr. York. This is very much in his field.

Mr. THOMSON. It was a tough decision for me last year to vote for or against funds to continue the TITAN program—it is up to you to do it or not, and it is up to us whether we supply the funds. I went for the TITAN program because of some of these factors you mentioned about such as not putting all our bows on one string or all our arrows on one bow, or whatever it is, but from what I have been able to observe and find out since, my thinking is tipping the other way. Off the record.

(Discussion off the record.)

Mr. THOMSON. General Twining, in your very interesting presentation you showed a number of Soviet bombers. (Discussion off the record.)

Mr. THOMSON. One thing that has been of great concern to me as I have sat on this committee is that perhaps our intelligence information, the first step in our evaluation here, or in a field order, is our principal weakness. Do you see any way of getting more and better concrete information upon which intelligence could be based, other than through the mechanism of a reconnaissance satellite?

Secretary GATES.—Off the record.

(Discussion off the record.)

TEPEE PROJECT

Mr. THOMSON. While we are on that subject, on about page 10 or 11 of your statement, Mr. Secretary, you referred to this improved information in communication techniques and that sort of thing. Is the TEPEE project the Navy talked to us about last year one of those things that is worthy of consideration?

Secretary GATES. I did not identify the TEPEE by name.

Mr. THOMSON. Off the record.

(Discussion off the record.)

Secretary GATES. Oh, yes. This is one of the ideas that come up from time to time—and we are encouraging any ideas that may provide increased missile warning capability. This was an intriguing idea put forward by a scientist in the Office of Naval Research. I do not think it looks quite as good now as it looked in the beginning. There are a number of difficult technical problems yet to be solved. We are going ahead with the research and funds are included in this budget for that purpose.

Mr. THOMSON. One thing has been particularly annoying to me since we have all this difficulty with enemy intelligence. I find we are giving out our intelligence hand over fist. I came back at Thanksgiving after having been cautioned about this TEPEE project, being told that it was so simple that any high school physics student could probably do it. Then it came out and was in all the Washington papers.

Secretary GATES. No one deplors this more than I.

Mr. THOMSON. It was certainly a shock to me. Off the record.

(Discussion off the record.)

RELIABILITY OF SOVIET MISSILES

Mr. THOMSON. You compared several characteristics as to what our missiles were and what we thought the Soviets might have. Reliability was not compared.

How do you think they compare in reliability?

General TWINING. Similar to ours.

Mr. THOMSON. I think we were given an estimate of _____ percent on theirs and up to _____ percent on ours.

General TWINING. _____ percent to get to the target area.

Mr. THOMSON. Of the _____ percent that got off?

General TWINING. Yes.

Mr. THOMPSON. Ours is higher.

Secretary GATES. _____ percent in the intelligence.

Mr. THOMPSON. I thought ours was substantially higher than that now that we have had these continuous successes.

General TWINING. The _____ is exceptionally good in the ATLAS, and so on.

Mr. THOMSON. How about the reliability in getting off the pad?

General TWINING. We figure it will be just about what I said.

Secretary GATES. Mr. Chairman, would it be appropriate to caution the committee on this discussion? We are talking about some things here that many people in the Pentagon are not cleared for.

Mr. MAHON. Proceed as you think best.

Mr. THOMSON. General Twining, I would like to congratulate you on your statements made, particularly with regard to this danger of downgrading our capability. What that gets down to is this thing that we have all read about—that is the danger of somebody miscalculating and setting off a war; is that right? If we give them comfort by downgrading ourselves, then they are liable to miscalculate as they miscalculated in Korea.

Is that what it gets down to?

General TWINING. That is right.

I would like to mention here to the committee that I hope that you have not thought that I am up here trying to make you feel completely happy about this force that we have. No military man has ever been happy with what he has, but I want to let you see what we think the true picture is. I would like to see it a lot stronger.

Mr. THOMSON. I appreciate that, General.

General TWINING. I do not want you to think that I am complacent. I want to see that you get the picture.

Mr. THOMSON. In the two years I have had the pleasure of listening to your presentations, I have been particularly impressed by the realistic approach and objective approach you have tried to take and in not trying to take credit for something we do not have or giving credit where credit is not due.

U.S. MILITARY POSTURE

On page 5 of your statement, Mr. Secretary, you make the statement that it is also possible that the Soviets might elect to produce and deploy missiles in larger quantities than presently estimated.

If they were to do that, would that produce—as I understood Mr. Dulles to say it would—the higher levels ——— that were estimated for any given year in the presentations that were made?

Secretary GATES. That is correct.

Mr. THOMSON. I would like to also congratulate you, Mr. Secretary, for making clear on page 8 this: Even with the greater rate of potential of growth of the economic and industrial facilities in the Soviet Union as compared to our rate of growth, we still would be far ahead of them in 1965 and 1969. I appreciate your clarifying that for the record.

I think there has been too much loose talk and, in fact, I went down yesterday to the Bureau of Mines appropriations and they were taking some of these loose figures to justify a bigger appropriation there. I appreciate that clarification.

I heard statements about this gap in the ICBM, again referring to the numbers gap. It was not clear in my mind what you were getting at.

If I understood you correctly, and I would like to have you clarify it for me, you were saying that even with reference to what was shown on your chart as to ICBM's, when you compare the two we have a slightly smaller number for a slight period in the future—if the POLARIS missile, though, were to be taken from the water-launching category and placed up in the ICBM, which you could reasonably do because you tie a ship together with its range with a shorter range missile—then we would be up where they are for all practical purposes numberswise.

General TWINING. That would help a great deal, the POLARIS. In addition to that, we have the ——— attack aircraft on carriers in the 6th and 7th fleets fully ready.

We have this great preponderance of heavy bombers above theirs. The whole picture is what I am showing that adds up to this.

In my mind, though I say we would like to have as many to balance out, we feel, or I feel——

Mr. THOMSON. That POLARIS submarine carries 16 missiles. When you take that times nine, you have 144 and basically you are saying that although we put them in this separate category of water launch to be on the conservative side with good logic it could have gone up in ICBM?

General TWINING. We give the Soviets credit for some of that.

Mr. OSTERTAG. Would you yield?

Mr. THOMSON. Yes.

Mr. OSTERTAG. Does that mean, General, readiness, operational and ready to go?

General TWINING. POLARIS?

Mr. OSTERTAG. All of this picture.

General TWINING. Yes, sir; on both sides we have employed the same comparison criteria insofar as is possible.

Mr. OSTERTAG. Yet, we do not know how ready they are from the standpoint of launching?

General TWINING. We just assume they are getting ready for them or they would not be building them.

(Discussion off the record.)

Mr. THOMSON. Do you give any credit to the Soviets for reload capability on a practical basis with their missiles?

General TWINING. We do not give ours any either.

Mr. THOMSON. One shot?

General TWINING. Yes.

Mr. THOMSON. Therefore, it would tie in directly to the number of sites they have as to their actual capability to launch missiles upon this area that we are interested in defending?

General TWINING. That is right.

Mr. THOMSON. You mentioned that, assuming we are hit first, that we then do not look to ——— as means of destruction and, number one, if you first of all have missiles——

General TWINING. That is something we should talk about off the record.

Mr. THOMSON. I am not going to take the time of the committee again to discuss how a general war might or might not develop. We went into that quite extensively last year in the hearings, but do I take it that as far as the composite thinking is concerned, we still are thinking of this master retaliation theory and allowing them to fire the first missile?

Secretary GATES. For a general war?

Mr. THOMSON. Yes.

Secretary GATES. Yes; definitely.

Mr. THOMSON. I still stick to the position I took last year, that you do not get general wars by somebody thinking about it at night and saying the next morning, "Push the button."

DEVELOPMENT OF COMMON-TYPE WEAPONS SYSTEMS

I reviewed a little of this and talked to college friends and so forth who are employed by several different major airplane companies and I want to congratulate you for the action you have taken on the B-70 and F-108. It seems to me that if we continue to take half steps we are never going to take a full stride. We use up the economic resources we have available by taking these half steps and then it hampers us in taking a big stride forward to place us way out in front.

In connection with that, is there any thinking going on in the Defense Department of trying to get a common fighter, a common bomber, and then to modify that so as to make it adaptable for different services, like the Navy, Marine Corps, or the Air Force?

Secretary GATES. Yes, there is a great deal of thinking and effort going on in that area. It has been accentuated quite a bit by the establishment of Dr. York's research and development office. We are buying the F-105 for close ground support of the Army in the field. I am sure that if it works out this will be a plane the Marines should consider. We are also talking about the possibility of more modern interceptors—not as advanced as the F-108—for continental defense. In this case one of the three planes under consideration is a Navy plane, a McDonnell F4H, which is one of the most advanced fighters in the world.

We are free, completely free, to interchange information and all services are——

Mr. THOMSON. Mr. Secretary, I hate to interrupt, but I just got the signal. I will submit some questions for the record, but I would like to get off in one other area in the time allowed.

PROFICIENCY FLYING

No. 1, proficiency flying. I thought we had that decided last year and I thought a directive went out. When I was being briefed at Warren, I was told we had to have more missile crews than I thought should be required because they had to have some time off for proficiency flying. When I got out to BMD, a man, whose name I do not want to put in the record, brought the problem in focus. I said, speaking as an individual and a member of the committee, "I am ready to give you your flying pay and bring the nonflyer doing a similar job up by means of proficiency pay to the same level, but I am not going to give you this airplane for recreational flying."

It costs \$120 an hour to fly a C-47. I told him that I liked to ride a horse but I buy my own horse and feed him my own hay and if he likes to fly, he ought to do likewise.

He told me that if that were to happen, too, in the next 3 years, he would quit the service.

They had there about 50 percent rated and 50 percent nonrated senior field officers.

"How many of you people feel the same way?" I asked them, and about 50 percent of the 50 percent who were rated raised their hands.

"Now," I said, "you have really complicated my problem. All we are trying to do is to put men, money, and materials together to buy some defense to assure the peace as far as I look at my duty on this committee. We have taken about all that we can get from the taxpayer, I think, and sometimes more than is sound to take from him, but he is putting it up.

"We can buy the materials from these different companies around us, but if you are going to say that I am going to lose men when I take this money out of your recreational flying, the cost of flying the airplane for you, then that makes me take a new look because that is the critical item.

"What is the solution to that as long as people are detailed out of the flying category and over into these missiles which, to me, is long-range artillery? They take a detail over there because it is the force of the future.

"What are we going to do about it? Are we going to continue to take money off missiles to give them this recreational flying, as I view it?"

Secretary GATES. We reviewed the proficiency flying problem pretty completely. Somebody had an idea we could save \$250 million a year, and we had a very comprehensive study made. It was the first paper I signed when my boss, Secretary McElroy, was in Geneva about the 1st of June. It is true that the proficiency flying pay is the least of the problem, the pay itself. The real problem from a cost viewpoint is in the airplane, its maintenance and operation and so on.

Mr. THOMSON. For the record and because of the time limitation, will you insert a summary of that review and what is now the regula-

tion as far as proficiency flying is concerned for men not assigned to flying duty?

Secretary GATES. Yes.

(The material referred to follows:)

PROFICIENCY FLYING

Proficiency flying, as a practice and the numbers of personnel engaged therein, has been thoroughly reviewed during the past several months. The problem has been discussed with the White House staff and several presentations given by the Assistant Secretary of Defense (M.P. & R.). We have established a clearly defined policy in this matter which centers about four major points:

1. Requirements for rated officers will be reviewed and validated annually. Rated personnel inventories will be adjusted in line with requirements, and flying personnel engaged in functions not related to flying will be reassigned to positions where their skills can be more efficiently utilized.

2. Only the minimum necessary proficiency flying will be permitted. Each service will establish procedures and controls to reduce the total flying activity of proficiency flyers by granting credit for administrative and support flying against periodic flying-hour minimums and maximums.

3. Proficiency flying will be performed only by those who need to maintain flying skills for current or future assignments. Each service will conduct an annual screening to identify and remove from active flying, personnel who can no longer be expected to fill positions requiring a rated officer. Personnel will be identified on the basis of age, grade, occupational specialty, flying experience, and future aeronautical potential.

4. Each service will implement the provision of the Appropriations Act permitting the payment of flight pay without the requirement to fly to selected individuals, as determined by the Secretary of each Military Department, who have held aeronautical ratings for not less than 20 years.

Department of Defense Directive No. 1340.4, May 29, 1959. Subject: "Proficiency Flying Programs," sets forth in detail the current policy and is attached to the end of this statement.

Each of the services have reviewed their proficiency flying programs in the light of the four principles I have set forth above and have issued implementing instructions. Illustrative of these actions are the following summaries of the Air Force and Navy:

Air Force Regulation 60-2, "Annual Flying Requirements," has been revised and published, outlining the Air Force policy that flying time accomplished exclusively for the maintenance of individual proficiency be held to a minimum. Individual proficiency requirements are fulfilled in conjunction with administrative, support and other type flights to the maximum extent possible, consistent with operational requirements. Proficiency gained from administrative support and other type flights serves to reduce the flying hours required for maintaining individual flying proficiency.

The annual screening to identify and remove from active flying, personnel who can no longer be expected to fill positions requiring a rated officer has continued throughout the Air Force. The Central Flight Status Selection Board for 1959 was convened on December 1, 1959, and reviewed the records of 3,399 rated officers, previously identified through a screening process of all rated officers in the Air Force inventory. Of the officers identified through the screening process, over 2,100 have been selected to be removed from flying status. Of the number selected to be removed from flying status, approximately 1,850 are pilots and 250 are navigator/observers. This emphasizes the continuing vigorous action which the Air Force has taken annually in this area.

The Air Force has implemented the provision of the appropriation act which permits the payment of flight pay without the requirement to fly to selected individuals who have held aeronautical ratings for not less than 20 years to the following degree:

(1) Pay records of all rated personnel with not less than 20 years rated service have been annotated so as to permit the payment of flying pay without flying as required by Executive Order 10152, dated August 17, 1950.

(2) In addition, certain rated personnel indicated in the category outlined in paragraph d.(1). above, will be excused from complying with annual proficiency flying requirements as prescribed by AF'R 60-2. No flying hours will be programed or allocated for these selected individuals. The names of the individuals to be considered have been selected and will be submitted to the major air commands for review and comment prior to final evaluation by a board of officers to be convened at this Headquarters. Completion of this process is expected by February 15, 1960.

In implementation of the Department of Defense Directive, the Navy Department has reviewed and revised all current policies, instructions, and regulations bearing on proficiency flying. As a result of the Navy's review and submission of revised instructions, the Assistant Secretary of Defense (MP&R) on September 25, 1959, notified the Navy that the proposed instructions concerning the proficiency flying program of the Navy Department had been reviewed and were approved as being consistent with Defense policy.

In connection with implementing the provisions of the 1960 Appropriations Act permitting payment of flying pay to selected individuals, who have held aeronautical designations for not less than 20 years, without the requirement to fly, the Navy has established the following categories of naval aviators:

(1) *Category I*.—Aviators who have held designations as a naval aviator for less than 20 years and have not reached age 45. (95.5 percent.)

(2) *Category II*.—Aviators who have held designations as a naval aviator for less than 20 years and have reached age 45. (1.1 percent.)

(3) *Category III*.—Aviators who have held designations as a naval aviator for 20 years or more and have not reached age 45. (0.5 percent.)

(4) *Category IV*.—Aviators who have held designations as a naval aviator for 20 years or more and have reached age 45. (2.9 percent.)

In addition, a reduction in maximum annual flight time permitted for proficiency flying by categories was made as follows:

(1) *Category I*.—100 hours (no change).

(2) *Category II*.—From 100 hours to 60 hours.

(3) *Category III*.—From 100 hours to 60 hours.

(4) *Category IV*.—From 100 hours to 0 hours if physically qualified.

The Navy does not plan to program aircraft or operations and maintenance funds to support proficiency flying for category IV aviators. Also category III and IV will neither be required to, nor permitted to fly any monthly hour minimums although they are entitled to receive flying pay.

As can be noted from a review of the above summaries of Air Force and Navy action with regard to proficiency flying, the Defense Department is taking aggressive action in this area.

MAY 29, 1959.
NUMBER 1340.4.

ASD (M.P. & R.)

DEPARTMENT OF DEFENSE DIRECTIVE

Subject: Proficiency Flying Programs.

Reference: (a) Secretary of Defense memo to the Secretaries of the Military Departments, 1 March 1957, subject: "Proficiency Flying" (hereby cancelled).

I. PURPOSE

This Directive sets forth Department of Defense policy for the administration of proficiency flying programs to insure that they are operated in an efficient and economical manner.

II. CANCELLATION

Reference (a) is superseded and cancelled on the effective date of this Directive.

III. DEFINITION

For the purpose of this Directive, proficiency flying is defined as flying performed under competent orders by rated personnel primarily to maintain basic flying skills while serving in assignments where such skills would normally not be maintained in the performance of assigned duties.

IV. POLICY

A. Department of Defense policy recognizes the importance of proficiency flying as a means of maintaining basic flying skills.

B. Each Service will exert a continuing effort to improve the administration and management of proficiency flying programs.

1. Requirements for rated officers will be reviewed and validated annually. Rated personnel inventories will be adjusted in line with requirements, and flying personnel engaged in functions not related to flying will be reassigned to positions where their skills can be more efficiently utilized.

2. Only the minimum necessary proficiency flying will be permitted. Each Service will establish procedures and controls to reduce the total flying activity of proficiency flyers by granting credit for administrative and support flying against periodic flying-hour minimums and maximums.

3. Proficiency flying will be performed only by those who need to maintain flying skills for current or future assignments. Each Service will conduct an annual screening to identify and remove from active flying, personnel who can no longer be expected to fill positions requiring a rated officer. Personnel will be identified on the basis of age, grade, occupational specialty, flying experience, and future aeronautical potential.

4. Each Service will implement the provision of the Appropriations Act permitting the payment of flight pay without the requirement to fly to selected individuals, as determined by the Secretary of each Military Department, who have held aeronautical ratings for not less than twenty (20) years.

V. IMPLEMENTATION

A. The Military Departments will review and revise as necessary all current regulations, policies, and instructions bearing on proficiency flying to insure that they are in conformance with policies set forth in this Directive.

B. Copies of proposed revisions to regulations, instructions, and policies will be furnished the Assistant Secretary of Defense (Manpower, Personnel and Reserve) within sixty (60) days for review and approval, together with a statement of plans for the implementation of this Directive.

VI. REPORTS

Instructions for the submission of future reports to the Secretary of Defense will be issued separately, subject to appropriate report control action.

VII. EFFECTIVE DATE

The policies stated in this Directive are effective immediately.

THOMAS S. GATES,
Acting Secretary of Defense.

USE OF NONRATED PERSONNEL IN AIR FORCE

Mr. THOMSON. One last question, and you can supply the answer to this for the record.

I next ran into the proposition from Lowry that the configuration for a missile wing was going to be two squadrons of airplanes and one squadron of missiles. Colonels command squadrons, generals command wings. To me, that was saying to every nonrated man in the Air Force, when you crank in the proposition if you cannot fly them, you cannot command them, "unless you can fly you cannot go above colonel," which is what the level of a squadron commander is. In effect you are saying, unless the man is one of the one or two fortunate ones who get to be a staff officer or have General Schriever's job, or General Ritland's job, that is it. To me that raises serious doubts as to whether we can get a defense system, at any cost. Trained manpower is expensive to obtain and in some cases the loss is irreplaceable.

Would you comment upon what thinking is going on, what problems are inherent within the Air Force, as far as the domination of the flier over the nonflier is concerned and what the effect is upon manpower retention which is what I consider the most critical in putting men, money, and materials together, to buy defense and assure peace?

When I got these nonrated people aside and said, "What are you going to do?" these men on whom we have spent the taxpayer's money to send them to MIT, Cal Tech, et cetera, and who are the backbone of the missile program and who now have about 15 to 17 years of time in and are full colonels—in most instances said to me "We are going to quit at the end of 20 years."

Secretary GATES. I would be glad to comment for the record if you would like me to. It would be equally appropriate and perhaps more appropriate if you were willing to discuss this with the Secretary and the Chief of Staff of the Air Force. This is an important morale problem and an important personnel problem within the Air Force itself. I know they are aware of it and I know that they have it under study. We will comment on the Defense directive on proficiency flying and Defense thinking about this, but it would be most appropriate to review this with the Air Force.

Mr. THOMSON. I made an effort to do that and will continue that effort.

One last statement. When General Olds, who is the commander of your 15th Air Force which will have the missiles, and all of them that we can presently foresee, as far as I know, under his command, came to my office in Cheyenne and I presented these two problems to him. I said, "General, I want you to be helpful to me. How can I keep both the flier and the nonflier in uniform to provide defense so we will not have to keep retaining and retraining people for industry, and so forth? I do not see where we are going to get defense at any cost that way."

Mr. SIKES. Would you yield to me?

Mr. THOMSON. Just 1 second.

General Olds' reply to me was in effect that "I cannot be helpful to you."

I am eager to talk to the Air Force and the Chief of Staff of the Air Force.

I yield.

Mr. SIKES. Is it true that in this period when the number of fliers will be constantly decreasing because of fewer numbers of planes in service that there is almost no promotion above the rank of colonel for a nonflier?

Secretary GATES. No, it is not true. I have not checked the facts but I am advised that recent selection boards in the Air Force have promoted to general officers almost half-and-half between fliers and nonflyers. Certainly, the coming people in all the services, as far as promotions are concerned, will be these highly skilled technical people who have postgraduate degrees. It is inconceivable that they would not be.

Mr. THOMSON. Included in the material which you will submit, will you submit to the committee staff, and a copy to me, the configuration on the various missile sites that have been so far selected as to—

Secretary GATES. Command?

Mr. THOMSON. Warren is all missiles; Lowry is all missiles; but Ellsworth is going to be two and one, and so on down the line.

I was told by one party—now I begin to understand why—the only site the site-selection team will consider is one with runways. We cannot get them to look at the ones without runways because they want to keep this configuration going. I would like to see the sites that have been selected and what the configuration is going to be at each site submitted to the committee.

Thank you, Mr. Chairman.

(The material requested is classified and has been provided the committee.)

NEED FOR SUPERSONIC MANNED BOMBER

Mr. MAHON. Mr. Secretary, I would like to make a statement and ask for your comments in regard to a situation which we have discussed one way or the other several times in this hearing.

In the testimony you have put your best foot forward, so to speak, with respect to our military strength. It is perfectly proper and necessary to weigh carefully the elements of our strength, but we also need to weigh carefully the elements of our weakness. I am sure that you fully agree with that statement.

It gives me concern that we do not have a supersonic intercontinental manned bomber. I know that ICBM's are growing more important, but we plan to rely somewhat on the manned bomber for many years.

Our B-52 is not much faster than some of our commercial airplanes and in spite of that fact we are downgrading the B-70 supersonic intercontinental bomber by placing less emphasis on its development and procurement.

We are not pressing forward as fast as we could on the now operational B-58 medium bomber which has supersonic capabilities. I realize that the B-70 project and the B-58 are terrifically expensive, but I do not want to let budgetary restraints stand between us and what we need to maintain in the way of military power. Should we deliberately slow down in this important field?

I wish you would give your general reaction to this issue that is a big national issue and a controversial issue within the Pentagon and outside the Pentagon.

Everybody knows that the Soviets have a great number of fighter aircraft, far more than we have. They have ground-to-air missiles. Of course, the HOUND DOG air-to-ground missile is a significant element in our attack capability and our retaliatory capability. You have discussed that and the air-launched ballistic missile but the HOUND DOG and the other could not be the whole answer. Subsonic bombers are becoming increasingly vulnerable to attack and that was pointed out last year by General Powers, commander of the Strategic Air Command, but whether it is pointed out or not, everybody knows this.

We just do not face a rosy picture as to our manned bomber force. We are not moving rapidly toward a supersonic bomber force. Within the framework of these questions which I have raised, I would like to get, in a nutshell, your reaction to that.

Secretary GATES. Mr. Chairman, the B-70 project was, like the other important ones, given every known kind of review by the Joint Chiefs

of Staff, by the technical people, and by all of us. As you have pointed out, the B-58 and the B-70 are very expensive systems. The Air Force itself recommended \$5.5 billion for the B-70 program to have some aircraft operational in 1965.

There are many unknowns in this weapons system and there are many people who believe—and I think probably they would turn out to be correct—that the B-70 would actually be even more expensive than that and become operational at a later date than 1965.

This system is designed for the purpose of massive retaliation as part of our strategic deterrent. But by 1965 we have every reason to believe that we will have four big missile systems in being and capable of delivering this same kind of attack. The B-70 would add diversification to this attack force as the B-52 bomber does today and will continue to do for a long period in the future.

It is a matter of prudently choosing where you put your resources and whether this weapons system, the B-70, would really be as effective as the four big missile systems are anticipated to be.

There are problems in the B-70 development. Some of the materials and components that will be used are not known at this time. This is a whole new state-of-the-art advance of great magnitude, involving the use of metals and components that are still in the purely research stage. As to the advantages of increased speed, it is really a question of judgment because the speed of a bomber does not necessarily markedly reduce its vulnerability. Of course, it reduces its vulnerability somewhat, but it does not mean that the bomber is invulnerable.

There are some technical opinions that say the B-70 would be quite a handsome radar target, but since the aircraft does not exist, the opinions are all theory. But I believe that the B-70 as a complete weapons system is questionable at this time. The prudent thing to do is to go ahead with the development of the prototypes and postpone the complete weapons system. We may not lose very much by this postponement in any event.

Mr. MAHON. Off the record.

(Discussion off the record.)

Mr. MAHON. During the period when there will be a gap in the ICBM area—that is a period which we are approaching—it is argued very strongly that by a quick acceleration of the B-58 program you would reduce the hazard, if there is any hazard, in the so-called ICBM gap.

Have you weighed that carefully?

Secretary GATES. Yes; the B-58 program has had some development troubles also and we have an enormous investment in the B-58. I do not think it would quite fit into the so-called gap picture in very big numbers. It would probably come along a little later than that and, at the moment, we think the B-58 program recommended in this budget is the proper approach to it. In this case, we have a very good opportunity to change our minds at any time because this airplane is in production and the research and development work is principally behind us.

Mr. MAHON. Mr. Sikes?

AIR-LAUNCHED BALLISTIC MISSILE

Mr. SIKES. I do not believe we have discussed the air-launched ballistic missile which General White talked about the other day before the National Press Club. How soon will the effect of this missile be felt and how will it be used?

Secretary GATES. This, again, is a research proposition for which I think there is \$60 million in the 1961 budget. That is a pretty hefty figure for a research proposition. This concept will be pursued. It has, as a concept, obvious attractions.

Mr. SIKES. Is it still in the design stage?

Secretary GATES. Yes; as a complete system.

Mr. SIKES. Have we tested some of its components?

Secretary GATES. There have been no test firings of this system. However, there have been test firings of other test vehicles relating to this weapon concept.

Mr. SIKES. Will we test components or the weapon itself in 1961?

Secretary GATES. I am sure we will to some extent.

Mr. SIKES. Would it be usable on all of our bombers?

Secretary GATES. The concept is that this would be applicable to the B-52 and B-58.

Mr. FLOOD. You are talking about a ballistic missile, not the HOUND DOG?

Secretary GATES. Not about HOUND DOG. This is a ballistic missile.

MINUTEMAN PROGRAM

Mr. MAHON. When we have the Air Force witnesses before us we will go thoroughly into the question of whether we are accelerating the solid propellant, intercontinental ballistics missile known as the MINUTEMAN as rapidly as possible.

Would you give us a brief comment as to whether or not we are doing the maximum in the acceleration of this program?

Secretary GATES. Yes; we are, Mr. Mahon. We are doing it at the highest priority and have included in this budget money for an initial production capability.

General Twining reminds me that we have not yet set the force goals on the MINUTEMAN.

Mr. MAHON. Is there anything further?

(At the close of this portion of the hearings a series of questions were propounded to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff by Mr. Sikes, of Florida; Mr. Flood, of Pennsylvania; and Mr. Thomson, of Wyoming. Because of the early printing date for this portion of the hearings, these questions and their answers will be printed in a subsequent volume.)

Mr. MAHON. It was necessary to start our hearings this year before the President had formally submitted the 1961 Budget. Therefore, we have not had the benefit of what the President's budget message had to say on defense. This might have had some effect on the questions asked, but I assume that what we have been told is in accord with what the President will say in his message next Monday. Since the budget message will be available when these hearings are printed next Monday, I will ask the staff to extract that part of the message pertaining

to defense and print it as an appendix to this record. It may also be well for certain other pertinent tables and segments of the budget to be printed as a part of this hearing record.

Mr. Secretary, it has been very helpful to us to have your frank and very comprehensive presentation. I have noted that all members interrogating you have, to an unusual degree, complimented you. I think these compliments have been deserved. I wish you every success in your extremely important job as Secretary of Defense, and I want to thank you for your appearance. Likewise I want to thank you, General Twining, for again appearing before us this year and giving us your evaluation of the situation. We feel that we can rely heavily upon you in these desperately important matters.

APPENDIX

BUDGET MESSAGE OF THE PRESIDENT

Department of Defense—Military.—New appropriations of \$40-577 million are recommended for the military functions of the Department of Defense for 1961. Expenditures in 1961 are estimated at \$40,995 million. These amounts exclude funds for the development of the Saturn space project which I have proposed be transferred to the National Aeronautics and Space Administration.

Strategy and tactics of the U.S. military forces are now undergoing one of the greatest transitions in history. The change of emphasis from conventional-type to missile-type warfare must be made with care, mindful that the one type of warfare cannot be safely neglected in favor of the other. Our military forces must be capable of contending successfully with any contingency which may be forced upon us, from limited emergencies to all-out nuclear general war.

Major national security

[Fiscal years. In millions]

Program or agency	Budget expenditures			Recommended new obligational authority for 1961
	1959 actual	1960 estimate	1961 estimate	
Department of Defense—Military:				
Military functions:				
Military personnel:				
Present programs	\$11,801	\$11,959	\$12,124	\$11,813
Proposed legislation, retirement pay			22	24
Operation and maintenance	10,384	10,137	10,321	10,527
Procurement	14,410	13,943	13,602	13,085
Research, development, test, and evaluation	2,859	3,680	3,917	3,910
Construction	1,948	1,670	1,359	1,188
Revolving funds	-169	-444	-350	30
Subtotal	41,233	40,945	40,995	40,577
Military assistance	2,340	1,800	1,750	2,000
Atomic energy	2,541	2,675	2,689	2,666
Stockpiling and expansion of defense production	312	230	134	39
Total	46,426	45,650	45,568	45,282

¹ Additional obligational authority available by transfer, \$350,000,000.

² Compares with new obligational authority of \$45,517,000,000 enacted for 1959 and \$44,749,000,000 including \$25,000,000 in anticipated supplemental appropriations estimated for 1960.

Forces and military personnel strength.—This budget will provide in the fiscal year 1961 for the continued support of our forces at approximately the present level—a year-end strength of 2,489,000 men and women in the active forces. The forces to be supported include an Army of 14 divisions and 870,000 men; a Navy of 817 active ships and 619,000 men; a Marine Corps of 3 divisions and 3 air wings with 175,000 men; and an Air Force of 91 combat wings and 825,000 men.

If the reserve components are to serve effectively in time of war, their basic organization and objectives must conform to the changing character and missions of the active forces. Quality and combat readiness must take precedence over mere numbers. Under modern conditions, this is especially true of the ready reserve. I have requested the Secretary of Defense to reexamine the roles and missions of the reserve components in relation to those of the active forces and in the light of the changing requirements of modern warfare.

Last year the Congress discontinued its previously imposed minimum personnel strength limitations on the Army Reserve. Similar restrictions on the strength of the Army National Guard contained in the 1960 Department of Defense Appropriation Act should likewise be dropped. I strongly recommend to the Congress the avoidance of mandatory floors on the size of the reserve components so that we may have the flexibility to make adjustments in keeping with military necessity.

I again propose a reduction in the Army National Guard and Army Reserve—from their present strengths of 400,000 and 300,000, respectively, to 360,000 and 270,000 by the end of the fiscal year 1961. These strengths are considered adequate to meet the essential roles and missions of the reserves in support of our national security objectives.

Military personnel costs.—About 30% of the expenditures for the Department of Defense in 1961 are for military personnel costs, including pay for active, reserve, and retired military personnel. These expenditures are estimated to be \$12.1 billion, an increase of \$187 million over 1960, reflecting additional longevity pay of career personnel, more dependents, an increased number of men drawing proficiency pay, and social security tax increases (effective for the full year in 1961 compared with only 6 months in 1960). Retired pay costs are increased by \$94 million in 1961 over 1960, partly because of a substantial increase in the number of retired personnel. These increased costs are partially offset by a decrease of \$56 million in expenditures for the reserve forces, largely because of the planned reduction in strength of the Army Reserve components during 1961.

Traditionally, rates of pay for retired military personnel have been proportionate to current rates of pay for active personnel. The 1958 military pay act departed from this established formula by providing for a 6% increase rather than a proportionate increase for everyone retired prior to its effective date of June 1, 1958. I endorse pending legislation that will restore the traditional relationship between retired and active duty pay rates.

Operation and maintenance.—Expenditures for operating and maintaining the stations and equipment of the Armed Forces are estimated to be \$10.3 billion in 1961, which is \$184 million more than in 1960. The increase stems largely from the growing complexity

of and higher degree of maintenance required for newer weapons and equipment.

A substantial increase is estimated in the cost of operating additional communications systems in the air defense program, as well as in all programs where speed and security of communications are essential. Also, the program for fleet modernization will be stepped up in 1961 causing an increase in expenditures. Further increases arise from the civilian employee health program enacted by the Congress last year.

Other factors increasing operating costs include the higher unit cost of each flying hour, up 11% in two years, and of each steaming hour, up 15%. In total, these increases in operating costs outweigh the savings that result from declining programs and from economy measures, such as reduced numbers of units and installations, smaller inventories of major equipment, and improvements in the supply and distribution systems of the Armed Forces.

In the budget message for 1959, and again for 1960, I recommended immediate repeal of section 601 of the Act of September 28, 1951 (65 Stat. 365). This section prevents the military departments and the Office of Civil and Defense Mobilization from carrying out certain transactions involving real property unless they come into agreement with the Committees on Armed Services of the Senate and the House of Representatives. As I have stated previously, the Attorney General has advised me that this section violates fundamental constitutional principles. Accordingly, if it is not repealed by the Congress at its present session, I shall have no alternative thereafter but to direct the Secretary of Defense to disregard the section unless a court of competent jurisdiction determines otherwise.

Basic long-line communications in Alaska are now provided through Federal facilities operated by the Army, Air Force, and Federal Aviation Agency. The growing communications needs of this new State can best be met, as they have in other States, through the operation and development of such facilities by private enterprise. Legislation has already been proposed to authorize the sale of these Government-owned systems in Alaska, and its early enactment is desirable.

Procurement, research, and construction.—Approximately 45% of the expenditures for the Department of Defense are for procurement, research, development, and construction programs. In 1961, these expenditures are estimated at \$18.9 billion, compared to \$19.3 billion in 1960. The decreases, which are largely in construction and in aircraft procurement, and are offset in part by increases for research and development and for procurement of other military equipment such as tanks, vehicles, guns, and electronic devices. Expenditures for shipbuilding are estimated at about the same level as in 1960.

New obligational authority for 1961 recommended in this budget for aircraft procurement (excluding amounts for related research and construction) totals \$4,753 million, which is \$1,390 million below that enacted for 1960. On the other hand, the new authority of \$3,825 million proposed for missile procurement (excluding research and construction) in 1961 is \$581 million higher than for 1960. These contrasting trends in procurement reflect the anticipated changes in the composition and missions of our Armed Forces in the years ahead.

The Department of Defense appropriation acts for the past several years have contained a rider which limits competitive bidding by firms in other countries on certain military supply items. As I have repeatedly stated, this provision is much more restrictive than the general law, popularly known as the Buy American Act. I urge once again that the Congress not reenact this rider.

The task of providing a reasonable level of military strength, without endangering other vital aspects of our security, is greatly complicated by the swift pace of scientific progress. The last few years have witnessed what have been perhaps the most rapid advances in military technology in history. Some weapons systems have become obsolescent while still in production, and some while still under development.

Furthermore, unexpectedly rapid progress or a technological breakthrough on any one weapon system, in itself, often diminishes the relative importance of other competitive systems. This has necessitated a continuous review and reevaluation of the defense program in order to redirect resources to the newer and more important weapons systems and to eliminate or reduce effort on weapons systems which have been overtaken by events. Thus, in the last few years, a number of programs which looked very promising at the time their development was commenced have since been completely eliminated. For example, the importance of the Regulus II, a very promising aerodynamic ship-to-surface missile designed to be launched by surfaced submarines, was greatly diminished by the successful acceleration of the much more advanced Polaris ballistic missile launched by submerged submarines.

Another example is the recent cancellation of the F-108, a long-range interceptor with a speed three times as great as the speed of sound, which was designed for use against manned bombers in the period of the mid-1960's. The substantial progress being made in ballistic missile technology is rapidly shifting the main threat from manned bombers to missiles. Considering the high cost of the F-108 system—over \$4 billion for the force that had been planned—and the time period in which it would become operational, it was decided to stop further work on the project. Meanwhile, other air defense forces are being made effective, as described later in this message.

The size and scope of other important programs have been reduced from earlier plans. Notable in this category are the Jupiter and Thor intermediate-range ballistic missiles, which have been successfully developed, produced, and deployed, but the relative importance of which has diminished with the increasing availability of the Atlas intercontinental ballistic missile.

The impact of technological factors is also illustrated by the history of the high-energy fuel program. This project was started at a time when there was a critical need for a high-energy fuel to provide an extra margin of range for high-performance aircraft, particularly our heavy bombers. Continuing technical problems involved in the use of this fuel, coupled with significant improvements in aircraft range through other means, have now raised serious questions about the value of the high-energy fuel program. As a result, the scope of this project has been sharply curtailed.

These examples underscore the importance of even more searching evaluation of new major development programs and even more penetrating and far-ranging analyses of the potentialities of future technology. The cost of developing a major weapon system is now so enormous that the greatest care must be exercised in selecting new systems for development, in determining the most satisfactory rate of development, and in deciding the proper time at which either to place a system into production or to abandon it.

Strategic forces.—The deterrent power of our Armed Forces comes from both their nuclear retaliatory capability and their capability to conduct other essential operations in any form of war. The first capability is represented by a combination of manned bombers, carrier-based aircraft, and intercontinental and intermediate range missiles. The second capability is represented by our deployed ground, naval, and air forces in essential forward areas, together with ready reserves capable of effecting early emergency reinforcement.

The Strategic Air Command is the principal element of our long-range nuclear capability. One of the important and difficult decisions which had to be made in this budget concerned the role of the B-70, a long-range supersonic bomber. This aircraft, which was planned for initial operational use about 1965, would be complementary to but likewise competitive with the four strategic ballistic missile systems, all of which are scheduled to become available earlier. The first Atlas ICBM's are now operational, the first two Polaris submarines are expected to be operational this calendar year, and the first Titan ICBM's next year. The Minuteman solid-fueled ICBM is planned to be operational about mid-1963. By 1965, several or all of these systems will have been fully tested and their reliability established.

Thus, the need for the B-70 as a strategic weapon system is doubtful. However, I am recommending that development work on the B-70 airframe and engines be continued. It is expected that in 1963 two prototype aircraft will be available for flight testing. By that time we should be in a much better position to determine the value of that aircraft as a weapon system.

I am recommending additional acquisitions of the improved version of the B-52 (the B-52H with the new turbofan engine) and procurement of the B-58 supersonic medium bomber, together with the supporting refueling tankers in each case. These additional modern bombers will replace some of the older B-47 medium bombers; one B-52 can do the work of several B-47's which it will replace. Funds are also included in this budget to continue the equipping of the B-52 wings with the Hound Dog air-to-surface missile.

In the coming fiscal year additional quantities of Atlas, Titan, and Polaris missiles also will be procured. I am recommending funds for 3 additional Polaris submarines to be started in the coming fiscal year and for the advance procurement of long leadtime components on 3 more—making a total of 15 Polaris submarines and the appropriate number of missiles. Funds to continue the development and to initiate production of the first operational quantities of the Minuteman are also included in this budget.

Thus, four strategic ballistic missile systems will be in development and production during the coming fiscal year. These, together with

the manned bomber force, the carrier-based aircraft, the intermediate range ballistic missiles, and the tactical aircraft deployed abroad, ensure our continued capability to retaliate effectively in the event of an attack upon ourselves or our allies.

In order to ensure, insofar as practicable, the safety and readiness of these forces, we have substantially completed the dispersal of Strategic Air Command aircraft and the construction of alert facilities. These measures will permit a large portion of all our manned bombers and supporting tankers to get off the ground within 15 minutes after receiving warning of an attack.

I have also authorized the Department of Defense to begin to acquire a standby airborne alert capability for the heavy bombers. This will entail the procurement of extra engines and spare parts, and the training of the heavy bomber wings with the ability to conduct an airborne alert. It is neither necessary nor practical to fly a continuous airborne alert at this time. Such a procedure would, over a relatively short period of time, seriously degrade our overall capability to respond to attack. What I am recommending is a capability to fly such an alert if the need should arise and to maintain that alert for a reasonable period of time until the situation which necessitated it becomes clarified.

Attention is also being given to the safety and readiness of our land-based strategic missile forces. Except for the first several squadrons, strategic missiles will be dispersed in hardened underground sites. Measures are also being taken to shorten the reaction time of liquid-fueled missiles. The MINUTEMAN, because it will be solid fueled, will have a quick reaction time and will lend itself to mobile use. The solid-fueled POLARIS to be carried in submarines at sea is by its very nature highly invulnerable.

Aid defense forces.—Much progress has been made in increasing the effectiveness of the North American Aid Defense Command organized in 1957 as an integrated command of the United States and Canadian forces. The U.S. military elements—consisting of parts of all of our armed services—are integrated with Canada's Air Defence Command for maintaining an air defense capability for the entire North American Continent.

While we pay increasing attention to the growing threat of a potential enemy's ballistic missiles we should not lose sight of the fact that for the time being the manned bomber is the major threat. Although some \$17 billion has already been invested in defense systems against manned bombers, excluding the cost of personnel and operation and maintenance, certain segments have yet to be completed. These were described in the Department of Defense air defense plan presented to the Congress last year. The funds recommended in this budget will substantially complete the programs outlined in that plan. Specifically, the last major elements of the Nike-Hercules surface-to-air missile program will be financed in 1961 and the Bomarc interceptor missile program will approach completion. The related radar warning, electronic control, and communication systems will also be further equipped and modernized.

In response to the increasing missile threat, we are pressing to completion a new system for the detection of ballistic missile attack—the ballistic missile early warning system. Construction has been

under way for the last two years and the first segment is expected to be in operation in about a year.

To provide for an active defense against ballistic missile attack, I am recommending the continuing development of the NIKE-ZEUS system, but it will not be placed in production during the coming fiscal year during which further testing will be carried out.

The NIKE-ZEUS system is one of the most difficult undertakings ever attempted by this country. The technical problems involved in detecting, tracking, and computing the course of the incoming ballistic missile and in guiding the intercepting ZEUS missile to its target—all within a few minutes—are indeed enormous.

Much thought and study have been given to all of these factors and it is the concensus of my technical and military advisers that the system should be carefully tested before production is begun and facilities are constructed for its deployment. Accordingly, I am recommending sufficient funds in this budget to provide for the essential phases of such testing. Pending the results of such testing, the \$137 million appropriated last year by the Congress for initial production steps for the NIKE-ZEUS system will not be used.

Sea control forces.—Control of sea and ocean areas and sea lanes of communication is an integral element in the maintenance of our national security. The naval forces which carry the primary responsibility for this mission will consist of 817 combatant and support ships, 16 attack carrier air groups, 11 antisubmarine air groups, and 41 patrol and warning air squadrons.

From new construction and conversion programs started in prior years, the Navy will receive during fiscal year 1961 an unusually large number of modern ships. These will include the fifth and sixth *Forrestal*-class attack carriers, the first nuclear-powered cruiser, nine guided missile destroyers, seven guided missile frigates, and six nuclear-powered submarines. Three more Polaris ballistic missile submarines and a converted guided missile cruiser will also be commissioned.

For the coming fiscal year I am recommending the construction of 20 new ships and conversions or modernizations of 15 others. Included among the new ships is an attack carrier. It is planned to construct this carrier with a conventional rather than a nuclear powerplant.

While it is generally agreed that a nuclear-powered attack carrier has certain military advantages, such as extended range and endurance at high sustained speeds, these advantages are not overriding as in the case of a submarine. In a submarine, nuclear power provides the critical advantage of almost unlimited operation, submerged at high speeds. This enables nuclear-powered submarines to carry out missions which no conventionally powered submarine, no matter how modern, could accomplish.

The advantages of nuclear power with respect to the carrier, however, are not comparable. The primary requirement in a carrier is up-to-date facilities to operate, safely and effectively, the most modern naval aircraft. Use of a conventional powerplant will in no way prevent a carrier from functioning as a completely modern and mobile base for fleet aircraft for its foreseeable life. The additional \$130 million which a nuclear-powered carrier would cost can be used to

much greater advantage for other purposes. I, therefore, strongly urge the Congress to support this request for a conventionally powered aircraft carrier.

Tactical forces.—Elements of the ground, naval, and air forces comprise the tactical forces which are available to deal with cold war emergencies and limited war situations, in addition to performing essential tasks in the event of general war. Recommendations made in this budget provide funds for modernization and improvement in the effectiveness of our tactical forces.

Increased emphasis has been given in this budget to improving the mobility and firepower of the 14 Army divisions and other active combat elements of the Army and the 3 Marine Corps divisions. Additional quantities of new rifles and machineguns employing the standard NATO ammunition will be procured, as will combat and tactical vehicles of all kinds, including the new M60 tank, the M113 armored personnel carrier, self-propelled howitzers, trucks and jeeps. In recognition of the value of artillery in both nuclear and non-nuclear warfare, an entire new family of self-propelled artillery is introduced with this budget. This new artillery is lighter, more mobile, and, utilizing new ammunition, will have a greater range than that of types currently available.

The Army and Marine Corps will also buy a wide variety of guided missiles and rockets such as: Sergeant, Honest John, Little John, and **Lacrosse** for medium and close range ground fire support; Davy Crockett for an integral infantry-unit close-range atomic support weapon; and Hawk and Redeye for defense of field forces against air attack. Army aircraft procurement proposed for 1961 is more than 35% higher than for the current year, and includes funds for surveillance aircraft and for utility and medium cargo helicopters.

The tactical forces of the Army are supported by the tactical air wings of the Air Force which will also be provided with an increased capability under these budget recommendations. Funds are provided for increased procurement of F-105 supersonic all-weather fighter bombers. These aircraft, with their low-altitude handling characteristics and large carrying capacities for both nuclear and nonnuclear weapons, will strengthen significantly the air support available to the Army ground units.

The three Marine divisions are tactically supported by three Marine aircraft wings, which will also receive quantities of new aircraft.

(The following is an extract from the highlight statement preceding the Department of Defense chapter in the President's budget :)

DEPARTMENT OF DEFENSE—MILITARY

The 1961 budget for this chapter includes funds both for the military functions of the Department of Defense, as heretofore, and for the military assistance program, formerly carried under the Funds Appropriated to the President chapter. Although the appropriation for military assistance will continue to be made to the President, it is now shown with the appropriations for the military functions of the Department of Defense.

Summary of budget authorizations and expenditures

[In millions]

Title of appropriation groups	New obligational authority			Expenditures		
	1959 enacted	1960 estimate	1961 estimate	1959 actual	1960 estimate	1961 estimate
Military personnel—total	\$11,463	\$11,658	\$11,837	\$11,801	\$11,959	\$12,146
Active Forces	10,174	10,262	10,426	10,544	10,592	10,741
Reserve Forces	649	681	612	616	667	611
Retired pay	640	715	799	641	700	794
Operation and maintenance	10,195	10,317	10,527	10,384	10,137	10,321
Procurement—total	14,293	13,090	13,085	14,410	13,943	13,602
Aircraft	6,134	6,143	4,753	7,658	6,670	6,027
Missiles	4,107	3,244	3,825	3,339	3,500	3,479
Ships	1,947	1,139	2,035	1,493	1,651	1,644
Other	2,105	2,563	2,471	1,921	2,121	2,451
Research, development, test, and evaluation	3,775	4,189	3,910	2,859	3,680	3,917
Construction—total	1,384	1,364	1,188	1,948	1,670	1,359
Active Forces	1,358	1,291	1,153	1,862	1,608	1,302
Reserve Forces	26	73	35	86	62	57
Revolving and management funds	57	30	30	-169	-444	-350
Total, military functions	41,168	40,647	40,577	41,233	40,945	40,995

Additional obligational authority available by transfer: \$535,000,000 in 1959; \$430,000,000 in 1960; \$350,000,000 in 1961.

Military personnel.—Total military personnel expenditures (for Active and Reserve Forces and for retired pay) in 1961 are estimated at \$12,146 million, \$187 million higher than 1960 and \$345 million higher than 1959.

Active Forces personnel.—Expenditures for Active Forces military personnel in 1961 are estimated at \$10,741 million, \$149 million more than 1960 and \$197 million more than 1959. The 1961 program provides for a total strength of 2,489,000 on June 30, 1961, the same as on June 30, 1960, but 14,000 below the June 30, 1959, actual strength.

Active Forces military personnel

[In thousands]

	June 30, 1959	June 30, 1960	June 30, 1961
Total, Department of Defense	2,503	2,489	2,489
Army	861	870	870
Navy	626	619	619
Marine Corps	176	175	175
Air Force	840	825	825

Average man-years in 1961 are estimated at 2,488,000, compared with an average of 2,495,000 in 1960 and 2,564,000 in 1959. Despite the decline in man-years over the period, expenditures rise as the estimated average cost per military man increases from \$4,160 in 1959 to \$4,255 in 1960 and \$4,330 in 1961. The increase of \$170 per man over the period is caused chiefly by (1) required increases in the Government's social security contributions as an employer; (2) the phased increase in the numbers of enlisted men receiving proficiency pay; (3) increased numbers of men in enlisted pay grades E-8 and E-9; (4) a further rise in the number of dependents; and (5) additional longevity pay reflecting the rising experience level of the forces.

Most of these factors of increasing cost per man are associated with the Defense Department's efforts to develop a truly career force. These efforts have

been successful: recruitment and reenlistment rates have improved; the experience level of the forces has increased; the average intelligence level of enlisted personnel has risen; and the rate of disciplinary cases has been sharply reduced. However, the very success of this program has produced some increases in personnel costs, which are compensated for by increased overall effectiveness.

Reserve Forces.—Reserve personnel expenditures in 1961 are estimated at \$611 million, which is \$56 million less than 1960 and \$5 million less than 1959. The 1961 budget will provide for about 1,002,000 reservists on paid status at year end compared with 1,083,000 at the end of 1960 and 1,062,000 at the end of 1959. The adjusted reserve strengths, as shown in the accompanying table, will continue to provide an effectively trained military reserve adequate to meet the requirements of the Armed Forces.

Reserve Forces military personnel in paid status

[In thousands]

	June 30, 1959	June 30, 1960	June 30, 1961
Army Reserve.....	350	358	321
Drill pay status ¹	314	300	270
Other paid status.....	36	58	51
Army National Guard.....	399	400	360
Navy Reserve.....	130	137	130
Drill pay status ¹	120	129	129
Other paid status.....	10	8	1
Marine Corps Reserve.....	46	47	47
Drill pay status ¹	45	45	45
Other paid status.....	2	2	2
Air Force Reserve.....	65	69	71
Drill pay status ¹	57	62	63
Other paid status.....	8	7	8
Air National Guard.....	71	72	72
Total.....	1,062	1,083	1,002

¹ Includes 3- to 6-month trainees.

NOTE.—Detail may not add to totals due to rounding.

Wherever appropriate, the unit organization of the Reserve components is being changed to conform with that of the Active Forces in order to facilitate their integration in time of emergency. In the Reserve components of the Army, the changeover to the Pentomic concept has been virtually completed and, coupled with other actions, has resulted in considerably higher mobilization readiness. By the end of 1961, ground elements of the Marine Corps Reserve will be reorganized to conform with the combat elements of the Regular Fleet Marine Forces. Coupled with the transition to multiple paid drills, this reorganization will effect a marked improvement in the mobilization readiness of the Marine Reserve units.

All of the Reserve components participating have benefited from the 6-month training program. This program, which provides basically trained personnel to the Ready Reserve, allows the Reserve components to concentrate on advanced unit or individual training and thus maintain a high state of mobilization readiness. During 1961, the 6-month training program will continue to provide the majority of the necessary input of trained recruits to maintain the Reserve components at the planned levels.

Many elements of the Reserve components conduct some of their training with the Active Forces. Other Reserve elements are actually participating in, or taking over, missions assigned to the Active Forces.

In addition to supporting 27 divisions and numerous other combat units, the Army National Guard in 1961 will man an increased number of on-site Nike battalions for the air defense of the United States, thus relieving Active Army units for other duty.

Also contributing to the mission of the Air Defense Command, the Air National Guard will continue to maintain a certain portion of its fighter-interceptor force on "runway alert" and man, on an "around-the-clock" basis, certain aircraft control and warning radar sites.

Antisubmarine warfare aircraft, destroyers, destroyer escorts, and mine warfare ships manned by Selected Reserve crews of the Navy Reserve will continue to participate in regular fleet exercises. These crews carry standby active duty orders at all times which, in the event of mobilization, make them and their ships available for immediate deployment. It is expected that by the end of 1961 there will be Selected Reserve crews on 58 destroyers, destroyer escorts, and minesweepers, thus making an important contribution to our antisubmarine and mine warfare potential.

The Air Force Reserve, in addition to providing a pool of skilled individuals ready to augment the Active Air Force in time of emergency, also maintains a significant airlift capability in being.

Retired pay.—Expenditures for retired pay in 1961 are estimated at \$794 million, a total that is \$94 million more than 1960 and \$153 million more than 1959. Of the \$794 million in 1961, \$22 million is associated with proposed legislation which would authorize military personnel retired prior to June 1, 1958, to receive benefits consistent with the higher rates of pay provided by the Military Pay Act of 1958. At the end of 1961, about 289,000 persons will be receiving retired pay, compared to 254,000 at the end of 1960 and 230,000 at the end of 1959. With increasing numbers of military personnel who entered service during World War II becoming eligible for retirement, the numbers and cost of retired persons can be expected to continue an accelerating upward trend in future years.

Operation and maintenance.—Expenditures for operation and maintenance activities of the Active and Reserve Forces in 1961 are estimated at \$10,321 million, which is \$184 million more than 1960, but \$63 million less than 1959.

Average man-years for both military and civilian personnel, numbers of military units and installations, inventories of major weapons such as ships and aircraft, and the associated steaming- and flying-hour programs, all continue to decline gradually from 1959 to 1961. Nevertheless, overall operation and maintenance costs continue to increase. Among the factors tending to offset the planned reductions in activity levels are higher unit costs per flying hour, up 11% in two years; per steaming hour, up 15% since 1959; and the higher unit costs of maintaining and overhauling ships, missiles, aircraft, engines, etc.. These rising costs are caused chiefly by the introduction of more complex and advanced weapons into the active military forces. For example, the cost of overhauling a jet engine in the new B-58 is about six times as much as that for a jet engine in the older B-47. The annual operating costs for a nuclear-powered submarine are over three times as high as for a conventionally powered submarine of a similar type.

In addition to these higher unit costs, the expansion of certain going programs will require increased funds in 1961. The cost of operating and maintaining the expanding major electronics and communications systems (SAGE, BMEWS, Missile Master, etc.) will increase by over 70% from 1959 to 1961. Similarly, funds for that portion of the fleet rehabilitation and modernization program financed under Operation and maintenance will increase by about 25% in 1961 over 1960, reflecting continuation of the effort to improve the condition and readiness of the fleet. The cost of maintaining and furnishing the rapidly increasing number of family housing units is expected to rise by about 23% from 1959 to 1961. A modest liberalization of the dependent medicare program—through relaxation of restrictions on certain specified medical contingencies—will result in an increased cost per patient.

New activities, such as the civilian employee health benefits program enacted last year, are a third factor accounting for increased operation and maintenance costs.

Funds are included to enable the Strategic Air Command to acquire an "on the shelf" airborne alert capability which, if the need should arise, would permit a portion of the heavy bomber force to be on continuous airborne alert during periods of international tension. This program will require indoctrination training, larger inventories of spare parts (provided for under the Procurement title), and increased maintenance activities.

Procurement.—Because procurement of a major weapons system is so closely related to the research, development, test, and evaluation of that system a more accurate picture of the trends from 1959 through 1961 may be obtained by com-

binning these two appropriation groupings. Expenditures for this combination are estimated at \$17,519 million in 1961, which is \$104 million less than in 1960, but \$250 million more than 1959.

The 1961 budget provides for the procurement of 1,510 aircraft—633 for the Air Force, 658 for the Navy, and 219 for the Army. The total is 99 greater than in 1960, although 224 less than in 1959. The reduction from 1959 is, however, concentrated primarily in trainers and helicopters.

Procurement of both the greatly improved B-52H heavy jet bomber and the supersonic B-58 medium jet bomber will be continued during the year, as well as KC-135 supporting jet tankers. The 1961 procurement will complete the equipping of 14 B-52 wings. Development work will continue on the B-70 Mach 3 long-range bomber airframe and engines to provide two prototype aircraft for flight testing in 1963.

An increased number of F-105 supersonic fighter-bombers are planned for procurement in 1961 over 1960. Because of their all-weather capability, special low-altitude handling characteristics, and ability to carry a wide variety of conventional as well as nuclear munitions, these aircraft will strengthen significantly the close ground support capability of the tactical air forces. Procurement of the C-130 turboprop transport for tactical airlift will also be continued.

The number of Navy attack aircraft to be purchased, including the supersonic A3J, will be increased to augment carrier attack and close-support capabilities. Procurement of the Navy's supersonic F8U-2N and F4H all-weather interceptors will remain at about the same level as in 1960, but substantially above 1959. An increased number of the GV-1 tanker-assault transport aircraft and S2F anti-submarine aircraft will also be procured.

Total Army aircraft procurement in 1961 will increase more than 35% over 1960, including the Mohawk turboprop observation aircraft, the Caribou twin engine transport aircraft, and the Iroquois utility helicopter used for combat area movement, medical evacuation, and light cargo. The first production quantities of the Chinook helicopter will also be bought in 1961.

The 1961 budget reflects the continually increasing emphasis on missiles of all kinds in national defense. Funds for the procurement and production of the four main strategic deterrent missiles—Atlas, Titan, Minuteman, and Polaris—will be further increased. No new funding will be required in 1961 for the Jupiter and Thor intermediate range ballistic missiles, but procurement of the Hound Dog and Quail for use by the B-52 strategic retaliatory force will be continued at a high level.

Funding for the Bomarc and Nike-Hercules air defense missiles will largely complete the procurement program for these missiles. Procurement of the Talos, Terrier, and Tartar fleet air defense missiles will continue as additional guided-missile ships join the fleet.

Funds will also be devoted to continuing the procurement of large numbers of air-to-air missiles such as Sparrow for the Navy and Marine Corps, Falcon for the Air Force, and the combat-tested Sidewinder for both the Air Force and Navy.

A wide variety of other missiles for support of the ground forces is planned for procurement in 1961. The number of Bullpup air-to-surface missiles to be purchased in 1961 will be increased considerably over 1960. In the category of surface-to-surface weapons, the effort on the longer range tactical missile Pershing, offering much greater flexibility, accuracy, mobility, and a considerably shorter reaction time than its predecessor Redstone, will continue on a high priority basis. Additional funds will be provided for the tactical close-support rockets, Little John and an improved version of Honest John. These, together with Lacrosse and Sergeant missiles, will provide medium and short range ground support firepower. A substantial procurement of Hawk missiles, together with the first production quantity of Redeye—a man-carried air defense missile—will be made in 1961, to improve the defenses of our ground forces in the field against low level air attack. For close support of front line troops, a sizable quantity of Davy Crockett—a man-carried nuclear rocket—will be procured, and in 1961 the first production buy of an improved guided antitank missile will be made.

Close ground support firepower will be augmented by the procurement in 1961 of a family of lighter, more mobile, self-propelled howitzers. An increased quantity of new 7.62-mm. rifles, machineguns, and ammunition will be purchased.

Included in the 1961 procurement program are about 18,000 tactical vehicles; a third increment of the new 105-mm. armed, diesel powered, medium tanks; tank recovery vehicles; and lightweight, air droppable, armored personnel carriers.

The 1961 shipbuilding program includes the aircraft carrier for which advance procurement funds were appropriated by the Congress last year. However, it is proposed to construct this carrier with a conventional rather than a nuclear powerplant. In addition, funds are provided for construction of 3 guided-missile frigates, 2 guided-missile destroyers, 3 nuclear-powered submarines, 3 Polaris fleet ballistic missile submarines, and 8 other ships, for a total of 20 ships.

The buildup of the Polaris fleet ballistic missile submarine force will continue at the rate of three submarines per year. The first three were built with funds made available in 1958. Funds appropriated in 1959 were used to build six more—three in 1959 and three in 1960. In addition to the 3 Polaris submarines scheduled for 1961, which will bring the total to 12, funding is provided for the purchase of long leadtime components for 3 more submarines to be started after 1961.

An additional 14 destroyers will undergo major modernization in 1961, the second annual increment of the fleet rehabilitation and modernization program designed to improve the antisubmarine warfare capability of the Navy and to extend the useful life of World War II destroyers.

In the electronics category, additional funds are provided for procurement of large radars for two ballistic missile early warning system (BMEWS) stations. Funds are provided for additional semiautomatic ground environment (SAGE) computers, for the radar improvement program and to extend the air weapons control system in overseas areas. The 1961 budget also provides for the development of extensive command and control communications for air defense, Strategic Air Command ground forces, and other needs of the military services.

Research, development, test, and evaluation.—Expenditures for basic and applied research, and for the development, test, and evaluation of new and improved weapons and equipment under this title are estimated at \$3,917 million in 1961.

Under the rearrangement of the Defense budget adopted last year, funds for the development, test, and evaluation of major weapons systems and components which were previously carried in Procurement accounts, have now been largely transferred to this title. Those remaining in the Procurement title are separately identified.

In the aircraft category, the 1961 program emphasizes the development of a variety of tactical aircraft, continues the aircraft nuclear propulsion program conducted jointly by the Air Force and the Atomic Energy Commission, provides for continuation of the X-15 hypersonic and very high altitude research aircraft, and increases the development support for the ground launched and manned Dynasoar vehicle which will have near orbital capabilities.

As in 1960, the category receiving the largest amount of funds will be missiles and related equipment. Large sums are provided for the improvement of the range, accuracy, and reliability of the Polaris missile.

Intensive research and development work will be continued on the Army's Nike-Zeus antimissile missile. Adequate funds are provided for the full scale testing of this system, under realistic field conditions, in order to ascertain its practicability as a weapon system.

Funding is also provided to continue necessary further developmental work on a wide variety of other tactical missiles just entering the inventory, such as Pershing and Sergeant; as well as on such more advanced projects as an air-launched ballistic missile, the Mauler for air defense of the forward area of the field army, and a new, highly mobile, solid-fuel missile for direct support of Army battle groups.

Antisubmarine warfare research and development will be continued at a high level, including development of both fixed and mobile submarine detection devices, improved tracking equipment, nuclear depth charges, and new antisubmarine weapons such as surface and submarine launched antisubmarine missiles.

Funds are also provided to keep abreast of new developments in chemical and biological warfare.

For the military space effort funds are provided for satellite systems for early warning (Midas), reconnaissance (Samos), communications (Notus), and navigation (Transit). The Department of Defense contribution to the national space program will also include the development of improved solid and liquid missile propellants and of advanced guidance and communications techniques, and research in high-altitude phenomena and space medicine. Funds for the Saturn, a very high thrust booster project, in 1961 are shown in this budget as a part of the funds requested under the National Aeronautics and Space Administration.

Provision is also made for continuation of the present high levels of effort in basic research in order to add importantly to the share of fundamental knowledge and in advanced research in such areas as materials, seismology, oceanography, electronic components, and low temperature physics.

In addition, \$150 million is included for the Department of Defense Emergency Fund—the same amount as in 1959 and 1960. This fund permits rapid exploitation of scientific breakthroughs and unanticipated technological developments which may occur during the coming year.

Military construction.—Expenditures for military construction in 1961 are estimated at \$1,359 million, \$311 million less than in 1960, and \$589 million less than in 1959. Expenditures are continuing to decline as construction of air defense installations and Strategic Air Command bases move toward completion, but are expected to level off as missile base construction activity accelerates.

The 1961 program for active forces continues to place increasing emphasis on missile installations and on electronic facilities for air defense. Funds are provided for the construction of additional Atlas and Titan operational sites, for installations to support the initial deployment of operational Minuteman missile squadrons, and for Polaris weapon system base facilities.

The budget also provides for the improvement of facilities for existing radar warning and control systems, such as the Pinetree Line, Dewline, and SAGE; for improved Nike-Hercules radar facilities; and for further extension of the Loran system.

The program also includes the construction of new research, development, test, and evaluation facilities. Additional funds are included for the Pacific Missile Range, and for the construction of development and test facilities for the Nike-Zeus system.

The existing physical plant of the defense establishment, including waterfront, airfield, maintenance, medical, and housing facilities will be improved and modernized.

Construction expenditures for Reserve Forces facilities are estimated at \$57 million, compared with \$62 million in 1960 and \$86 million in 1959. The decline reflects the stabilization of these forces and the tapering off of new facility requirements. The emphasis is now on urgently needed replacement construction.

Revolving and management funds.—The \$30 million of reappropriation shown under this title for 1961 is the amount to be added to the revolving fund for Wherry housing. These additional funds will permit the Department of Defense to continue in 1961 its program of acquiring and rehabilitating Wherry housing units.

Again in 1961 there will be an excess, estimated at \$350 million, of receipts over expenditures in the revolving and management funds of the Department of Defense. This excess of receipts will reduce to \$40,995 million the Department's net expenditures for Military functions estimated under the first six budget appropriation groups.

Composition of the Armed Forces.—The 1961 budget for the Military functions of the Department of Defense provides for major forces as follows :

Department of Defense—Summary of major forces

[Fiscal years 1959-61]

	Actual,	Planned	
	June 30, 1959	June 30, 1960	June 30, 1961
Army:			
Divisions.....	15	14	14
Armored cavalry regiments.....	5	5	5
Armored combat commands.....	1	1	1
Brigades (infantry).....	2	2	2
Battle groups (infantry).....	8	8	9
Field artillery missile groups (heavy) (Redstone).....	3	3	3
Army missile commands.....	4	4	5
Army air defense antiaircraft battalions.....	(85)	(81½)	(87½)
Guided missile battalions (equivalents).....	74	73½	82½
Other battalions (gun, skysweeper, automatic weapons).....	11	8	5
Separate surface-to-surface missile battalions.....	18	24	26
Active aircraft inventory.....	(5, 199)	(5, 663)	(5, 791)
Helicopters.....	2, 357	2, 714	2, 840
Fixed-wing.....	2, 842	2, 949	2, 951
Navy:			
Commissioned ships in fleet.....	(860)	(817)	(817)
Warships.....	386	383	382
Other.....	474	434	435
Attack carrier air groups.....	16	16	16
Carrier antisubmarine air groups ¹	11	11	11
Patrol and warning squadrons.....	42	42	41
Marine divisions.....	3	3	3
Marine air wings.....	3	3	3
Active aircraft inventory.....	9, 649	8, 657	8, 348
Air Force:			
USAF combat wings.....	(105)	(96)	(91)
Strategic wings.....	43	40	38
Air defense wings.....	27	23	20
Tactical wings.....	35	33	33
USAF combat support flying forces.....	(145)	(118)	(115)
Air refueling squadrons.....	60	62	66
MATS air transport squadrons.....	27	22	21
Other specialized squadrons.....	58	34	28
Active aircraft inventory.....	20, 890	19, 513	18, 885

¹ Prior to 1960 the carrier antisubmarine capability was represented by 22 carrier antisubmarine squadrons which have been reorganized into 11 carrier antisubmarine air groups.

Army.—Army forces will total 14 divisions and 25 other major combat units at end 1961—an increase of 1 battle group and 1 missile command over the force planned for the end of the current year. There will also be some increase in the number of separately organized tactical surface-to-surface missile units.

Of the 14 divisions, 7 will be deployed in critical oversea areas and 4 others (1 in Hawaii and 3 STRAC divisions in the continental United States) will be ready for immediate deployment to any trouble spot in the world. Other necessary combat and combat-support units will be similarly deployed and ready.

In the air defense guided missile battalions—which increase by nine as anti-aircraft gun battalions continue to be phased out—the conversion from Nike-Ajax to the nuclear-capable Nike-Hercules missile will continue at a rapid pace. The number of Hawk missile battalions for low altitude defense of Army units overseas will also increase considerably.

The active aircraft inventory will rise during 1961 as modern planes such as the Mohawk observation aircraft and the Iroquois helicopter are delivered.

During 1961, the Army will also receive significant quantities of new equipment to modernize its ground forces. The new M60 tank, the NATO standard 7.62 family of small arms, the improved jeep, and the M113 armored personnel carrier will all enter the inventory in quantity for the first time. Also being received in production quantities for the first time will be the Little John and Sergeant surface-to-surface tactical missiles, and Davy Crockett, the individual man-carried nuclear-capable rocket for close support of troops on the battlefield.

Navy and Marine Corps.—During 1961, the Navy will have 817 ships in the active fleet, the same number planned for the end of the current fiscal year but

a decrease from 1959. There will also be a small decrease in the number of warships, compared with end 1959.

However, during 1961, the fleet will receive from new construction more new ships than in any year since World War II, except for 1955. Many of these ships will be either nuclear powered, have a guided missile capability, or both.

During 1961, the fifth and sixth *Forrestal*-class attack carriers, *Constellation* and *Kitty Hawk*, will be commissioned, replacing older *Essex*-class carriers. The first nuclear-powered cruiser, *Long Beach*, armed with Talos and Terrier fleet air defense guided missiles, together with 16 guided missile destroyers and frigates, will also be commissioned during the year.

The Polaris ballistic missile-firing submarine force will be augmented by three more submarines during 1961, bringing the total in commission to six by the end of the year. In addition, six other nuclear-powered submarines will be commissioned during 1961.

The antisubmarine warfare forces of the Navy will be significantly improved during the year. In addition to the previously mentioned new ships, many of which have improved ASW capabilities, several new items of ASW equipment will be introduced in 1961. Asroc, a rocket-assisted torpedo and depth bomb; several new types of sonar equipment; and Dash, a drone ASW helicopter, will all become operational for the first time. In addition, a new all-weather search helicopter, the HSS-2, and a new improved carried-based ASW aircraft, the S2F-3, will be introduced into the fleet during 1961.

While the active aircraft inventory of the Navy will decline, new and improved aircraft, such as the supersonic F4H fighter and the mach 2 all-weather A3J attack plane, will be introduced into the forces, replacing older models.

The Marine Corps, with three divisions and three air wings, in 1961 will continue to maintain combat-ready forces organized, equipped and prepared to deploy immediately anywhere in the world. During 1961, with improved personnel management and a lower-than-normal loss of personnel the Marine Corps will be able to allocate a larger percentage of its strength to the combat forces. This will permit the reactivation by the end of 1961 of a number of battalion landing teams without any increase in overall strength. In addition, Hawk guided missile units will be activated for the protection of combat units against low level aircraft attack.

Combat effectiveness and modernization will be improved during this period by the delivery of the first increment of the 7.62 mm. (NATO) weapons family and the introduction of the Davy Crockett weapons system into the Fleet Marine Forces. Aviation effectiveness will be improved by increased air-to-air guided missile capabilities; by the introduction of the Bullpup air-to-surface tactical missile; and by the activation of the first in-flight air refueling squadron, which will appreciably improve the capability of Air Fleet Marine Forces units to deploy rapidly to forward areas.

Air Force.—The reduction of two strategic wings reflects a phaseout of older B-47 medium bombers, and is partially offset by the delivery of the first wing of the new supersonic B-58 medium bombers and additional quantities of an improved version of the B-52. Because of their much greater range, larger bomb load, greater speed, and more advanced electronics systems, a smaller number of the new B-52's will provide the same or greater combat capability than was provided by the B-47's phased out. By the end of 1961, 13 heavy bomber wings will be equipped with B-52's, an increasing number of which will carry the Hound Dog stand-off missile and the Quail decoy missile. These wings form the hard core of our nuclear strike force.

More importantly, our retaliatory capability will be further enhanced during 1961 by additions to our long-range missile deterrent force. By the end of that year, additional units of the Atlas ICBM and the first few Titan ICBM's will be operational. The number of intermediate range ballistic missile squadrons deployed abroad with our allies will also increase in 1961.

Important to the security of the strategic force will be the first operational BMEWS station capable of providing warning of an ICBM attack. This warning, together with the previously mentioned "on-the-shelf" airborne alert capability, and the base hardening and dispersal program, will help ensure the immediate response of our nuclear deterrent force in the years ahead.

The reduction of three air defense wings will be offset by continuing deliveries of all-weather Century series fighter aircraft and by provision of surface-to-air Bomarc missile units. By the end of 1961, eight Bomarc squadrons are planned to be operational, compared to four at the end of the current fiscal year.

The capability of the tactical wings will be considerably increased by the availability of additional quantities of the all-weather, supersonic, nuclear-capable F-105, and by the growing availability of tactical missiles and improved weapons.

Overall, there will be a decrease in the active aircraft inventory of the Air Force, primarily through elimination of older aircraft. At the same time, however, there will be a significant increase in the guided missile inventory.

Summary.—In summary, the 1961 budget for military functions provides for the Department of Defense as follows :

New obligational authority.—\$40,577 million, and in addition \$350 million to be derived by transfers from the revolving funds of the Department of Defense. For the Army there is provided \$9,546 million and \$260 million to be transferred from the Army stock fund. For the Navy there is provided \$12,013 million and \$60 million to be transferred from the Navy stock fund. For the Air Force there is provided \$17,737 million and \$30 million to be transferred from the Air Force stock fund. \$1,281 million of new obligational authority is provided for the Office of the Secretary of Defense.

Direct obligations.—Total direct obligations are estimated on a comparable basis at \$42,412 million. These are shown by category in the following table:

[In millions]

	1959 actual	1960 estimate	1961 estimate
Military personnel.....	\$11,929	\$12,008	\$12,187
Operation and maintenance.....	10,132	10,300	10,527
Procurement.....	14,800	13,605	14,364
Research, development, test, and evaluation.....	3,544	4,268	3,952
Military construction.....	1,748	1,497	1,382
Total, military functions.....	42,151	41,679	42,412

By excluding intragovernmental transactions from the amounts in the preceding table, data can be obtained on obligations which result in the purchase of goods and services from private individuals and businesses. This measure, set forth on the following table, more closely portrays the economic impact of Defense's activity:

Obligations to the public

[Excludes intragovernmental transactions]

[In millions]

	1959 actual	1960 estimate	1961 estimate
Military personnel.....	\$11,928	\$12,007	\$12,187
Operation and maintenance.....	10,145	10,297	10,513
Procurement.....	14,002	13,265	13,799
Research, development, test, and evaluation.....	3,550	4,339	3,952
Military construction.....	1,711	1,504	1,382
Revolving and management funds.....	-292	-216	-315
Total, military functions.....	41,045	41,196	41,517

Net expenditures.—\$40,995 million: Army, \$9,383 million; Navy, \$11,683 million; Air Force, \$18,614 million; and the Office of the Secretary of Defense, \$1,315 million.

Recapitulation of budget authorizations, obligations, and expenditures

[In millions]

Organizational component	New obligational authority			Direct obligations			Expenditures		
	1959 enacted	1960 estimate	1961 estimate	1959 actual	1960 estimate	1961 estimate	1959 actual	1960 estimate	1961 estimate
Army.....	\$9,381	\$9,679	\$9,546	\$9,555	\$9,966	\$10,008	\$9,468	\$9,349	\$9,383
Navy.....	11,820	11,214	12,013	12,147	11,677	12,139	11,728	11,571	11,683
Air Force.....	18,713	18,475	17,737	19,599	18,854	18,994	19,084	18,823	18,614
Office of the Secretary of Defense.....	1,255	1,279	1,281	851	1,182	1,271	953	1,202	1,315
Total, military functions.....	41,168	40,647	40,577	42,151	41,679	42,412	41,233	40,945	40,995

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