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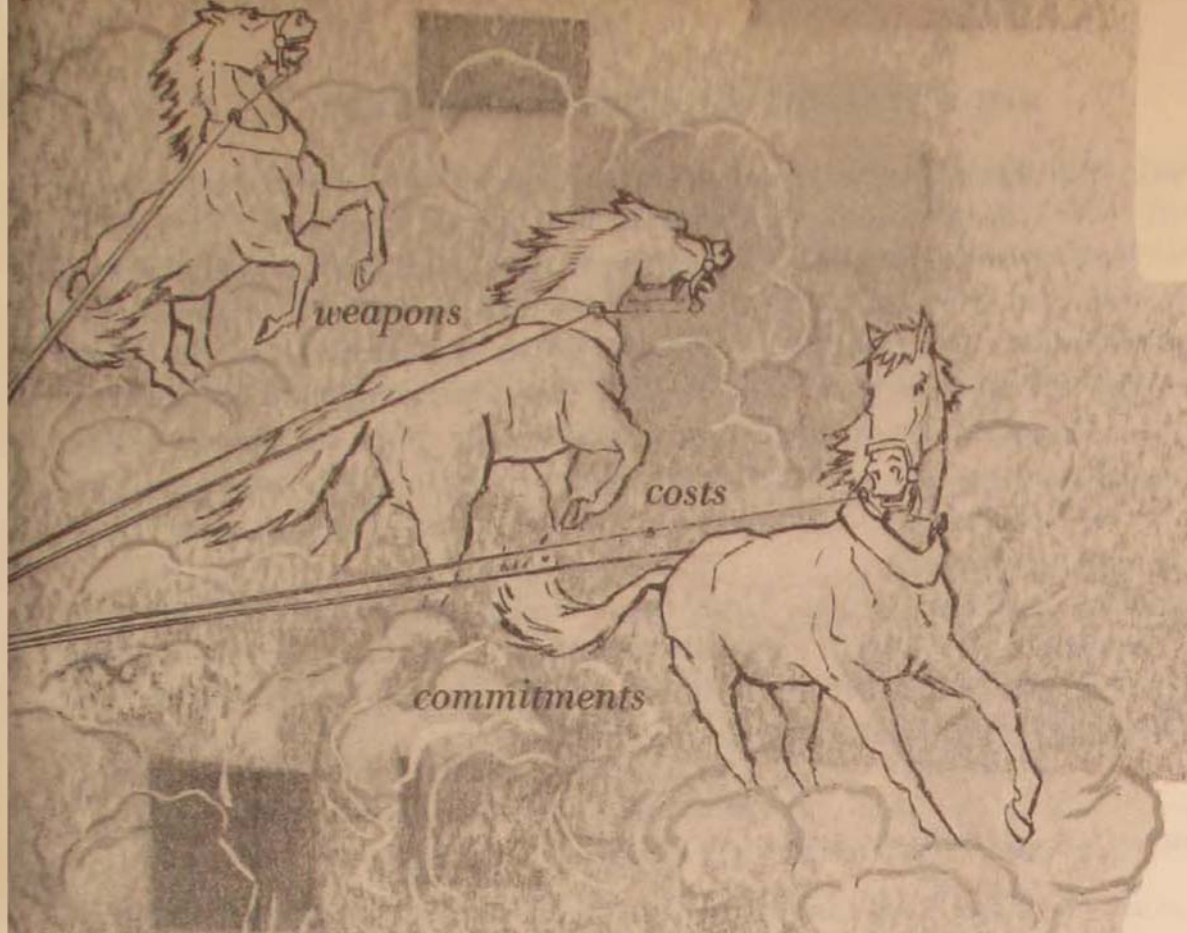


## The Stalemate in Concepts

BRIGADIER GENERAL ROBERT C. RICHARDSON III

ONE HAS only to read contemporary writings on national policy or listen to the views presented each year to Congress by those concerned with U.S. security planning to realize the increase in confusion and differences of opinion over the direction we should henceforth give to the defense efforts of the Free World.

Interservice conflict is clearly on the increase, as is uncertainty with respect to what is required in defense funds and defense organization to deal with the Communist threat in this atomic, missile, and space era. In recent years nearly all long-range force programs and defense plans have



been extremely unstable. United States, NATO, and other Allied force goals have been approved repeatedly and yet never achieved. These goals invariably have been revised downwards as their target dates have approached, and generally for economic reasons.

This situation suggests that there is something fundamentally wrong with long-range security planning when minimum force requirement plans are never fulfilled, even when they are based solely on a "capabilities" approach. The trouble appears to lie in our ability—or inability—to properly take into account changes in costs, concepts, and weapons in time, the relationship that exists between these basic elements of any defense effort, and how change or lack of change in these areas affects the national security posture.

Of the many problems that face the military establishment, full adjustment to changing technology and to changing weapons capability is perhaps one of the most difficult. This adjustment is made increasingly more bothersome by the equally dramatic impact of the "cost squeeze" upon our national military posture. The result is a growing inability of the military to satisfy commitments and programs in face of rising costs and relatively fixed resources and concepts.

We are now in an era in which the adjustment of military programs to limited military resources has become an element in the daily life of every national military planner and commander. How adroit we in the professional military have been in this adjustment is open to serious question. One thing seems clear, however. If we are to continue to defend the Free World adequately, then the military, the "body politic," and our elected officials will have to analyze very carefully the ramifications of today's dynamic national security environment. Adjustments will have to be made, and made successfully; there is no alternative if we are to survive.

Two additional major problem areas which we must consider concurrently with the problems of rapid technological progress in weaponry and the "cost squeeze" are those of conceptual change and its handmaiden, military commitments. It is within the interaction of this quartet—weapons, costs, concepts, and commitments—that the greatest potential is to be found for a major breakthrough in resolving our most pressing national security problems within the resources we can realistically hope to commit. The character of modern war is determined by two principal factors: "what" we can have to fight with—our weapons, and "how" we propose to use these weapons—our concepts.

What we can have at any time stems from both technology—the state of the art—and cost, which generally determines quantity if not quality. How we use our weapons stems from either past experience in war or objective study and analysis in peacetime.

### *elements of the planning equation*

Failure to fulfill long-range force programs and plans can generally be traced, in retrospect, to a failure to equate properly hardware, costs, and concepts. In turn, this failure derives from faulty estimates of the extent of change necessary in one or more of these elements to obtain the optimum combination for effective national defense. This failure is exemplified when we plan to use World War III weapons in accordance with World War II tactics and strategies; when we program general-war forces, designed for long wars of attrition, in an era of short atomic conflicts; or when we assume that the targets selected for strategic bombing will also be the optimum system for space delivery vehicles to attack.

Future military hardware is relatively predictable by comparison with future concepts. The weapons we can have at any time will depend on the emphasis given to research and development. Except for unanticipated breakthroughs, we can fairly accurately estimate the type and performance of the hardware that we can hope to have for the next 10 to 15 years. Changes in concepts, on the other hand, are not as easy to predict or to come by. While generally triggered by changes in hardware, they originate in assumptions and opinions rather than in projection of tangible, technical facts.

Both the U.S. and U.S.S.R. have allocated a tremendous amount of money and manpower to research and development of weapon systems in the past 20 years. The same cannot be said to be true of research and development in conceptual areas, in how these systems may be used. In fact it seems quite clear that in the area of concepts and all that goes with it (tactics, doctrine, and organization) the research and development effort has been limited to a very few people who have had a very narrow audience and very limited resources.

When we reflect upon military history, it seems to have been easier to change military hardware than military ideas and organizations. For

example, the last U.S. cavalry charge was purportedly in the Spanish-American War, yet the cavalry was not disbanded by the United States until we were in World War II some 41 years later. Concepts, force requirements, and organizations have not kept abreast of technology.

True, the requirement for change has always existed, but generally it has not been necessary to meet this requirement in peacetime for two reasons:

- In the past the comparatively limited progress in the development of new weapons did not make these weapons entirely incompatible with proven concepts.
- The slow-starting, long-drawn-out past wars of attrition allowed for a period of test, learning, and readjustment after they had begun.

For example, the Allies survived the German blitzkrieg and Stuka tactics at the start of World War II because these new concepts, while effective, could not be decisive before we had developed countermeasures.

These conditions no longer hold. Since the birth of nuclear weapons, the nation that waits for war to modernize its concepts into compatibility with its weapons will be defeated. We shall stand or fall on how well we are able to anticipate the need for change before the war starts. No longer can we afford the luxury of living the truism that "the military starts each war with the concepts and doctrines that won the last war."

Rapid progress in technology now provides the military with radically new and different weapons, many of which are several generations removed from those tested in war. In the past, new weapons generally were tested in small wars. Nowadays the bipolar nature of conflict and the fear of progression to general war have denied the opportunity to test the more exotic developments in such limited conflicts as have occurred. Thus opportunities to test conceptual, organizational, and tactical changes, as well as new weapons, under the relatively safe and controlled conditions of a small conflict are becoming few and far between. This means that in the future concepts will have to be changed on the basis of peacetime calculations, war games, and studies.

**The "Four Horsemen" of modern military planning are weapons, costs, concepts, and commitments. How well the planner anticipates their course trends and melds them into realistic planning determines how close a nation or an alliance comes to meeting desired force levels at different points in time. Brigadier General Robert C. Richardson III, Chief of the Long-Range Objectives Group, DCS/Plans and Programs, Hq USAF, points out that in recent years the Free World has consistently fallen short of its established goals. Analyzing the four ingredients of military planning, he finds that the rapid growth of technology and costs forms a hammer beating on the anvil of relatively fixed budget allocations. This leaves concepts as the object between hammer and anvil. New, original concepts, says General Richardson, must be vigorously pursued to adapt force structures to the increasingly costly weapons and meet commitments without prohibitive costs.**

*new concepts dictated by higher costs*

The new need to review our concepts in peacetime to conform to the dictates of atomic-missile-space-age weapons results not only from technological progress and the decisive nature of the initial phase of future wars but also from peacetime economic considerations.

Beginning with the great impetus given to military research and development in World War II, military hardware has increased in both cost and performance at a seemingly hyperbolic rate. The relative increase in cost of each new generation of weapons—each generally intended to take over the role or activity of an earlier weapon system—has perhaps outdistanced the increase in performance. We cannot say, therefore, that the military capability of each new weapon system has increased in direct ratio to its increase in cost.

The requirement for improved weapon performance has been a product not only of unanticipated technological breakthroughs in the over-all technological revolution in weaponry but also—and perhaps more significant—of the constant need to keep abreast of a changing Soviet threat. For the past 15 years, both the U.S. and U.S.S.R. have been engaged in a game of “handy handy up for broke” wherein each family of weapon systems seeks to overpower either its offensive or defensive enemy counterparts.

The development of weapons has also been accentuated by the manifold increase in military responsibilities, which range from additional international commitments to new weapon concepts such as space vehicles, BMEWS, etc. These new commitments have been generally added to existing military requirements, such as the Dew Line, NATO defense, etc.

Contributing to this snowballing of requirements for military hardware have been not only the lead time required for the weapons themselves but also the lead time for their elaborate and increasingly expensive support structures, which are not always suited for the replacing generation of weapons. For example, a “forward” base structure built at great expense to support aircraft is not equally adaptable to the support of newly deployed missile units.

We have noted that technological progress and Soviet competition have contributed to a constant turnover in weapon systems. The increased sophistication and performance of new systems have also been marked by a great increase in the costs per unit or weapon. One recent study suggested that the statement of modern force requirements and their dollar costs are so increasingly great that our choice seems either to be death by enemy explosion or economic self-destruction.

Production costs of almost every part of a new weapon system have increased. We are now flying aircraft with alloyed wings, the leading edges of which are machined. High-performance jet engines and high-speed flight have created metallurgical requirements that were unimagined 15 years ago. The cost of current bombers is about 1.5 to 2 times that of their immediate predecessor. The next generation of bombers will run two times the current bombers or three to four times those of 1950. In the missile field, research and develop-



ment has reached the multibillion-dollar figure, and the re-equipping of all types of forces with missiles will be a most expensive experience.

The cost of operating and maintaining new systems is also increasing. It costs \$500 per hour to fly a B-47. It costs \$1300 per hour for a B-52. Another example is the rapidly increasing trend in the operations and maintenance costs of the Defense Department's communications and electronics systems.

### *concepts versus quantity of weapons*

The quantity of weapons and forces required for any given military task is influenced by the concepts under which the task is accomplished. Thus the meaningful economic impact of future weapon systems requires that we take into account the concepts to be used, since these largely determine the quantity required to meet our commitments. For example, a defense organization built around a new concept for employing tactical firepower in a land battle could reduce force requirements to protect against an attack from a fixed threat. The same holds true for possible trade-offs in air forces and target concepts with the coming of space weapons or ICBM's.

The only exceptions to the rule are instances in which improved material performance allows the same job to be done with the same concepts but with less equipment. Generally speaking, however, if concepts and doctrines—i.e., the ways in which the military task is accomplished—remain constant in time, technological progress leads to spiraling costs to the extent that these are not offset by cuts in quantity based solely on direct performance comparison.

Obviously concepts cannot rationally be adjusted solely to accommodate cost. The selection of concepts must be based only on the military task to be accomplished in light of capabilities and limitations of the means—weapon system—available to accomplish the task. The basic problem is to devise, insofar as humanly possible, planning procedures which allow us to change concepts in consonance with the concurrent changes in weapon systems, instead of assuming that the changes merely provide a better means of doing the same old job in the same old way. Our inability to change our concepts constantly and in keeping with the evolution of new weapons leads to what I referred to earlier as the cost squeeze—a condition we might profitably examine, since it is at the root of most current controversies.

### *the cost squeeze*

An economist once characterized interservice rivalry as quite parallel to a general definition of inflation. If inflation may be loosely defined as "too many dollars chasing too few goods," the interservice rivalry may be characterized as "too many generals chasing too few dollars." This parody suggests one of the greatest problems facing the nation today. The cost of weapons has increased exponentially within the last 15 years, as we have seen. Similarly our peacetime military commitments have increased. We are now obligated to support a number of multinational security arrangements, such as NATO.

CENTO, SEATO, OAS, and ANZUS, as well as a number of bilateral security pacts, such as those with Canada, Japan, Korea, and Taiwan.

If we consider the evolution of military hardware and commitments against a relatively fixed dollar ceiling for defense, it becomes obvious that the quantity of forces has to be reduced. This is what we in the military planning game call the "cost squeeze." When it occurs, the pressures for more and more money are intense and extreme within the defense establishment, and the claimants represent almost every functional area and conceptual group.

Since 1949 the gross national product (GNP) has increased at the rate of approximately 3.5 to 5 per cent per year, depending on what projection you prefer. It is expected to continue to increase at the same rate. Yet since the Korean War the monies allocated to defense have tended to remain in the neighborhood of 40 billions of dollars. At the end of the Korean War we were allocating approximately 12 per cent of the GNP to defense expenditures; by 1958 this allocation had fallen to 9 per cent. In other words, the percentage of the gross national product allocated to defense has tended to decrease over the last few years. The real impact upon defense activities has been magnified further by the concurrent inflationary trend, which has resulted in the defense establishment receiving successive allocations of dollars with less purchasing power.

As we assess the future, it appears that any sizable increase in defense expenditures would require a reappraisal of U.S. economic and political views on tax rates, the size of the national debt, and other considerations. Although some increase in the future can be expected, it seems highly unrealistic to assume that over-all defense expenditures will be greatly increased, particularly to the extent necessary to cope with rising costs of new weapons and other defense factors.

On the assumption that over-all defense expenditures were keyed to a constant percentage share of the GNP, more defense programs naturally could be funded. I doubt very seriously that such a change would really satisfy the majority of the claimants. To be sure, some of the more difficult funding decisions could be postponed, but I am convinced that within several years they would have to be made.

Since the end of the Korean War, military manpower strengths have steadily been reduced. However, the personnel costs of maintaining a force of 2.3 million men in 1960 are about the same as personnel expenditures during the Korean period. The wage costs of the "blue collar" civilian employees of the Defense Department have steadily increased, even though the total number of such employees has been reduced. The retired pay of military personnel is now less than \$1 billion annually. Within a few years, when the retirement rolls are increased by the men who entered the armed forces in World War II, I am told that our annual retirement costs will exceed \$4 billion. Likewise the costs of maintaining bases and supplying other types of support have increased steadily.

Research and development continues to increase its claims upon the defense dollar. The frontiers of basic and applied research are changing so rapidly that R&D efforts seem to need an unforecasted dollar infusion daily. Many costly

projects never are developed into weapon systems—their objectives frequently are overtaken by other developments. Finally, the R&D share of the total cost of the life span of a given weapon system has increased fantastically.

The nature of the changing strategic threat to the United States has resulted in more and more funding allocations whose purpose is the ability to absorb attack. Some of the air defense alert and base dispersal programs are based on the need to retain a retaliatory capacity should we be attacked. Many support items are being stockpiled. Much of the expansion of funds in the electronics-communications area has been based on the necessity for ensuring communications should an attack be made against the U.S.

Personnel, R&D, and absorption needs have therefore claimed an increasing share of the defense budget. The balance, which is steadily decreasing, may be considered as the allocations available for the ability to deliver attack—our bombers, combat-ready divisions, fleets, etc.

It is important to consider what has happened to the costs of the weapon systems which compose our ability to deliver attack. The Army air defense weapon, the Nike Hercules, costs twice as much per battalion as the Nike Ajax it is replacing and six times the 120-mm antiaircraft battalion of the Korean War. In USAF fighter aircraft, we have observed the inventory changed from F-80's at \$100,000 each, through F-84's at \$300,000, through F-100's at \$750,000, to F-105's at twice the cost of the F-100. The atomic submarine costs 20 times its World War II prototype for just the vehicle, not including its Polaris missiles. The aircraft carrier since Korea has risen from approximately \$100 million per ship to perhaps \$500 million, excluding the costs of crews, aircraft, and munitions.

When defense costs rise in an environment of relatively fixed resources, commitments, and concepts, something has to give way. The military ultimately has to choose between implementing its classical concepts with less material and hence forces—a course of action invariably interpreted as a reduction in the military power of the nation concerned—or developing new concepts that require fewer forces.

So long as technological advances continue, the above pressures will constantly be felt. In each country, when the budget has reached a ceiling for the time period concerned and when the military has absorbed all the reductions in quantity that it can rationalize without admitting a major degradation in national defense, then a reappraisal of concepts in light of the new equipment becomes inevitable.

### *the cost-weapon-concept cycle*

The net result of the inequality that exists between the evolutionary tendency of weapons development and that of the concepts under which we use them is to generate a cycle in which military hardware changes while concepts and commitments tend to remain constant. This creates a growing gap between weaponry and our ideas of how to employ the weapons. The gap in turn generates economic and political pressures which eventually overcome the resistances to conceptual change that I have already discussed. When

this occurs in peacetime, an "agonizing reappraisal" occurs, such as the New Look of 1953. Concepts are brought back into phase with the new weapon capability and the cycle starts over again.

Let us examine the history of NATO defense planning as an example. In the early years of NATO, traditional concepts of the land-sea-air era called for the containment of the Soviet military capability by an equal quantity of Allied troops, of "mass." The traditionalists prevailed until the Lisbon Conference of 1952, when a nuclear defense concept was adopted. The principal motivating force for this conceptual change was not so much military advice as it was the obvious inability of the member states to fund a conventional defense. Politico-economic considerations forced the change, not a new appreciation of nuclear weapons which had been first used seven years before. The alternative to accepting the savings inherent in the use of atomic weapons was the probable collapse of the alliance.

The national military posture of major world powers has historically gone through a series of these cycles because technological advances in military material have invariably taken place at a steady pace. Military concepts, on the other hand, have generally remained constant over long periods of time or have changed only as a result of lessons from actual war.

Under ideal theoretical conditions, concepts should evolve gradually with the advent of new and more costly weapons. Since it is a human tendency to resist change in ideas and since people are loath to give up techniques that provided success in the past, this pattern of evolution is never realized.

Although military logic demands that concepts and doctrines now be changed in peacetime and without benefit of test in war, in practice it is economic considerations that have forced changes wherever they have occurred between wars. First, materiel changes steadily and costs go up, while quantity requirements—based on fixed concepts and doctrines and fixed commitments—tend to remain constant. Next, budget ceilings lead to force and weapon reductions, to stretch-out in procurement, and to the reduction or elimination of future systems such as the F-108. "We sell our life insurance policies in order to keep our antiquated standards." Finally, the increased costs and new weapons are accommodated through an "agonizing reappraisal" of concepts or commitments.

When defense funds are limited, the military has to choose one of three courses: it must implement its classical concepts with less material and hence less forces—a course of action invariably interpreted as a reduction of the military posture and military power of the nation; or it must reduce major commitments, with attendant political and security implications; or it must develop new concepts under which fewer forces can do the same job at least as effectively. So long as technological advances continue, such pressures will constantly be felt.

### *implications of the cycle to USAF planning*

If we understand the above relationships and the factors that lead to

periodic reappraisal of concepts and doctrines, not only can we exercise some control over the extent and nature of the changes but we can anticipate these in our long-range plans and force programs. If we continue to resist these changes and to plan on the basis that our current concepts, doctrines, and force levels will remain valid, we can expect waste, confusion, and constant short-term readjustment of programs, to the detriment of a sound defense posture and security policy.

Adjustments in concepts to take full advantage of technological progress are the key to having modern weapons with an effective defense at an acceptable cost. Simply adding new weapons to classical concepts, as is the tendency on the part of many, leads to more and more expenditures for a less and less effective defense.

Thus an understanding of the role that changes in concepts—the method of waging war—play in the cost and effectiveness of a defense effort in any time frame goes a long way towards explaining many of the current controversies over the adequacy of our defense effort. Those who wish to add the new weapons to classical methods of waging war will always claim the current effort to be inadequate, particularly in land and sea forces, since rising costs have resulted in a steady quantitative reduction of forces contrary to the classical idea of mass. Those who understand the need to change concepts along with the advent of new weapons accept the New Look force reductions as reasonable and proper in light of the changes in the nature of war as they see it. They can even foresee more reductions.

In assessment of the next 10 to 15 years, the question is not whether additional New Looks will be appropriate but whether in the era of protracted conflict we can again tolerate their provocation either by war or by politico-economic factors. Weapons are changing so rapidly that to wait for another Pearl Harbor or Lisbon Conference may be to confess defeat or annihilation. The military community must somehow discard its traditionalist mantle for a cloak of innovation and intellectual objectiveness.

This new need to make radical changes in our ideas of how to use our weapons in peacetime, and without test in war, and how to develop even newer weapons is the greatest military challenge the Free World has ever faced. The capability of future weapons may be so dramatically different from that of any existing weapon that any attempt to wed the future with today's established doctrines may be preordained to failure. The combat troops of space may be miniaturized digital computers!

One approach to resolving this dilemma is to analyze the conceptual gaps of the last decade, wherein weapons development has so far outdistanced concepts and military organizations that a major adjustment has had to be made. Through an analysis of such periods and of the junctures where new concepts were adopted, we may be able to identify some of the signposts which indicate when a new conceptual "gap-osis" is developing.

In other words, I suggest that our long-range security planning must henceforth contain a large change factor if it is to be realistic. Certain things are going to take place whether we like it or not. Other possibilities can be influenced only to minor degree and only in the distant future.

Long-range national security planners are like ants riding a log down the river. If they all paddle on one side they may steer the log towards one shore or the other. No amount of effort, however, will push the log back upstream very far nor can they beach it and take it inland, even though both these destinations are theoretically attractive. What happens in weaponry is controlled both by technological progress and unanticipated breakthroughs. The former is fairly predictable, the latter wholly unpredictable. Likewise how we use our weapons—that is, our future concepts and security policies—will be to a large extent controlled by military, economic, political, and public-opinion factors. These are the banks of the river that we must take into account when we chart the course for our Ship of State.

Much of what one reads nowadays that criticizes security policies, as well as some of the proposals I have heard recently, seems to ignore the existence of these river banks. The proponents of the various ideas put forth tend to argue them solely on the basis of their desirability, without too much regard for the constraints I have outlined—or, in other words, for the “art of the possible.”

What we might like to do, and what we can do, have always been two different things. For example, our planners, had they considered the Nazi threat in 1934 or 1935 against modern security values, might have considered proposing some form of NATO organization with its overseas deployments of U.S. forces. I think you will agree, however, that even had the proposal itself been attractive, its implementation would have been impossible in the political, economic, and public-opinion environment of that era.

Several examples of broad security planning concepts which may be considered as achievable or unachievable merit our attention. A long-range plan which recognizes the rising costs in weapons, the increasing importance of space in the international power equation, and the growing desire of allies for an independent nuclear defense capability may be considered achievable. Such a plan could be plotted within the course of the river.

On the other hand, a plan which ignores the atomic weapon, which seeks to return to conventional forces (notwithstanding the cost of modern weapons), which presumes that European nations will be willing to fight World War III on their soil to prevent America and the rest of the world from being destroyed lies, in my opinion, well outside the banks of the river. You might make a perfect case for such a plan. But it would only be a “school solution” for the people charged with implementing it. Weapons capabilities, economic factors, and political trends oppose such options. Even if we could change these inhibiting factors—move the banks of the river—we would probably lose in the long run, since we would have been overtaken by a new generation of weapons and power relations. The net effect of implementing such a plan probably would be to beach the Ship of State on the rocks along the shore, while our enemies moved rapidly downstream ahead of us toward space or some other more awesome objective.

What I am trying to say is that selection of national security policies

for the future is frequently a choice among rotten apples. The question is not so much what is the best course of action as it is what is the "least undesirable" course of action open to us.

Fortunately change takes place on both sides of the Iron Curtain. The Soviets undoubtedly find themselves in a similar dilemma between costs, weapons technology, and concepts. They no doubt also have to choose among a series of rotten apples. One of the things that complicates our choice, however, is that the intelligence community has no sure way of forecasting conceptual gaps in the Soviet cycle. As a result we normally plan against a long-range threat which is a projection (or buildup) of the enemy's existing concepts and capabilities, supplemented by new weapons. We then tend to match these capabilities in our own long-range plans. For example, Mr. Khrushchev's announced intention of reducing his land forces by half may well be a New Look provoked by rising real costs rather than by a calculated cold-war or disarmament maneuver, which it sometimes is portrayed to be. I submit that we will find a nation's power measured by different standards of quantity, by different ideas concerning the nature of the primary threat, by different force concepts, and by different weapons.

Some may contend that the type of security planning I propose is fatalistic. This may be correct. Nevertheless I am convinced that this approach will produce far more useful long-range results than the mere projection of current concepts, supplemented by new weapons, or than attempts to project concepts which are in contradiction to weapon development trends.

*Headquarters United States Air Force*

# Air Defense Systems Training Concept

COLONEL VICTOR MILNER, JR.

THE tactical training of combat crews for air defense has received a great deal of constructive criticism since its inception. Nearly all critics of the methods of combat crew training have suggested alternatives: change command jurisdiction; centralize combat crew training; have operational training units; civilianize all training.

In my opinion, all these recommendations for the improvement of combat crew training lack the most important element necessary to make the training effective and realistic. This element is that combat crews must be trained as they are expected to fight; they must be in a similar environment. This is in the environment of the Air Defense Command tactical unit. There the student, in addition to mission-oriented systems training in the tactical environment, can gain the maximum incentive and esprit through being a part of an actual tactical unit.

It has been suggested that the Air Force would gain appreciably if it transferred all the personnel and equipment used by the Air Training Command for air defense training to the Air Defense Command and if it gave Air Defense Command the added mission of training all combat crew replacements for the Air Force.

This is not the answer. Air Defense Command's tactical units are taxed to the utmost merely to accomplish their primary mission, that of providing air defense. The retraining required to familiarize and fit graduates of Air Training Command air defense schools into tactical units is almost prohibitive, when this effort must be taken from a tactical unit's already overtaxed mission capability. To add further to the burden of a tactical unit by giving it the mission of complete combat crew training would be fallacious.

We must formulate a concept which will give the trainee the advantage of the best possible professional instruction. That can only be given by professional instructors assigned to the Air Training Command. We must further give him the incentive, esprit, and systems training that can only be gained in the environment of a tactical unit of the Air Defense Command. In addition I believe there is a concept of training which provides, as a by-product, an appreciable increase in air defense at little or no extra cost.

## *interceptor training*

The air defense training for intercept controllers and pilots that is



given in the Air Training Command today is excellent as far as it goes. But the concept of training is still based on individual components—as, a single interceptor or radar—not on the complete air defense system. The training of air defense tactical crews must be accomplished in the air defense system environment. Only then can it produce the high-quality graduate necessary to meet the objective.

The training of tactical crews to the high standard of proficiency required in air defense cannot be attained except in an air defense tactical environment. However great the training effort might be, really effective air defense systems training cannot be accomplished on a typically large Air Training Command base. That is, a pilot or controller trained there cannot be fully qualified as alert-ready prior to reporting to his tactical unit.

The size of the training base alone prevents it from simulating to any effective degree the conditions of a typical air defense complex. The number of aircraft flying in the area, with many students attempting to perform realistic intercept missions, is so large that it is impossible for the school to produce more than an absolute minimum of realistic tactical training missions. The intercept missions that are flown must, of necessity, be "canned" and so preplanned that the actual tactical simulation and hence training value derived from them are at a minimum.

This is detrimental to the over-all preparation of the trainee to achieve his alert-ready status. In air defense, much as on an aircraft carrier, a tactical crew member must know every detail of the over-all layout so that he can do his job with split-second timing, day or night.

In the air defense tactical unit it is absolutely mandatory that all members of the tactical team brief and debrief as a team before and after each mission. This procedure is even more essential in the Air Training Command school. Yet the volume of training and the conjunction of schedules make it practically impossible for this essential phase of the training to be accomplished.

Enough interceptors to equip ten air defense interceptor squadrons are assigned to the interceptor pilot training schools of the Air Training Command today. These interceptors, though combat-ready, would be difficult to use effectively against an actual threat. In other words, without including

Today's requirement for integrated, combat-ready air forces has intensified the old problem of where training ends and squadron duty begins. Colonel Victor Milner, Jr., Commander of North American Air Defense Command's Goose NORAD-CONAD and ADC Air Defense Sector, argues that in modern air defense it is no longer enough to train interceptor pilots, radar operators, and intercept controllers separately. They will not approach combat readiness until they have had extensive training as a unit under conditions as near operational as possible. Developing ideas from his War College thesis, Colonel Milner maintains these requirements cannot be met in the normal environment of Air Training Command and yet should not be added to the responsibilities of the operational squadrons in Air Defense Command. His solution: give Air Training Command an air defense sector in which to perform its training mission while providing active air defense in its sector.

cost of support equipment and personnel, bases, etc., there is \$250,000,000 worth of aircraft specifically purchased for air defense that will never fight effectively if we are attacked.

It might be claimed that, inasmuch as these aircraft and the instructors that fly them are air defense augmentation forces, they will be able to perform a wartime role of air defense. Although "augmentation" gives a certain "sex appeal" to the training mission in peacetime and also sounds most practical and effective as a subject of theoretical discussion, it leaves a great deal to be desired. My personal experience in operational-readiness inspections and tactical evaluations of world-wide air defense forces from 1953 to 1958 has firmly convinced me that if war comes the forces that will fight most effectively in air defense will be those that are in a position to fight at the time of the attack.

The Commander in Chief, North American Air Defense Command, has stated that inasmuch as present and forecast allocations of funds will be insufficient to meet the total requirements for air defense we must ensure that, insofar as practical, every air defense interceptor possessed by the Air Force is so located as to make it potentially effective in the event of attack. The two Air Training Command bases where air defense training is conducted, Perrin AFB, Texas, and Moody AFB, Georgia, are not located where air defense interceptors have been required or programed to meet air defense requirements.

From the foregoing it appears that, as a result of environment and method of training, the training of intercept controllers and pilots for air defense falls short of the desired goal. First, the trainee is not trained in the air defense environment and given true air defense systems training. Second, and perhaps more important, approximately ten squadrons of air defense aircraft with their support equipment and personnel are so located as to obviate their utilization in case of attack. Hundreds of millions of dollars worth of defense equipment and thousands of highly trained personnel that could be effectively employed in the event of an attack are being held from the decisive air battle. The failure to effectively use a force of this size could, without any stretch of the imagination, easily mean the difference between survival and extinction.

In April 1958 the Air Training Command had assigned to it over 14 per cent of the total normally configured F-86D-L aircraft and 15 per cent of the qualified interceptor pilots in the continental United States. Obviously any action to enable Air Training Command to do a better and higher quality job of training and at the same time keep combat-qualified support personnel and aircraft in a posture to fight, in place, would be most desirable from all aspects—military or political.

This certainly is not to imply or suggest that the transition and combat crew training of interceptor pilots and intercept controllers should be performed by any other agency than the Air Training Command. Experience has shown that, when a combat command such as the Air Defense Command takes over the mission of basic tactical training, the primary mission of the command suffers and training cannot be given its proper priority and at-

tion. Usually what happens when bases and personnel are transferred from the Air Training Command to a combat command is that training continues but the combat mission of the command receives first priority. This results in the command being made up of first- and second-class citizens. The morale, combat mission, and training all suffer.

I believe we must accomplish this training as a joint effort—that is, under the control and direction of the Air Training Command but at operational bases of the Air Defense Command. It is only in this manner that we can train effectively, realistically, and economically and thus obtain maximum air defense combat capability as well as air defense training.

#### *air defense systems training concept*

Let us enumerate and then discuss some of the elements that must be included in this proposed air defense systems training concept if it is to be effective.

- It must be immediately responsive to the current requirements of the using agency, Air Defense Command.
- The Air Training Command must be given the added mission of providing air defense in an air defense air division or other complex.
- All training must be oriented to the tactical mission and environment and must be based on the air defense team concept.
- Schedules of courses must be of sufficient length to ensure that quality is not sacrificed because of weather or tight scheduling.
- Every effort must be made to improve incentive and appeal of the course by placing accent on the tactical spirit and mission orientation.
- Flying safety must be achieved as a by-product of operational proficiency, but not as a goal in itself.

To place the Air Training Command's interceptors, crews, and supporting personnel in a position where they can perform more effectively their training mission, while at the same time providing air defense, requires that the command's interceptor instructors and support crews be formed into an air defense division or air defense systems complex, with the combined mission of training and of providing air defense in its area. The Air Training Command's air defense division should be in the air defense system and required to carry out the routine air defense mission just as any other conventional air defense division. But for *combat* air defense activities this division would be under the operational control of Air Defense Command and be available to strengthen the present defenses. The officer manning of this division would require approximately a sixty-per-cent augmentation to accomplish both training and defense. This would still represent a considerable saving over the present divided mission requirements. Thanks to dual utilization of personnel and equipment, it would save hundreds of millions of dollars and at the same time would expand considerably the air defense capability of the Air Defense Command.

In routine and active air defense operations the Air Training Command division should be given operational-readiness inspections and tactical evaluations by Air Defense Command to determine its over-all air defense capabilities. These inspections and evaluations could be scheduled as a final graduation exercise for each class. Air Defense Command would thus be able to qualify all students as alert-ready prior to their assignment. The procedure would also provide a further effective quality-control check for other using commands. The regular accomplishment of these evaluations will be extremely beneficial to both the Air Training Command and Air Defense Command. It will, as a by-product, have the effect of standardizing and keeping up to date all training procedures and doctrine.

To be completely responsive to the up-to-date requirements of the Air Defense Command, the Air Training Command must be provided with a small number of officers from Air Defense Command. These men will assist the ATC division commander in checking quality control and maintaining continuous liaison with Air Defense Command to ensure that the product is of the quality and competence required. They will also ensure standardization of Air Training Command and Air Defense Command procedures. This function cannot be left to normal staff actions, as the training program must be made immediately responsive to the needs of the using command, despite rapid changes in air defense procedures and systems.

To fight effectively, all elements of the air defense system, air and ground, must work as an integrated team. The present training program for both interceptor pilots and air control and warning intercept directors fails to emphasize sufficiently the team concept. When new graduates are assigned to a tactical unit, an undue amount of time and resources is required to break down the individual's "free lance" spirit. The fallacy of attempting to intercept high-flying bombers, either day or night, by the "eyeball" method is obvious to the experienced interceptor pilot, but it is hard to convince the neophyte, swashbuckling interceptor pilot of this fact. Many hours of systems training are needed to prove to the interceptor pilot that, except in unusual circumstances, the human eye is far from adequate to perform an intercept. In the ground environment, to a lesser degree than with the interceptor pilot, there is the problem of mission-orienting the intercept controllers—to make them understand that their most minute error will cause the interceptor to miss its target. In the systems concept, cross-training of both the air- and ground-environment personnel must be stressed at all times. Their training must be made interdependent as in the Air Defense Command's unit training program.

To achieve team integration, the Air Defense Course in Air Training Command should be divided into two phases. In phase one, the pre-tactical phase, the student would be taught the fundamentals necessary for him to operate his weapon proficiently. For the aircrew this will include the airborne radar and aircraft. For the controller it will include the ground control intercept radar and its auxiliaries. During this phase both the aircrew and controller will be taught air defense tactical doctrine, regulations, and procedures to enable them to progress rapidly when assigned to

the air defense tactical training division. Every phase of the pre-tactical school must stimulate and motivate the desire of the student to advance to phase two, the tactical training phase, and become a member of "the team." The pre-tactical school must emphasize and devote an appreciable amount of time to cross-training and mission orientation.

To ensure the quality of training and the student's attainment of the standard of proficiency prior to his advancement to phase two, the tactical phase, the following radical breaks with traditional methods must be made:

a. The number of hours of exposure to a subject or a particular element of training must be completely eliminated as a measure of proficiency. The measure of a student's proficiency and ability must be obtained by written examinations, simulator problems, and actual practical application tests in the air for aircrews and at the radar consoles and their auxiliaries for the controllers.

b. To progress from one phase to the next, the student must be examined thoroughly by a board of examiners or one of its members as may be required. This board should work directly for the Deputy for Training, and a by-product of its work would be standardization, evaluation, and quality control.

c. The pre-tactical phase must be so organized as to permit a student to advance through all its elements at the rate that his achieved and certified proficiency will permit. This proficiency should be ascertained from tests and the accomplishment of the required number of successfully recorded sorties in the case of the aircrew, and by electronic systems exercise and actual air problems in the case of the controller.

The benefits from this improved method of operation will be evident in many ways:

a. The natural competition created among the students to advance at a more rapid rate than their contemporaries will engender spirit, enthusiasm, and initiative. A more receptive learning attitude and a better-quality graduate will be produced.

b. Indirectly the instructors will be subjected to the same stimulus, resulting in a better job with more incentive and spirit. Obviously an instructor's proficiency will become most obvious when the over-all proficiency of his students is evaluated.

c. This type of program, based on achievement only, will go far in regaining for both students and instructors the enthusiasm of competition and the stimulus of success that have been so sorely lacking since the pre-World War II era.

Since the inception of tactical training, the Air Training Command's tactical schools have had to sacrifice the quality of their graduates because of time lost to weather and mechanical breakdowns. Students were graduated with much less training than desired. In this systems training concept the production-line speed now employed must be lowered to the point that the quality of the product will not suffer as a result of unforeseen breakdowns. This can be achieved and the method improved over the

present by allowing sufficient time between classes for air defense exercises, which might be lengthened or shortened to meet unforeseen scheduling problems. However, if the candidate can pass practical written and oral examinations set under rigid quality control, he should be permitted to graduate on schedule regardless of the number of missions he has been unable to accomplish. Again, quality and not quantity must be the keynote of the concept.

Important factors to improve training that have always been difficult for the Air Training Command to achieve are incentive, esprit, and the mission orientation of both its instructor and its student personnel. In my opinion the assignment of an actual tactical mission to an element of the Air Training Command will be as beneficial to the permanent party as to the students.

The key to the success of this concept lies with the division commander. He must be a mission-oriented and operationally qualified general officer with a record of outstandingly successful air defense and command experience. All the officer personnel assigned must be outstandingly qualified in their specialty. The headquarters and the tactical units in this division must use every practical method of promoting esprit, competition, and mission orientation. Some of the tools to achieve this are discipline, tactical atmosphere, emblems of skill qualifications, squadron insignia, interdivision unit competitions, awards for flying, for controlling, and for progress, missile-firing competitions, and dining-in nights. This division should be given some of the old and famous unit numbers, along with their heraldry, to further achieve tactical identification.

A further benefit not now possible will be that instructor personnel can be continuously exchanged with the Air Defense Command to ensure their freshness, fitness, and enthusiasm for the mission. At present many of the air defense instructors in Air Training Command have been trained from its own resources and have never had practical air defense tactical-unit experience.

Flying safety in flying training has long been a matter of major concern. During peacetime, flying safety often tends to become the mission rather than a by-product of the mission. Without doubt a program that is realistic is going to be the cause of accidents and perhaps of interceptor crews getting killed. We must realize, however, that if the program is not realistic and effective a thousandfold more people might be killed. We cannot permit this to happen. Therefore, we must orient the instructors and teach the trainees that the most effective flying safety program is obtained through realistic training and is the by-product of operational efficiency.

The Commander of North American Air Defense Command stated a year or so ago the necessity for air defense along the Gulf of Mexico and the southern border of the United States. There is the possibility that the new Air Defense Training Division could be situated along the Gulf Coast and utilize some or all of the existing air bases such as MacDill, Tyndall, Eglin, Brookley, Chennault, Ellington, and Foster and Corpus Christi Naval Air Station. Most of these bases are now operating at a level well below

their capacity. Inasmuch as the ground environment is already operational in this area, the expense of establishing this training and air defense division on bases where the majority of the aircraft facilities already exist will be relatively low compared to the benefits to be gained.

At the present time the Air Defense Command operates three unit training and evaluation centers in the 63d Air Division at Tyndall, Eglin, and MacDill Air Force Bases in Florida. Each tactical unit in the Air Defense Command deploys at these bases to obtain its weapons training under the supervision and evaluation of weapons employment experts. There is a possibility that this 63d Air Division complex might afford a potential for the geographical location of the Air Training Command air defense division headquarters, especially since it is also strategically well located with respect to the previously mentioned Air Force bases along the Gulf of Mexico. Missiles and SAGE computers are being located in the area and at present the Air National Guard is standing alert to partially fill a need of southern border and Gulf Coast air defense at the request of the Commander of North American Air Defense Command.

It is not inconceivable that the Air Training Command might assume the unit training mission conducted at MacDill, Tyndall, and Eglin Air Force Bases and operate it in conjunction with ATC's own training and air defense mission. The important fact to consider is that every consideration should be given to future rather than the present weapon systems when a concept of this type is placed in effect.

THE Commander in Chief of the North American Air Defense Command has publicly stated on numerous occasions over the years that to accomplish his mission as directed and as he desires he must be given a considerable increase in both interceptors and crews. Our national survival can well be hinged on this requirement.

A practical, economical, and relatively simple method of more closely meeting CINCNORAD's requirement would be to implement this philosophy of the joint Air Training Command and Air Defense Command systems training program.

*Headquarters Goose Air Defense Sector*



# Minuteman Gains a Year

## *A Quarterly Review Picture Brief*

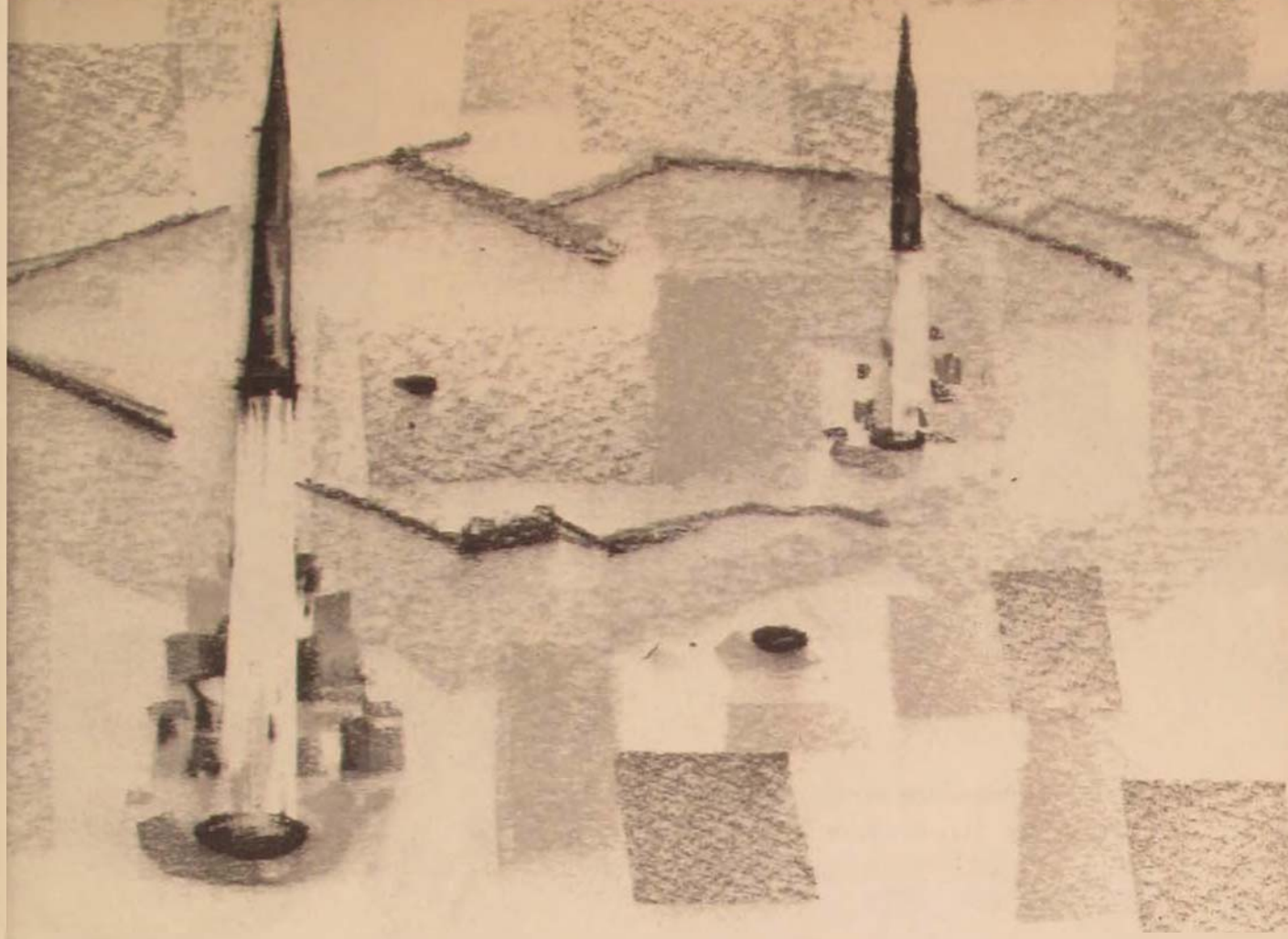
**H**ISTORY may well confirm that the most significant missile development in 1960 was the lopping of one year from the operational readiness date of the Air Force's three-stage, solid-propellant intercontinental ballistic missile, Minuteman. Its readiness date will be 1962, not 1963. This remarkable feat was made possible by the highly successful conclusion in May 1960 of the first phase of the Minuteman research and development program: the silo-development test series.

This was the first time that missiles of ICBM size had ever been fired directly from simple holes in the ground. The silo launching tests were of particular importance because Minuteman missiles will be deployed *first* in concrete underground silos and only later will be dispersed aboard special trains. The success achieved in the first eight silo tests permitted canceling the remainder of the 18 launchings originally programmed, thereby cutting months of valuable developmental time from the Minuteman program and resulting in savings of approximately ten million dollars.

### *silo-development test series*

Between September 1959 and May 1960, eight consecutive successful silo launches were made of a full-scale model of Minuteman at Edwards Air Force



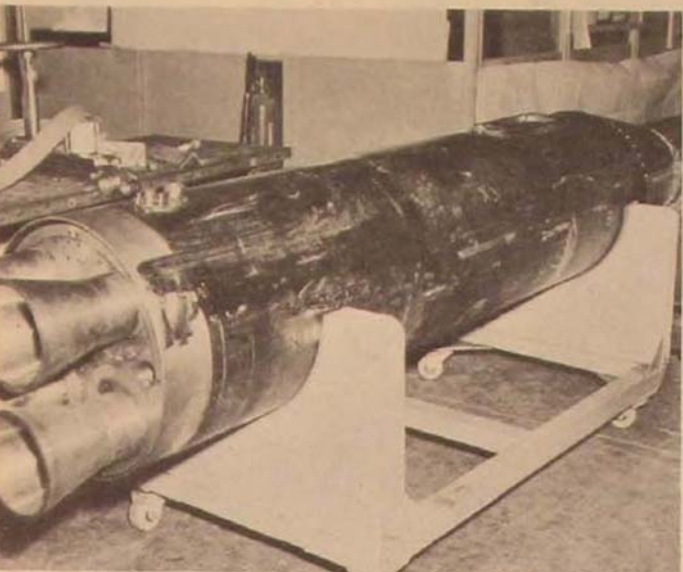


Base, California. These tests were carried out to study the feasibility of launching a missile directly from its underground silo. Primary interest was in establishing design criteria of a silo for the operational Minuteman (depth, diameter, wall thickness, etc.) and in determining the effects of a silo launch on the missile itself.

Preparatory to these eight silo tests, the Air Force and Boeing Airplane Company conducted 5200 subscale-model tests between the end of 1958 and the beginning of 1960. In a series of "cold-flow" experiments, supercooled, compressed nitrogen gas was rammed through a small wind tunnel to study the effect of the forces on a 1/30-scale Minuteman model's aerodynamic stability. Then, switching to a 1/20-scale model, some 1200 cold- and hot-flow tests were run to determine the pressures imposed by exhaust gases on both the missile and its silo.

The 1/20-scale model was again employed in 40 acoustic tests to find the noise level within the silo. Small microphones were placed along the walls of the simulated silo to measure the decibel level of a high-speed gas as it passed over the Minuteman model. High frequencies induce sympathetic resonance, or vibration, in objects near a noise source, and the Air Force wanted to know what effect this might have on delicate instruments—such as the all-inertial guidance system—that would be carried aboard an operational Minuteman.

Some 200 hot-gas tests were run on another 1/20-scale model. This subscale Minuteman was especially instrumented to measure the heat dissipation



*Mounted on preparation van, a 1/3-scale model of the Air Force Minuteman ICBM is readied for insertion in the horizontal test silo during the silo-development test program. At right is the surface opening of a Minuteman test silo at Edwards Air Force Base, California. Several silo-development test models of the Minuteman were launched from this silo.*



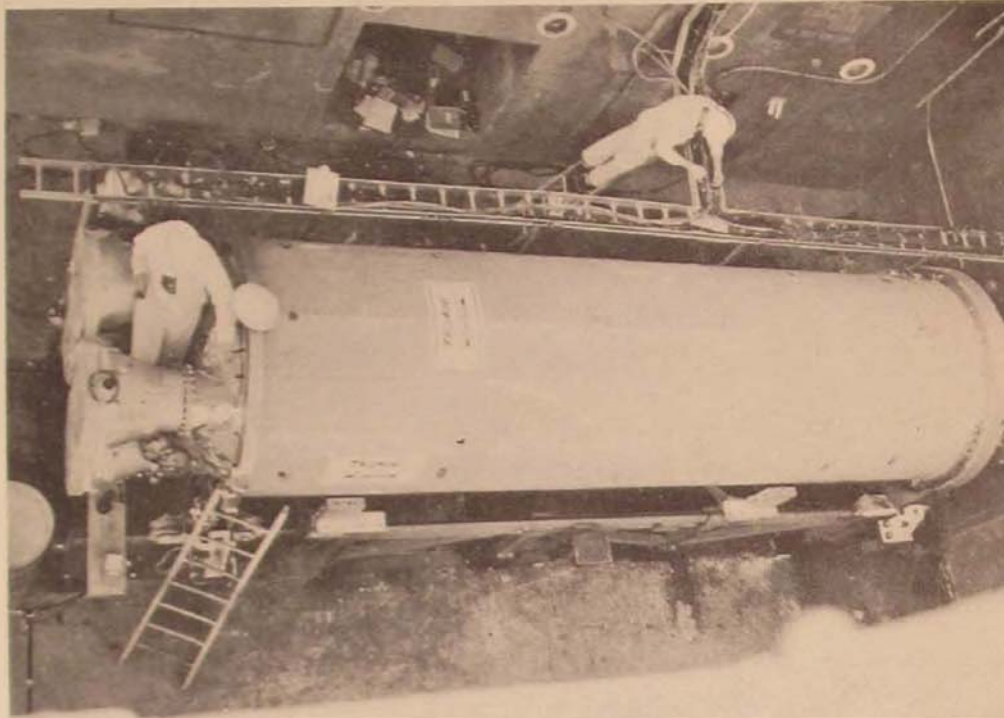
and absorption of a missile fired within a silo and surrounded by its own exhaust as it lifted out of its hole.

The 1/20 subscale model tests had been, in the main, successful. Because the subscale models were inexpensive and easily adapted to laboratory experimentation, a wide variety of factors (such as silo diameter and depth, shape and positioning of the flame deflector at the bottom of the silo, and positioning of the missile within the silo) could be studied in a short time period and at low cost. By the time tests began with a 1/3-scale model, the Air Force already had a good idea of what the problem areas would be and what the probable solutions would be. Seventeen 1/3-scale tests were conducted, with the missile locked inside a horizontal steel tube simulating a silo. The results were highly satisfactory to Air Force project officers. Measurements had been made of missile and silo pressure, temperature, acoustics, vibration, heat radiation, and materials strain. The 1/3-scale tests had provided valuable data, verified the scaling factors between subscale and full-scale programs, and established guidelines for full-scale firings of the Minuteman from a silo environment.

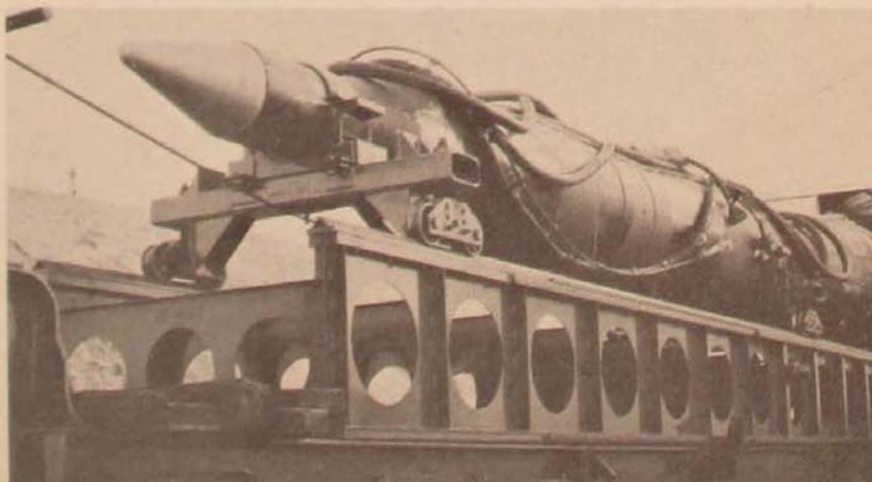
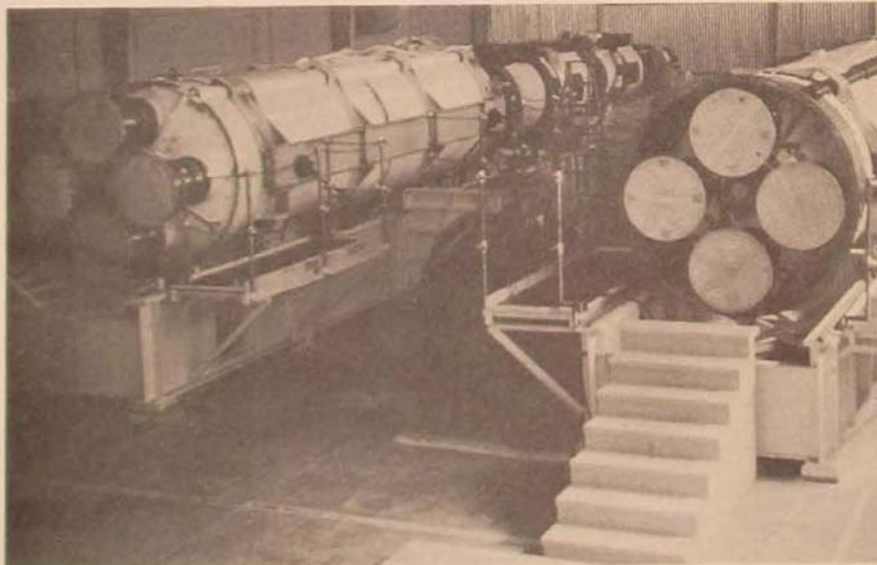
The first stage of the silo-development test missile was a full-size, flight-weight engine. The first missiles launched in this series had dummy upper stages approximating the size and weight of the actual Minuteman. Later missiles carried flight-weight upper stages with inert propellants. The re-entry vehicle was a dummy nose cone, which served also as ballast.



*Artist's concept of the Minuteman ICBM deployed in underground silos. In the foreground a Minuteman, which can be launched almost instantaneously from its silo, stands "at the ready." Below, a solid-propellant rocket engine is prepared for static test firing at the Utah plant of Thiokol Chemical Company, contractor for the Minuteman first-stage rocket engine.*



*Two silo-development test models of the Minuteman ICBM are stored in the check-out building at Edwards Air Force Base awaiting their turn to be silo-launched in the first phase of the Minuteman research and development program. These test missiles have live first stages, inert upper stages and dummy nose cones for ballast. Below, a full-scale, flight-weight silo test model of the Minuteman is positioned on its transporter en route from check-out building to launch site at Edwards Air Force Base.*



# Countdown for Minuteman Silo-Test Missile 111

## Launch time

- 120 min Start of countdown preparations—load tether.
- 50 min Area in general red—start of missile arming.
- 25 min Arming procedure complete.
- 15 min Start of flight control checkout.
- 10 min Flight control checkout complete—start instrumentation checkout.
- 5 min Preparation for final countdown:
  1. Verify all observers and participants ready for final countdown.
  2. Unlock console door.
  3. Remove silo No. 1 shorting plug.
  4. Install jumper plug in console.
  5. Remove red key—give to test conductor.
- 4 min Final countdown:  
In case of emergency, the area "B" observer will inform the test conductor. There will be no other transmissions except in response.
  1. Console power—on.
  2. Verify sequencer power supply on.
  3. Verify flight control no-go hold circuit on.
  4. Report flight control electronics ground power reading.
  5. Caisson No. 1 indicated.
  6. Silo instrumentation water—on.
  7. Sound audible warning.
  8. Check timing on brush recorder in control room.
  9. Safe and arm to "armed."
  10. Check firing circuit resistance.
  11. Close firing interlock—on.
  12. Flight control recorder—on.
  13. Sequence recorder—on.
  14. Visicorder—on.
  15. Tape recorders "A" and "C" to "record."
  16. Accomplish instrumentation calibration.
  17. Flight control hydraulic power—on. Read voltage.
  18. Tape recorders "A" and "C"—off.
  19. No-go reset.
  20. Verify flight control engineer ready.
  21. Integrators—on.
  22. Verify integrator engineer ready.
  23. All tapes to "record."
  24. Launch initiate:
- 30 sec Arm flight control battery. Emergency flight control power—on.
- 29 sec Activate flight control battery.
- 20 sec Start silo and missile radiometer. Purge gas flow.
- 14 sec Flight control checkout of automatic checkout system.
- 10 sec Flight control ground power—off.
- 5 sec Camera power—on.
- 2 sec Missile instrument cooling water—on.
- 1 sec Visicorder to "jump" speed.
- 0.0 sec Uncage flight control gyros. Fire pulse, launch signal, 28 volts.

Flight of these silo-launched missiles was restricted by two means. Propellant-burning time of the first-stage engine was limited to just a few seconds—enough to lift the missile out of its underground storage and launch silo. Missiles were also tethered by heavy nylon cables to restrict flight to a few hundred yards. Even though it burned only a short time, the first-stage engine developed full thrust as it propelled the missile from the launch silo.

After the first four launches (on 15 September, 2 and 22 October, and 22 December 1959), it was realized that a good basic design for Minuteman had been attained. Many of the technical questions had been answered or been found to be inconsequential. When the fifth and sixth tests (on 26 January and 3 March 1960) also proved successful, the Air Force decided to end the program after the eighth flight test. Approximately a year and ten million dollars had been saved from the original program—time and effort that may prove to have been critical in this country's efforts to maintain an ever-modern, ever-effective deterrent posture.

*Air University Quarterly Review*

*In test launch of a full-sized model of the Minuteman ICBM at Edwards AFB, flame and smoke precede the missile from its silo. The Minuteman emerges. Its first-stage engine ceases to burn (as programmed) and tethering cables further restrict its flight. Its test objectives achieved, the Minuteman falls back to earth.*



# In My Opinion . . .

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## OFFICER EDUCATION: LET'S MAKE IT ATTRACTIVE

MAJOR ROBERT J. ULRICH

THE American people, the Congress, the Department of Defense, Headquarters USAF, and Air University are all sold on the proposition of educating officers. A vast and complex system has been raised in worship of Wisdom. Energetic planners, exhibiting an almost unbounded faith in the promise of Education, have quotas, finances, and curricula all worked out in advance for the next decade. Well and good!

For if the Air Force is truly going to be a profession, its leaders are going to have to be educated men with a broad understanding of principles. They must also have the ability to apply the principles to the twisted international power struggle of our times.

Education is a principal route to a respected professionalism that will increase acceptance of the Air Force by the country's important citizens. Until the Air Force is fully accepted, it will have to fight an endless series of running skirmishes to accomplish its staggering mission. Education has to be the watchword.

All this is understood by military leaders, planners, and educators. But how about the target of this educational weapon system? How does the man who has been designated the principal character in this educational adventure feel about being thus honored? Is the whole business attractive to him?

In pursuing the literature of Air Force education, one finds more than occasional concern with the fact that officers are not applying for schools in numbers large enough to fill budgeted quotas; official reports darkly hint that while involuntary assignment to school is not desirable it may be resorted to if necessary; graduates of one phase or another of the system speak resignedly of "a year lost"; there is wonderment, even among faculties, as to "where it's all leading . . ."

This is really an anomaly: the Air Force is willingly investing fantastic resources in officer education, but the entire program might one day be called to account because the object of all this affection, the officer, doesn't automatically accept the overtures being made. One would think the lines of applicants for schooling would be longer than recruiting queues in depression time, but such isn't the case.

Before an up-and-at-'em officer with a string of good ER's to his credit, in a job he likes, and with his future in the palm of his hand willingly devotes a year to education, he wants to know the payoff—for the Air Force and for himself. If the schooling is not at least as good as the business he was in, he is apt to feel cheated. About all he will get out of the

expensive attempt made to educate him will be another year's safe-conduct toward retirement. And the Air Force, it should be remarked in passing, will have suffered an irreparable blow.

The compelling factor in officer education today is selling education to the officers. Everybody else seems to be sold, but big plans, lots of money, smooth administration, fine buildings, and the latest in curricula are not the answers to the problem of educating Air Force officers. The answers lie with the student-elect, and only with him. If he can be sold on the virtue of education, the program is unbeatable. How can he be sold? By providing him with an educational climate which is attractive because it benefits both the Air Force and him.

Six facets of Air Force education deserve urgent consideration.

*Keep education mature.*

Education is not necessarily mature simply because it is labeled as such in a directive. Its standards and the atmosphere in which it is conducted determine whether it is mature or immature.

Officers should be trusted with free time to study and think. General Spaatz remarked at the dedication of Air University, in 1946, that he hoped it would be a place where a man would have quiet and the time to think. The endless busy-work which stems from the natural desire of curriculum-planning officers to fill all the squares on their charts violates this grand concept and should be cut far below what appears to be the absolute minimum.

The Air Force officer-educational system should not operate remedial clinics or high-school refresher forums. The officer in school must be challenged with great and difficult ideas, with mature ideas befitting his station and purpose in life. Education is not easy, and it is never ordinary. The men privileged to partake of it ought not be ordinary. But if some are, some who cannot grow in a mature educational environment, these should summarily be put out to make room for the competent.

It is the very nature of mature education which attracts the excellent officer, and he is the one in whom the Air Force must invest.

*Keep education selective.*

Nothing can make the sublime more swiftly ridiculous than making it common. Professional education should be reserved for the professional, and the definition of who constitutes the professional is not limited to the number of years a man has signed on for. Professionalism, like ability, is not a direct function of longevity.

The Air Force should educate only those who have promise and inclination. The most degrading act which can be committed against officer education is the dragging in of those who have neither promise nor inclination, just for the sake of filling quotas.

Admission to the educational system's opportunities should be by qualifying examination, rather than mere length of service and grade. The plain and announced end in view should be the establishing of an

educated elite who will run things for those who do not care or do not have the ability to cope with education and conceptual thinking.

The college degree as a prerequisite for commissioning is rightfully the basic standard. That many, many officers must be schooled beyond the baccalaureate level, at Air Force expense, is equally obvious. But the Air Force can neither hope to develop nor support a Ph.D. proletariat. Advanced education is the province of those who want it, can contend with it, and will use it to the advantage of the Air Force.

Dynamic men, from their very nature, are not going to want very much something which everyone can have if he just hangs around long enough. That is what is wrong with making education common—it drives away the paying customers. That is what makes the sublime ridiculous. To be attractive to the kind of officer the Air Force needs to lead it in the future, education has to be highly selective. The true professional will fight for all the education he can get if he is convinced it will set him apart, do him some good, and help the Air Force.

*Make education voluntary.*

The unwilling student is the weeping sore on the body educational. Because of his disaffection he learns little, even through osmosis, and he corrupts and disenchants those who would learn. Why he does not want to better himself is his own business, but he ought not be forced upon those of his fellows who do seek to profit from their studies.

Education should always be voluntary for this overriding reason: no man can be educated by compulsion. He can be exposed to education by compulsion, yes, but he cannot effectively be ordered to become a more comprehending person in so many months. He may meet certain superficial criteria, such as passing quizzes and bluffing his way through interviews, but once the pressure is off, he will revert to type. There will be little improved in him, and education is supposed to change a man by improving him for life. Education must be beloved and sought after.

The human can be trained by compulsion. So can the jackass. The jackass, however, with his mean nature, can never be *educated*, no matter how hard the whip. The man who has to be whipped to school will never become educated either.

*Make education competitive.*

The normal man likes the climate of competition. It spurs him on to a plateau of attainment far above what he will do when competition is minimized or even forbidden. Every man who today is an officer in the Air Force was weaned on competition and has thrived on it. The educational facet of his life was no exception. He possibly knew precious little Greek or Latin, but Phi Beta Kappa and *summa cum laude* were meaningful. In his spare time, he gave his all for the coach.

But if a man of high caliber, who has worked hard, gets no more recognition than an alphabetical rank in a hurried line rushing across a stage to get a certificate of attendance, his competitive spirit is not only



dead—it has been embalmed. Everybody gets the same diploma, no matter what his performance, and to the man who has tried and lived up to his capabilities the egalitarian character of this time-consuming routine is galling. Unless he has great depth of soul, the genuinely capable officer who finds himself in an "everybody-is-equal" society will sooner or later begin acting like everybody else. He will gravitate toward mediocrity.

When the leveling technique is applied to education, the art suffers grievously. Why would anyone want to pick on the field of education for the creation of an artificial atmosphere of complete and selfless togetherness? In no other imaginable sphere of human endeavor is there a competitive void. Education is not the exception to the rule. Those who do not relish healthy and fair competition are either retarded or lacking in enthusiasm, and neither the retarded nor the unenthusiastic should be cluttering up universities and usurping precious space.

*Make education rewarding.*

When an officer in a selective, highly competitive, and mature educational system has demonstrated distinctive ability, he should get his reward. And this reward ought to be in the concrete form of a distinctive assignment.

If there is hesitancy or refusal on the part of the Air Force to give the remarkable officer a definite promise that his job after school will be bigger and more challenging than his last, if he cannot be shown that he has climbed another rung up the ladder, if he will not be more respected and sought-after than he was, he will want little to do with education. It won't be attractive to him.

The drawing of a year's pay for the learning of facts and the exploration of ideas is not incentive enough. The able officer wants to use the facts and make the ideas a part of his brain power. If he cannot, or is not permitted to, he might better have stayed where he was, to get on with a mission he probably considered fairly important.

Unless there is a reasonable promise of betterment as a reward for a job well done, officers in huge droves are going to shy away from education. For officers, while patriots first, are practical men of affairs who appreciate all too well the damage a collegiate hiatus can wreak upon a career.

Give the top few per cent of a class its reasonable choice of assignment, award some actual preference on the Promotion List, offer at least a guarantee of job promotion, and a flood of voluntary applications for schooling will enable the Air Force to pick and choose from among the eager and the qualified.

*Give education some positive goals.*

Goals are necessary to high-spirited men. And goals must be more than wispy, nebulous promises of better things to come. Whether immediate, short-range, or long-range, goals must hold out the accomplishment of a known objective. A certificate of attendance and an entry in the service record do not constitute goals that justify long periods of study.

There can be immediate goals, such as passing a quiz or giving a worthwhile talk, and these can be immediately satisfying. The short-range goal might be getting through the first semester with an "A" average, and this goal can be satisfied and satisfying.

But what is the long-range payoff? Graduation, per se, is a childish goal. What happens after graduation? What has been the real object of the exercise? Did everyone—faculty and students alike—actually understand what was to be taught and learned?

These questions can be accurately answered only within the context of an educational milieu that is mature, selective, competitive, voluntary, and rewarding. In such an atmosphere, goals inhere. The volunteer already has a goal or he wouldn't have volunteered, and selectivity and competition automatically offer more goals. A deserved chance to get ahead is another goal. No need to talk to this man in vague and platitudinous generalities. This man will know the direction and rate of his progress. Progress will be his goal, although he may translate that concept into simpler terms.

There is no selfishness here; a person simply has to know what he is working toward. If he can detect little or no purpose to his efforts, the efforts will shortly cease. He will exercise himself only to the slight extent required by the aimless environment in which he finds himself.

THE PURSUIT of education which characterizes Air Force life today is one of the unique stories of all military history. This lively interest in professionalism through education is perfectly in keeping with the fundamental regard of the American people for learning. And because it will one day make the Air Force stronger, it will make the Nation stronger. For reasons unnumbered, the officers of the Air Force must, with all other leaders of the land, be educated men.

But some lines have to be drawn to keep the proposition from becoming common, unwanted, and unattractive. Education ought not be a numbers racket. It is hardly very professional to go about pridefully confusing quantity with quality. Education must be prized and sought after if it is to be something of value and purpose to the Air Force and its officers. It will never be prized and sought after if it becomes common.

It may take some time to convince many officers that they need more than a bachelor's degree to live up to their capabilities in the new Air Force, but those who are already convinced and now find education attractive will make up in quality for whatever quantitative losses might temporarily be incurred. Those who voluntarily go ahead now will be as missionaries to convert the multitudes, for they will prove by example the wonders an officer can work when he is educated to do his best for his country and himself.

Education is the watchword, but a watchword that must be qualified by six important concepts: it must be *mature, selective, competitive, voluntary, rewarding*, and instilled with *goals*. Education thus qualified will succeed because it will be attractive, attractive to the finest of the Corps.

## NEW DIMENSIONS IN LEADERSHIP

ORON P. SOUTH

**WE ARE** now three technological revolutions removed from 1945. Even the political and economic atmosphere in which we live is completely different from that we knew in 1955.

Although we acknowledge these changes, emotionally we refuse to accept them and their implications. We still educate tomorrow's aerospace leaders as if we expected to return to "normalcy" at any time. This refusal to accept and to act cannot continue if we intend to give young men the kind of basic education and training they need to lead tomorrow's Air Force.

### *the missing concept*

To educate and train for leadership there must be some conception of what kind of leadership is desired or is possible. The Army and Navy have tried to conceptualize this. The Air Force has not. A comment on this, with an emphasis on the need for action, is found in a recent War College thesis by Lieutenant Colonel Walter J. Schweiger, Jr., entitled "Obligations of Leadership":

In terms of the Air Force, the first need is a strong statement of policy which will clearly define the need and the problem, and lay groundwork for action. The second need is formulation of a specific program of leader development. Among organizations of size or importance, the Air Force is one of the few which have failed to grapple with the problem on a policy level and to set up a comprehensive program for leader development.

When the Air Force became "independent" in 1947, a number of important decisions had to be made with respect to policies for personnel actions. Prominent among these were: (1) What kind of leadership should the Air Force encourage? (2) What type of individual should be selected for future leadership in the Air Force? (3) What policies should be adopted to encourage the leaders selected to remain in the Air Force? All these derived from a more fundamental question: Should the Air Force rely on the Army system of selecting, training, and retaining leaders, or should it develop a new system?

Before this question could be answered, another—concerned with the kind of military competence the Air Force wanted to develop—had to be considered: Should the Air Force prepare primarily for the creative tasks of the future, for the operational tasks of the future, or for both? By answering this question in favor of future operational tasks, the Air Force, consciously or unconsciously, in effect decided to rely on the Army system. Since some undoubtedly will quarrel with this analysis, let us review the reasoning on which it is based.

### *the Army heritage*

Traditionally the Army has placed most value on the kind of leadership needed on the field of battle. It has selected and trained those who show

promise for this kind of leadership. And it has generally reserved its highest honors, rewards, and ranks for these men, to encourage them and retain them. Conversely, those in support arms—such as Quartermaster, Ordnance, Signal Corps—have found the path toward higher advancement and honors more difficult by comparison.

This pattern is based on a number of premises—sometimes unrecognized—about the nature of war, methods for manning wartime forces, weapons, and relationships among people.

*The primacy of the battlefield.* War until recently has been considered almost entirely as a military affair, unrelated to a political context and not serving a political function. Indeed this view is embedded in the Constitution and in American political thinking. This is noted by Bernard Brodie in *Strategy in the Missile Age* (Princeton: Princeton University Press, 1959):

It is our major dilemma in thinking about war and peace today that we do so within an intellectual and emotional framework largely molded in the past. Our images, slogans, ideas, and attitudes on the subject of war, some of which are buttressed by the most powerful cultural sanctions, are transmitted to us from times when war was characteristically, with but a few historical exceptions, a limited-liability operation.

And because past wars have been won on the battlefield, the Army quite naturally has emphasized those qualities which make for success on the battlefield.

Since America would not fight except when attacked, large professional armies were not needed. When an attack did come, wartime forces could be composed of volunteers commanded by professional soldiers, specialists in battlefield activities.

These two concepts about war and wartime forces, to be workable, depended on relatively simple weapons, a large stockpile of these weapons (or the ability to produce them rapidly in large quantities), and the kinds of relationships in civil society that were not too different from those found in military society. These concepts also presupposed that Army officers would not have to be concerned with developing weapons but rather that their primary concern would be with using those weapons that were available.

*From 1776 to 1941.* When American armies were first formed, weapons were primitive, and, although troop training was desirable, even untrained men fought well because they were using weapons they were accustomed

**What kind of preparation should the Air Force be giving today to the young officers who will command the aerospace forces of 1975 and 1980? Mr. Oron P. South, Professor of History, Documentary Research Division, Research Studies Institute, Air University, argues that the trend toward extension of the spectrum of conflict and increasing technological innovation obsolete the past emphasis on battlefield leadership as the dominant concern in grooming the future commander. The increasing complexity and variety of problems in international relationships will indeed call for military leaders who have the traditional courage of the operational commander—but this courage undergirded by broad and deep education.**

to handling in everyday life. What was true during the Revolutionary period was also true in 1812 and from 1861 to 1865. Recruitment was for a short period and training was as much for conditioning—as one would condition a horse to pull a wagon—as for employment of weapons. Only a few, the professional officers, were intensively trained, but this training was in field engineering and tactics.

Because of the attitude toward war and weapons, by 1900 many organizational and administrative habits had become fastened on the Army. Since weapons were simple and organizations were standard, men could be transferred from one place to another without any great difficulty. A rifle was a rifle in Missouri as well as in California. And an infantry battalion was about the same in Georgia as in Wyoming. Besides, a change in assignment brought a change in scenery and new companions and relieved the tedium of garrison life.

Between 1900 and 1917, however, the technological revolution of the late nineteenth century began picking up momentum. The development of a practical internal-combustion engine made possible the airplane, the tank, and the truck. This revolution and its implications for warfare, by and large, meant nothing to the professional military man, or to political leaders. The professional was not technically trained, and neither he nor the political leader worked under concepts which dictated an interest in the possibilities of the technological revolution.

When the United States entered World War I the same basic concept that prevailed in George Washington's time was still considered valid. This concept held that war is fought for military victory and that it is possible to fight one by taking in large numbers of untrained men who will be commanded by men who are military experts on the battlefield. This again presupposed rather simple weapon systems and the ability to produce them in quantity. It is worth noting that while we did produce rifles in large numbers we did not produce much else. Between 1 April 1917 and 11 November 1918, for example, only 815 field guns were manufactured in this country and shipped to Europe.<sup>1</sup>

Although World War I and the aftermath suggested the importance of political and technological factors in war, neither received much attention in the United States. The professional soldiers in charge of the Army chose mainly to disregard many of the developments of the war. Decisions about tanks are illustrative of the trend. The Tank Corps created in 1918 was abolished after the war, and tanks were assigned exclusively to the Infantry. The latter decision was incorporated as law in the 1920 National Defense Act. "The purpose was," according to Army historians, "to prevent the Tank Corps from ever being reconstituted to plague the Infantry and other arms as a separate mechanized force comparable to the Air arm."<sup>2</sup>

When World War II came the Army was woefully deficient in modern arms. Part of this deficiency can undoubtedly be traced to the lack of

<sup>1</sup>Constance M. Green, Harry C. Thomson, and Peter C. Roots, *The Ordnance Department: Planning Munitions for War*. Office of the Chief of Military History, Department of the Army. Washington: Government Printing Office, 1955, p. 24.

<sup>2</sup>*Ibid.*, p. 189.

Congressional enthusiasm for appropriating money for research, but the record shows that the Army was not inclined to prod the Congress. Indeed the Army was wont to reassure Congressmen that our forces were well equipped with modern weapons and materiel. As late as the spring of 1941, for example, the Chief of Ordnance, Major General Charles M. Wesson, told a House Committee that American weapons were as good as "and in many instances superior to those of any other army in the world."<sup>3</sup> It should be noted that the Chief of Ordnance received his requirements from the combat branches. That is, he could not start development on his own initiative. And the evidence is that the combat arms did not forcefully push for full exploitation of our scientific and technological capabilities.

### *the Air Force experience*

We are now—and have been for several years—at the point where the impact of technology and differing concepts of war are making themselves felt. The change was first noticeable soon after World War II. At that time the human problem started becoming the number-one problem in the Army as well as in the Air Force. Both have tried to escape the necessity for having organization, administration, and training reflect conditions of conflict commensurate with the technological level of possible weapon systems. In the Air Force, for example, concentration on more complex weapon systems without equal attention to the concomitant human problem has had the effect of making the human problem become rapidly more critical. In part this difficulty has arisen because of the Air Force decision to adopt the Army's system of emphasizing battlefield competence.

*Primacy of operational competence.* In the Air Force the rated officer, especially the pilot, has been the counterpart of the Army battlefield commander. Like the Army, the Air Force has devoted its greatest effort to attracting those men potentially capable of leading or commanding an operational force. And, as in the Army, the highest proportion of promotions and rewards generally has been reserved for such men.

In a small way the Air Force is making a move to open more opportunities for nonrated officers, such as under certain conditions allowing nonrated officers to command missile units; but these moves give the impression of being responses to pressures rather than part of a comprehensive, long-range program. A few statistics suggest that the type of leadership needed to command an operational force is still the most highly rewarded in the Air Force: of the general officers on active duty in the Air Force in January 1960, 88 per cent were rated officers, although only approximately 55 per cent of the entire officer corps are rated. Of course a number of general officers have scientific, technical, or other educational qualifications, but these are still secondary rather than primary. The aeronautical rating still seems to be the determining factor.

One interesting aspect of this situation is that more senior officers are assigned to jobs calling for broad knowledge and experience than to jobs

<sup>3</sup>*Ibid.*, p. 207.

in the operational field. John W. Masland and Laurence I. Radway in *Soldiers and Scholars: Military Education and National Policy* (Princeton: Princeton University Press, 1957, p. 516) have pointed this out: "It is striking to note that a majority of our very highest ranking officers were assigned to duties requiring them to deal with the economic, scientific, or political aspects of military functions, and that only a minority were assigned to operating units in the field." They also found that for every general officer in a nonoperational unit there were 6 colonels, 10 lieutenant colonels, and 10 majors so assigned.

One of the rewards available to officers is higher schooling. In the War College Class of 1960 approximately 80 per cent of the officers attending were rated. The years 1952 to 1960 show a similar proportion:

<i>Year</i>	<i>Total USAF officers</i>	<i>Nonrated</i>
1952	105	0
1953	124	16
1954	129	34
1955	132	27
1956	131	42
1957	131	23
1958	130	18
1959	130	20
1960	129	26

Another reward is spot promotions. These are given *only* in an operational command, SAC. What they might do to boost the retention rate of technically and scientifically educated officers in a noncombat command has never been determined. This is not to argue for spot promotions in other commands. Other ways would seem more suitable in the long run.

*ROTC vs. Academy education.* Other evidence of the emphasis on operational activities and on men who can discharge the responsibilities inherent in them is observable in the manner in which the Air Force has conducted the ROTC program. At a time when the demand for scientifically and technologically trained men was rising, the Air Force might have used this program to obtain such men. Instead, by and large, the program in recent years has been used to recruit candidates for pilot training. The figures for the last six years are indicative of the postgraduate mix:

#### Air Force ROTC Graduates

<i>Year</i>	<i>Rated</i>	<i>Nonrated</i>
1953-54	6600	6524
1954-55	8495	2681
1955-56	6352	1453
1956-57	4403	1311
1957-58	3946	1425
1958-59	1725	2349
1959-60	1723	2091
	<hr/> 33,244	<hr/> 17,834

Again it should be pointed out that many of the subsequently rated ROTC graduates may have scientific or technological education (and also that the trend toward emphasizing postgraduate pilot training is changing). If such is the case, this is a happy circumstance rather than a planned outcome, for the aeronautical rating has been the important factor. Another consideration is that more rated than nonrated ROTC graduates stay in the Air Force. Before 1957 the proportion was about two to one. Since 1957, when rated graduates had to sign up for a five-year tour, surveys indicate that the proportion is about four to one.

While the Air Force has been relatively unconcerned about what kind of an education the ROTC graduate has received, this same lack of concern has not been manifest about the kind of education given at the Air Force Academy. Over the years the Army has found out how to handle a man and what kind of courses to give him at West Point to produce operational commanders and leaders. The Air Force has taken this pattern from the Army and has applied it to the Air Force Academy, so that the kind of training and education the cadet receives is rigidly controlled.

This seeming contradiction between the lack of interest in the ROTC cadet's education and the tremendous concern over the training and education of the Academy cadet is explained by the fact that the Academy cadet is under the control of the Air Force. Once the ROTC graduate enters the Air Force he is subjected to the same pressures that have been on the Academy cadet for four years. These pressures and the rewards system are primarily designed to produce an interest in and a commitment to operational jobs.

It should be emphasized that this system makes sense only when the primary task is seen as being connected with the battlefield and when there is a relatively simple weapon system. If the factors responsible for producing battlefield capability are even equally as important as the battlefield, this system will have great difficulty coping with those factors, for the men capable of handling them will have been driven out of the Air Force. Colonel Schweiger makes somewhat this same point (in the study mentioned earlier) when he says:

... the concept of an elite corps of technically [operationally] oriented personnel dominating all phases of the Air Force is suffocating to leadership and wasteful of leadership skills which are needed now in every type and to every degree, and for which the need will grow more and more acute as time goes by.

The question now is, should this system be continued or should it be subjected to a complete and thoroughgoing overhaul? That it has been efficient in doing what it was designed to do is beyond question. It has produced exceptionally able operational commanders and men who have been brilliant in their ability to improvise in the operational field. Witness, for example, the Berlin Airlift and the high state of readiness of the Strategic Air Command.

It is noteworthy that the system has not produced—because it was not designed to produce—leaders in the field of weapon development, scientific and technological discovery, or methods for influencing human behavior. The kind of leaders needed in these fields and the type of leadership required have not been sought or developed. This has been pointed out



by Colonel Oliver G. Haywood, AFRES, a former Chief of the Air Force Office of Scientific Research, in his article "Technology and Military Men" (*Air University Quarterly Review*, VIII, 1 (Summer 1955)):

. . . in industry . . . more and more engineers are going into management because they are needed in management more than ever before. . . . The military is trending in the opposite direction. The path to advancement is not through scientific and engineering experience and understanding. There is little place for technical men on the military "management team," yet military technology is inherently a part of the team's decisions.

It is most curious that Air Corps officers were extremely critical of the Army's attitude toward aviation, yet adopted the kind of leadership pattern responsible for producing Army attitudes. The same men who opposed the airplane also opposed the tank. An indication of the same kind of trend in the Air Force is the increasing extent to which really complicated problems of defense and offense, of strategy and tactics, are farmed out to special organizations for study. Another indication is the increasing extent to which weapons precede doctrine. Ideally doctrine precedes weapon development, but this has not been true since before World War II.

### *the Air Force problem*

Some see these developments as an indication that the Air Force should abandon its insistence on operational competence and operational creativity and concentrate on producing technical experts. This is to mistake the problem. The problem is to change the leadership pattern and value system to produce the climate favorable to the kind of military expert who has not only operational competence and creativity but also a more general competence and creativity. Perhaps the nub of the problem can be stated as follows: In the past the Air Force has relied for leadership on courageous, brainy men. In the future it must rely on *highly educated and trained courageous, brainy men*.

It cannot get this kind of men until the status and reward system is changed and the attitude toward education is modified. This call for change was also made in the USAF Scientific Advisory Board's "Report of the Working Group on Scientific and Engineering Officers," July 1959:

If current Air Force policies in the procurement, training, and utilization of scientific and engineering officers are not modified, it may be forecast that the present shortage of such officers, which is already serious, will grow rapidly over the next five to the next ten years, to truly dangerous proportions.

Since talented, well-educated men will probably always be scarce, the continued emphasis on rated officers drastically degrades opportunities for achieving the kind of balanced officer structure needed.

### *future leadership demands*

The cadet who enters the Air Force Academy or the ROTC program in the early 1960's (the two main officer procurement sources) will occupy decision-making positions in 1980, 1990, and 2000. Shall he be prepared for his immediate job on graduation or for the decision-making tasks of the

later years? The best answer seems to be the latter. In a period of rapid change and transition it simply does not make sense to train and educate an individual for limited specific tasks; preferably his training and education should be broad and based on fundamentals. The case for this in the field of science and technology has been stated well by Dr. Detlev Bronk in his address entitled "The National Problem" presented before the Air Force Association in February 1957:

I believe in the training situation there is one desperately important thing we need to do. I refer to the provision of a broader foundation on which the student can grow intellectually in order to deal with the unseeable problems of the future. Unless we do this, we are going to be guilty of a tremendous waste of scientific and technical manpower.

I realize that it is easier to train the student to do that which is immediately important, for which there is an immediate market, but that is a great ultimate loss. If a man has not enough foundation upon which he can build, ten, fifteen, twenty-five, or thirty years after his graduation, when he should be achieving the pinnacle of his career, he will be unable to contribute effectively, because the world of science and technology will have grown beyond his limited ability to grow.

*Tomorrow's broader tasks.* If we look at both the scientific and political picture for the decades ahead, the reasons for broad training and education become even clearer. We are confronted with political, economic, and ideological revolutions as significant and as world-shaking in their implications as the revolutions in science and technology. All these create new problems for the future, a future which must be forecast if we are to cope with it adequately.

One such long-range forecast, entitled *A World in Transition* (31 December 1959), was prepared by TEMPO (Technical Military Planning Operation) of General Electric Company.

1. The increasing diffusion of power—politically, economically, scientifically, militarily—among the nations of the world, with nations moving from one state of development to a higher state and some of them emerging to challenge the superior position of today's leaders, the United States and the Soviet Union.

2. International nuclear weapons diffusion—the spread of nuclear weapons capabilities to France, Communist China, and other countries—will increase the probability of nuclear war—total or limited—and increase the difficulty of establishing international controls over armaments.

3. Outbreaks of limited wars. The period 1965-1975 will see sporadic outbreaks of limited war, largely of the brushfire variety but not precluding Korean-type conflicts. These outbreaks will be occasioned not only by direct or proxy aggression by the Russians or the Chinese but also by nationalist aspirations and political and economic instability in underdeveloped areas.

4. The increasing industrial and military capability of Communist China—resulting in the rise of a power center of great danger to the peace of the Orient, in particular, and of the world, in general. Whether this threat can be lessened by bringing Red China into the United Nations and thereby exercising a restraining influence on that country will be one of the debated questions of the future.

5. Revival of Soviet and Chinese military aggression. Central in the basic conflict between the Free World and the Communist Bloc is the expansionist compulsion inherent in Communism. There is little evidence to suggest that lasting solutions, as against short-run accommodations, will be achieved or that the Communists' leaders will be successful in extending their control over new territory by non-military means. Thus, military aggression can be anticipated from both the Soviet Union and Communist China as long as communism remains the prevailing ideology.

The ability to compete successfully in the kind of world depicted by these forecasts is a function of broad education, training, and experience, as opposed to no or little education and only specialized training and experience. As adjustments are made, as they inevitably will have to be, the man who has not mastered the fundamentals will be lost.

*The continuum of conflict.* Events of the past few years and projections of the future indicate that we are confronted with what has been called a spectrum or continuum of conflict. Its significance is that we are now, and will be in the future, confronted with graduated degrees of persuasion and violence. For tomorrow the military expert must be able to devise strategies, tactics, and weapons to work effectively throughout the continuum. This ability is dependent on a broad, thorough education as a base on which to build.

The existence of this continuum of conflict has been much talked about, but in reality little has been done to explore its full implications for the Air Force and the other armed services. One effect has already become apparent—increased professionalization, as opposed to manning a force with short-term volunteers.

*Professionalism.* Volunteers generally fight well only when they are defending their country or are fighting for some other equally meaningful cause. The Korean War furnished incidents in example. Initially the Air Force found that some rated reservists who had been recalled wanted to be taken off flight status. Had this country been attacked, it is doubtful that any such difficulty would have been encountered. The Eighth Army was at one time in low spirits until General M. B. Ridgway took command and made it a "professional" army. S. L. A. Marshall described the men of the Eighth after General Ridgway took over as the "hardest-hitting, most workmanlike soldiers" he had seen in the course of three wars. These observations about short-term draftees or volunteers are not meant to disparage the reservists and draftees who fought in Korea and who on the whole did an admirable job; rather they point out that there is a psychological difference between the reaction of men drafted to fight a limited war and those drafted to defend their country.

In one sense the Cordiner Pay Bill with its recommended increases for career men and specialists was a recognition of this need for a professional fighting force. Even if we were still fighting with relatively simple weapons, we would in all probability have been forced into increased professionalism simply because we were fighting somewhere in the continuum rather than at the extreme.

This kind of professionalism requires a rather high degree of commitment to the value system at stake in the continuum of conflict. This commitment depends on awareness and understanding, and these generally are inculcated through education. The commitment is necessary because, considering the state of technology and the demand for secrecy in development and planning, external controls are no longer effective over the professional. The Constitution sets up certain safeguards, external controls, to ensure that military forces do not take over the country or dominate politics. Under present conditions these controls are ineffective (as various Secretaries of Defense have discovered), not by any design on the part of military officers, but simply because the nature of the problem is such that it cannot be handled from the outside. Internal controls are the only effective

controls in this situation. (This development alone argues against indifference over the kind of education received by ROTC and OCS candidates.) The Secretary of Defense, unless he has been in the Defense Department for a good many years, can best control through policy decisions rather than through attempting to actually manage the armed forces.

Another implication of the continuum of conflict is that the primary mission of the armed forces is not to deter general nuclear war but ultimately to help create the conditions which will resolve the conflict in favor of the value system of the United States and the Free World. This is the larger creative task mentioned earlier and the different kind of creativity needed by the future military expert. As long as chief emphasis is placed on the need to deter a major exchange of nuclear weapons, the problem will not be considered in its proper perspective and needed abilities will not be developed. This is not to argue against the necessity for a capability to deter. Such a capability remains indispensable.

*Problems of organized complexity.* Part of the ability to be creative in this area is related to a relatively recent development in the physical and behavioral sciences—attempts to handle problems of organized complexity.

Before 1900 scientists worked on problems with only one or two variables. Experimental and analytical techniques were developed to determine how, for example, gas pressure varied with the volume of gas. Around 1900 scientists began working on problems of unorganized complexity, that is, problems with thousands of variables each with random characteristics. By the use of statistical and mathematical techniques it was possible to arrive at averages and means. With these the scientist and engineer could predict and control as never before. One example was in the development of the atomic bomb.

In recent years attention has been directed to problems of organized complexity both in the physical and human world. The tools for this are found in electron microscopes and other electronic instruments, especially automatic data-processing machines. The techniques lie in mathematics, in statistics, and in system studies. The concepts lie in the idea of organization and purpose in the universe, based on the assumption that we can identify functions of an interrelated whole.

These tools, techniques, and concepts provide a means to organize systematically for innovation. Where yesterday we stumbled on inventions and discoveries, today and tomorrow we can invent and discover on purpose. We can visualize what we want, determine what is lacking, and set a development program on its way. This also requires a commitment to and an understanding of the value system being defended. The ability to innovate raises ethical and moral questions that are not present when inventions come by accident.

The ability to innovate requires an enormous store of knowledge from which to draw. Fortunately this has been increasing at a rapid rate. The editor of the *Christian Science Monitor*, Mr. Erwin D. Canham, points out—"The greatest fact of our century, surely, is not atomic fission, nor great wars, nor power rivalries between two portentous systems, nor even

the awakening of peoples. It is the growth of knowledge—the fantastic pyramiding of knowledge.”

At the higher levels in the Air Force in the future, officers must be able to deal effectively with the organized complexities which exist in the defense structure and in the continuum of conflict. They must be able to conceptualize and describe the entities which exist and to identify functions of the entities. And they must be able to organize and manage to best satisfy the requirements of these entities. At the lower levels officers must be able to develop organizations and means for contributing effectively to the purposes for which the Air Force is organized. They must be able to innovate and to supervise innovation. They must be able to lead in operational situations.

Perhaps an exposition of the previous paragraph will make the meaning clearer.

The Air Force today is an organized complexity. Supposedly a significant action at the top or within the organization should have its effect on the rest of the organization. Within limits, this effect can be controlled; but how can we set these limits intelligently without having some idea of the actual and ideal relationships between functions and without a clear concept of what we wish to accomplish in both the short run and long run? Since these kinds of ideas and concepts are not usually available, cuts in appropriations and increases in appropriations are frequently made across the board. This assumes that all activities are of the same relative or absolute importance; but intuitively we know this is not so.

If a change in strategy is ordered, it would be desirable to effect such changes in functions and allocations of resources as will achieve maximum results in a minimum of time. But who today in the higher levels of the Air Force can determine what these changes should be, especially with any certainty? And who at the lower levels can be put to work creating organizations and weapons to support the change of strategy?

No one can say with certainty that twenty or thirty years from now such problems can be solved with scientific dispatch. But it does seem safe to say that within the next fifteen to twenty years such problems can be solved with more scientific exactitude than is now possible. Whether the Air Force will have the people competent to deal with them is dependent on the kind of action that the Air Force takes now.

To solve successfully the kinds of problems that organized complexity presents, several skills are required:

- The ability to learn rapidly and to teach one's self.
- The ability to theorize and construct models, not only of natural phenomena but also of human phenomena. Creativity generally springs more from synthesis than from analysis.
- The ability to use analytical approaches, such as mathematical programming. This sharpens the perception of critical variables in decision making and points to the need for objective, quantitative information.
- The ability to communicate effectively.

TODAY's military expert reaches a position of authority by climbing the operational ladder. Some recognition exists that this pattern is out of joint with the times, but no comprehensive program exists for a radical change. The path to preferment is still through operations, and the value system in the Air Force is oriented toward selecting, training, and retaining individuals who show capacity for operational leadership. This emphasis stems from an outmoded conception of war and is based on the assumption that the objective is to be able to win a military victory or to destroy an enemy's will to fight. This conception is no longer valid, for the objective of the use of power or force is to achieve political stability or change in the world.

The military expert of the future must be a *specialized generalist*, specialized in the sense that he is concerned with the continuum or spectrum of conflict, and generalist in the sense that he is concerned with the full range of knowledge, skills, and activities required to function effectively in any and all areas of the continuum. His substantive area—the discipline with which he is concerned—is that of developing strategies and means for influencing human behavior. It follows that his basic education and training should not be aimed at making him primarily a physical scientist, an engineer, or a behavioral scientist. Instead it should be aimed at giving him from all of these fields the knowledge, concepts, and techniques that will be useful in his substantive area.

Putting this concept into effect may turn out men who are overeducated for the first jobs they have to perform. But this will not be as true in the future as in the past because of the rapidity of change and the accumulation of knowledge. The men who receive this kind of education will be more educable than those with a narrow, specialized education.

Broad education and training are better calculated to produce men who lead in developing and using means (psychological or physical, violent or nonviolent) for influencing human behavior; who lead in identifying areas that need research and in managing and coordinating research projects; who lead in evaluating the content and methodology of the research of others; and who lead in doing and inspiring research aimed at formulating concepts for strategy and tactics.

This latter research, especially as it relates to strategy, is probably the most important area of research facing the military expert of today and tomorrow. And yet it is an area which none of the armed services has shown a disposition to tackle. Nor have they encouraged individuals or organizations to be creative in this area. Yet high-level strategy is the foundation stone on which the whole defense edifice rests. It is either the greatest inhibiting force or the greatest vitalizing force in our posture.

# ...Air Force Review

## CODIFICATION OF LAWS RELATING TO THE ARMED FORCES

COLONEL MARTIN MENTER

THE 85th Congress, by Public Law 85-861, 2 September 1958, completed the gigantic codification project of the Department of Defense. This codification involved the restatement, within a single law or code in subject-matter groupings in accordance with a carefully determined outline, of some 1000 separate prior statutes relating to the armed forces (Army, Navy, Air Force, Marine Corps, and Coast Guard) that had been enacted from 1789 to 1958. Minor supplemental codification bills will be introduced at the beginning of a Congress, if necessary, to bring within the code the pertinent legislation enacted by the prior Congress without reference to the code.

The initial codification bill, enacted as Public Law 1028 by the 84th Congress on 10 August 1956, had codified the statutes enacted through 31 March 1955. It was perhaps the largest bill ever introduced and enacted into law, and certainly was the best-drafted codification ever presented for enactment. It gave the Air Force its first clearly defined set of laws specifically applicable to it. The Air Force, born as an offspring of the Army under the National Security Act of 1947, inherited the statutes generally applicable to its parent. Much of this legislation, while applicable to the Air Force, recited the vesting of authority in named statutory chiefs of branches within the Army, such as the Quartermaster General or the Chief of Engineers. These statutory offices do not exist in the Air Force.

Further difficulty arose in sorting out all the Army legislation that related to functions transferred to the Air Force under the National Security Act of 1947. Congress had provided that on a transfer by directive of the Secretary of Defense of functions, personnel, projects, activities, or other things from the Army to the Air Force, the law applicable to that which was transferred would continue to apply. The statutory duty to carry out the law relative to the items thus transferred would then vest in the Secretary of the Air Force and the Department of the Air Force. Imagine the legal researchers' problem in determining and finding the statutes involved by Transfer Order No. 6 of the Secretary of Defense issued under the National Security Act of 1947. This order directed the transfer to the Secretary of the Air Force and the Department of the Air Force of

*... so much of the functions, powers, and duties of the Secretary of the Army and the Department of the Army as are necessary to accomplish the following purposes: ... Procurement of such items of materiel, supply, and services as heretofore have been assigned to the*

Army Air Forces or the Department of the Air Force for procurement by directives of the War Department or the Department of the Army, or pursuant to the National Security Act of 1947, or may hereafter be assigned to the Department of the Air Force for procurement pursuant to the National Security Act of 1947, or otherwise, together with all matters relating or incident to such procurement; and industrial mobilization planning with respect to such items as mentioned above, including matters related thereto. [Italic supplied.]

We in the Air Force should be particularly happy to now have the express restatement of the law applicable to us.

As persons directly concerned, we in the armed forces should know about this codification and its general content. Such knowledge may give us another tool to help do our jobs better. We realize that behind almost every official action we undertake in the services lies a permissive or restrictive statute enacted by the Congress under its Constitutional power to make rules and regulations governing the armed forces. The new codification is so well arranged that each staff officer can easily gain a working familiarity with the law governing the area of his responsibility. Of course the staff officer will undoubtedly still have occasion to contact a judge advocate or law specialist in applying the law to specific problems.

Let us review the background of this composite restatement of the Congressional enactments relating to our armed forces. The laws contained therein had been enacted in separate statutes from 1789 through 31 December 1957. The Public Laws of each session of Congress are collected and published in a single volume as Statutes at Large. As our country grew older, additional volumes were added for each Congress. In 1878 the permanent laws contained in the 19 volumes then published were repealed, restated, and re-enacted as the Revised Statutes. Since 1878 no similar restatement has been attempted. The laws of the 86th Congress, first session, comprise volume 73 of the Statutes at Large. While each volume contains its own index, there is no general index to all volumes. Succeeding Congresses occasionally enact legislation overlapping in subject matter. Of course the last statute on a subject is the governing law. Where there exists prior unrepealed legislation on the same subject, that too is still the law to the extent that it is not inconsistent with the later statute. A legal researcher must first find the various applicable statutes and then compare one against the other to determine the present law before attempting its application to a given situation.

In 1926 Congress enacted the United States Code. Unlike the Revised Statutes of 1878, this code did not repeal and replace the prior law; rather Congress stated that the United States Code would be only "prima-facie," or "presumptive," evidence of the existing law. This code divided the law contained in the Revised Statutes and in the Statutes at Large of a general and permanent character into 50 subject-matter titles. For example, title 5 relates to Executive departments, title 10 to the Army, title 14 to the Coast Guard, title 18 to the Federal criminal laws, title 32 to the National Guard, title 34 to the Navy, title 37 to pay and allowances, title 41 to public contracts, title 50 to war. The editors of the United States Code were given license to restate the law and distribute it as they deemed appropriate within the 50 titles. Where the public law on enactment



expressly amended a prior law, the pertinent section of the code was rewritten by the editors of the code to reflect the law as amended.

The United States Code was a great advance in reducing the time it took to research the law—for a while. But soon some of the law relating to the military services for various reasons was placed in other than the titles of the military departments. New legislation frequently did not expressly repeal or amend older legislation, although the new legislation covered the same subject matter as legislation already on the books. As no repeal or amendment was expressly stated, both the old and the new statutes were then carried in the United States Code even though they sometimes were inconsistent with one another. Policy concepts concerning the armed forces also changed, leaving much deadwood on the books.

This situation was pointed up in the "War Department Haislip Board Report" of August 1947. This board had reviewed the tangled gamut of laws relating to the Army and concluded:

. . . Many of these laws are archaic and have been amended so many times that extensive legal research is often required to settle even a relatively minor question of statutory interpretation. During the war this fact was not a great deterrent because of the broad powers granted in the War Powers Act, but, upon expiration of the emergency, these archaic laws will return to plague the Army. Therefore, it would appear advisable to commence a project with the goal of framing a complete restatement and recodification of the military laws of the United States.

This recodification was initiated by the Army and ultimately became a triservice project monitored by the Department of Defense. The aim of the codification was to restate the existing laws relating directly to the armed forces in clear, modern, and easily understood language. Instead of being only presumptive evidence of the law as was the prior United States Code, the new restatement was to be enacted as "positive law" by the Congress, with an express repeal of the prior legislation concerned. Thus it would have the status of and could be cited as the law itself, just as other statutes in the Statutes at Large. This restatement was to be enacted as title 10 of the United States Code and entitled "Armed Forces."

The drafting of the new title 10 was an immense undertaking. Initially all law within the purview of the codification was literally cut out of a set of the Statutes at Large and of the United States Code. Court and Comptroller General decisions and opinions of the Attorney General of the United States and the Judge Advocates General of the armed forces construing these laws were researched. These cut-out provisions of laws and digests of reported rulings and opinions were assembled on various colored cards. About 100,000 cards were collated and arranged into about 5000 groupings, each dealing with a provision of law. These units were then distributed to the attorneys working on the project. Their task was to study and rewrite each provision in light of its past reported legislative history and judicial or other construction.

The new title 10 extracts provisions from 23 titles of the United States Code. This included all of the prior title 10 relating to the Army and Air Force, all of title 34 relating to the Navy, and so much of title 32 as related to the National Guard of the United States as a reserve component

of the Army and Air Force. The law relating to the National Guard in its state capacity remained in title 32, which was also codified and enacted in its code form at this same time. Provisions of the United States Code relating to the military departments only by reason of broader application to the Government generally, such as the laws governing the civil service, were not included in our codification but left undisturbed in their place within the United States Code. The law governing pay and allowances was not included and remains in title 37, United States Code, as it applies also to the Public Health Service and Coast and Geodetic Survey. The few provisions of law relating to the Department of Defense as an Executive department were also omitted and remain in title 5, United States Code, as that title contains the organizational statutes of the Executive Department of the Government. Projects are now under way for the codification of titles 5 and 37 which will result in a redistribution of some of the provisions of these two titles to title 10. During the drafting of title 10, liaison was maintained with the Committee on the Judiciary of the House of Representatives.

As the statutes being codified had been enacted through the years from 1789 on, the terminology used in one statute frequently had a different meaning than when used in another setting years later. In restating both laws, the different uses of the same term had to be reconciled so that throughout the title the same term had the same meaning. For example, in some settings the word "officer" included both warrant and commissioned officers and in others solely a commissioned officer. As the new title itself was to become a single statute, consistent usage of the term "officer" was necessary after defining it in the initial definition section of the title.

As many attorneys were engaged from time to time in the drafting of the title, a "drafting guide" was prepared so that all of them would use similar arrangement of subject matters and identical wording for similar concepts. The guide suggested simplified, modern language to remove ambiguities and present a clear text. Some of the instructions were:

- Use the present tense.
- Use the active voice.
- Use positive rather than negative expression.
- Use the same words when expressing the same concept.
- Avoid phraseology like "aforesaid" and "whatsoever."
- Avoid pairs having the same meaning, like "null and void," "order and direct," "final and conclusive."
- Normally, instead of the phrase, "It shall be lawful for the Secretary to . . . ," say "The Secretary may."
- Instead of the phrase "under the provisions of," say "under."
- Avoid provisos altogether. To introduce an exception or limitation say "except that," "but," or "however," or simply start a new sentence.
- Instead of "from 1 February 1959" say "after 31 January 1959."

This last example removes the ambiguity as to whether 1 February is intended to be included. There were many further examples and rules as to choice of language, general approach, and typography.

The codifiers arranged the law within each subtitle in a simplified system corresponding generally to the division of staff responsibilities within each of the armed forces. Title 10, Armed Forces, is divided into four major subtitles:

- A. General Military Law
- B. Army
- C. Navy and Marine Corps
- D. Air Force

Under subtitle "A" is the law that relates to the military departments generally, as well as some laws applicable to the Coast Guard: for example, provisions for the Joint Chiefs of Staff, the Armed Forces Personnel Council, the Uniform Code of Military Justice, and what previously had been the Armed Services Procurement Act of 1947. If a statute is applicable only to one or two services but not to all, it is not carried in subtitle "A" but is separately stated under each of the subtitles for the service to which applicable. As the Coast Guard had its laws separately codified previously in title 14 of the United States Code, Coast Guard law is contained in the title 10 codification only to the extent that it falls within the purview of subtitle "A," i.e., the law that is applicable to all the armed forces. An exception is made in the case of a statute of general application to all services where the subject matter concerns a larger body of law that is not yet of general application. In such cases the statute is restated for each service rather than having a single statement in subtitle "A."

Each of the service subtitles is broken down into parts comparable generally to military staff organization. For example, subtitle "D" relating to the Air Force is divided into Part I—Organization, Part II—Personnel, Part III—Training, and Part IV—Service, Supply and Procurement. The subtitle breakdowns for the Army and for the Navy and Marine Corps are generally similar. The parts are broken down into chapters, each concerning a major subject or category of law within the part. For example, Part II—Personnel—is subdivided into chapters:

#### *Chapter*

- 831. Strength
- 833. Enlistments
- 835. Appointments in the Regular Air Force
- 837. Appointments as Reserve Officers
- 839. Temporary Appointments
- 841. Active Duty
- 843. Special Appointments, Assignments, Details and Duties
- 845. Rank and Command
- 847. The Uniform
- 849. Miscellaneous Prohibitions and Penalties
- 851. United States Disciplinary Barracks
- 853. Miscellaneous Rights and Benefits
- 855. Hospitalization
- 857. Decorations and Awards
- 859. Separation from Regular Air Force for Failure to Meet Standards
- 861. Separation for Various Reasons
- 863. Separation or Transfer to Retired Reserve

- 865. Retirement for Age
- 867. Retirement for Length of Service
- 869. Retired Grade
- 871. Computation of Retired Pay
- 873. Civilian Employees

Each chapter is subdivided into sections, the final breakdown of the format in the codification. For example, Chapter 833—Enlistments—has the following sections:

- 8251. Definition
- 8252. Temporary enlistments
- 8253. Air Force: persons not qualified
- 8254. Air Force: during war or emergency
- 8255. Regular Air Force: recruiting campaigns
- 8256. Regular Air Force: qualifications, term, grade
- 8257. Regular Air Force: aviation cadets; qualifications, grade, limitations
- 8258. Regular Air Force: reenlistment after service as an officer
- 8259. Air Force Reserve: transfer from Air National Guard of United States
- 8260. Air Force Reserve: transfer to upon withdrawal as member of Air National Guard
- 8261. Air National Guard of United States: enlistment
- 8262. Extension of enlistment for members needing medical care or hospitalization

As the majority of Air Force law is inherited from the Army, similar arrangement was made of the law of the two services. To find the Army law corresponding to an Air Force section, one subtracts 5000 from the section number as in the example just given. There is no Army section 3257 comparable to the Air Force section 8257. This gap is purposely made to permit the retention of the Army and Air Force parallel numbering where one of the two services has a provision of law not common to the other service. In this case, the Air Force section 8257 concerns the enlistment of an aviation cadet, which grade the Army does not have. Each of the sections contains the text of the law concerned. For example, the last section in the chapter on enlistments—section 8262—appears as follows in the new title 10:

- 8262. Extension of enlistment for members needing medical care or hospitalization
  - (a) An enlisted member of the Air Force on active duty whose term of enlistment expires while he is suffering from disease or injury incident to service and not due to his misconduct, and who needs medical care or hospitalization, may be retained on active duty, with his consent, until he recovers to the extent that he is able to meet the physical requirements for reenlistment, or it is determined that recovery to that extent is impossible.
  - (b) This section does not prevent the retention in service, without his consent, of an enlisted member of the Air Force under section 8638 of this title.

The Army section of like import is section 3262 (8262 less 5000). It is identical in wording except for reference to "Army" instead of "Air Force"

and for the reference to section 3638 in (b) above instead of section 8638. A similar section of the Navy and Marine Corps is section 5537. Section 8262 quoted above may be compared with the section of law it restated to note the general improvement made by the codification. This law previously was contained in volume 63, Statutes at Large, at page 560 and, as set out in section 628a of the prior title 10 of the United States Code, it read:

628a. Hereafter any enlisted man of the Army of the United States in the active service, whose term of enlistment shall expire while he is suffering disease or injury incident to service and not due to misconduct, and who is in need of medical care or hospitalization, may, with his consent, be retained in such service beyond the expiration of his term of enlistment, and any such enlisted man shall be entitled to receive at Government expense medical care or hospitalization and his pay and allowances (including expense money authorized by law and credit for longevity) until he shall have recovered to such extent as would enable him to meet the physical requirements for reenlistment, or until it shall have been ascertained by competent authority of the service concerned that the disease or injury is of a character that recovery to such an extent would be impossible, whichever is earlier: *Provided*, That any enlisted man whose enlistment is extended as provided herein shall be subject to forfeiture in the same manner and to the same extent as if his term of enlistment had not expired, and nothing contained in this section shall prevent any enlisted man of the Army from being held in the service without his consent under the provisions of section 629 of this title.

Source notes, entitled "Historical and Revision Notes," for each section of the new title 10 are contained in the Congressional committee reports on the bills by which the present title 10 was enacted into law. The new 1959 permanent edition of title 10 of the *United States Code Annotated* (published by Edward Thompson Company, Brooklyn, New York, February 1959) also contains revision notes showing the statutory source for each new section. The reasons for deletions, additions, or changes in wording are also given in these revision notes.

These committee reports also have tables containing much useful material. They are the most comprehensive ever developed in a codification. By these tables the researcher can easily trace the old law to the new title 10 or be advised of its omission or transfer to other titles of the United States Code, together with the reasons therefor. Table 3 gives the basis of applicability to the Air Force of each provision of law restated in the new title 10 for the Air Force that was not previously expressly applicable by its own terminology.

It is apparent that the armed forces are now clothed in statutes of more modern dress. The codification has eliminated as obsolete or has impliedly repealed about forty per cent of the law previously carried on the statute rolls. Consolidation of related laws has effected a further ten-per-cent reduction. A studied and controlled restatement of the language of the law has given us a more readable, accurate, understandable, and findable body of law, arranged for the convenience of the persons charged with its administration. We in the Air Force for the first time have "our own" laws.

This codification was not a revision but a restatement of the law. It effected changes of form but not of substance. With our statutes thus set forth, existing defects and deficiencies become more readily apparent. These may now be studied with a view to improving the substance and effecting greater uniformity of the laws relating to our armed forces.



# *The Question of National Defense Organization*

## *A Quarterly Review Study*

The pressures of missions, technology, and economics of national and Free World defense have once again made the organization of the defense forces of the United States a subject of investigation and political debate. Within the last few years we have observed an increasing number of journalists, university professors, political leaders, and professional people writing upon the subject of defense organization. In addition, within the 1960 session of Congress five separate bills have been introduced calling for reorganization of the Department of Defense.

The enormous complexity of the proposals involved and the ramifications of special viewpoints and interests make a meaningful proposal for reorganization a worthy subject of discussion, debate, and penetrating analysis. Moreover such discussions, debates, and analyses require a systematic approach to the issue of defense reorganization. All such investigations must attempt to assess and identify the requirements of an effective defense organization in terms of future national and international requirements, rather than being confined to existing problems or traditional concerns.

The following series of articles dealing with the more important elements of national defense organization were written by members of Research Studies Institute. It must be emphasized that the views they have expressed are strictly their own and do not represent official indorsement by any element of the Air Force or any other official agency. The first article is a proposal for reorganizing the defense structure. The five articles that follow discuss critical aspects that would be involved in any systematic investigation of defense organization. The titles of the six articles are as follows:

- "A Proposal for the Next Step in Defense Reorganization"
- "Civilian-Military Balance in the Defense Establishment"
- "The Case for Genuine National Military Planning"
- "Arguments for Unified Combat and Support Commands"
- "Some Reflections on the General Staff"
- "A Survey of Selected Reorganizational Proposals"

For readers interested in pursuing the subject beyond the limited space available here, the authors conclude their presentation with a selected bibliography of recent studies and writings on defense organization.

—The Editors

# A Proposal for the Next Step in Defense Reorganization

COLONEL ARCHIE J. KNIGHT  
COLONEL ALLEN F. HERZBERG

LET'S reorganize! This cry has been heard with increasing frequency of late with regard to the Department of Defense. In September 1959 the Committee on Government Operations, U.S. House of Representatives, urged an Army-Air Force merger as a beginning to "end waste and confusion" in the Pentagon. Since then the press and individual members of Congress have continued to point out many of the current problems in the Department of Defense and the need for correction. Pending before Congress now are three bills calling for complete merger of the separate services, one of them introduced by Senator Stuart Symington, a former Secretary of the Air Force, a member of the Senate Committee on Armed Services, and an acknowledged expert on the Department of Defense. Despite the fact that the last major reorganization of the Department of Defense involving legislation was as recent as 1958, this new push from *outside* the Department indicates it is time to look again at the adequacy of the organizational structure of national defense.

## Current Status and How It Got That Way

The problem of the over-all organization of the armed forces has been of grave concern for many years. During World War II the Army, the Navy, and the semi-independent Army Air Forces each found itself working with another service as often as or more often than it worked alone. Following that experience, "unification" of the services under a single Secretary of Defense was accomplished in 1947 to centralize control of the land, sea, and air forces. In 1949, after a study by the Hoover Commission, additional steps were taken toward "unification." Just as the 1949 amendments were based largely on the Hoover Commission report, so Reorganization Plan No. 6, effective in 1953, closely followed recommendations made by the Rockefeller Committee. Subsequently another effort was made in 1958, when a Reorganization Act strengthened the "authority and control" of the Secretary of Defense over the three services.

# The Status

## *Previous Steps toward Unification*

- 1947—Established a federation of the three services, with a single civilian Secretary of Defense at the head. Many safeguards incorporated to ensure the individual "rights" of the separate services.
- 1949—Eliminated the Cabinet status of the service Secretaries, enhanced the position of the Secretary of Defense, increased the size of the Joint Staff, and created the position of Chairman of the Joint Chiefs of Staff.
- 1953—Increased the status and powers of the Chairman of the Joint Chiefs of Staff.

## *Steps Not Taken*

### *Requiring Congressional action:*

*Merge the services.* This would create a one-service organization of the Department of Defense and would include all lesser items on the list that are not based on retaining the separate services. This action would provide unity of military direction and eliminate duplication and competition based on service distinctions.

*Authorize a single military Chief of Staff.* This would provide unity of military direction in the top military council (the Joint Chiefs of Staff) instead of the present committee action.

*Separate the Joint Chiefs of Staff from their services.* To end noncompatible, dual responsibilities.

*Establish a "National Defense" service.* To provide a recognized separate service for "career" national defense officers whose responsibilities should be independent of special land, sea, or air affiliation. This new service could also provide the base for an expansion to include all military personnel if a merger of the services is eventually decided to be desirable.

*Remove the ceiling on the size of the Joint Staff.* To provide for increased functions. Could be coupled to commensurate reductions in service staffs.

*Consolidate all military personnel laws.* To provide a uniform basis for appointment, promotion, retirement, and administration of military personnel. Would facilitate assignments, utilization, and administration.

*Eliminate the service Secretaries or redesignate them as Under Secretaries of Defense.* Would concentrate civilian control at one level instead of two in the Department of Defense. Would reduce coordination layers and would facilitate effective civilian control of defense policy, as distinct from operations.

### *Requiring Presidential action:*

*Establish a unified Strategic Command.* To provide single operational control of all strategic forces. Would absorb the present single-service Strategic Air Command.

*Establish a unified Tactical Command.* To consolidate unassigned limited-war forces in a unified command. This action would complete the assignment of all combat forces to a unified command, a stated Presidential objective.



# of Unification

Consolidated separate boards directly into the Office of the Secretary of Defense (OSD) and increased the number of supervisory positions in OSD.

1958—Further strengthened and clarified the direction, authority, and control of the Secretary of Defense over the Department of Defense. Made the unified commands directly responsible to the Secretary of Defense through the Joint Chiefs of Staff, eliminating the service departments from the chain of command. Made JCS work the primary duty of the service chiefs. Further increased the authorized strength of the Joint Staff.

*Establish unified Support Commands.* To provide for consolidated field activities in such support areas as research and development, logistics, intelligence, and personnel and training.

## *Requiring Secretary of Defense action:*

(The list would be endless; only actions with significant unification implications are given as examples.)

*Recognize that in fact the Chairman, JCS, is the principal military assistant of the Secretary of Defense.* This would increase the influence of the Chairman to the extent that unity of military direction might approach that under a single chief of staff.

*Require unified commands to submit force and weapon requirements to the Joint Chiefs of Staff.* This would force the JCS to provide meaningful, unified guidance to the unified commands, would reduce service influence in controversial areas, and would facilitate JCS force determinations and adjustments to outside limitations.

*Establish common forms and procedures for officer effectiveness reports.* To provide a common basis for promotions in all services and to facilitate comparisons between services.

*Establish a common job-classification system for all military personnel.* To facilitate interassignment and control of all military personnel.

*Establish common administrative procedures.*

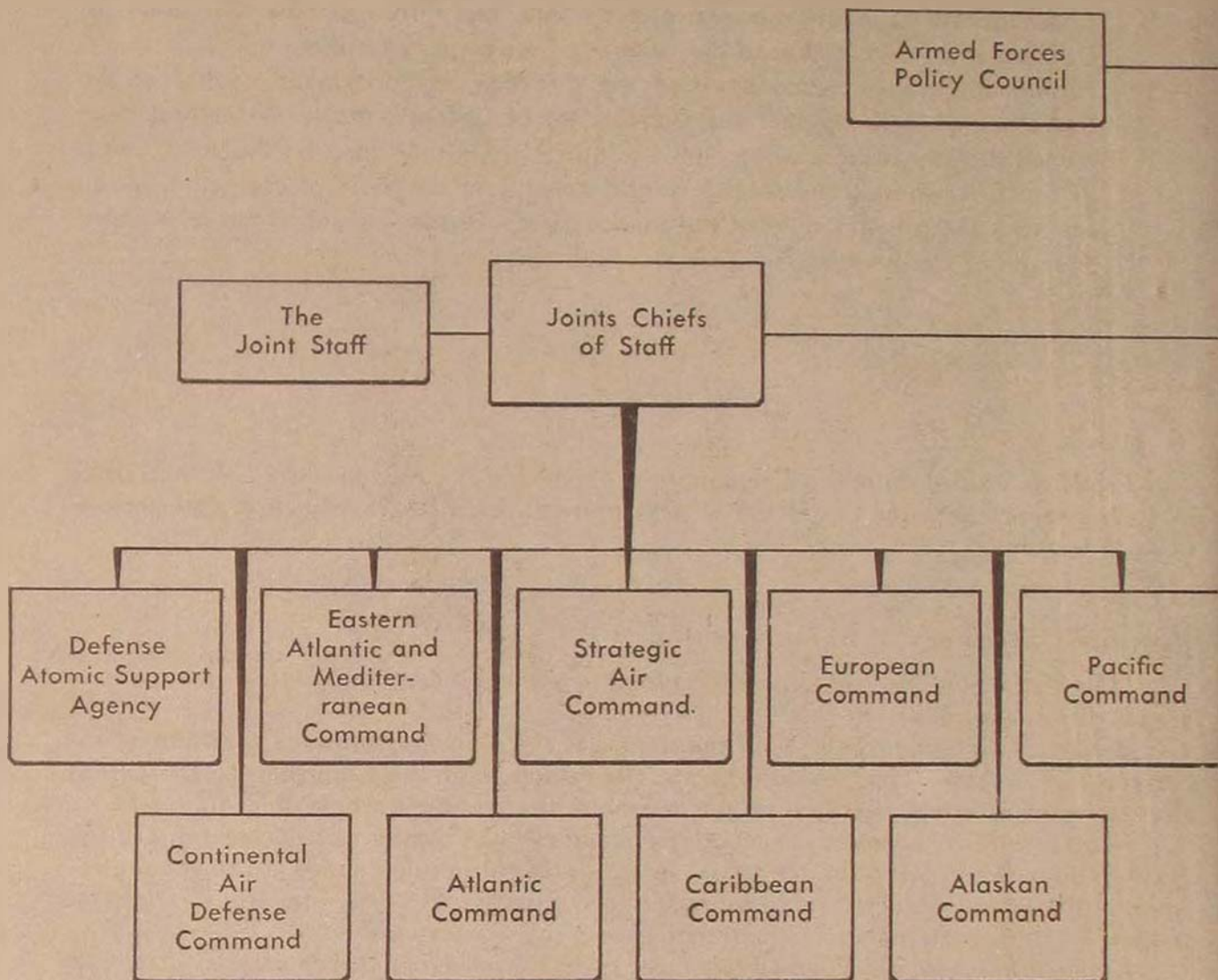
*Facilitate the interservice transfer of officers.* To facilitate the career utilization of special skills for which the demand fluctuates among the services (e.g., pilots).

*Consolidate and align the continental administrative areas of the several services so that they coincide.* To realize savings through the consolidation of headquarters, communications, facilities, etc., at single locations or at a reduced number of locations.

*Integrate the operation of the senior officer professional schools down through the Command and Staff School level.* Would provide greater interservice understanding and knowledge.

*Integrate and consolidate the operation of ROTC.* Essentially an economy measure through the elimination of duplicating detachments at colleges. Certain actions could be taken by the Secretary of Defense. Others would require legislative changes to existing laws.

# The Department of Defense



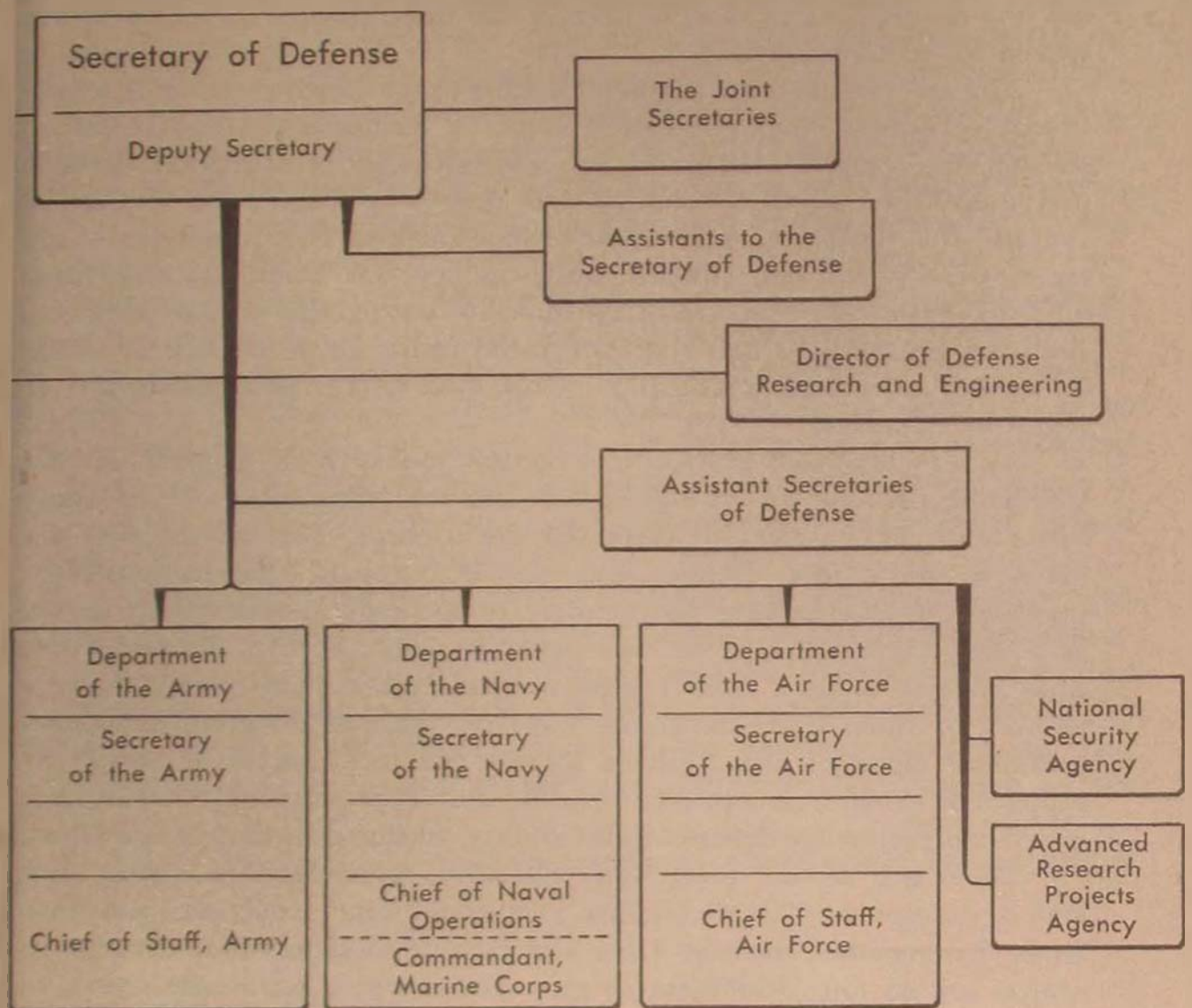
Each of these four major reorganizations since World War II has moved the Department of Defense further along the path of unification. This trend, if continued, must eventually result in a single-service type of organization of the Department of Defense.

What these previous actions have not provided in the direction of unification can best be summarized from the statement of intent by Congress itself in the Department of Defense Reorganization Act of 1958. This says there shall be

- no single chief of staff over the armed services,
- no general staff of the armed services,
- no merger of the military services.

A further feel for where the Department of Defense stands today as regards a unified organization can be gotten from a typical list of reorganization possibilities for the future. This list is not exhaustive. Some items are relatively minor. Others are sweeping and controversial and would necessarily carry many lesser items with them.

These areas for future action should give the reader some appreciation of what the Department of Defense does *not* have in the way of complete



unification. Most of the discussion and arguments heard today center around one or more of these points.

*the concern over organization*

The present organization of the Department of Defense consists of four distinct and separable components. The Office of the Secretary of Defense (OSD) consists of the civilian appointee heads of the structure—the Secretary of Defense and his assistants, including the Director of Defense Research and Engineering. The Joint Chiefs of Staff (JCS) is the top military level in the Department of Defense, and its members are, by law, the principal military advisers to the Secretary of Defense, the National Security Council, and the President. The JCS consists of the Joint Chiefs and the Joint Staff that serves them. Under the Secretary of Defense and the JCS are the unified commands, the combat forces of the Department of Defense, consisting of components furnished by the various services according to the mission and needs of a particular unified command. One noncombat element included here is the Defense Atomic Support Agency (formerly the Armed

Forces Special Weapons Project). The services, considered together, constitute the fourth division of DoD. Each of the three services is headed by an appointed, civilian Secretary.

Why the concern over the organization of the Department of Defense? Probably because in today's special situation our defense is so critical to us that no element capable of improvement can be neglected. In the past the United States has always had time to get ready for a possible conflict after the necessity to do so became obvious. As a result peacetime forces were small and unready, little money was made available, and differing—even competing—military thoughts on fighting a war were encouraged, on the basis that war itself could prove which was best or which constituted a winning combination. Only then were expensive amounts of resources committed.

No such luxurious procedure is possible today. In any general war the U.S. must be right in its concepts before the war starts, and its ready forces must be sufficient to carry out the concept. The country will not get a second chance. Neither does the U.S. appear able to afford the insurance of fully backing two or more competing concepts simultaneously as a shotgun prescription to cover what is right and best. Rather, under what appears to be a fixed budget available for military preparedness, a number of unresolved, competing military concepts are given some proportionate share of the available money. No one concept is completely supported; none is completely thrown out. The unintended result is a mixed concept for the defense of the country, which tends to defy evaluation.

There is a second, theoretical possibility. Assuming that a truly integrated concept can be determined, we could take reductions and then either accommodate them or *know* and be able to substantiate that the resources are no longer sufficient to give the concept a reasonable chance of working.

The present organization of the Department of Defense does not appear to allow for following this second course of action. In a situation where there is neither so little money that it doesn't much matter what you do, nor so much that everyone can have what he thinks he needs, many feel that the key to providing the best possible defense for the United States—and to knowing whether it is adequate after we get it—lies in optimum organization of the Department of Defense.

#### *attitudes toward further unification*

Before going into an analysis of the recognized current deficiencies and troubles of the Department of Defense, it might be well to identify the attitudes of certain key groups toward any reorganization of the Department of Defense.

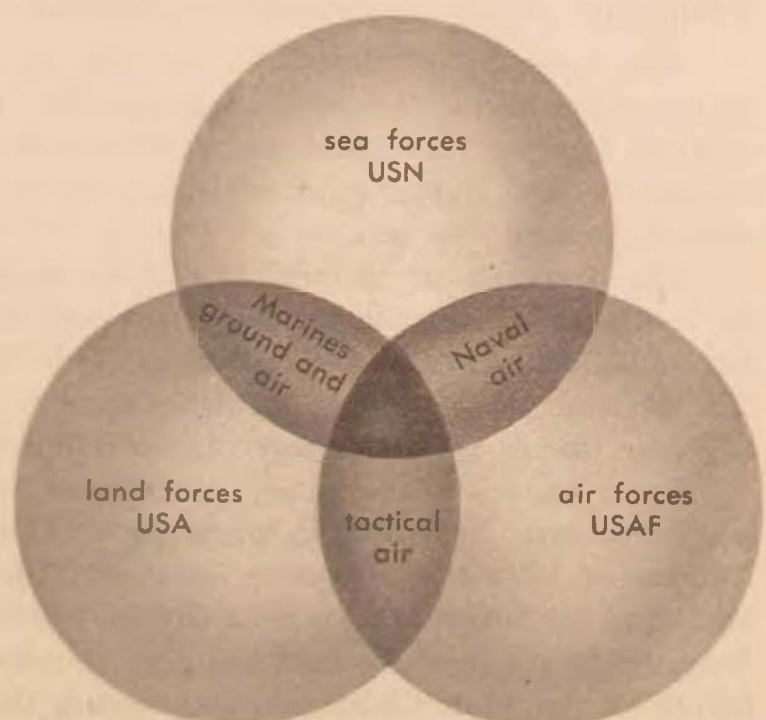
Congress is the key to any fundamental changes in the Department of Defense, since its approval must be secured. Individuals in Congress have been outspoken and well-publicized champions of complete unification; but, as a whole, Congress has traditionally been slow to approve greater

centralization of authority, particularly military authority, in the Department of Defense. This cautious attitude is a penalty DOD pays for its size and importance. Congress must preserve the checks and balances in the Government. Coupled to this is a concern that too much one-man military authority in DOD might mean too much dependence on the infallibility of judgment of one man or might create a potentially dangerous concentration of power. With these thoughts in the background and confronted with a lack of military agreement among the services as to what is best for national defense, Congress understandably adopts this cautious approach. Only the pressures of current difficulties calling for correction, of the cost of defense, and of the obvious march of technology have caused such changes as have been approved. Congress still finds itself frequently in the uncomfortable position of influencing military decisions affecting the security of the country from among unresolved and conflicting military recommendations presented to it. This can be a tight shoe to wear at times and argues as much as anything else for continued adjustments in organization toward greater unification.

As for the services, many Navy and Marine Corps spokesmen have been consistently opposed to any further unification. The roots of this opposition probably lie in a fear that their role might be lessened and that they might be subjugated to strategic philosophies they consider erroneous. They already enjoy rather complete control of the resources necessary to their varied missions, contrasted to the more interdependent position of the Army.

Many Air Force and Army spokesmen have consistently favored further

## Overlapping Areas among the Services



unification, a position based on conviction and probably also on a feeling that their concepts will not suffer in the process.

The public and particularly its vocal element, the press, have consistently favored further unification. Spared the final-decision responsibility carried by Congress and free of the personal involvements of the services, informed public opinion has stressed changes that will be in keeping with accepted principles of management, that will end service squabbles, and that promise more adequate defense for dollars expended.

### *difficulties in the Department of Defense*

The past fifteen years have witnessed a revolution in weapons and the systems associated with them but have not seen a comparable revolution in the organization to handle these weapons and systems. Since the Department of Defense was established in 1947, important organizational and procedural changes have been made. Yet traditional concepts and ways of doing business now may jeopardize our ability to take advantage of the technological advancements available, to plan for those that will be available in the future, and to use our resources in an optimum manner. Patterns from the past perhaps have continued to influence national defense policy unduly at a time when weapons and weapon systems far outpace the ordinary imagination.

Not all major problems in the Department of Defense can be attributed to the organization of the military forces themselves. Other influences outside the military chain of command play a decisive part in providing effective defense. When military planning, thinking, and imagination come into contact with the Governmental machinery designed for decision making, it is possible that the ponderousness of this machinery may in itself retard our national ability to respond to the challenges of the mach-15 missile era.

The following major problems are believed to be inherent in the present organization of the Department of Defense:

*The Secretary of Defense is not able to function as envisioned.* The Secretary of Defense has "direction, authority, and control over the Department of Defense." To determine direction of development and to exercise control, he needs clear guidance from above and below and time to consider the guidance he gets.

The Secretary of Defense should be concerned constantly to obtain, for military use, clear statements of national objectives, policies, and strategies. "The root of our troubles," says Major George Fielding Eliot, "is not lack of strategic planning, but lack of a defined and accepted national objective toward which strategy can be oriented."

From below, the Secretary of Defense lacks the clear statements of agreement that he needs to participate effectively in national planning. Antiquated roles and missions, statutory responsibilities of the Chiefs of Staff, and the absence of a truly national defense doctrine all combine to deny the Secretary of Defense the type of military guidance he needs. The failure of the Joint Chiefs to agree among themselves forces the Secretary

of Defense either to make the decisions they should make or to arbitrate their differences. Time spent in evaluating service differences of opinion, in settling service squabbles, and in apportioning weapon systems might be used better in other ways.

*The respective roles of military and civilian officials need clarification.* Although there is no question about civilian control over the military and civilian responsibility for the direction and control of military affairs, one big question needs answering: Are the military people to run the Department under civilian control, or are the civilians to run the Department with military advice? It is clear that the President, the National Security Council, the Secretary of Defense, and other agencies of the Government must have proper military advice. On the other hand it is certainly not custom, nor the intent of law, that civilian officials and agencies should attempt to conduct military operations.

Legally and logically, civilian primacy in the Defense Department cannot be disputed. But civilian occupancy of key positions, civilian staffing, and the detailed supervision of military activities by civilians are increasing. Civilians are increasingly used in other than policy positions, positions which in fact enter the realm of purely military business. Professional officers not unnaturally object to civilian judgment on questions of weapons and their use, tactics, strategy, and the forces and levels of support where these questions are within military competence. This situation has arisen in part because professional officers have not presented fully reconciled military recommendations for civilian consideration.

Although it is no longer possible at higher levels to separate affairs into purely "political" and purely "military," this does not obviate the need for a better working arrangement between civilian and military authorities than now exists. Some way must be found to continue the principle and actuality of civilian control while providing for proper use of the military and the advice of professional officers.

*The Joint Chiefs of Staff are not filling their expected roles.* Although the members of this body by law are the "principal military advisers to the President, the National Security Council, and the Secretary of Defense," they are also charged with the responsibility for preparing strategic and logistic plans, reviewing major material and personnel needs of the services, and giving strategic direction to the military forces. These latter responsibilities generally produce most of the service pressures on the Joint Chiefs. These pressures force the Joint Chiefs into the role of "a committee of partisan adversaries engaged in advancing service strategic plans and compromising service differences." This in turn permits "too little . . . time and opportunity to think spontaneously or comprehensively about over-all strategic problems."\*

Except for the Chairman, the members of the Joint Chiefs of Staff are the senior officers of the military services—Air Force, Army, and Navy, and the Marine Corps in the event business relating to the Marine Corps is to

\**International Security—The Military Aspect*, Special Studies Report II of Rockefeller Brothers Fund, Doubleday and Co., Inc., New York, 1958, p. 29.

be discussed. This dual allegiance and responsibility given the Joint Chiefs make it doubly hard for them to function effectively in either capacity. With two responsibilities, they cannot shirk the one because of the other. As long as they have statutory obligations to their service they are not free agents. Advice on national defense problems, given as members of the Joint Chiefs of Staff, must always be tempered or adjusted to service obligations and responsibilities, no matter how "unbiased" they may wish to be.

*The roles and missions of the services are not compatible with modern technology.* A review of all the recent defense organizations and concepts of operations reveals a persistent rigidity in the roles and missions of the three services. Despite the tremendous revolution in weapons produced by modern technology, neither basic legislation on the functions of the armed services nor the Key West, Newport, and subsequent agreements and decisions have brought substantial change in the roles and missions of the services. Undoubtedly the range, speed, and destructiveness of modern weapons have created an overlap of the traditional boundaries between the three services. This has in turn produced interservice rivalry, which hinders the creation of an integrated national strategic plan.

Service differences over roles and missions cannot be resolved by ancient methods. Since future conflicts will call for combined operations, the capability for making flexible, sensible adjustments of established roles and missions must be forced. So far the seriousness of the situation seems to have led to increased rigidity rather than to flexibility.

The Joint Chiefs of Staff cannot solve military problems because the services, in their zest for retaining their separate entities, force purely military problems onto the political stage, where they must be solved by the Secretary of Defense, the President, or the Congress. Each service, by a natural rationalization tempered with service pride, precedent, and experience, views the proper balance of forces to be the one that will maximize its own role and ensure continued existence. Naturally the full benefit from our military expenditures cannot be realized when there is a duplication of weapon systems, wastage of scientific talent, and needless expenditures on facilities, resources, and manpower.

It is generally admitted that the current definition of roles and missions bears little relevance to the actualities of war. The roles and missions were drafted before the technological revolution in weaponry was recognized. The result is that new weapons are being placed in a strait jacket of obsolescent missions instead of being given missions that conform to an evolving technology and current and future military problems.

The method of transportation for a weapon system—whether by aircraft, by submarine, or by jeep—should not necessarily determine which service controls the weapon. With the coming of ballistic missiles, the connection between delivery vehicle and service function is almost completely eliminated. Thus the assignment of a new weapon system to an individual service becomes more and more arbitrary. When the services cannot reach agreement among themselves they set the stage for either the Secretary of Defense, the President, or the Congress to settle the dispute.



The conclusion is that roles and missions are competitive rather than complementary. It is not a question of one service attempting to encroach upon another service's functions. It is rather a characteristic of modern weaponry.

*Duplication of effort in the Department of Defense is difficult to discern and stop.* With each service constantly developing new weapons and new concepts for using these weapons, certain duplication of effort takes place. This duplication is not always in the national interest because the various service programs are basically unilateral. Each service, in carrying out its roles and missions, naturally tries to get weapon systems that are the best obtainable for the job to be done. Each service is interested in getting as great a share of the total firepower as it can. These factors, combined with the astronomical advance in technology, have created areas of conflict related to service roles and missions and have resulted in wastage of national resources.

Although extensive reorganization has led to the formation of various agencies designed to prevent unilateral and independent research and development, the fact remains that the National Aeronautics and Space Administration (NASA), the Advanced Research Projects Agency (ARPA), and the Office of the Director, Defense Research and Engineering, have not yet succeeded in completely solving this problem.

### *goals and objectives*

Any listing of objectives to be met in planning a reorganization of the Department of Defense, when stated in general terms, is usually accepted as noncontroversial. Such a list of objectives is essential to provide a frame within which specific proposals can be placed, related to one another, and made to form a cohesive total. It is when one considers the possible means by which these objectives can best be met that honest and often wide differences of opinion arise.

Textbook principles and criteria of organization apply to the Department of Defense as to any organization, but in addition there are criteria unique to the Department of Defense as a powerful, nonprofit, Governmental agency responsible for the security of the country. Difficulty arises from the fact that the security of the country is an item not susceptible to positive proof as to its validity at any given time. It has been said that nothing succeeds like success. It might also be said that nothing creates controversy like the inability to be positive as to what will be a success.

Not all the criteria peculiar to the Department of Defense as a military or Governmental agency are in the nature of additions or amplifications to textbook principles. Some are antagonistic to accepted management principles. They must be accommodated in a way that does the least damage possible to accepted management principles while still being satisfied themselves. The general United States Governmental system of checks and balances, which has been applied with especial vigor in the case of the Department of Defense, is an example.

# Authoritative Statements

## *Presidential Statements*

President Eisenhower, on 3 April 1958, in his message to Congress on the reorganization of the Department of Defense, enunciated the following points:

Separate ground, sea, and air warfare is gone forever.

We must free ourselves of emotional attachments to service systems of an era that is no more.

There must be complete unity in our strategic planning and basic operational direction.

The tendency toward service rivalry and controversy must be sharply reduced.

Service rivalries have been made inevitable by the laws governing our defense organization.

We need to maintain an effective deterrent to war.

Fighting forces must be organized into operational commands that are truly unified, and each must be assigned a mission in full accord with our over-all military objectives.

Prompt decisions and the elimination of wasteful activities must be primary goals.

The authority of the Secretary of Defense must be clear and direct.

When military responsibility is unclear, civilian control is uncertain.

We must adjust to the technological revolution in weapons of war.

## *Department of Defense Statements*

The Secretary of Defense and members of the military, in testifying before Congress on the Reorganization Act of 1958, substantiated the President's statements and emphasized or added the following:

"Unified commands must meet today's need for quick decisions and greatly increased capability for rapid reaction. They must assure full concentration of our available power and the best potential use of our newest weapons." (Secretary of Defense Neil McElroy)

"Provision must be made to make certain that the Secretary of Defense will get the most able military advice that can be obtained, both for strategic planning and for operation of the combatant forces." (Secretary McElroy)

"There must be unified direction of the research and the development programs of all the services." (Secretary McElroy)

"Responsible decentralization is required in an organization as large and as complex as the Department of Defense." (Secretary McElroy)

"The Army should continue to train primarily for land warfare, the Navy primarily for sea warfare, and the Air Force primarily for air warfare." (Secretary McElroy)

"Changes in functions must be made as necessary to keep up with the progress of technology and new weapons." (Secretary McElroy)

"We must establish a peacetime organization which can meet wartime requirements." (General Thomas White)

"We must provide a system which will better enable the Joint Chiefs of Staff to act with corporate responsibilities and corporate views." (General White)

"The organization must provide the best of the spirit and devotion of the people in it. These are best engendered in the services." (Admiral Arleigh Burke)

# of Principles and Criteria

"The organization must be ready to respond to a great variety of threats."  
(Admiral Burke)

"At the top there should be planners who are completely familiar with the qualities of the components." (Admiral Burke)

"There must be provision for the proper separation of powers between Congress and the Executive. We must avoid more power, more centralization, and less specific accountability by the military to Congress." (General Clifton Cates, USMC, Ret.)

"Unified direction of strategic planning and unity of military command are essential." (General Maxwell Taylor)

"There must be a Joint Staff so organized and manned as to provide the Secretary of Defense and the Joint Chiefs of Staff with the necessary professional assistance." (General Taylor)

"The joint staff should approach high-level problems on the basis of national rather than service viewpoint and interest." (General Carl Spaatz, USAF, Ret.)

## *Congressional Statements*

Congress, motivated in varying degrees by its concern to provide for the defense of the country, to maintain service traditions and distinctions, to prevent a situation conducive to political dominance by the military, and to maintain control over the discharge of its own responsibilities, has expressed the following:

"There is no intent to enjoin the services to fight separate wars." (Senator Richard Russell, Chairman, Senate Committee on Armed Services)

"Unification is the unification of effort to achieve the most effective use of manpower and material to provide for the defense of the nation." (Senator Russell)

"It is our intent to provide the President and the Secretary of Defense with the authority demonstrated to be required for effective administration of the Department." (Senator Russell)

"We must be able to retaliate instantly against any threatened aggression."  
(Senator Russell)

There shall be: (a) no single chief of staff of the armed services, (b) no general staff of the armed services, and (c) no merger of the military services. (Statement of Intent, Reorganization Act of 1958.)

## *Rockefeller Report Statements*

The Rockefeller Report on the Department of Defense, published in 1958, made recommendations concerning changes in the Department. All its recommendations except those involving the Joint Chiefs of Staff were incorporated in essence in the Reorganization Act of 1958. The Report made three major criticisms of the Department of Defense, which can be restated in the form of principles:

Functions assigned the services should be complementary rather than competitive. Competition has been brought about by weapon technology and by the nature of the major threats facing this country.

The organization must provide for the development of a comprehensive and coherent strategic doctrine for the United States.

The Secretary of Defense must be free to devote attention to the initiation and development of high military policy, instead of being burdened with the negative task of arbitration.

It must be stated here that the creation of an organizational structure and its related functions is not sufficient in itself to determine the success of any organization. People and procedures are equally essential. Qualified and willing personnel can make some very awkward organizational structures work, but this is not to say that they would not function better within a more logical organizational structure. The problem still remains of determining the best possible structure, irrespective of manning, that will make the greatest contribution to the goals of the organization.

In considering an organization for the Department of Defense and the principles which must be kept in mind, we see that certain ones are more pertinent than others because they relate directly to deficiencies or difficulties that have arisen or they reflect new developments impinging upon the military. These principles, the observance of which is or has been subject to question, are the ones we are concerned with finding. In this search we have compiled some recent authoritative opinions that are helpful.

### *principles and criteria*

The examples we have given are only a small sample of the principles and criteria available on the subject of reorganization of the Department of Defense. It is believed, however, they fairly represent the field of knowledgeable current thinking on this matter. Taking these into account and broadening our horizon to look beyond current interests, concerns, and proposals toward an ultimate end position, we can arrive at a consolidated list of principles and criteria that should be met by any proposed organization of the Department of Defense:

*Provide for civilian control.* This criterion has been interpreted by Congress to require that, in addition to the civilian control exercised by Congress and the President, the operating heads of the Department of Defense and of the three services will be civilians. In addition to this, some of the Congressional fervor in maintaining separate services is undoubtedly based on providing assurance that civilian control will not be circumvented or converted to backing a monolithic military position.

This criterion is not always easy to reconcile with accepted management principles of professionalism and continuity.

*Be capable of immediate reaction in an emergency.* This criterion has been accepted or forced upon everyone today because of the intercontinental atomic forces-in-being poised facing each other from opposite halves of the world. It has resulted in the first moves toward truly unified organizations of practically all combat-capable forces, removed from the operational control of their parent service and grouped into functional or geographic commands according to national military tasks.

*Encourage and adjust to technological developments.* Technological developments and the urgency of the threats facing the country today are the two factors exerting constant pressure on the Congress and on the Department of Defense as to its organizational fitness. Missiles and other develop-

ments refuse to fit into neat service categories based on the medium of operation of each service—the present basis of the division of functions between the services.

*Provide for a flexible, functional grouping of combat forces.* The nature of the threats facing this country and their relative importance are subject to change. Combat-force organizations must be grouped to correspond with the threats that exist at any time and the tasks associated with them.

*Provide complete unity in our strategic planning and basic operational direction.* Every authority advances or supports this point in some fashion or other. It is also the most criticized lack in the Department of Defense today, but there is extreme diversity of opinion as to the cause or causes and the proper corrective action. Some of the stated possible causes include: (a) failure of the Secretary of Defense to exercise the authority he has and to make military decisions when required; (b) lack of a single chief of staff with a supporting military general staff; (c) conflict of interests of those assigned as Joint Chiefs of Staff or to the Joint Staff; and (d) lack of effort or willingness to make the JCS function properly.

There is not much question that a single military chief of staff of the armed services, with an adequate staff, would produce decisions, strategic planning, and unified military guidance for the Department of Defense. This would be a difficult organizational change to bring about. It may also be questioned whether arbitrary decisions for the sake of decision would be better than the present system of decisions by compromise, negotiation, and lack of action. There is no question, however, that a method must be found for articulating and bringing together in an adequate decision-making process all the divergent points of view and the expert knowledge of the specialists.

*Functions assigned the services or other components of the Department of Defense should be complementary rather than competitive.* There is already a trend toward applying the distinctions between services to assignment of support functions rather than to combat-operations functions. This should help reduce the built-in competitive aspects of the functional assignments contained in the present roles and missions of the services.

*Provide maximum cost efficiency.* This rule applies where it does not run counter to some requirement more important than economy. No one has argued or is likely to argue that three services are more economical than a single service would be. Other reasons, considered more important as of now, are controlling in this case and in similar requirements laid down by the laws governing the Department of Defense.

*Maintain personnel motivation and morale.* This criterion is often advanced to justify the separate services. It must be served, and the scope and pace of organizational changes must take this into account.

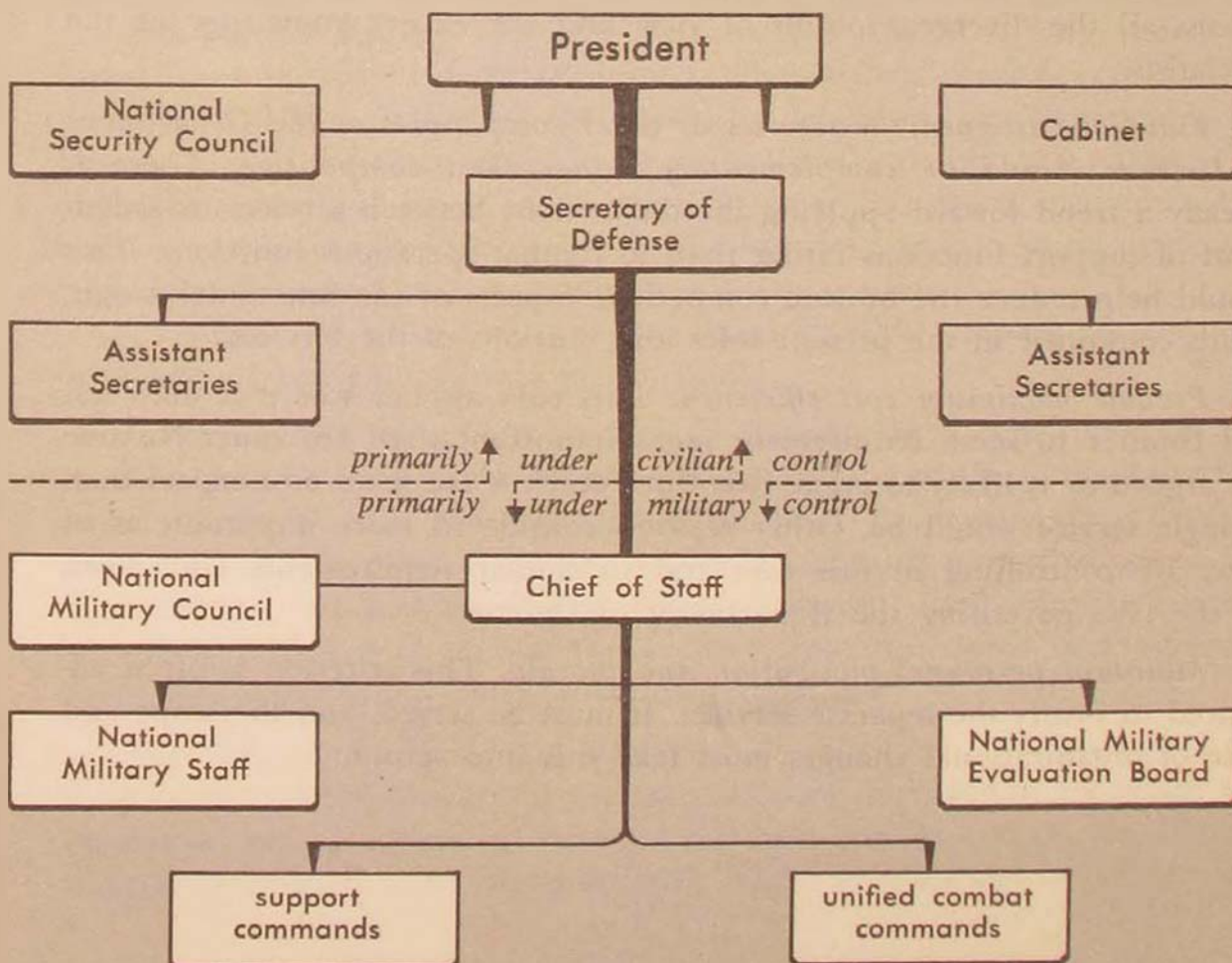
## Organization for a Single Military Service

THE organizational concept illustrated in the proposed organizational chart provides an organization that will overcome the deficiencies that have been noted without violating any fundamental principles inherent in the management of the military establishment of the United States.

Two basic principles are incorporated in the proposed organization: civilian control, and unity of command. Civilian control, both in principle and actuality, is an essential element in our philosophy of government. The arrangement recommended places civilians at the Secretary and Assistant Secretary level to make top policy and administrative decisions, and it provides a military chief, with staff, to execute the civilian decisions and to advise on military matters.

To ensure unity of command, the traditional line-and-staff type of organizational structure is planned for top management within the military establishment. This structure will eliminate management by committee, by majority vote, by forced compromise, by irresolution, or by default. It will provide for decisions based on the best interpretation of facts and information available. It will resolve the conflict between those who fear too much concentration of power at the top levels and those who fear the absence of ability to make intelligent decisions quickly.

### Proposed National Defense Organization



The simplified chart suggests how the two principles of civilian control and unity of command are incorporated in the organization of the Department of Defense and the military establishment.

The statutory role of the Secretary of Defense is not changed. He is the chief executive agent of the Commander in Chief of the military forces, the President. He will receive better *national* military advice because he will have a professionally competent staff whose members will make decisions based on national rather than conflicting service interests.

The Assistant Secretaries of Defense and the Assistants to the Secretary of Defense constitute civilian "check and balance" in the Department of Defense. They assist the Secretary in meeting the requirements of the Executive and Legislative branches of the Government. Their activities are directed to areas outside the purview of the Chief of Staff, normally such matters as the budget, procurement, and installations and national policies pertaining to mobilization, manpower usage, legislative pressures, and related problems.

A single chief of staff in the chain of military command is absolutely essential to a properly run military establishment. He is subordinate to the Secretary of Defense in all matters of policy and administration.

A National Military Council is provided to function as the top military advisory group for strategic planning and related matters. It replaces the present Joint Chiefs of Staff. It acts as a review agency for the activities of the National Military Staff. Its members make suggestions and recommendations regarding their own activities to the Chief of Staff. They assist the Chief of Staff in providing guidance to the National Military Staff and in reviewing for him the strategic plans submitted by the National Military Staff.

The National Military Staff prepares the emergency war plans, long-range objectives plans, logistic and weapon requirements, budgetary estimates, and personnel plans. It programs the needs of the support, deterrent, and tactical forces so that all support and research and development activities are timed to coincide with the implementation of the plans that are developed.

Perhaps the most serious weakness within the present organization of the Department of Defense and the armed forces lies in the area of planning, budgeting, and programing. Presently, each service develops its own force structure, budget, and programs. This leads to waste, inefficiency, delay, and, worst of all, a less-than-adequate military posture.

The fundamental and unique contribution which the National Military Staff can make to the military establishment and to national defense is a truly unified strategic plan based on a single strategic concept. This plan will be the catalyst which produces unity in military command, unity in the combat forces, unity in the support of combat forces, and unity in research and development programs.

#### *a master plan*

To produce this unity, the National Military Staff must develop a

single master plan for the over-all guidance of the armed forces. This master plan should take the form of a National Strategic Objectives Plan, supported by appropriate emergency war plans, logistic plans, and mobilization plans, and should outline developments for eight to ten years in the future. It should translate national policies and objectives into a military strategy for the armed forces. It should identify the weapon systems and force goals needed to maximize the armed forces' contribution to future national defense needs; provide guidelines for phasing weapon systems in and out of inventory; and define the force composition best suited to weapon systems and plans. The master plan would:

- Provide a strategic appraisal and concept of present and future warfare.
- Provide for evaluation of the relationship between advances in technology and weapon systems and those in strategy. This evaluation should develop the criteria needed to guide the selection of preferred weapons from among competitive weapons and should provide broad guidance for research and development programs.
  - Provide a basis for budget estimates for the armed forces.
  - Provide broad guidance for logistic support programs.
  - Provide basic guidance for personnel and manpower programs.

In essence the master plan should provide the basic guidance to enable the combat commands to determine their detailed requirements and war plans. It should provide a basis for the three services to plan their support and training requirements. The services would in no way be involved in generating force recommendations, since these would come from the combat commands.

Such planning will make new demands on the intelligence input. The military intelligence community could provide more effective national military intelligence estimates if all intelligence activities were integrated and centrally directed by a joint agency or command. A completely integrated national military intelligence product could then be supplied up to the National Military Staff and down to the combat and support commands, thus eliminating the effort now expended by the Joint Staff and the services in arriving at agreed intelligence estimates. A Military Intelligence Agency, made up originally of the major intelligence and counterintelligence activities of the three services, is therefore provided to attain more timely, economical, and effective inputs for the over-all planning function.

The combat forces must be organized, equipped, and deployed to perform assigned tasks. These will change from time to time as national military policies and strategic plans change. At present their tasks may be identified as:

- deter general war
- defend North America
- support allies
- discourage or defeat small-scale attacks.

Forces to perform assigned tasks should be organized functionally. This will preserve the principle of unity of command and ensure that there



is no break in the chain of command between the Chief of Staff and the President. Functional commands will present their programs and requirements to the National Military Staff, which will effect coordination with other functional commands and with support agencies.

A minimum of five unified combat commands will be required: a United States Strategic Command, a U.S. Mobile Strike Command, a Continental U.S. Defense Command, an Atlantic Command, and a Pacific Command. The present Alaskan and Caribbean Commands will be absorbed by the Continental U.S. Defense Command, and the European Command will ultimately be absorbed by the Atlantic Command. Additions to or changes in these commands may be required as external threats develop in the future.

These unified combat commands can all be identified with existing unified commands except the U.S. Mobile Strike Command. The creation of this command will complete the process of assigning all operational forces to a unified command. Its mission will be to discourage small-scale attacks by providing unified task groups, organized and ready to support United States policy and strategy in the event of limited or peripheral actions short of the need for deterrent forces. It is visualized that this command will be primarily U.S.-based, highly mobile, and ready to reinforce any unified area command or to operate independently. It must be prepared for conventional warfare or for limited atomic operations in combined land-sea-air actions, or in any lesser combinations, or singly.

The present military services will be retained for an indefinite period to provide for personnel and training activities. Eventually the services will be replaced by functionally organized support commands. As now visualized, support missions will include materiel logistics, personnel logistics, communications, and transportation. These may be grouped as functions of a single support command.

### *functions*

Any successful organization must ensure that all functions essential to its mission are performed and properly coordinated. The Department of Defense must provide for functions found in any organization, plus some that are peculiar to military organizations. The essential functions include:

planning	liaison and public relations
intelligence	inspection
programing	evaluation of
comptroller	combat capabilities
military operations	weapons and materiel
research and development	plans and programs
procurement and supply	research and development
personnel and training	personnel and training
communications	security

The proposed method of operation provides that functions common to and peculiar to the armed forces be planned and developed by the National Military Staff and reviewed by the National Military Council, the Chief of

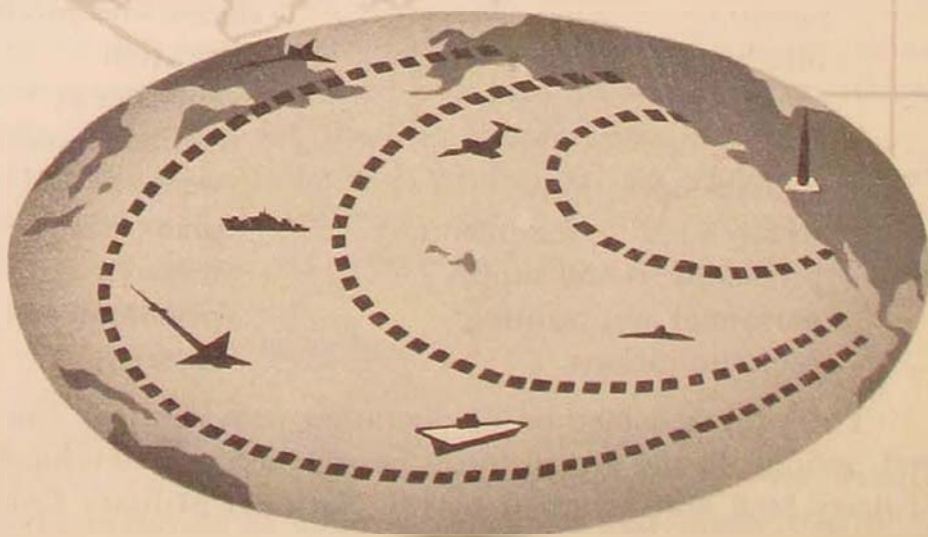
# Major Unified Combat Commands



U.S. Strategic



Atlantic Command



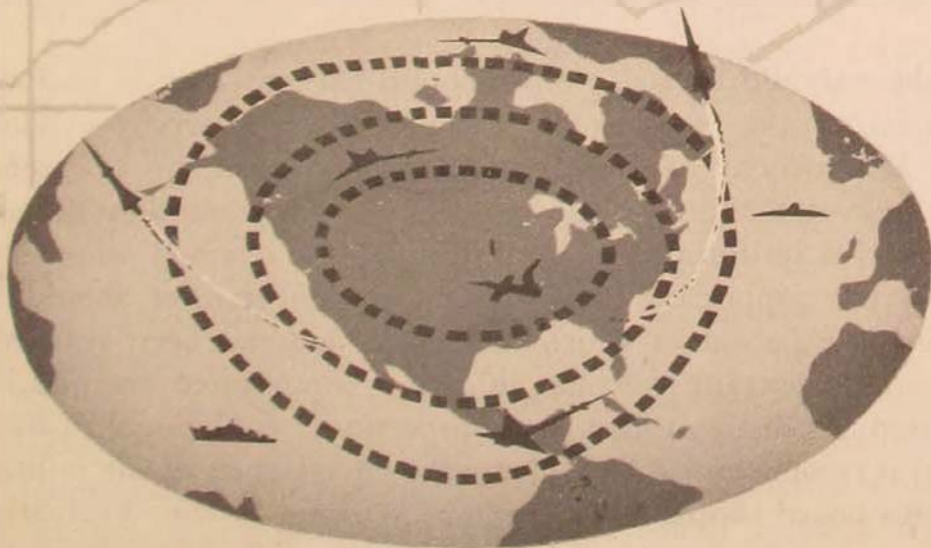
Pacific Command



Command



U.S. Mobile Strike Command



Continental U.S. Defense Command

Staff, and the Secretary of Defense. It is essential that national military policy and national military doctrine be formally stated so that realistic strategic plans can be prepared from them. Once strategic plans are prepared, a truly national force structure can be programmed and war plans and programs can be developed accordingly. The military-establishment budget can be simplified and more readily explained to the Congress. Better guidance for materiel procurement, personnel procurement, and research and development can be obtained. The influence of vested interests both in and out of the military establishment can be reduced. Military problems can be resolved by professional military officers. If military policy and doctrine can be enunciated by one staff, the management of the Department of Defense will be infinitely easier. Control of policy and doctrine is the key to control of the military establishment.

A serious problem facing the Department of Defense is that of making intelligent provision for research and development. Serious deficiencies have existed in the management of R&D, particularly in planning, in overlap of programs, and in deciding when to initiate, curtail, expedite, or abolish a specific project.

A unified Research and Development Command, directly under the Chief of Staff, is provided for in the proposed reorganization. Under this organization the Commander of the Research and Development Command answers directly to the Chief of Staff and receives his guidance from the National Military Staff. Requirements for basic research, applied research, developmental research, and research support come from the Research and Development Staff of the National Military Staff and from the respective commanders of the support forces and unified commands.

The Director of Defense Research and Engineering, in addition to advising the Secretary of Defense, functions as a high-level officer who coordinates requirements with such agencies as National Aeronautics and Space Administration (NASA), Atomic Energy Commission (AEC), and similar agencies. No requirement for the Advanced Research Projects Agency is seen.

Initially logistic support for the unified commands will come from the separate services. As requirements are standardized it should be possible to organize a unified Logistics Command with the mission of providing logistic support for the military establishment, including the unified or combat commands.

Ultimately there should be a single promotion list and a single uniform. These are essential to the creation of a single military service. Officers assigned to the Department of Defense and the commanders of unified commands and their staffs will be placed on a single promotion list and will wear a distinctive uniform. This uniform will be retained when they return to one of the supporting services. Interservice transfer should be encouraged during the period in which unification has not been realized.

One of the most important functions in a large complicated organization is that of evaluation (as distinguished from inspection). A National Military Evaluation Board is recommended to evaluate the effectiveness of the military establishment. This board supplants the present Weapon Systems Evaluation Group and acts as a reviewing agent for the Chief of Staff, much as the

National Security Council acts in reviewing for the President. It ensures that all responsibilities assigned by the Chief of Staff are discharged satisfactorily and are in harmony with national military plans. The board's review is designed to ensure that the plans made for organizing, training, deploying, and supporting forces are adequate for implementing national strategic plans. It reviews the activities of the National Military Staff and all allied activities under the Chief of Staff which, if not functioning properly or phased appropriately, detract from the effectiveness of the military program of the Chief of Staff. Board reviews are broad in scope and encompass the whole spectrum of activities of the National Military Staff, the unified commands, and the services commands.

THE major changes involved have been discussed only to the extent necessary to convey clearly the general nature of what is required. If accepted, the concepts developed here will provide guidance for the separate, detailed studies needed on every segment of the proposed reorganization. More than guidance, it is hoped that the organization and responsibilities outlined here will be the final impetus in improved military planning and accelerated decision making necessary to better prepare our country to meet any emergency.

### Proposed Phasing for the New Organization

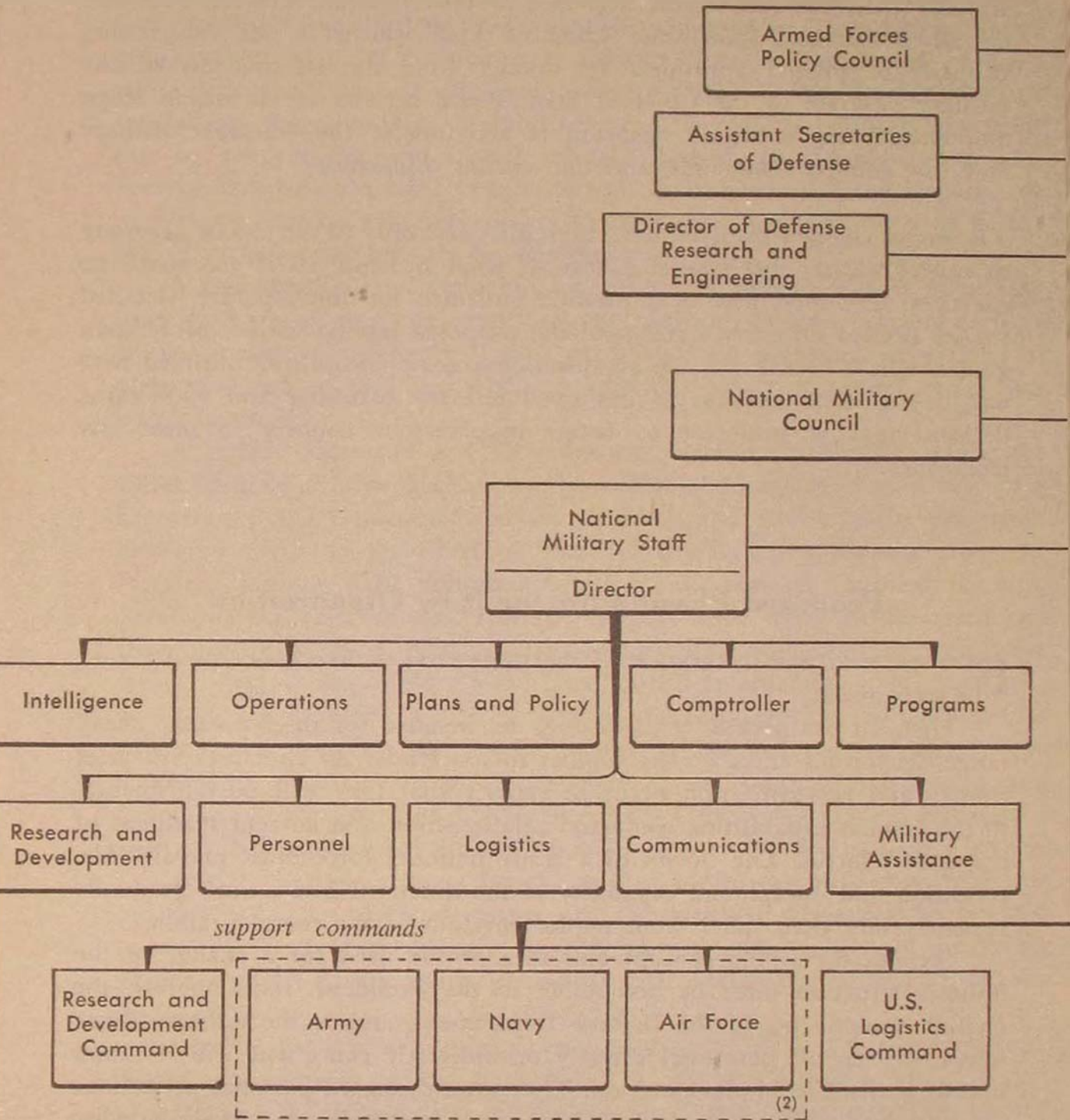
**I**N PROGRAMING the integration of the three services, five major points must be recognized:

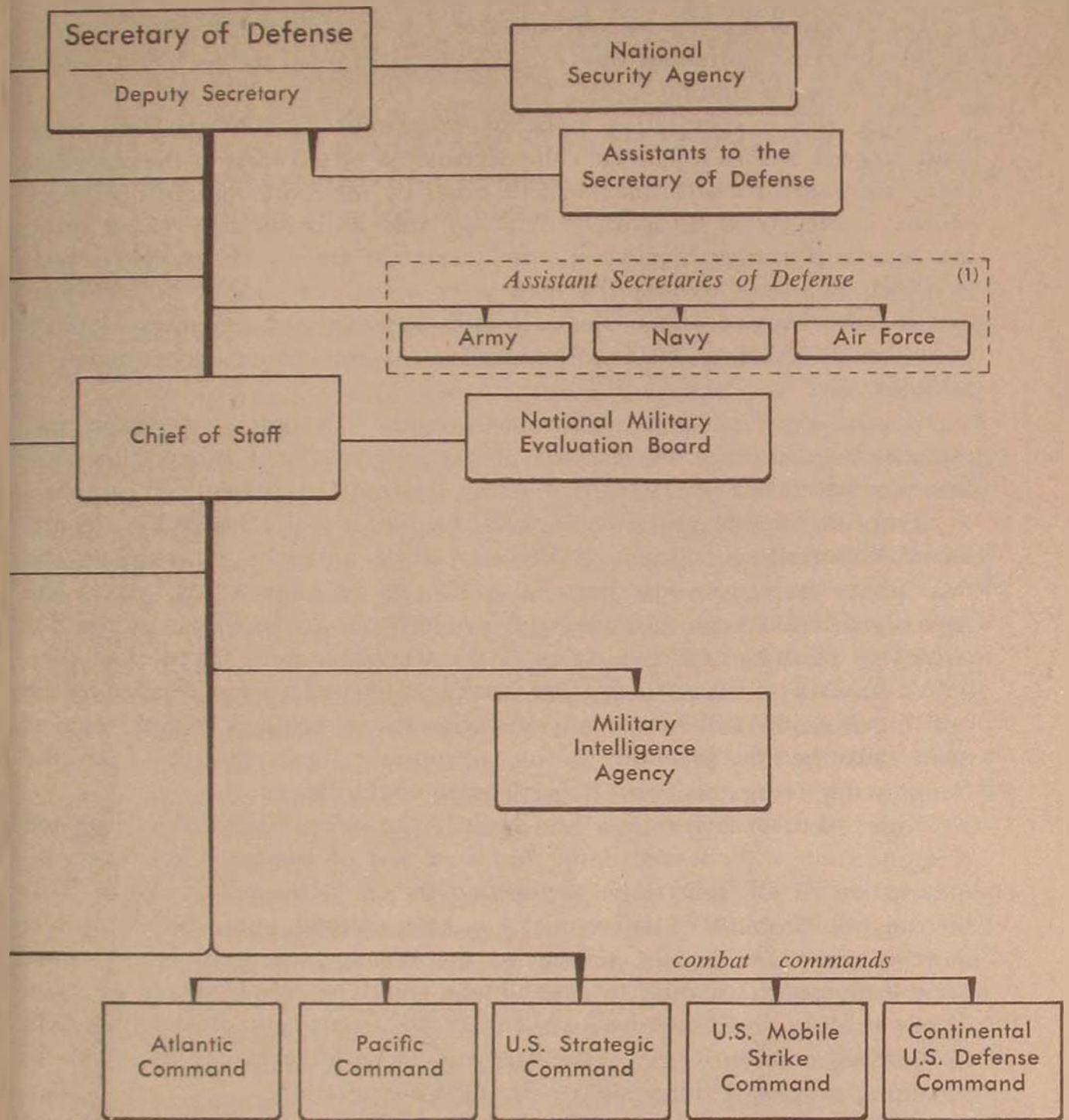
First, all prospective changes must be weighed for their possible short-range deleterious effect on the combat forces. Under no circumstances must change and reorganization occur so rapidly that they will be detrimental to the combat capabilities, command relationships, and current readiness of the armed forces. The theory of a ready national force must prevail. The condition and operational capability of the deterrent forces must gradually benefit rather than suffer from implementation of the reorganization.

Second, the whole concept and idea of the need for a change of the military structure must be acceptable to the President, the Congress, the civilian components of the Defense Department, and to the military themselves, so that all personnel directly or indirectly concerned will do their best to assist in its implementation. They must disregard personal prejudices, service interest, and individual positions so that the objective of doing what is best for the national interest transcends other considerations.

Third, any reorganization plan must be workable in a practical sense as well as correct in its principles of management. It is tempting and frequently helpful to oversimplify—to ask the question, “If the U.S. had no defense establishment at all and it was our responsibility to create one, what type of organization would we favor?” Plans based only on this proposition, while appealing in their simplicity, would founder through neglect to consider the problems created by such radical reorganization.

# Proposed Department of Defense





(1) to eventually be deleted when Army, Navy, and Air Force are unified

(2) to eventually be replaced by a unified Personnel and Training Command

Under our present organization the careers of many officers are tied to the use of outmoded weapon systems. Any reorganization that corrects this state of affairs but does not offer incentives to this group is faced with many stumbling blocks.

Fourth, while the problem is primarily one not of cost but of increased combat effectiveness, the two are interrelated. It is doubtful that Congress would authorize additional funds to fill the gap caused by lost effectiveness during any reorganization.

Fifth, the reorganization must be programed in such an order and must proceed at such a pace that the decrease in effectiveness of the activities being reorganized and unified will be offset by the more efficient operation of the whole. It is recognized that any reorganization may cause some loss in administrative effectiveness. Military units are usually granted a year in which to regain combat readiness after being re-equipped or otherwise reorganized. Positive efforts can minimize the expected temporary loss of effectiveness resulting from reorganization of the entire Department of Defense.

To meet all these conditions will require devotion, systematic and methodical planning, and a spirit of purposiveness and cooperation that have not heretofore prevailed within the Defense Department.

Once the new organization is decided upon, it will behoove the Department of Defense to obtain all necessary legal authority to complete the task before taking the first step. Congress may be expected to inspect the new organization very carefully, and properly so. It would be to the disadvantage of the new organization if the transition were started and then halted for lack of expected legal authority. Even under ideal conditions the new organization will have many obstacles to overcome. The first requirement must be the procurement of appropriate legal authority from the Congress for reorganization of the defense establishment.

Once the necessary laws are passed, the adoption of the suggested reorganization without additional funds or loss of combat effectiveness requires, first of all, that it be understood by the personnel it affects. This involves the problem of communication. One method would be to conduct short courses, service-wide, similar to the management courses that have been instigated from time to time. These could be supplemented by mandatory reading and extensive publicity. The Department of Defense's skill in "putting out the word" could determine to a large extent its success in obtaining a smooth transition to the new organization.

To get the defense establishment from where it is to where it should be will not be accomplished quickly or easily. Nevertheless the objective is not unattainable. This thought should be foremost. The goal can be attained by prudent men taking prudent actions. The goal need not, and for that matter should not, be achieved overnight. Let the reorganization be phased slowly, methodically, with the objective of providing the best possible defense for the least cost.

The steps proposed here are grouped into five phases: preliminary phase, activation phase, operational phase, clean-up phase, and final phase.



*preliminary phase*

The first phase requires the establishment of a Joint Reorganization Task Force under the central direction and management of the Secretary of Defense. This Joint Reorganization Task Force should ideally be established by Presidential decree. It should have as its objective, in addition to "salesmanship," the execution of the preliminary phase and participation in the execution of the activation phase. It would consist of two bodies: the first, a high-level joint military-civilian body to establish policy and guidance; the second, a larger staff to implement this policy. The second body would also be of joint military-civilian composition. Within this Task Force should be a legal advisory section.

*activation phase*

Three separate and distinct actions would create organizational bodies to plan, program, and direct the various steps of the activation phase.

*Step one* would be to separate the Joint Chiefs of Staff from their present service affiliations and use that body as the nucleus of the National Military Council. The National Military Council would be a body composed of the most experienced and senior military personnel. Even personnel recently retired could be returned to duty by Presidential action to serve temporarily on the Council. It would seem logical that the number on the Council should be more than the present JCS but not so large as to be unwieldy or unmanageable. Their temporary chairman should be designated by the Secretary of Defense to serve until the Chief of Staff is appointed. In any event, the Chief of Staff should probably be appointed within a few months after the organization of the National Military Council. The Council will then aid and advise only the Chief of Staff. Its further membership will be nominated by him but will be subject to approval of the Secretary of Defense. No member should serve more than four consecutive years.

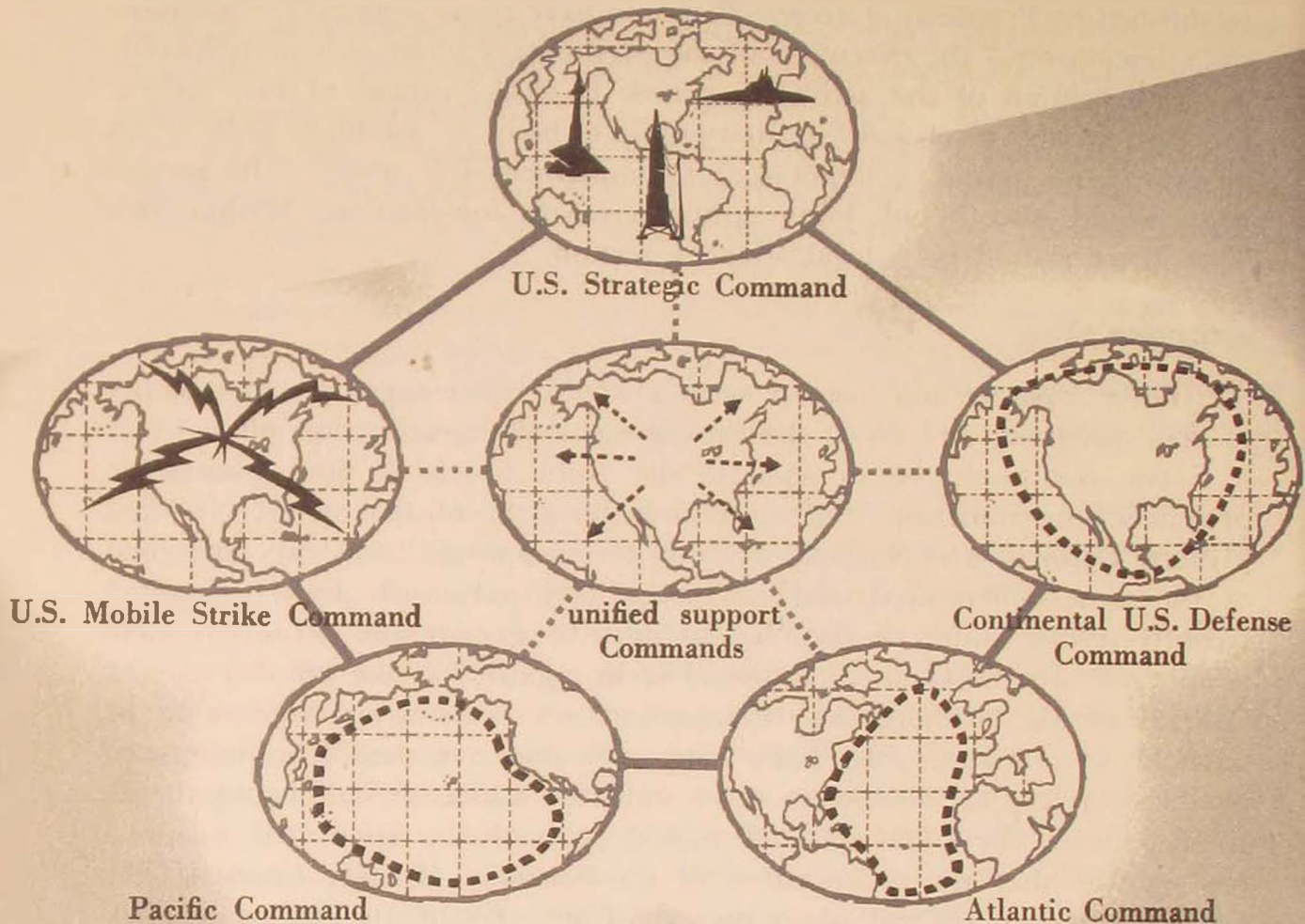
*Step two* would be for the Chief of Staff to direct the National Military Council to establish and organize the National Military Evaluation Board. It can then be formed in time to evaluate and monitor all forthcoming reorganizational actions. It should consist of qualified military and civilian personnel selected as best capable of meeting the charter and intent of that body. It too reports directly to the Chief of Staff and has a single Director nominated by him and approved by the Secretary of Defense.

*Step three* would be to organize and establish the National Military Staff under the guidance and direction of the National Military Council. The National Military Staff will in reality stem from the present Joint Staff but be expanded in size and be broader in scope of responsibilities and actions. From it will come the planning necessary to phase the remaining reorganization actions.

*operational phase*

Six separate but closely related actions comprise the operational phase

# Phases of Reorganization



## 3. Operational phase

Step 1: activate the United States Strategic Command.

Step 2: activate the United States Mobile Strike Command.

Step 3: activate the Continental U.S. Defense Command.

Step 4: activate the Atlantic and Pacific Commands.

Step 5: activate the Research and Development Command.

Step 6: activate the U.S. Logistics Command.

## 2. Activation phase

Step 1: divorce the JCS from service affiliations, form the National Military Council, and appoint a Chief of Staff.

Step 2: create the National Military Evaluation Board.

Step 3: organize and establish the National Military Staff.

## 1. Preliminary phase

Step 1: establish under the Secretary of Defense a joint task force to plan and execute the preliminary and activation phases.

Step 2: establish within the Office of Secretary of Defense appropriate public

information and legislative liaison.

Step 3: secure appropriate legislation.

Step 4: undertake a service-wide indoctrination and instruction program. Integrate reorganization instruction in service schools.

5.

## Final phase

Step 1: integrate Army, Navy, and Air Force in a unified Personnel and Training Command.

Step 2: discontinue Assistant Secretaries of Defense for Army, Navy, and Air Force.

4.

## Clean-up phase

Step 1: discontinue the Departments of Army, Navy, and Air Force, and activate an Ass't Sec Def for each service.

Step 2: approve a distinct uniform for officers assigned to unified staffs.

Step 3: integrate officers assigned to unified staffs into one promotion list.

of the reorganization. Each step creates a new unified command of the military department. The services would eventually be stripped of combat forces and combat responsibility. Once these steps are completed, each service is relegated to being a supporting agency for the unified combat forces.

*United States Strategic Command.* Step one of this phase establishes and organizes the United States Strategic Command as the primary deterrent force of the Nation. Within it will be those forces—formerly of the three services—which represent our strategic strength. Once the forces and units are allocated and assigned, their further control and organization are the prerogative of the commander. The commander's determinations are based on the detailed and strategic guidance furnished by the Chief of Staff with the advice and assistance of his supporting agencies, the National Military Council, the National Military Staff, and the National Military Evaluation Board. Once forces are assigned to this commander, they are completely under his command. They are administered, controlled, deployed, further trained, and held in a readiness status by the unified commander. There should be no dual allegiance, divided command relationships, or conflicting sources of authority. From then on it is the responsibility of the Army, Navy, and Air Force to render support to the unified commander for their forces assigned to him. Support requirements come to the three services from their former forces, but are requested by the Commander, United States Strategic Command.

*United States Mobile Strike Command.* Step two establishes the United States Mobile Strike Command by integrating appropriate units of the Army, Navy and Air Force into a single unified command. These forces, when combined into the Mobile Strike Command, also operate under the guidance of the broad objectives and planning of the Chief of Staff, with the advice and assistance of the National Military Council, the National Military Staff, and the National Military Evaluation Board. As in the United States Strategic Command, the Commander, U.S. Mobile Strike Command, is the commander in every sense of the word. He organizes, deploys, and readies

his forces to protect the interests of the United States should localized situations contrary to U.S. interests arise anywhere in the world. The primary requirements likely to be placed upon him by the Chief of Staff are that he maintain diversified forces for use in either conventional warfare or limited atomic actions based upon localized situations or geographical factors.

*Continental U.S. Defense Command.* Step three organizes the Continental U.S. Defense Command by using the present North American Air Defense Command (NORAD) as a nucleus and giving to the commander the same full command authority and responsibility as given to the commanders of the United States Strategic Command and the United States Mobile Strike Command. In addition, it is suggested that the Caribbean and Alaskan Commands as presently constituted be absorbed by Continental U.S. Defense Command. Forces once assigned by the Chief of Staff become part of this unified command and divorce themselves from their former service affiliations, except for predetermined supply and logistical support. Thus all segments of the military units assigned to the task of defense of North America will be integrated into a single unified defense command. That command will have operational and administrative control of the personnel, equipment, and facilities assigned to it.

*Atlantic Command and Pacific Command.* Step four regroups the present geographical unified commands into two area commands, the Atlantic Command and the Pacific Command. Depending upon the world situation, other area commands could be organized when necessary. The need for additional commands would be decided by the Chief of Staff based on recommendations made to him by the National Strategic Evaluation Board, the National Military Council, and the National Military Staff. In the event such a determination is made, new unified commands such as a Southeast Asian or Middle East Command could come into being as separate commands similar to those already in existence. Each of the new commands would obtain its personnel, materiel, and facilities from a regroupment of the other unified commands or from the Army, Navy, and Air Force support elements. The area unified commands should not be constricted by fixed geographical boundaries but should be able to absorb or give up units or areas of responsibility in accordance with directives of the Chief of Staff. This concept would allow for smooth and rapid interchange of resources among the unified area commands. These commands would thus be able to meet particular threats or conditions as they might arise anywhere in the world.

The Chief of Staff would determine whether or not the units of the United States Mobile Strike Command came under the operational control of area commanders in the event they were deployed. His decision would depend upon the circumstances and situation at the time.

Preliminary to the establishment of unified commands, whether of a support or combat type, a standard system of administration must be introduced. All unified commands will then operate administratively in a standard, uniform manner. Obviously this will be desirable when units are

interchanged or transferred from one unified command to another. It is imperative that the standard administrative system be adopted and used by all the combat and support commands within the defense structure.

*Research and Development Command.* Step five amalgamates all defense research and development activities into a single, unified Research and Development Command under the Chief of Staff. It will initially reorganize as required by the new organization chart. After its reorganization it will requisition personnel, facilities, laboratories, etc., from the three services as soon as the Commander, R&D, is ready to assume responsibility for a particular function.

The first subcommand of R&D to be established will be that of missiles. Following in order will be communications and electronics, manned vehicles, armament, and finally national ranges. Senior R&D officers from all three services will be brought into the new organization from the beginning.

After completing activation of the operating commands, the nucleus for the R&D section of the National Military Staff will be chosen from Headquarters R&D Command.

A major point is that, once the new R&D organization is agreed upon, successive steps to effect it must follow one after the other.

*United States Logistics Command.* Step six amounts to probably the biggest and most complex problem facing the complete amalgamation of functional responsibilities within the proposed organizational concept of the armed forces. If consideration is given to the complexities of the logistical, supply, and distribution fields, it will be all too obvious that dissolution of the problems is not quick and easy. This is true today and will be even more markedly true in the future as the technical pace of weapon development increases. Adding to this factor an extremely large, variable, and broadly deployed system of military units emphasizes that there will be many problems involved in the evolution of the logistical structure.

Among the many facets of logistics, some can be adapted to a unified logistics concept much more readily than others. As long as the concept of integration implies acceptance of the single service by gradual indoctrination and evolution rather than arbitrary command and legislation, the best approach is to do first what is obvious and accepted as logical. With this step as a beginning, the rest of the pattern can develop in sequence, leaving the most difficult problems of logistical organization until last.

On this basis the following approach is suggested. First, establish the unified United States Logistics Command, with the commander and supporting headquarters staff reporting to the Chief of Staff. To begin with, three subcommands will be assigned to the unified command. The first of these, a Common Stores Subcommand, will assume the responsibilities and personnel now operating within the single-manager supply concept. The second subcommand will be Support Services, with responsibility for commissary operations, exchange and ships stores operations, theaters, and all morale and recreational functions. The Facilities Subcommand, the third subcommand, will consist initially of real estate and transportation activities

for all services. It is suggested that a Liaison Division be established at the outset to provide separate service representation to the unified logistics activities. Concurrently with these assignments, all physical facilities which now store the commodities concerned with the various subcommands should be assigned to the unified United States Logistics Command.

The organizations and functions just described should be well developed before any attempt is made to expand the unified United States Logistics Command into other areas within the field of logistics. In other words the system must prove itself before further reorganizational steps are taken.

The fourth subcommand will be the Combined Arms Subcommand. A logical starting point for this evolutionary step will be to accept weapons currently in use by the various unified and specified commands then in existence. These weapons, it would seem, could best be managed on a unified basis and thereby establish the nucleus for the further development of the unified United States Logistics Command into the area of "peculiar" items. Facilities to support such weapon systems could then come under the responsibility and control of the unified United States Logistics Command.

The extension of unified logistics to the unit and base level would naturally follow after some assurance that the new pattern is successfully working.

#### *clean-up phase*

The next to last phase, aptly called the clean-up phase, will include the next logical phasing steps toward completion of the proposed reorganization for the Department of Defense.

Once the steps up through the operational phase have been taken, most—although probably not all—of the former responsibilities and functions of the Army, Navy, and Air Force will have been removed from their respective jurisdictions. Essentially the three services end up having some support responsibilities not yet assumed by the unified United States Logistics Command, but primarily their function at this period of time will be one of personnel administration and training.

*Army, Navy, and Air Force Commands.* It would seem appropriate as step one of this phase that the Departments of the Army, Navy, and Air Force be discontinued as departments and reactivated in command capacities only. Their command responsibilities will assume the functions of limited logistical supply to the unified commands and the procurement, basic training, perhaps technical training, and supply of personnel to the unified commands. It is therefore at this point in the phasing that the former services will lose their identities as departments.

Concurrent with the action of discontinuing the military departments, the Secretaries of the Army, Navy, and Air Force will be placed at the Assistant Secretary of Defense level, for Army, Navy, and Air Force respectively. Presumably they will serve in this capacity as long as the Army, Navy, and Air Force Commands remain intact.

*Single uniform.* Step two involves the authorized wearing of the single

uniform by all officers assigned to the various unified staffs of the entire military establishment. This will include personnel assigned to the Office of the Secretary of Defense, all staffs supporting the Chief of Staff, and the officers in the staffs of the unified commands.

*Single promotion list.* Step three, the last step in the clean-up phase, will be the integration of all officers assigned to the high-level staffs and to the staffs of the unified commands into a single promotion list. This will result in the complete separation of these officers from their former service. It raises the prestige and increases the incentive among the officers of the unified commands and precludes their careers' being inalienably tied to outmoded or discontinued weapon systems with which they have been identified in the past. The single promotion list will do much to unify the endeavors of all officers.

### *final phase*

Two steps remain to be taken in the final phase leading to the goal of a true single-service military establishment for the Nation:

- (1) Integrate the Army, Navy, and Air Force into a unified Personnel and Training Command.
- (2) Discontinue the offices of Assistant Secretaries of Defense for the Army, Navy, and Air Force.

With the end of this phase comes the completion of the reorganization task.

It is not the intent here to fix a dogmatic method of approach to phasing. It might be that further study will indicate more logical variations to phasing steps than those that have been advanced. But only through the adoption of a well-defined, consistent plan of action can the new organization task be most expeditiously and efficiently completed.

There has been no attempt to cover every segment of the defense hierarchy. In fact, it would be impracticable to attempt to do so. Such important functions as the Medical Services, the Chaplain Corps, Finance, the Inspector General's Department, and the many bureaus, boards, committees, and groups presently existing within the Department of Defense must be considered separately as the need arises during the reorganization process.

Also no attempt has been made to establish the phasing in relation to time periods. How long it will take to go from one phase or one step to the next is a matter of judgment and experience. Where the completion of one step might require only the time for signature on a directive, another might take several months or longer. The time would depend upon the opposition, the necessary planning, and the complexity of the problem. The important point is that there be a logical sequence or master plan to follow.

It is appropriate to mention an observation that became obvious from a review of past reorganizations. One of the major stumbling blocks to be encountered in establishing a single Chief of Staff, the National Military

# Possible Modifications

The action steps recommended in the preceding sections are those believed necessary to realize a truly unified reorganization of the Department of Defense that will overcome the recognized deficiencies of the present organization and also meet the general goals and objectives which any Department of Defense should satisfy.

A further question that always comes up, and one which we may ask ourselves with profit, is: Can we eliminate some of the recommended action steps and still meet our stated objectives? An analysis of this point should increase our grasp and understanding of reorganization possibilities and help develop a competence to distinguish between what is essential and contributory and what is diversive, immaterial, or even retrogressive.

The objectives stated under "goals and objectives" are intended to be inclusive. Boiled down to maximum conciseness, they may be summarized: "The guiding objective is to develop an organization of U.S. military forces which provides unity of command and direction at the top military level, with complementary rather than competitive subordinate organizations." This simplification is based on the premise that the single most important missing ingredient in the Department of Defense today is the lack of unity of military control, and that when this log jam is broken, along with certain legislative restrictions, other requirements will fall in line.

As a preliminary to arriving at a minimum essential list of actions, let us list the ones already recommended:

## *JCS-level actions*

1. Divorce the JCS from service affiliation.
2. Create the National Military Council and the National Military Evaluation Board.
3. Appoint a Chief of Staff of the Armed Forces.
4. Activate the National Military Staff.
5. Approve a distinct uniform for officers assigned to all unified staffs.
6. Integrate officers assigned to unified staffs into one promotion list.

## *unified command actions*

7. Activate the United States Strategic Command.
8. Activate the United States Mobile Strike Command.
9. Activate the Continental U.S. Defense Command.
10. Activate the Atlantic and Pacific Commands.
11. Activate the Research and Development Command.
12. Activate the United States Logistics Command.

## *service merger actions*

13. Discontinue services as departments; redesignate them as commands; and establish an Assistant Secretary of Defense for each.
14. Integrate Army, Navy, and Air Force into a unified Personnel and Training Command.
15. Discontinue the Assistant Secretaries of Defense for Army, Navy, and Air Force.

Can some of these steps be eliminated? Let's consider them in reverse and see how far we can go before we have to give up any hope of achieving unity of military command and direction and noncompetitive subordinate organization.



## of Recommended Actions

The last three steps eliminate or merge the separate services. Prior to this action they have already been reduced to personnel and training activities with no responsibility for determining major requirements or for material procurement against these requirements. At this point the services are probably true support agencies and non-competitive because their tasks are finite and directed from above. Their later elimination is justified on the basis of probable economy and the final completion of a true functional organization of the Department of Defense. Opposed to this step are morale factors of group identification, tradition, history, and emotional attachment, all of unknown strength by the time this step would actually take place. These last three steps are not critical to the objectives to be realized.

Step 12. This step removes materiel procurement and logistics from the services—the removal of a sizable job. As long as this responsibility is divided among the three services, a considerable job of coordination and determination of procurement responsibilities must be done by a higher echelon of command. In itself, logistics responsibility in the services need not be productive of internecine strife. Division of producer logistical tasks based on the medium of locomotion provides as good a functional division as any method of breakdown—something which cannot be said in regard to combat missions and tasks.

Step 11. As a major and critical task of any modern military power, research and development is tied in directly with the nature of the threats facing a country and the possibilities of technological advances in dealing with these threats. As long as the research and development task remains divided among the three services, the coordination and workload requirements to monitor service assignments and recommendations will be terrific. R&D is too closely related to combat, concepts, and the future to admit of easy management between the services.

Step 10. This step is a simplification of existing unified commands and does not in itself change the extent of control by unified commands. It does not, therefore, affect our *critical* organizational objectives.

Steps 9, 8, and 7. Under the phasing proposed in the basic study, these steps achieve the very important objective of putting *all* combat forces under unified commands, thereby paving the way for taking the present services out of the combat-requirements business and eliminating the primary source of bitter and nonconstructive competition between the services.

Steps 1 through 6 relate to JCS actions and provide for unity of direction and command of the armed forces, backed up with a competent, specialized staff removed from disruptive "conflict of interest" influences. This major principle must be provided. It is difficult to see how any of these six steps can be eliminated with any assurance that the necessary objectives will be met.

Actions numbered 1 through 8 appear indispensable to provide military unity of command and to make the services into productive teammates by removing them from the combat-requirements field. This might do the job. Anything less is almost automatically doomed to failure as far as ultimate goals are concerned.

Of the steps beyond No. 8, some are more important than others when considered from the viewpoint of criticality. No. 11, the establishment of a unified Research and Development Command, may be necessary before partisan service viewpoints achieve their proper perspective in the context of national military requirements. The remaining steps can probably be argued and settled primarily on the basis of the logic involved. If unity of military direction and decision is provided the armed forces, with combat forces and requirements removed from service cognizance, it may not be necessary to take the final step of eliminating the services.

Council, and the National Military Staff is the unfounded fear of a "Prussian General Staff" and a trend toward military dictatorship. The organization proposed here should not give rise to that fear. There is little in the way of similarity. This reasoning will have to be expertly presented to alleviate the popular fears that currently exist.

The present treatment of this subject is not exhaustive. Further study will be needed on every segment of the proposed organization to phase it into the over-all organization. Should the suggested principles and philosophy be adopted, it is believed the United States will realize a more effective military organization. That, after all, should be the objective of every person in a position to participate in the planning for and transition into the new organization.

### Completely Different Possibilities

THERE is an almost unlimited number of possible reorganizations of the Department of Defense, most of which have been already suggested by one authority or another. Many of these proposals are less drastic than those recommended here. In fact, the history of reorganizations of the Department of Defense since World War II has been a succession of steps that have just about exhausted all the easy steps. Today we are faced with the situation that all the little steps have been taken without solving the basic troubles of the Department of Defense and the giant steps are about all that is left.

Any search for alternatives is probably based on estimates of feasibilities. The main lines of resistance are best summarized by Congress itself in its statement of intent in the Reorganization Act of 1958, that there should be:

- no merger of the services
- no single chief of staff
- no general staff

These prohibitions are all violated in our recommendations. It would be difficult not to do so. There is not much of any place left to go except head-on through them.

Assessing the strength behind those prohibitions is quite difficult, depending as it does on the international situation, the cost of defense, and the nature of the current military problems confronting the Department of Defense and the Congress. One thing is fairly certain: as long as the defects are as troublesome as they are today, Congress will continue to authorize changes, even at the expense of encroachment on their stated prohibitions, until some kind of correction is achieved.

The prohibitions are not all of equal strength. The first is probably the strongest, if for no other reason than that the other two would automatically go if this one did. That is why the merger of the services was proposed to be the last order of business. Also the existence of the services does not, per se, violate the achievement of our main goals.

The second prohibition is the next strongest, the last one being obvi-

ously the weakest of the three. It is difficult to know what exactly is meant by "no general staff," for we certainly have a sort of one today in the Joint Staff. The present Joint Staff is hedged about by size, composition, and tenure restrictions, but it functions in the position where a general staff is called for. It is even organized along general staff lines today.

It is difficult to find alternatives which avoid the prohibitions against a single chief of staff, or a general staff, and which still offer some hope of meeting desired goals. The Rockefeller panel report of 1958 recommended that the Chairman of the Joint Chiefs of Staff be designated as the principal military adviser to the Secretary of Defense and the President and that the Joint Staff be organized on a truly unified basis. The President did not include either of these recommendations in his 1958 reorganization request to Congress.

How those recommendations were expected to work out was not detailed in the Rockefeller report. Designating the Chairman of the JCS as the principal military adviser was evidently intended to take advantage of the authority of the Secretary of Defense to make decisions. With one primary military adviser presenting military problems, their pros and cons, and his recommendations for resolution, there might develop an understanding and relationship that would in effect give the Chairman of the JCS the same usefulness and authority as a single chief of staff.

The other recommendation to create a truly unified joint staff probably was designed to remove the inhibiting constrictions which now cause members of the Joint Staff to be negotiators, administrators, and coordinators rather than national military planners. Supported by a truly unified staff, the Chairman of the JCS could present to the Secretary of Defense not only service positions but also the missing combination of a resolving fourth position—the armed forces position.

The creation of an adequate, functional general staff is basic to the success of a unified Department of Defense. Yet in the past this point seems to have been submerged while the bigger questions of a single chief of staff and service mergers were discussed. This was perhaps proper; yet a general staff is required and can probably be attained if the term "general staff" is avoided and if the logic of having national military as well as service specialists is properly presented.

If "less drastic" measures are considered there is always the danger of achieving less than might have been secured under the pressures existing at the time. Then there is the further danger that these less drastic measures may provide just enough amelioration of symptoms to block later earnest consideration of a real cure. Whatever is required to ensure a *reasonable* chance of success should be strongly advocated and supported.

THIS study has attempted to do more than present "just another" proposed reorganization of the Department of Defense. It has also tried to bring in and consider the real-life complexities surrounding the subject to confuse and trap the unwary. Even at the possible expense of weakening its basic

presentation, it has explored the byways of lesser alternatives. It has not tried to sell a solution so much as it has tried to present a basic do-it-yourself kit for the professional in a subject that is approaching its most interesting phase: real, working unification of the Department of Defense. The question yet to be answered is not whether there will be further unification but rather "How soon will the next step take place and how much will it encompass?"

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# Civilian-Military Balance in the Defense Establishment

COLONEL JACK L. BENTLEY

CIVILIAN control of the Department of Defense is an accepted American principle of government, supported as staunchly by the professional military as by the civilian community. This principle, however, is far more difficult to achieve in practice than it is to support in theory. In contradistinction to Clemenceau's historic dictum that war is too serious to be left to the generals, it can be said today that the maintenance of peace has become far too complex to be left solely to politicians. In fact, the ever-increasing interaction of military and other national affairs has posed some of the most difficult problems our country has had to face since World War II.

When the Founding Fathers provided for civilian control of the Nation's military forces, they were concerned primarily with protecting civil liberties from military or military-supported tyranny. They recognized that an autonomous military establishment could constitute a threat to the economic well-being of the new republic and to the constitutional principles upon which its government was based. Since then the principle of civilian control has become a fundamental of our philosophy of political and social organization. Never once during the past 178 years has that principle been seriously challenged.

## *civilian control vs. civilian bureaucracy*

There appears to be agreement that the division between civilian and military control within the military forces should be along a line dividing "policy" from "operations." This line often is not distinct and has resulted, upon occasion, in the extension of civilian control into operations. The problem has been further complicated by the growth of the Office of the Secretary of Defense (osd) and the increase in its functional offices, each normally headed by an Assistant Secretary. The Reorganization Act of 1958 further centralized one area of control in osd by establishing a Director of Defense Research and Engineering, with special authority in the field of research and development of weapon systems.

Where extension of civilian control into "operations" in the Department of Defense has occurred, it has not been sought by civilian officials as a group so much as it has been a product of the necessity for obtaining common defense positions on a variety of subjects, or through the inability

of the services to achieve a consensus on common problems. Furthermore, as the requirements for far-reaching decisions on the budget, development, and procurement matters have increased, so has the interest of top DOD management turned more and more to how the services are performing their tasks. A major complicating factor in achieving effective military control of military matters is that certain management processes (or systems) demonstrate an increasing influence upon military operations and the decisions which commanders can make. A further complication is that many military functions do not lend themselves readily to managerial processes and systems developed for private industry. The Defense Department is not a business! It is not a money-making organization.

The seeming unwillingness of the services to agree on even nonessential military matters results in more and more issues being referred to civilian authorities for decision. To make such decisions, civilian authorities require independent staff assistance. When provided, this increases the capacity of the civilian authorities to make even more decisions. As more and more decisions are made, a need for follow-up procedures develops, which in turn creates additional demands for even larger staffs. Backlogs occur, inaction follows, and essential military decisions are not made by military professionals.

Since the Secretary of Defense is precluded by law from establishing a "military staff" in OSD, much of his staff assistance is provided by career civil servants of very high Civil Service ratings. These professional civil servants constitute an indispensable part of our armed forces. Certain specific jobs and functions require continuity that cannot be easily obtained by military personnel who are continuously rotated in and out of new assignments. Certain technical and professional skills can be attained and maintained only through full-time application to their specialized field. With Civil Service positions established for these functions, the military professional is free for assignment to general military duties.

This philosophy itself is valid. Its application in the defense establishment has certain pitfalls.

The civil servant at the OSD level is first of all a professional. He has competence in his specialized field of endeavor; he is an authority in his chosen specialty. He has been placed in his assignment to advise and assist the appointed officials in the exercise of political control over national defense policy. Unfortunately, the tenure of most of our senior appointed officials in DOD has averaged only slightly more than a year. The consequence has been a developing situation in which individuals of excellent technical training and experience in specialized fields (accounting, budgeting, statistical analysis, etc.) have been called upon to render judgments on the quantitative and qualitative requirements of the armed services. Many of the senior Civil Service positions have developed over the years into "policy" positions themselves, partly as a result of the difficulty in filling such positions with political appointees but also as a result of normal bureaucratic growth. Also the promotional opportunities in many OSD positions have been very good for competent, young civil servants. This has meant that many

senior military officers have had to deal with or work for relatively young civilians.

The presence of a large and influential group of civil servants between the appointed officials and the military may be creating a buffer, reducing the responsiveness of OSD to the real needs and combat requirements of the services. This could become a major problem in obtaining effective civilian control without compromising essentially military responsibilities.

#### *basic civilian control safeguards*

Reduction of "detailed" civilian control of the military will not endanger "adequate" civilian control. Control of defense activities at the top is vested in the legislative authority of Congress and the authority of the President as Commander in Chief. Within this authority the Congress, through its general legislative powers and particularly through its responsibility for budget appropriations, exercises both broad and specific control of force structure, size and composition, and even force deployments. The President's control as Commander in Chief, exercised through his appointed Secretary of Defense, is further strengthened by his control of the appropriated money through the Bureau of the Budget and, in turn, through DOD.

The Secretary of Defense has a statutory responsibility for the direction and control of the armed forces. This responsibility may be delegated only in specified instances. The Joint Chiefs of Staff may recommend actions (or implementations) only by the authority and direction of the Secretary of Defense. The unified and specified commanders are "responsible to the President and Secretary of Defense—only." It is within the internal administration and processes of the Department of Defense that change is needed. Within our form of government the positive, over-all controls will remain, regardless of any consolidation or repackaging that might take place within the armed forces.

Perhaps one solution to this problem is to delegate more authority to the unified commanders and to the Joint Staff, as well as to the military departments. Such authority should be limited to making and enforcing those decisions involved in administration of over-all defense policy developed in OSD. Civilian control would still be overriding by means of veto power over decisions made by the military. Civilian control would be overriding also because the civilian electees and appointees would reserve to themselves decisions involving national objectives, over-all policy, force structure limits, and over-all budget decisions.

Besides the direct method of broad direction and control, the Secretary of Defense exercises several other means of exact control:

- The review and approval of budget programs prior to their presentation to Congress. This tool lends itself to very positive and detailed control.
- Control of the apportionment of the money within OSD that has been appropriated.

- Approval or disapproval of projects, particularly of weapons and weapon systems. This monitorship is done in the interest of preventing overlap, verifying feasibility, and ensuring compliance with roles, missions, and policies.

As long as these basic controls remain—and they are not in question—civilian control of the military can never be in serious doubt. Beyond that, the degree of control exercised and its source are questions to be answered solely on the basis of what will contribute most to an efficient, responsive, and adequate organization.

Overcivilianization of control positions and functions in the Department of Defense is in large part a result of the lack of agreement among the services on a variety of issues and the absence of the unity of military staff direction over all military planning efforts. Once started, civilian substitution may become self-generating and self-perpetuating. This trend might jeopardize national security. The continued referral of essentially military issues to civilian leadership for decision is symptomatic of an organizational and procedural problem. In some cases it appears that the military services may have placed parochial service considerations ahead of the national interest. In others, it appears that approved national security policies are not being honestly supported. In still others it appears that, in the absence of a common strategic “outlook” directed by a responsible military head, the military is well on the road to surrendering its historic mandate through its refusal to act decisively on military questions. One effective solution to these problems lies in a reorganization of the Department of Defense that ensures professional military decisions on essential military matters and common military advice to civilian leadership.

The present organization has created real problems in the relationship between the civilian and military that must be solved in a new organization. The basic principles guiding these relationships stem directly from our Constitution and from precedent. The historical control of the civilian over the military must be maintained. It is one of the cornerstones of our free and democratic Government. It must be kept foremost in the mind of the planners when they reorganize the national defense establishment. An effective civilian-military balance must be obtained.

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# The Case for Genuine National Military Planning

COLONEL LEONARD F. DOW

NATIONAL military planning must implement the national objectives of the United States by the most direct, unified, and economical means possible. Military plans and postures must be so formed that at any given time they can support the national objectives. Anything less places the security of the Nation in jeopardy.

To make sure that military planning is genuinely national and completely unified in support of the national objectives of the United States, two conditions of paramount importance must prevail:

- Firm national objectives must be established and constantly re-evaluated and made known to the military.
- The internal organization of the Department of Defense must be such that it can readily support the established national objectives and still be flexible enough to adjust to changes of these national objectives.

Only when these two conditions are met in entirety can there be genuine national military planning.

General Taylor, in his book *The Uncertain Trumpet*, suggested that in the existing planning process there is neither a clear statement of national objectives nor a defense organization capable of developing truly national military plans. Furthermore General Taylor suggested that although the desire and intent exist to plan nationally, the nature of the existing organization precludes the "integration" of service interests and consequently the achievement of genuine national military planning.

This situation is not new. Many attempts have been made to remedy it. The over-all reorganization of the national military establishment has been a priority subject of great concern for many years. The valiant effort in 1947 to unify the services under a single Secretary of Defense was a major step. It was hoped to centralize control of the land, sea, and air forces and, by so doing, to establish a focal point where adequate time and effort could be given to all military planning and subsequent organization and operations. Again in 1949, in 1953, and in 1958 official steps were taken to achieve greater unification and centralized control.

The 1958 defense reorganization legislation charged the Joint Chiefs of Staff, supported by the Joint Staff, with "national" military planning. Strangely enough, prior to 1958 both the Army and the Air Force had in

their respective service charters a legal basis for conducting "national" military planning. The 1958 legislation, however, did not eliminate the influence of the individual services on national military planning; the services continue to plan unilaterally and attempt to develop national plans through compromise.

Genuine national military plans may be defined as those firm, agreed-upon, over-all, strategic plans, with their necessary supporting plans (logistics, mobilization, intelligence, etc.), that could support the national objectives if translated into military action at any time, anywhere, under any conceivable combination of circumstances, from a military show of force to general war.

One of the functions prescribed for the Joint Chiefs of Staff in the Act of 1947, and as amended, was to "prepare strategic plans and provide for the strategic direction of the Armed Forces. . . ." These laws further provided a staff (now limited to 400) to assist the JCS in performing this function. In providing strategic plans and direction to the armed services subject to approval of the Secretary of Defense, the Joint Chiefs of Staff and the Joint Staff present their draft plans and programs to the individual military services for comment, review, and concurrence. The results of this procedure generally represent the lowest common denominator upon which all the services can reach agreement. Sometimes even a lowest common denominator cannot be found and the paper is "split" two, three, or even four ways. This makes—it encourages—"political" intervention in the military decision-making process. Compromised "joint" positions based on the lowest common denominator, or plans resulting from "split" papers, may not always yield the best national strategic plans obtainable.

### *roles and missions*

In the contemporary cold-war era, with its concurrent technological advancement, many optimum strategies might require major changes in the present organization of the services and particularly in the assignment of current military roles and missions. The roles and missions of the three services are still essentially based on the 1947 Key West Conference Agreements; they have not been materially changed since that time. Initially these roles and missions were based upon a conception of the relative capabilities of the three services, each relegated to the physical medium in which it could most efficiently operate according to its experience and assigned weapon systems. With the rapid changes that have taken place in weapon systems, political strategy, and military tactics, it appears to many observers that the classical or traditional breakout of military functions along lines of land, sea, and air may become increasingly difficult. President Eisenhower has said that separate land, sea, and air warfare is gone forever.

A new agreement as to the respective roles and missions of the Army, Navy, and Air Force is almost impossible in light of the present arsenals of the three services. Especially is this true if the agreement were negotiated in the shadow of the old concepts of definitive spheres of operations. The

Army was associated with the land, the Navy with the sea, and the Air Force with the air. That was a logical association when the weapons consisted primarily of conventional rifles, ships, and airplanes. Now with missile artillery, missile submarines, megaton bombs, and a myriad of other innovations, the old breakdown of land, sea, and air must be relegated to history. No amount of wishful thinking, imagination, or intent can cleanly divide specific roles and missions among the services in the future.

The fact that the three services cannot logically have roles and missions which will eliminate interservice competition and allow each a specialty that complements and supports the others is a major contributing factor that weakens our national military planning. Service interests may sometimes transcend national interests. And there is no answer if the defined roles and missions attempt to follow the old practice of giving to the three services their respective responsibilities based upon a land, sea, and air division of operations. General Maxwell Taylor in his recent book, *The Uncertain Trumpet*, attempts just such a definition which is as antiquated as the battleship:

I would define the Army, Navy and Air Force in functional terms as those services within the DOD charged respectively with providing the military forces necessary for the successful prosecution of sustained combat operations in a land, sea, and air environment.

General Taylor goes on to define the Army land environment:

In the case of the Army, the land environment would be defined as including the land itself and the contiguous layers of air and sea necessary for use in ground operations.

Such a definition is tantamount to saying simply that the Army must have any and all weapons it deems necessary to perform its mission. It would include ships and related weapons for the contiguous sea areas, aircraft of various types for the contiguous layers of air, and all types of missiles to counteract any threats to its ground operations.

Such thinking applied to all three services would only further hinder successful unified national military planning. Definitions of roles and missions cannot be drawn to guarantee that any one of the three services will not encroach upon the others' sphere of operations. Technological advancements in weaponry since the Key West Agreements are responsible for these encroachments. They are not the product of a particular service attempting to take over another service's function; they are a product of modern weaponry.

### *service interests*

It is understandable that the Joint Chiefs of Staff are constantly pressured by service interests. These pressures in turn force the Joint Chiefs to play a role never intended by law. They have a dual allegiance and responsibility that perhaps are not compatible. They must uphold service interests based upon roles and missions, and they must attempt to arrive at national planning objectives. Thoughts and decisions toward national military plans are inevitably tempered by service obligations and loyalties.

The day-to-day administrative problems which characterize the process

by which consensus is obtained in joint planning are so great that the Joint Staff is perhaps engaged more in "administrative" and "coordinative" functions than in true "national" military planning. Some Joint Staff planners have indicated that they are not actually doing the planning for the Joint Chiefs. Nor is the Joint Staff normally charged with briefing the Joint Chiefs on agenda items. Even the "staffing" of JCS papers is primarily a service function. Such conditions may result in less-than-desired genuine national military planning.

Without a *modus vivendi* by which service conflicts may easily be resolved in the national interest by the JCS-Joint Staff arrangement, many JCS decisions are based on past JCS agreements. Past agreements thus seem to take on an unnatural permanency and importance. In military planning where objectivity and decisiveness are paramount, precedents may cause overly cautious plans not suitable to forward-looking national policy or to full exploitation of modern weapons.

As long as service influence remains dominant in formulating joint plans, the agreed-upon strategic plans may reject desirable changes because one military department would be inordinately affected. At the national level it is imperative that the senior military staff be able to prepare national strategic plans unhampered by precedents or by tumultuous administrative and coordinative procedures. Ultimate national military plans must consider service views but *never* be limited by them. Once a non-partisan national military plan is agreed upon, it is the duty of all the services to support it. The services support the plans; the plans do not support the services.

Strategic military planning must represent something more than a series of compromised positions of the military services. If the "joint" planning staff creates another administrative battlefield upon which interservice differences are fought out, it does not meet its fundamental purpose.

Certain substantive changes seem appropriate in the organizational and procedural arrangement of the Department of Defense. A command and control system must be developed which will ensure effective direction of the national military capability. The present organizational arrangement of the Department of Defense is not sufficiently effective in ensuring the development and operational employment of a truly unified national military capability. Some of the shortcomings can be related to the system of obtaining unity of military direction at the top military level. A more effective military decision-making process is desirable. With the Joint Chiefs of Staff in a position of having to act as "judges, plaintiffs, and defendants" on all major national issues, national military planning may suffer. Furthermore, the corporate nature of the present JCS organizational arrangement may make it merely another "committee-type" operation.

Thus two major areas of conflict are currently impeding genuine national military planning:

1. The inability of the Joint Chiefs of Staff and the Joint Staff to function as a truly National Military Staff because of a combination of conflicting interests and the lack of positive direction.

2. The undue influence of conflicting service interests resulting from the persistent rigidity in the roles and missions of the three services, which are increasingly becoming more competitive than complementary as a result of new weapons.

*reorganization must come*

Genuine national military planning should emanate from the Joint Chiefs of Staff and the Joint Staff, as intended by the present organization and current laws, with all parties in agreement. Since human nature and conflicting interests make this exceedingly difficult under the present system, the desirable solution appears to be a new organization tailored to today's requirements. Some of these changes would probably require legislation, others would require Presidential or Congressional approval, and still others could be ordered by the Secretary of Defense using his existing authority, as Secretary Gates has effectively demonstrated in certain areas.

Two objectives should govern the organizational and procedural changes:

- A realigned and effective national defense organization must provide and encourage genuine national military planning.
- The military establishment must be capable of reassigning, transferring, or abolishing existing roles and missions and of assigning responsibilities on the basis of truly national military needs.

To provide unity of military direction at the top of the entire military segment of the Department of Defense, a single chief of staff, as Senator Symington's bill recommends, seems desirable. He would perform his function in a manner comparable to the classical Army chief of staff, or as all of the service Chiefs have operated since the 1958 Defense Reorganization Act. Under him might be organized a National Military Council, consisting of a vice chief of staff and three deputy chiefs of staff, one from each service. They should most logically be the present service chiefs of staff, who would be permanently separated from their respective services upon filling the newly created positions in the National Military Council. This, as a corporate body, would be the top military group to advise and assist the Chief of Staff in strategic planning and related matters. It would replace the present Joint Chiefs of Staff.

Serving the Chief of Staff and the Military Council would be a National Military Staff. Its functions would consist primarily of preparing emergency war plans and long-range objectives plans; consolidating the logistic needs, weapon requirements, and budgetary estimates as submitted by the unified commands; and personnel plans. This raises another possible weakness in the present military organization. Each of the services controls its military resources and submits its theoretical needs based on its own unilateral planning. Yet a truly national defense capability requires a truly national military strategic plan, based upon a single national military intelligence estimate. Nothing less will suffice.

The National Military Staff would be the "working agency" for the

top element of the military organization within the Defense Department. It would translate the national policies and objectives, as obtained from higher civilian authority by the National Military Council and the Chief of Staff, into an effective armed forces military strategy and plan. The director of the National Military Staff should be junior in rank to the members of the Council and the Chief of Staff. The National Military Staff would have to be a larger organization than the present Joint Staff, since it will assume many of the planning and programing functions now performed by the services. The planning responsibilities of the proposed unified commands would also be greater.

Once this reorganization has been accomplished, the Chief of Staff would direct, with the advice and assistance of the National Military Council, that *all* combatant forces be organized into unified commands. This will reduce service influence on the combat forces and place upon the unified commanders the requirement to determine force, weapon, and budgetary needs to perform their assigned missions. Roles and missions assigned to these unified commanders will be based on a *functional* or *geographic* basis rather than on the existing land, sea, and air breakouts.

Opposite and on equal level with the National Military Staff, a new agency is proposed. Under the theory that the strategies and means of waging future warfare will continue to change faster than ever before, a National Military Evaluation Board should be established as a necessary supporting agency for the Chief of Staff and the National Military Council. Almost all military organizations, up to and including the separate services, have had similar agencies in the form of inspectors general, evaluation boards, review boards, etc.; but this proposed National Military Evaluation Board will function in a broader capacity and with greater responsibility than any of its predecessors. Primarily it will act for the Chief of Staff, reviewing for him and reporting as necessary on the major policies, decisions, and plans for the National Military Council and National Military Staff. The Evaluation Board would also continually evaluate and analyze the posture and capabilities of the unified commands and support commands to ensure that they can support the formulated military plans and objectives. The Evaluation Board's considerations would be broad in scope, similar to the relationship of the National Security Council to the President. It acts as "eyes and ears" for the Chief of Staff, not in opposition to but in support of his Council and Staff. This agency, in effect, assists the Chief of Staff in being doubly sure that national objectives are being supported by the maximum effective military plans, strategies, equipment, and forces within authorized budgetary allocations.

By such a reorganization the United States would achieve the most effective deterrent and defense posture for the dollar expended. Weapons have changed, concepts of warfare have changed and are changing, world tensions are based on different beliefs and philosophies, international political actions are taken with only two major blocs of power primarily considered—the "free world" and the "dominated world." Military organization for

planning must change with the changing times, regardless of the traditional sentiments and military responsibilities.

The United States military establishment must be able to act immediately and effectively at any point on the broad spectrum from peace to general war. Maximum security can be attained only through a truly unified military force functioning as a closely knit team. This goal can be achieved only when we have an organization capable of genuine national military planning.

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# Arguments for Unified Combat and Support Commands

COLONEL RICHARD C. KUGEL

THE National Security Act of 1947 and implementing Executive orders formalized the structure of joint combat commands, with support from the individual services. Evolved out of the experience of World War II, in 1947 this was an excellent organization. But increasing speeds, ranges, and capacities of modern weapon systems indicate that the organizational elements which were efficient and satisfactory ten years ago may not be equal to the demands of current and future eras with their missiles, Polaris submarines, and satellites.

Subsequent legislation and Executive orders succeeded for a time in keeping this organization at least within sight of a front-running military technology. Then the impending entrance of the strategic missile and other modern weapons made it obvious that the old machine was beyond further refinement and no longer fulfilled national security needs.

In a message to Congress dated 3 April 1958 President Eisenhower called for a sweeping reorganization of the national defense establishment. His stated purposes were to:

- fit new weapons more expeditiously into the defense establishment
- make the combat forces more responsive to the direction of the Commander in Chief and the Secretary of Defense.

The Defense Reorganization Act of 1958 has in general achieved the specific objectives which the President set. Two organizational deficiencies of the old system still remain: duplication of missions between *area* and *functional* combat commands, and continued reliance on the individual military services to support the unified combat structure.

Relentlessly, the increasing costs of weapon systems and their operating and supporting forces continuously pose new problems for the Secretary of Defense and his assistants and for the military departments. Hence this proposal for an organization of combat and support commands which would, within an over-all unified-service concept, correct the defects and furthermore would—to borrow from the President's message to Congress—"achieve the utmost military efficiency in order to generate maximum power from the resources we have available." It is of course recognized that many of the functional alignments which will be discussed could be developed short of merging the individual military services.



## Combat Commands

**A**NALYSIS of past as well as existing unified command structures leads to certain conclusions if the combat commands are to provide the necessary level of national security with a judicious expenditure of resources:

- The missions and tasks deriving from a single national strategic plan, approved at the highest level, should be the sole basis for the combat command structure.

- All combat forces should be removed from the control of the military departments and assigned within the combat command structure.

- The military departments should be precluded from directly influencing the posture, capabilities, or concept of employment of the combat commands. In other words, they should have no authority to determine weapon or force requirements.

- Service-component commands should ultimately be eliminated from the make-up of combat commands. Subdivisions within combat commands will obviously continue to be needed, but they should be based on function or task and not on service affiliation.

- There should be but a single line of command to and within each combat command. Moreover there should not be any superfluous organizational layers between the major combat commands and the seat of government in Washington.

- The composition and missions of combat commands—and their creation and disestablishment as well—should be redetermined from time to time so that the over-all structure may remain abreast of technology and the changing tasks which an evolving strategy will necessitate. Duplication of missions must, as a general rule, be viewed as an unwarranted luxury. Each instance must be critically evaluated and permitted only on the basis of needed strength in depth.

With missile weapons now beginning to enter the operational inventory in significant numbers, it is more important than ever that the United States reorganize its combat command structure to make it consistent with these guidelines. Functionally-oriented combat commands offer the greatest promise of exploiting the potential of missile weapons. In general, for each major combat function there should be but one major combat command. All forces designed primarily for strategic warfare should be organized into a United States Strategic Command. Forces designed primarily for limited war should be grouped in a U.S. Mobile Strike Command. All U.S. forces designed primarily for the security of the North American power base should be integrated into a Continental U.S. Defense Command.

Not all our military security undertakings can be fitted neatly into a functionally-oriented major command structure. This is particularly the case where Allied military forces must be augmented or where military bases and lines of communication beyond the North American power base must

be continuously protected. In such situations, area commands must be resorted to; but economy of resources demands that any proliferation of area commands be scrupulously avoided. Ultimately there should be only two area commands, an Atlantic Command and a Pacific Command. These commands could be extended to provide contact with all our important allies and coverage of all external bases and lines of communication essential to our defense posture. If necessary, they could be extended until they met somewhere in the Eastern Hemisphere.

It should not be necessary, however, to encircle the earth with area commands. United States national policy is, and should continue to be, to encourage all Free World nations to build and stand on their own military strength against Communist limited-objective aggressions. Where this strength is inadequate to cope with a specific limited-war situation, the functionally-oriented U.S. Mobile Strike Command would provide the needed augmentation.

Moreover the ICBM should diminish the need for United States area commands in a general-war role, including the deterrence of such wars. This prospect portends, in particular, a decreasing role for NATO in the deterrence or fighting of a general war. Eventually the U.S. European Command may diminish to the extent it would be more logical, from an organizational and manpower point of view, to make it a subcommand of the Atlantic Command. The need for United States military commitments in Europe certainly will not disappear overnight. Political considerations can be expected to resist the reduction of these commitments. But as the general-war role of NATO lessens, a point will eventually be reached where the diminished United States military commitments in Europe can be transferred to the Atlantic Command. There is precedent for such an arrangement: United States military participation in SEATO was originally assigned to the Pacific Command and so remains.

Except where contraindicated by alliance commitments, area commands should not duplicate the missions assigned to the functionally-oriented commands. In fact one of their primary missions should be support of the latter. This support should consist, in large part, of providing the security, maintenance, and provisioning of bases and facilities required in their areas by the major functional commands.

There remain certain noncombat DOD responsibilities for which provision must be made. Military missions and MDAP are examples of these functions. These responsibilities would be carried out by the area commands. Where political considerations dictate that they be given a special measure of prestige, this can be done by organizing them into a major subcommand of an area command. For example, the MDAP and military mission functions of the present Caribbean Command could quite properly be organized as a major subcommand of the Atlantic Command. The headquarters for this subcommand could remain in Panama.

It is not possible or desirable to prescribe the internal organization of the proposed combat commands. The peculiarities of their missions must determine this, and the internal organization must be largely the prerogative

of the commander. He must be accountable for following sound managerial practices in establishing the internal organization of his command. He must not shape his organization on subjective factors such as, for example, the personality of an individual subordinate commander or the service affiliation of a subordinate force.

Superimposed on the requirement to exercise sound managerial practice should be the prescription that the internal organization of unified commands avoid service-component structuring to the extent that other determinant factors permit. The de-emphasis of the service component in unified commands can assist materially in transferring personal loyalty from the individual military service to the unified national military establishment.

Actions required and a general timetable to transition from the present unified command structure to that proposed are presented in the accompanying chart.

## Support Commands

**E**STABLISHING a unified support command structure is, first of all, a matter of identifying homogeneous support functions within the present military establishments. Next, the identified functions must be consolidated in appropriate DOD-wide support commands.

The principal problem in making this transition is phasing the transfer of responsibilities from the old to the new organizations. The change-over must be made without even a temporary degradation of our total defense posture.

Research and development and logistics are areas where substantial improvements could be realized through consolidation between the present military services. Since a detailed analysis of the entire problem is beyond the scope of this article, the R&D and logistic functions will be used to illustrate one type of a unified support command structure.

### *Research and Development Command*

In 1949 Executive Order 10072 gave as a major objective of research in the Department of Defense "To obtain maximum performance of the research task at the minimum feasible cost. . . ."

This directive must, of course, be taken in different context from an order to go out and buy a finite item at the lowest available price in the market place. Research is fundamentally wasteful in that not every project succeeds. A shotgun approach must sometimes be taken. But results have always paid off by a tremendous margin in relation to research costs—and always will.

Where money can be saved is in development. Under the present setup each service pushes the development of its particular weapons—land, sea, or air—without relation to the weapon capabilities and development projects of the other services.

# Transition to Proposed Unified Combat Commands

Command	Proposed Action	Phasing		
		short-term	mid-term	long-term
<i>new commands</i>				
U.S. Strategic Command	To be established.	*		
U.S. Mobile Strike Command	To be established.	*		
Continental U.S. Defense Command	To be established. (This will be the U.S. component of a Canadian-U.S. North American Defense Command.)	*		
Atlantic Command	<ol style="list-style-type: none"> <li>1. Strategic warfare functions to be transferred to the Strategic Command.</li> <li>2. Mobile limited-war force mission to be transferred to the Mobile Strike Command.</li> <li>3. Continental U.S. air and missile defense functions to be transferred to Continental U.S. Defense Command.</li> </ol>	*	*	*
Pacific Command	<ol style="list-style-type: none"> <li>1. Strategic warfare functions to be transferred to the Strategic Command.</li> <li>2. Mobile limited-war force mission to be transferred to the Mobile Strike Command.</li> <li>3. Continental U.S. air and missile defense functions to be transferred to Continental U.S. Defense Command.</li> </ol>	*	*	*
<i>effect on present commands</i>				
Strategic Air Command	To be absorbed by the Strategic Command.	*		
Continental Air Defense Command	No change internally. To be assigned as the air and missile defense component of the Continental U.S. Defense Command.	*		
Caribbean Command	To be absorbed by the Atlantic Command.	*		
Alaskan Command	<ol style="list-style-type: none"> <li>1. Air and missile defense functions to be taken over by Continental U.S. Defense Command.</li> <li>2. All other functions to be transferred to the Pacific Command.</li> </ol>	*	*	
Eastern Atlantic and Mediterranean	<ol style="list-style-type: none"> <li>1. Mobile limited-war force mission to be transferred to the Mobile Strike Command.</li> <li>2. All other functions to be transferred to the European Command.</li> </ol>		*	*
European Command	To retain present status for the time being. All functions to be transferred ultimately to the Atlantic Command.			*

Reporting on this wasteful competition, the Stever Report of 20 June 1958 concluded:

There has been an intense research and development rivalry as each of the services has worked hard to establish its future in the air defense, guided missiles, and space fields. In this competitive process, the Defense Department has been unable to limit interservice competition to that essential to most rapid progress. As a result, the roles and missions of the services have become competitive rather than complementary.

The single-service concept offers the only real correction of this deficiency. The remedy has two principal ingredients:

- Have a single agency, a National Military Staff, to determine requirements for the development of new weapons and materiel and for the improvement or discontinuance of current weapons and materiel.
- Consolidate the entire military R&D effort in a single R&D organization, fully coordinated under one commander and free from unnecessary duplication.

The first element of the remedy is discussed in two of the other articles in this series. Only the second element—a unified R&D organization—will be developed here.

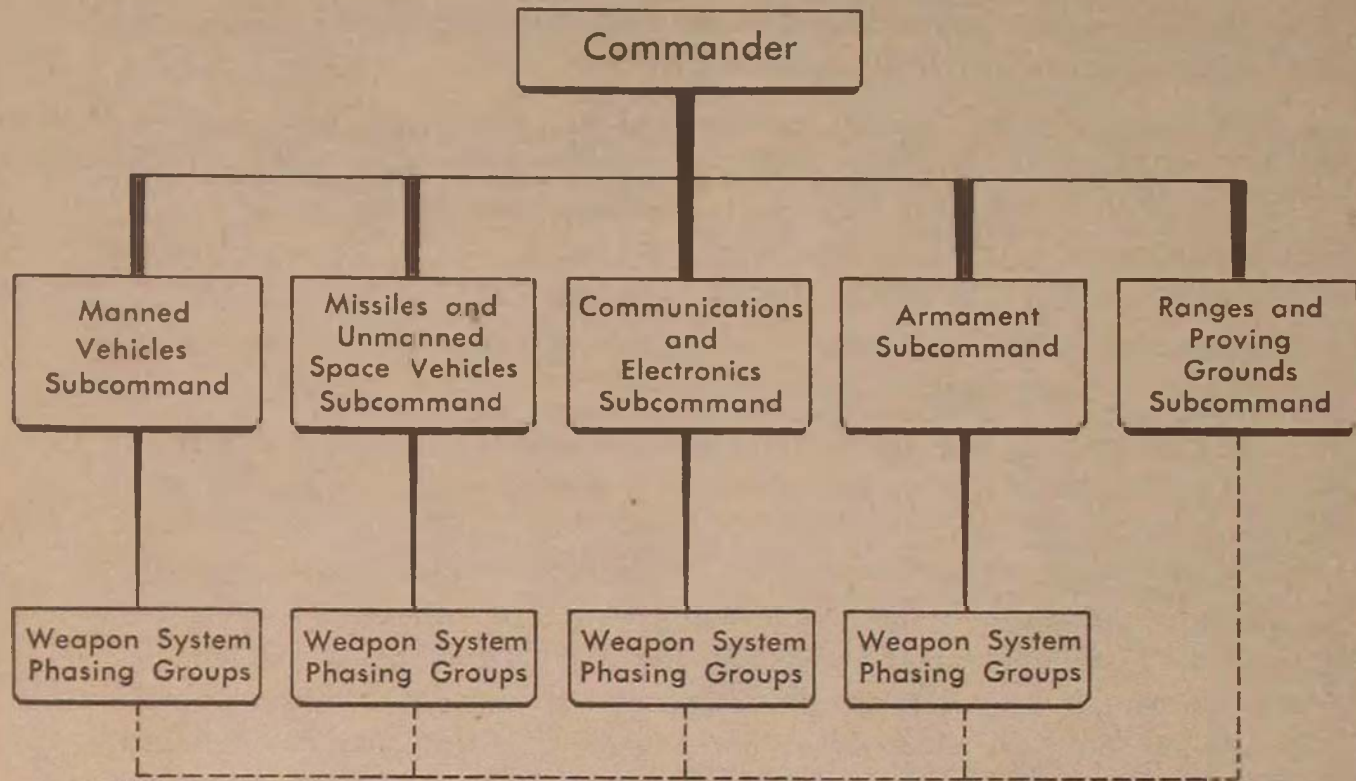
Under a single-service concept all research and development activities of the three present military departments would be merged into a single command. The functions of the Research and Development Command would be to perform research and development activities in accordance with the National Strategic Objectives Plan provided by the National Military Staff. The commander preferably would be a military officer with scientific background. His deputy would be a civilian scientist; he would complement the capabilities of the military commander and promote closer ties between the military and the civilian scientific community.

*Vertical management structure.* The R&D Command would be subdivided into functional subcommands. Each of these subcommands would be commanded by a Deputy Commander, Research and Development Command, for that particular functional area. Specific subcommands might include Manned Vehicles, Missiles and Unmanned Space Vehicles, Communications and Electronics, Armament, and National Ranges.

It is not the present purpose to specify an exact organization but rather to suggest a general organizational structure. The five subcommands advanced in this discussion appear to include the bulk of the research and development work. Probably a number of small areas of research would not fall within these subcommands and must be arbitrarily assigned to one of them with which it has no family ties. This procedure is preferable to establishing a larger number of R&D subcommands and thereby jeopardizing the control and coordination that could be provided by the R&D commander.

- A Deputy Commander for Manned Vehicles would be responsible for R&D throughout the entire spectrum of vehicles operated by human crews—conventional and nuclear-propelled aircraft, surface vessels, submarines, tanks, trucks, and other vehicles, plus their supporting systems.

## Proposed Unified Research and Development Command



At first it might seem that R&D for the manned-vehicles field covers too great an area, with too great a disparity between vehicles for one commander and staff to supervise. Yet it could well be that the nuclear-powered ship and airplane have more research in common in their development than do the submarine and the aircraft carrier. It is important to note that there may be more logical groupings of weapons than by the ones traditional to the three services.

- A Deputy Commander, Missiles and Unmanned Space Vehicles, would conduct R&D in the entire area of missiles and their space environment. In addition to the strategic and tactical offensive missiles, his responsibility would include antimissile missiles, satellite reconnaissance, space flight, and, of course, their supporting systems.

- A Deputy Commander for Communications and Electronics would continue the research now conducted by the three services in the C&E area. In addition to developing communications equipment and techniques, part of his activity would be devoted to supporting the first two deputies named above, by developing penetration aids, such as electronic and infrared countermeasures, to parallel the development of the offensive carriers being undertaken by them.

- A Deputy Commander for Armament would also support the first

two deputies by developing bombs, rockets, and warheads (conventional and nuclear) for their delivery vehicles. This subcommand would also develop small arms, cannons, mines, torpedoes, and other types of weapons required by units of the Department of Defense.

- A Deputy Commander, National Ranges, would manage all the nation's R&D ranges and proving grounds. His subcommand would plan, schedule, and control the use of all ranges. It could perform certain tasks of assembling, processing, collating, and distributing scientific data. Certainly a central clearinghouse for research information would be of value, and this function could well be the assigned responsibility of this R&D subcommand.

To consolidate the efforts of the several subcommands and coordinate their major activities, a positive program must be established. The Air Force has achieved this through its weapon system management concept. It is foreseen that the entire unified R&D activity would function under a similar system modified to fit its particular needs.

*Horizontal management structure.* Once development is embarked upon, a Weapon System Phasing Group (wSPG) would be activated. (This term is used instead of the Air Force term Weapon System Project Office (wSPO) because the functions are somewhat different.) This group would aid in the management of the development of the weapon system for which it was created. While each R&D function would be organized vertically—manned vehicles, communications and electronics, etc.—the wSPG would operate horizontally across the organization chart. It would be the hub of the weapon-system development activity. It would be established by the Deputy Commander, Research and Development Command, for the subcommand having executive responsibility for the development of the particular weapon system. Upon completion of the R&D phase and transfer of the weapon system to the U.S. Logistics Command, the wSPG would also be transferred. As soon as the Weapon System Phasing Group has served its purpose, it would be dissolved.

Obviously not all products would require the establishment of a Weapon System Phasing Group. The majority would be monitored by normal staff actions. Only the large, complex vehicles and their supporting systems would come under the purview of a wSPG. Through this functional organization, aided by wSPG's when required, the R&D requirements of the Department of Defense could be met efficiently and expeditiously.

### *U.S. Logistics Command*

A large part of Department of Defense appropriations is spent each year by the several logistics organizations of the three military departments. It is therefore only natural that the logistics organization—or, rather, organizations—of the national military establishment should be given frequent

and critical attention in an effort to evolve a more economical and possibly more effective logistics system.

The criticisms of the present to-each-his-own logistics concept are too numerous to recount here. There are two basic and recurring ones:

- The present system involves wasteful and unnecessary duplication of personnel, physical plant, administrative facilities, and identical or similar items of equipment and supply.

- Attempts to coordinate the procurement and disposition activities of these various logistics organizations have never achieved more than fleeting success. The logistics agencies often compete for the same goods and services, and occasionally one of them disposes of excess items at salvage prices while another is procuring like new items at original-cost prices.

The unified concept offers a consolidated logistics organization that promises to accrue substantial net gains in effectiveness and economy over the present multiplicity of individual service organizations. The concept proceeds upon several basic principles:

1. The fundamental purpose of any logistics system is to provide the most effective support possible to combat forces.

2. The structure must initially accommodate existing logistics practices of the three services.

3. Designation of certain items of materiel as "peculiar" or "common" is valid, in its broad sense, only so long as the combat commands consist of separate service components. At such time as a true unified combat organization is achieved, these designations—and the present management aspects that go with them—will no longer apply.

The concept of a unified logistics organization envisions an integrated command responsible for all facets of the logistics support task. The size and complexity of such a command are recognized and respected. But the benefits—to the Nation, to the combat command, and to the logistical function itself—derived from this concentration of responsibility would outweigh the difficulties of management.

Development of the unified U.S. Logistics Command begins logically at the user level—the bases, sites, shipyards, etc. Maximum supply, storage, and maintenance would be done at this level, as would most base procurement, communications, and transportation. A Base Support Activity would be operated at each user station to perform the local supply, maintenance, procurement, communications, and transportation requirement. The Base Support Activity would be a component of the user command.

Obviously there is a residual supply, maintenance, procurement, and transportation function that cannot be accomplished in all cases at user level. This aspect of the logistics function would be lodged with an appropriate Logistics Center for each geographical area. These Logistics Centers would consist of the present-day Air Force depots, Navy depots, Army arsenals and depots, etc. These centers would retain specific quantities of materiel identified as buffer stocks for short-range support of the bases. They would provide specialized repair facilities to augment contractor



repair programs. They would also operate as support activities for off-site military facilities (AC&W sites, detached units). Certain of the Logistics Centers would be designated as Disposal Points. The Disposal Points would receive, via automatic shipment, all materiel declared at base level for disposal and would process and dispose of it. The Logistics Centers would, in short, perform the plant-operation segment of logistics support. They take care of warehousing, repair, and disposal as distinguished from the management segment of logistics.

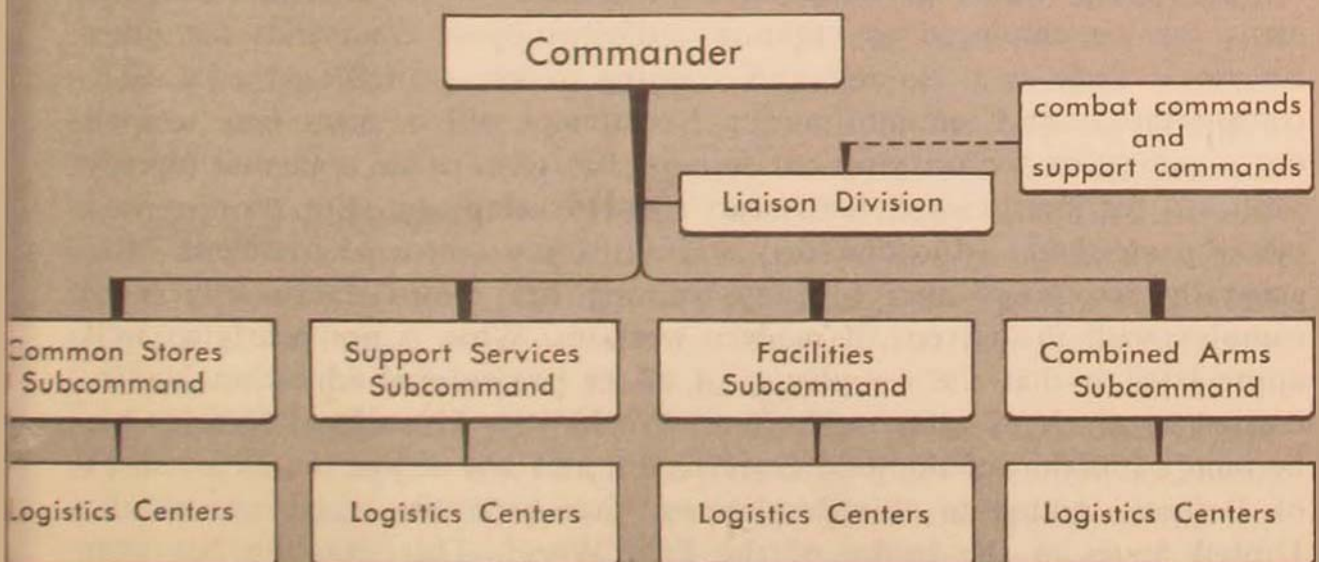
Performance of the management segment of logistics would be at the next higher echelon, the subcommand level. Four major subcommands would be established, identified as Common Stores, Support Services, Facilities, and Combined Arms. These subcommands would operate as semiautonomous organizations. They would be responsible for the determination, acquisition, and distribution phases of the particular resources assigned to them.

Finally, at the apex of the proposed organizational structure, would be the Commander, U.S. Logistics Command, and his headquarters. At this level only two basic functions are to be performed—those of top-level direction and control.

Operating within the headquarters and with direct access to the commander would be a Liaison Division, consisting of representatives of the combat commands and certain of the other support commands. In addition to access to the Logistics Command headquarters, these liaison representatives would be authorized direct communication with subcommands.

Of the several subcommands, the Common Stores Subcommand would be assigned those commodities which for the most part are now operated under the single-manager concept. Clothing, textiles, medical supplies, POL, and subsistence are examples. The Support Services Subcommand would be responsible service-wide for base procurement, base supply, maintenance, and operation of commissaries, photo labs, exchanges, etc. The Facilities

## Proposed Unified Logistics Command



Subcommand would include functions such as real estate, transportation, and communications. Each of these subcommands, for its respective logistics functions, would be responsible service-wide for determining requirements and for acquiring and distributing resources.

*Combined Arms Subcommand.* The fourth logistics subcommand, Combined Arms, frankly offers the major difficulties that may be encountered. The Combined Arms Subcommand involves materiel that is now identified as "peculiar" to one service or another. Logistics, as it involves these items, undoubtedly would be characterized by controversy. This subcommand would be organized on a basis of management by weapon system. While the weapon-system basis stems from present-day weapon management philosophies of the USAF, the implementation contemplated here would go much beyond its current application. The typical weapon system manager would, for example, be a manager in the true sense of the word, with all the elements of managing his weapon system within his control. A manager would live with his weapon system from the start of the development phase until the system reaches a "second-line" status or some similar status in which its support warrants considerably less attention.

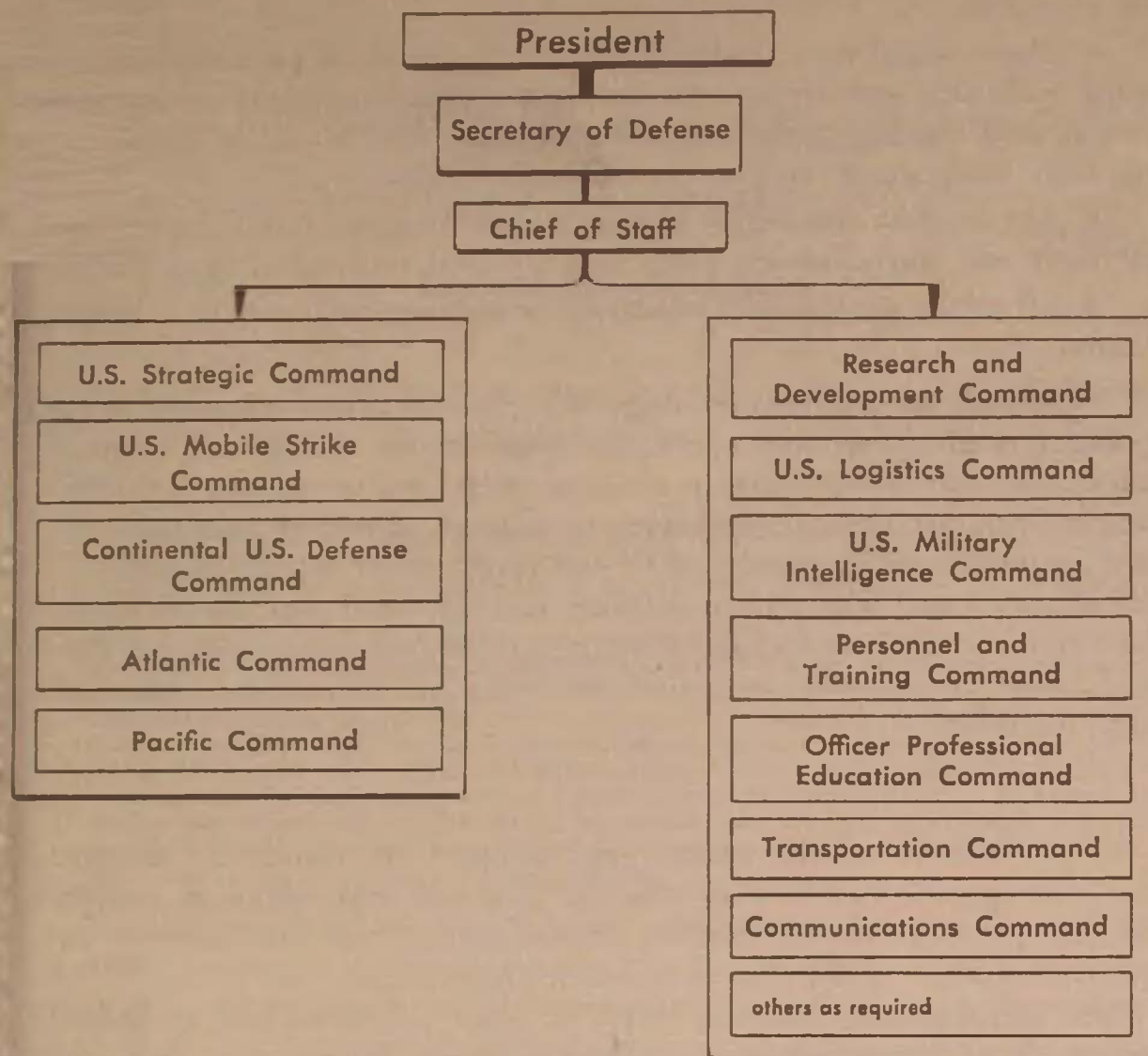
The Combined Arms Subcommand could be organized into an Aeronautical Section, a Ships Section, a Missile Section, and a Ground Equipment Section. Its activities would require closer relationships with the Liaison Division than any of the other subcommands in view of the nature of its business. Only through constant coordination with the Liaison Division could the Combined Arms Subcommand accurately anticipate and translate the needs of the combat commands.

The concept forming the basis for the proposed organization of the U.S. Logistics Command recognizes that effectiveness of logistics support is in direct proportion to effectiveness of working relationships between the supported and the logistics forces. The proposed organization would enable the development and maintenance of such relationships.

#### *other support commands*

Structures similar to those for logistics and for research and development can be employed to organize unified support commands for other functions, such as personnel and training, officer professional education, transportation, and communications. No attempt will be made here to spell out organization for carrying out support functions other than that already proposed for logistics and for research and development. But training and officer professional education may warrant a few words of comment. It is generally recognized that military training has grown enormously more complex with the advent of modern weapons. What is not nearly so well appreciated is that the complexity of officer professional education has increased as much or even more. Since World War II national security has become a function of the total Government and not of just the Department of Defense. Added to this development has been the emergence of the United States as the leader of the Free World. This situation has seen

# Combat and Support Commands under the Unified Concept



commissioned officers increasingly thrust into positions of international and interdepartmental policy planning and directing. In short, commissioned officers are no longer merely tacticians and combat leaders; they are now to be found in the role of diplomat, administrator, economist, scientist, educator, and general manager. The dimensions of the training and professional education tasks facing the Department of Defense have mushroomed accordingly. But that is not all. If our national military establishment is to realize its full potential contribution to the total Governmental function of national security, it must eradicate the selfish and divergent service viewpoints which continue to exist. And the place to start this remedial action is, obviously, in the training and education systems.

Although again no attempt is made here to present an exact organization for this complex task of military training and education, maximum consolidation and coordination of the total effort are clearly called for. This coincides with the central purpose of the single-service concept. Under that concept, the following general scheme of organization is indicated:

- Coordination would be exercised by the National Military Staff.
- All basic military training and all training in individual skills common to land, naval, and aerospace forces would be consolidated in a single command.
- There would be a land-warfare training command, a naval-warfare training command, and an aerospace-warfare training command to conduct individual-skill training peculiar to these types of warfare and to train and equip basic land, naval, and aerospace combat units.
- The combat commands would carry out separate training of the larger land, sea, and aerospace forces and the joint training of these forces.
- All officer professional education would be integrated in a single command.

This scheme of organization suggests a possible future employment of the present military services under the single-service concept. It is quite apparent that they would have to continue their present support functions during the initial stages of transition to a single service. Later many of these functions would be taken over by new single-service support commands. Ultimately, however, the present military services could logically be transformed into the land, naval, and aerospace force training commands. This function may justify their permanent retention but in the lesser status of support commands.

**T**ESTING of the combat and support commands by accepted management principles will show that the proposed organization is soundly based and portends an effectiveness, responsiveness, and utilization of resources far superior to those of the present organization.

Each major support function could be made the mission of a separate organization. However, a single command might be formed with each support function constituting the mission of a subcommand. Alternatively, some functions, such as research and development and logistics, could be made separate support commands, while others would be grouped as subcommands under a common headquarters.

It hardly need be said that the proposed organization represents a wide departure from the present one. If it were to be adopted, many existing units would vanish or change beyond recognition. The great majority of military personnel—and former armed forces personnel, too—cannot contemplate such a possibility without some feeling of reluctance born of cherished association. But in this day of the compressed time factor, military organization is just as susceptible to obsolescence as the weapon and support systems on which it is centered.

During the Congressional hearings on the Reorganization Act of 1958, Senator Symington made a point of asking witnesses how they would organize a national defense establishment today if none now existed and they were starting from scratch. His implication is apparent: Any sentimental or selfish compromise with the past could court national disaster.

# Some Reflections on the General Staff

COLONEL JOHN C. HEALEY

SEVERAL years ago Dr. E. L. Katzenbach, in a lecture at the Naval War College, summed up a strange American political and military phenomenon:

Across the pages of American legislative history there flits a curious Man on Horseback. He is a military man—usually a general and almost never an admiral, incidentally—who sits in the wings waiting to take over the government from the civilians. He has, of course, never existed and yet he is quite as real as if he really had. At various times he has been given various names. At the beginning of our history, he was at times called Julius Caesar; at others, Oliver Cromwell. He lost these identities a few decades later to be reincarnated as Napoleon; in the 1860's he became Napoleon III. And finally, after 1914, the Man on Horseback became a multiheaded monster, to wit, the Prussian General Staff. But despite the fact that this Man on Horseback has always been a foreigner, and therefore, one who has grown up in other surroundings and circumstances, he plays and has played a very real role in the development of civil-military organization in the United States. . . . In any military reorganization which tends to bring the services closer together, this nonexistent personality is important, because he is the man whom many see in the box marked "Chairman, Joint Chiefs of Staff" or "Chief of Military Service."

This description of the Prussian General Staff as a "multiheaded monster" typifies to a large degree the reaction of otherwise rational persons when the subject of an armed forces general staff is raised. Immediately the "scare" or "hate" words start flying, and waves of emotionalism sweep away any chance of calm deliberation. One remembers the cartoonists' caricatures of German general staff officers so popular during the two World Wars and immediately assumes that a general staff must be bad because the Germans had one in both those wars. It is a simple matter then to conclude that the wars were started because of the existence of a general staff and that if there had been no general staff there would have been no war.

This is typical of the sort of red herring produced by opponents of unified staffs. There are many others, invoking other scare words, bugaboos, and incorrect definitions. The most fundamental misconception is the one involving the actual definition of a general staff, which is truly no more than a staff to serve a general officer. The term has come to mean much more, but the more restrictive definition is the correct one.

So we see objections based on relating all general staffs to the infamous Prussian type and on distorted definitions, emotionalism, and what borders on superstition. There are others, of course, such as an allegation that civilian control would be lost or diminished, that one man or one small group of men would have too much power, that a general staff results in narrow or single-track planning, that the military is plotting to take over

the government, that competition between services is desirable and must be retained, that there must not be a system which would prevent free expression of the views of all.

### *top staff the target*

In analyzing objections to the general staff organization, one does well to bear in mind that there is little opposition to a staff as such. After all, Congressional committees have staffs and so do businesses and nearly all organizations which are operated on the principle that one man cannot know everything about everything and must have others to advise and assist him. Hence there is no real objection to a military commander's having a staff. This holds true until the discussion turns to a military commander whose headquarters is, first, the top headquarters and, second, is at the seat of the Government. Then this same staff principle turns into something that must be viewed with suspicion.

The commander of a field army or of a numbered air force may safely have a staff, as may the commander of a major air command or of a comparable army unit. He may call it a general staff or anything else without offending anyone. It may perform at its level the identical functions set forth for a general staff in Washington—on a reduced scale of course—and there will be no hue and cry. But if the same organizational principles are applied in Washington, there is immediate suspicion and the Man on Horseback comes riding down Pennsylvania Avenue.

Obviously, then, the objections are to the level of the staff's authority and to the location in which the staff functions. No one would question that it is proper for a numbered-air-force commander to exercise absolute authority over all the elements of his command or that the Chief of Staff of the Air Force is the single military head of that service. It is inconceivable, for instance, that SAC would operate independently of TAC or ADC. Or that in the Army the Infantry would carry on a private war without being part of a larger whole with the other arms and services.

These principles are taken for granted. Not so the top staff organization to achieve them. On the one hand the leaders of the Nation call for absolute, 100-per-cent teamwork of the military forces, starting at the lowest level and carrying on through the level of total national effort. But the means of realizing this teamwork is another matter, as it has been throughout the entire military history of this country.

### *origin of the military staff*

During the American Revolution, when small groups of minutemen were fighting entirely independent of one another, General Washington called for organization, unity of command, and teamwork. In the Civil War and in other wars which followed, the evolution of the military staff can be traced. Eventually we see the great masses of men and arms that made up the joint task forces of World War II. As the size and complexity

of the forces increased, so did the requirement for proper control. The military staff was the device—one which had begun to take form as early as the fifteenth century, along with the development of professional military forces.

The armies of European countries and of Great Britain developed staff systems along slightly divergent lines, but all embodied the same general principles as far as the purely military functions of the staffs were concerned. In Germany, for example, one can trace the origin of the Prussian General Staff to the year 1635, when Frederick William adopted from the Swiss the idea of having general staff officers to advise and assist commanders in the conduct of war. This staff, in the now familiar sense, first attained prominence in the early 1800's. Between that time and the end of the German Empire in 1918, the German General Staff traveled a road which is entirely incompatible with American thinking. That is why "German General Staff," or even "general staff," now brings forth in this country a vision of something frightening.

It must be remembered that a general staff, of itself, is not bad—it is a "German General Staff" that we want to avoid. The German system evolved as it did because of a number of national characteristics that are completely contrary to those in this country. For example, the German officer was always considered to be in an elite class, and the general staff officer was the cream of this elite. One was born into such a career, and it is significant that members of the most prominent families normally chose the profession of arms as the one in which to best achieve their social aims. Prestige and pride of station were factors, as was the fact that these "chosen ones," as they were wont to consider themselves, believed that they alone were competent to lead Germany. They only tolerated others.

With such an attitude it is not surprising that civilian control—one of our most cherished principles—was repugnant to the German General Staff. They felt that they were far above such meddling, and they were able to act in this manner because the bulk of the German people agreed with them or at least acquiesced. As Mirabeau remarked in 1788: "Prussia is not a country which has an army; it is an army which has a country."

Germany was characterized by an overpowering spirit of militarism and an exaltation of the profession of arms. The nation's military adventures were led by the professional militarists but were made possible only by the willingness of the people themselves to support these leaders.

#### *civilian control over a U.S. General Staff*

Contrast the German situation with the one that has existed in the United States from this nation's earliest days. The basic safeguard is the people themselves and their national character. They made sure, at the very beginning, that there were clearly defined Constitutional safeguards, such as those which give Congress the responsibility "to provide for the common defense" and to "make rules for the government and regulation of the land and naval forces." There are civilian Secretaries above the most

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senior military men, and the President above them. Congress controls the budget, and senior appointments are made by the President "with the advice and consent of the Senate."

It was found necessary in this country, as in others, to develop the staff system for the greatest efficiency of military forces. But from the start the staff system met with opposition, if for no other reason than resistance to change.

Elihu Root, while Secretary of War, recognized in his first annual report for 1899 that "the real object of having an army was to prepare for war" and went on from there to take the first steps toward creation of a general staff. He called for a systematic study of plans to be followed under all contingencies of possible conflict, preparation of material of war, introduction of field maneuvers, establishment of an Army War College, and a detailed plan for staff duty. In 1902 he proposed legislation that would create a General Staff. The proposal met with internal opposition, as is the case today in unification proposals. General Nelson Miles said the bill would "revolutionize our system of administration, and take from the commanders of the army and the departments, divisions and brigades the proper control of military affairs." In other words, it would consolidate and integrate diverse units into one army, instead of allowing perpetuation of the local autonomy then in style. In spite of this and other opposition, the bill passed and became law on 14 February 1903. It again emphasized the principle of civilian control by creating a Chief of Staff to the President. The main objective then was the consolidation and integration under one head of the military forces (excluding naval) as they existed at that time, and the provision of a proper staff to assist that one head.

Today's situation is only slightly different. Again it is suggested that the military forces be brought together under one chief of staff and that he be given an adequate staff.

### *unification today*

It is doubtful if anyone now would suggest that it was a mistake to consolidate the separate corps and bureaus of 1903 into one army or that the action should be reversed. Should the Corps of Engineers and the Infantry fight wars separately? Should the Marines act independently of the Navy, or naval aviation independently of surface forces? The obvious answer is that they should not. So if air, ground, and sea forces ought to be combined in the Navy, why should they not be combined nationally?

It has been generally conceded that it is logical to have the Air Force's fighters, bombers, interceptors, and other units under one chief of staff; that the infantry, artillery, and armor are properly members of one team; and that the surface ships, submarines, naval aviation, and marines belong together under a single chief. This system operated fairly well up to the time of World War II. Then it became apparent that all elements had to be welded into a single force for the proper conduct of modern war. The concepts of the task force and of joint and combined operations

followed. The war was won by great masses of men and arms, from various services, operating jointly and combined.

Before us is the next step. It can only be further unification. Taking the step is necessary because the kind of war we would fight and the nature of the weapons are already apparent. Any war of the future will be total war, requiring total effort from the most perfect team we can weld of the various elements that make up our national power. The preparation of that team must begin at once, for we will not have time to do so after war has begun. There will be no period of grace for us, as has been the case in previous wars. Whatever we intend to fight with must be established and perfected now.

### *objections and answers*

Let us consider some specific objections to the general staff system which have been voiced from time to time.

*Charge: single staff = Prussian General Staff.* Congressman Paul J. Kilday (Dem., Texas), speaking before the House Committee on Armed Services, said that "every time you enlarge that General Staff and you give it additional statutory power, you are heading inevitably nearer and nearer to the Prussian staff concept." General Nathan F. Twining answered this viewpoint in the hearings before the Committee on Armed Services, House of Representatives, April–May 1959:

Those who oppose the concept of greater unification in the United States Defense Establishment argue that a single military staff designed to coordinate the activities of all United States armed services, would create in the United States a counterpart of the notorious German General Staff of World War I and World War II. This, the argumentation continues, is patently evil because German aggression in those wars was the inevitable result of German militarism, and German militarism in turn was the result of the predominance of the single German General Staff which, by establishing control over all the armed services, was able to lead Germany down the road to military dictatorship and ruinous war. . . .

These assertions regarding the evils and dangers of a single General Staff of the Prussian or German variety are based upon a fundamental historical inaccuracy.

Germany did not have a single General Staff for her armed services in World War I. The German Army and the German Navy were completely independent, and no staff existed to coordinate their efforts. It was to a large extent due to the failure of Germany to coordinate its Army and Navy efforts that Germany failed to achieve a quick victory in World War I. . . .

The historical evidence is clear that there was in Germany no pretense toward unified staff control of the three armed services during either World War I or World War II. The Germans never established a unified command structure at any echelon below Hitler and his personal staff advisors. Whatever coordination of effort was accomplished amongst the services was due to the initiative of individual German officers. I would like to read a quote from General Zimmerman of the German Army:

"It is a matter of irony that Eisenhower, the servant of the great democracies, was given full powers of command over an armed force consisting of all three services. With us, living under a dictatorship where unity of command might have been taken for granted, each of the services fought its own battle. Neither Rundstedt nor Rommel, try though they might, succeeded in changing this state of affairs in creating a unified command. The result was that the German Army fought singlehanded against all the armed forces of the Allies."

. . . As to the danger which a general staff system poses to national civilian institutions of government, it should be pointed out that far from the German General Staff taking over the German Government prior to World War II, it was Hitler who took over the German General Staff and the German Army.

*Charge: single service means no military debate.* Drs. Gordon A. Craig

and Richard D. Challener, writing in the *Marine Corps Gazette* of September 1959, claim that an enlarged and unified staff would discourage the expression of service views contrary to unified staff doctrine and thus Congress would be cut off from a vital source of information. This certainly has not been true in the past—it was the Marines themselves who took to Congress and to the people their opposition to cuts in their own strength. Furthermore Congress has specified that service chiefs can express their opposing views if they wish. The same authority could be granted to chiefs of forces within a unified service if Congress so desired.

*Charge: single service means undue military influence on politics.* The same writers argue that it "would be increasingly difficult to resist staff advice in political questions and, in times of national crisis or disaster, there would always be a tendency to allow arguments of military expediency to receive undue weight." It is not made clear why advice would be asked, given, or accepted in political questions; however, it is assumed that a military leader would be expected to suggest matters of military expediency in times of crisis. That is one of the things he would be paid to do. Also it is not clear why one more step in unification would suddenly create this danger when all past steps have not even foreshadowed it. The general staff in this country has been enlarged and given more authority and reorganized on several occasions, but it has never resembled the Prussian staff. One major reason is that it has never become involved in political considerations. There is no likelihood of its doing so in a nation where political matters are so completely the concern of the legislative branch of the Government and of the President and his foreign-policy advisers.

*Charge: single service means merely one strategic concept.* The opponents of unification sometimes raise the question: Can this nation afford to place its reliance upon a single strategic concept or doctrine?—Would it not be fatal to rely on a strategy which does not provide for alternative courses of action, which is not continuously subject to basic criticism, and which is not guided by awareness of the fact that one can never perfectly predict the future course of international relations? The strategy of a great nation cannot be improvised from day to day. It is essential that a comprehensive and coherent doctrine be devised. This is not to say that such a doctrine is a one-way street, but rather that it establishes a clear goal. There still are numerous alternative routes to follow to reach it. There must be plans, based on the national interest and founded upon realistic appraisal of the national capabilities and the basic elements of policy. A functioning general staff would establish such doctrine and such plans. That is what a general staff is for: to consider every eventuality and to devise the means of meeting each one.

*Charge: single service not fitted to peacetime.* The report of the Committee on Armed Services of the House of Representatives on the hearings on the Department of Defense Reorganization Act of 1958 makes the point that a general staff is desirable on the field of battle but not in planning at the top levels of government, where "a deliberate decision is infinitely

preferable to a bad decision." Presumably the "bad decision" would have been the result of haste. The report suggested that alternative courses of action are always suppressed on a general staff, so that the man at the top has only to approve or disapprove one plan presented to him, but not to weigh alternatives.

This thought is based on a fallacy. Proper staff work always presents all aspects of a problem to a commander for his consideration. Admittedly a solution is proposed; but it would be an amazing situation to find a commander who always accepted the proposed solution, and certainly a staff would not suppress or ignore alternative courses of action. The more apt comparison is that under the present system, because the Joint Chiefs are unable to come to joint decisions, the final decisions are made not by a military man but by the Secretary of Defense, based on the recommendations of the Joint Chiefs and taking into consideration all dissenting opinions. Unification would simply return the making of military decisions to a military officer.

*Charge: single service is a phony cure-all.* A senior military officer, in a speech before the National Press Club in January 1958, stated that "... this pressure toward reorganization is an illogical reaction to our not having an operational ballistic missile or satellite in the sky." In actuality the reorganization or improvement effort has been going on as long as we have had military forces. It is the stark facts of today's military threat which make reorganization so vital today. It was the rise of the popular, democratic mass army, plus the technology making possible its mobilization, supply, deployment, and maneuver with a total outpouring of national energies, which presented the problem of how to control such huge forces, how to command them, and most of all how to relate them to the political and social ends of the state. It is these ends which the forces were supposed to serve, according to Walter Millis in his preface to *History of the German General Staff* by Walter Goerlitz.

Millis supports the view that no one man is sufficiently wise to personally direct such a vast organization. The point is that that is the precise reason for a general staff. Since individual genius is not enough to direct these new forms of military action it became apparent, says Millis, that something else would have to be developed to meet the growing problem of generalship in a modern technological state. "The inevitable answer—in war as in commerce, industry or civil public administration—was system, organization and specialized training." That answer was embodied originally in the German General Staff and later in the general staff systems adopted in other countries.

Obviously then, the proper course is to take from the experience of the German General Staff those features which are considered desirable and to reject those which have been shown to be evil. This is precisely what has been done in this country so far. The organizational advantages, the opportunity for fully coordinated planning, the means of development of appropriate strategic doctrine are or would be retained. Rejected are the

political ventures which the Germans found fitted their national character, the caste system, the deviation from civilian control.

AFTER full examination of the facts and consideration of the opinions of those who favor or oppose a general staff system for the United States military forces, it can only be concluded that "the history of the Prussian general staff—the factual record rather than the fiction—does not supply cogent arguments against an integrated military establishment under democratic controls."\*

To make such a system work, we should have, as General Twining has said, a strategic staff; that is, a staff capable of doing national strategic planning and providing national strategic direction for global combat operations. Such a staff is an armed forces general staff.

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\*Alexander Marwald (a pseudonym), *Orbis*, Vol. III, No. 1, Spring 1959.

# A Survey of Selected Reorganizational Proposals

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A SURVEY of the ever-increasing literature on national defense organization suggests that many students of national defense affairs consider a reorganization of the national defense organization both essential and inevitable. The bulk of discussion in published articles, with some noteworthy exceptions, has been in favor of varying degrees of unification or integration.

Among the divergent propositions and suggestions, there is at one end of the organizational spectrum the full single-service and single-uniform concept. At the other end are proposals for some significant modifications or minor structural changes.

The organizational plans so far surveyed can be grouped into five categories. The list of such proposals is by no means exhaustive, and overlapping at certain points is unavoidable. The reader may observe some of the common denominators shared by these representative plans.

- Category I covers the proposals aimed at total integration of the services, with one uniform.

- Category II includes proposals looking toward the revision of legislation as a primary step in acquiring appropriate legal authority to reorganize and streamline the Department of Defense.

- Category III proposals seek to strengthen the existing defense structure by means of (a) retaining all services and bringing about improvement or (b) minimizing the three services, or (c) centralizing power and authority, or (d) redefining functions for the separate services.

- Category IV proposals concern changes within the Office of the Secretary of Defense organization, stressing either the continuation or elimination of the Joint Chiefs of Staff, or introducing something unique.

- Category V proposals emphasize groupment of functions or major tasks to meet the urgent needs of national security policy and planning.

Under each of the five categories, several representative plans or recommendations will be mentioned. It is beyond the scope of this article

to delve into the merits or flaws of each proposal. Limited space will not permit the citation of unclassified references to source materials.

*category I—proposals for a single service*

Former Secretary of the Air Force Thomas K. Finletter offered one "full treatment" proposal and concluded that there is no alternative to an ultimate single-service solution. In 1956 he pressed for unification and recommended one armed service, all in one uniform, with a single chief of staff and an armed forces general staff.

In the same year Major Margaret V. Berry listed some objections raised to any radical changes and discredited the unfounded fear of the "man on horseback." In her article she proposed an armed forces chief of staff, a general staff, single service, single uniform, and free transfer of personnel between the branches of a functional-command type of organization. In essence her argument centered around two considerations: first, basic loyalty of military personnel in one uniform to the national interest would not lower morale; and, second, under the leadership of a President of vast military wisdom and experience, the time is now ripe for realization of a single-service—single-uniform concept.

Peter J. Schenk, former president of the Air Force Association, has advocated "a single promotion list for all services, a single Chief of Staff, or a single military service."

Lt. General Elwood R. Quesada, USAF, Ret., believes that the only way to a proper solution of the Department of Defense is "to abolish, once and for all, the three services, and to combine them into a single service, having one uniform, commanded by a single Chief of Staff reporting to the Secretary of Defense and the President." He also suggested that an armed forces general staff should wear a national uniform, leaving behind their former service uniforms.

Colonel Matthew C. Mautz, U.S. Army, in his research study, has proposed a single service and a single military chief. Under the Secretary of Defense, he has envisioned an Armed Forces Chief of Staff, assisted by an Armed Forces Staff and a Vice Chief of Staff, the latter as director of various operations. He would create five Deputy Chiefs of Staff for Operations, Manpower, Comptroller, Strategy, and Weapon Systems. In his military organization there will not be three or four armed services. All elements are placed under two major forces: Combat Force and Support Force.

*category II—legislative revision*

To effect some kind of reorganization of the military structure, some proponents of unification have deemed it necessary to initiate significant statutory changes to achieve greater effectiveness and quicker decision-making. This group aims at effecting changes in the basic law and acquiring appropriate legal authority to clarify roles and missions and to energize



functions. In its view the development of new weapon systems and new strategic concepts, together with a decade's operating experience by DOD, has necessitated statutory changes and further clarification and interpretation of roles and missions of the armed services.

Discussions have centered around the point that although the Reorganization Act of 1958 was enacted to correct some of the most immediate problems, it did not go far enough in solving certain inherent weaknesses. For example, former Secretary of Defense Charles E. Wilson determinedly opposed any changes in the "unification" laws and had a particular distaste for a centralized procurement agency for common suppliers. He called the proposed unified purchasing procedure "concentration of stupidity."

Colonel William R. Kintner, author of *Forging a New Sword*, has pinpointed the trouble spot:

The Congress has been slow to recognize that its considerations of military policy and of the defense budget might be made easier if it approved a different organizational pattern for the Armed Forces. Having legislatively sired an organization which is organically incapable of functioning properly, Congress does not hesitate to criticize its deficiencies but it has ignored its own responsibility for the bastardized Department of Defense. This situation does not spring from any inattention to the problem or lack of effort on the part of Congress, but rather from certain basic factors in Congressional thinking.

The "unofficial" Army Staff Paper, excerpts of which were published by the *New York Times* on 24 June 1956, charged that the "unification" of the armed services at the Secretary of Defense level has failed deplorably. Then it went on to present some concrete recommendations toward accomplishing a specific national strategy and a more efficient military establishment.

Mention should be made in this connection of former Secretary of Defense Robert A. Lovett's proposals to correct some defects in DOD either through administrative procedures or by statutory enactments. His recommendations as to legislative amendment were fourfold: (1) to correct the vague legal interpretation of the position of the Secretary of Defense in relation to the JCS; (2) to make the Secretary of Defense a Deputy Commander in Chief with power to make decisions, to be responsible for establishing unified commands, and to eliminate wasteful duplications among the services; (3) to place directly under the Secretary of Defense a military staff which would devote full time to primary military responsibilities without being burdened by administrative and policy matters; and (4) to avoid the possibility of the Chairman of the JCS playing the part of a supreme commander.

Other similar suggestions, rightly belonging to this category though not mentioned here, consider that any progressive improvement in our defense establishment relies primarily upon the initiation of readjusted administrative procedures and more effective statutory amendments.

### *category III—strengthening present defense organization*

The chief objective of this third category coincides with that of the second. Yet it goes a step further in identifying certain areas in which specific changes would be critically needed. Under this general category there

are several divergent proposals. One group of proponents believes in achieving some coordination between the armed services. Another group inclines to minimize the triservice system.

*Those whose plan emphasizes coordination between the services:*

The Collins Plan (General J. Lawton Collins, U.S. Army, Ret.)

Colonel John Dibble, Jr., U.S. Army

The Eberstadt-Navy Plan (Ferdinand Eberstadt)

Lt. General James M. Gavin, U.S. Army, Ret.

Lt. Colonel Edward L. Katzenbach, Jr., USMCR

Henry A. Kissinger

Lt. Colonel Richard M. Lee, U.S. Army

The McNarney Plan (General Joseph T. McNarney, USAF, Ret.)

Colonel Raymond M. Neal, AFRES

The Richardson Committee Plan (headed by Admiral J. O. Richardson)

Thomas-Hill-Austin Bill (S. 2044)

Colonel Albert P. Sights, Jr., USAF

*Those whose plan minimizes the triservice system:*

W. Barton Leach, Director of Harvard Defense Studies Program, has stressed the functional organization of the Department of Defense. In his organizational chart four functional divisions are given more prominence than the three armed services: Atomic Deterrent, Continental Defense, Mobile Strike, and Antisubmarine.

Colonel Reesor M. Lawrence, USAF, has preferred to put under the JCS and Joint Staff such organizations as Land Staff, Sea Staff, Air Staff, Ballistic Missile Staff, Space Staff, and as many combat commands as the national defense may require.

Having in mind the necessity of creating a force structure attuned to the technological developments of this aerospace age, Major Samuel W. Rouch, USAF, has suggested in his research study the replacement of the JCS by a Senior Military Advisory Group. The institution of a Senior Military Advisory Group has also been advocated by Lt. General James M. Gavin, U.S. Army, Ret. Aside from some joint commands to be established, General Gavin has seen the necessity of creating a Chief of Military Operations to provide centralized control and coordination to the over-all military effort.

Colonel Albert P. Sights, Jr., writing in the *Air University Quarterly Review*, has proposed a staff organization that would fulfill the requirements of the "Chief of Military Operations." To him the present arrangement of combat commands under the direct or "executive agent" control of the triservice chiefs, who are in turn supervised by a nonmilitary Secretary of Defense, is a contradiction of the basic principles of line and

staff organization. He has emphasized the importance of consolidating diverse combat elements into five major combat commands.

*category IV—changes within the Department of Defense*

Proponents belonging to this general category have attempted to cope with some vital organizational issues within the Department of Defense. The solutions are not easy but at least there are some common denominators in the form of areas of concern: decision-making process, roles and missions, command and control (combined, unified, or specified commands, and other major combat and support elements of the services), and organization (with various shades of structural changes possible, in addition to what may be covered under command and control).

In these areas, studies have been made to recommend corrective measures. Notably the Rockefeller Committee, the Hoover Commission, and other groups have delved into defense problems and published their recommendations. Most of the proposals contain similar features. The establishment of a single commander of the armed forces, while retaining the three separate services, was supported by the Richardson Committee, the Collins Plan, and Dr. Vannevar Bush. Subscribers to a single service included the Richardson Committee, McNarney Plan, Collins Plan, Thomas-Hill-Austin Bill, and Rockefeller Committee. The latter recommended a "Department of the Armed Forces." Among the ardent advocates of a general staff or a single chief of staff, mention should be made of Generals Omar N. Bradley, Carl Spaatz, Elwood R. Quesada, and James M. Gavin, and Colonels John Dibble, Jr., Seymour I. Gilman, Richard M. Lee, and Albert P. Sights, Jr. The "unofficial" Army Staff Paper, cited before, proposed a single Chief of Staff to be appointed by the President to replace the JCS.

Of significance has been the proposal to create a functional "fourth service" within the defense structure. In some plans this fourth service was to handle missiles and rockets. In others a "fourth arm" was proposed to manage supply and services of common user-type items. The organization of a support service has also been given some attention.

*category V—groupment of functions or tasks*

Organization or reorganization, it has been pointed out, does not determine the tasks of war. Rather, tasks or functions dictate the need for reorganization. For various reasons the present military establishment is considered unable to serve its ultimate purpose. One reason is that in long-range defense planning there has been negligence in creating subdivisions based on functional areas of responsibility. Those who would regroup according to tasks consider the traditional land, sea, and air division of responsibility as a legacy from the past which today is artificial and tends to obscure the developing situation. The existence of new functions is directly attributable to advancing technology and new weaponry.

Proposed functional subdivisions (some including geographical subdivisions) of the broader responsibilities for conducting land, sea, air, and other warfare can be outlined with their respective proponents:

Senator Stuart Symington

- a. Retaliatory forces
- b. Defense forces
- c. Limited-war forces
- d. Logistic forces

Congressman E. P. Scrivner

- a. Strategic Command
- b. Tactical Command
- c. Defense Command

Colonel Seymour I. Gilman

- |                        |   |                |
|------------------------|---|----------------|
| a. Air Defense Command | } | Support Forces |
| b. Assault Command     |   |                |
| c. Logistic Command    |   |                |
| d. Deterrent Force     | } | Combat Forces  |
| e. Unified Commands    |   |                |

Lt. General James M. Gavin

- a. Home Defense Forces
  - (1) Air Defense Command
  - (2) Land Defense Command
  - (3) Civil Defense Command
- b. Short-Range Striking Forces
- c. Long-Range Striking Forces (SAC, Strategic Army Corps, Naval and Marine forces)

(Note: His three tactical theaters include the defense of Asia, Europe-Africa, and America.)

Colonels Albert P. Sights, Jr., and Richard M. Lee

- a. Strategic Atomic Command—Air Force
- b. Continental Defense Command—Air Force
- c. Atlantic Defense Command—Navy
- d. Pacific Defense Command—Navy
- e. Strategic Reserve Command—Army

Colonel Sights relates these five task commands to four basic tasks of national defense:

- (1) nuclear deterrence
- (2) continental defense
- (3) peripheral defense
- (4) strategic reserve

Colonel Reesor M. Lawrence

- a. Land Staff
- b. Sea Staff
- c. Air Staff
- d. Ballistic Missile Staff
- e. Space Staff

Colonel John Dibble, Jr.

- a. Strategic Command
- b. Peripheral Tactical Command (Atlantic and Pacific)
- c. American Defense Command

Colonel Raymond M. Neal

- a. Combat (Offensive-Defense) Force
- b. Warning and Reconnaissance Force
- c. Support Force
- d. Research and Development Force
- e. Theater Force

Henry A. Kissinger

- a. Strategic Force
- b. Tactical Force

W. Barton Leach

- a. Atomic Deterrent Force
- b. Continental Defense Force
- c. Mobile Strike Force
- d. Antisubmarine Force

THIS survey of proposed plans for a better defense organization has yielded some salient impressions:

- World conditions demand that the United States maintain a strong national security organization. To this end, new weaponry and technological breakthroughs require a change of the entire balance of the armed forces.

- The concept of a national defense organization must satisfy certain criteria; in particular, it must correct current weaknesses and duplication of efforts and be based on sound organizational principles.

- Continuation of the separate armed services, with consequent inter-service rivalries, waste, duplication, and enormous military budgets, presents weighty problems needing workable and acceptable solutions.

- The integration of the armed services at the combat and operational levels is much more complicated than we expected and will take time to work out.

- The objections to a single service would be fierce and partisan, the obstacles enormous but not insurmountable. Devotion to tradition and fear of displacement or change are stout barriers to complete integration.

- Service attitudes, as pointed out a decade ago, perhaps still reflect "a Navy reluctance, an over-ardent Army, a somewhat exuberant Air Force." (Congress, House of Representatives, "Unification and Strategy," 1 March 1950, p. 42.)

There is no obvious reason why the single-service concept could not in time provide more protective power and united strength for our national defense where the present defense structure has shown some weaknesses. To

develop a sound and long-range defense program around tasks, not around individual service or uniform, seems to be an approach in the right direction. Functional reorganization of the armed services, which has the virtue of originality and farsightedness, deserves due consideration. This summary of various organizational proposals so far surveyed has attempted to show both ends of the organizational spectrum.

Those who will exercise the power of decision as to the final shape of our defense structure might do well to remember a remark by the late Secretary of Defense James Forrestal: "The best organization chart in the world is unsound if the men who have to make it work do not believe in it."

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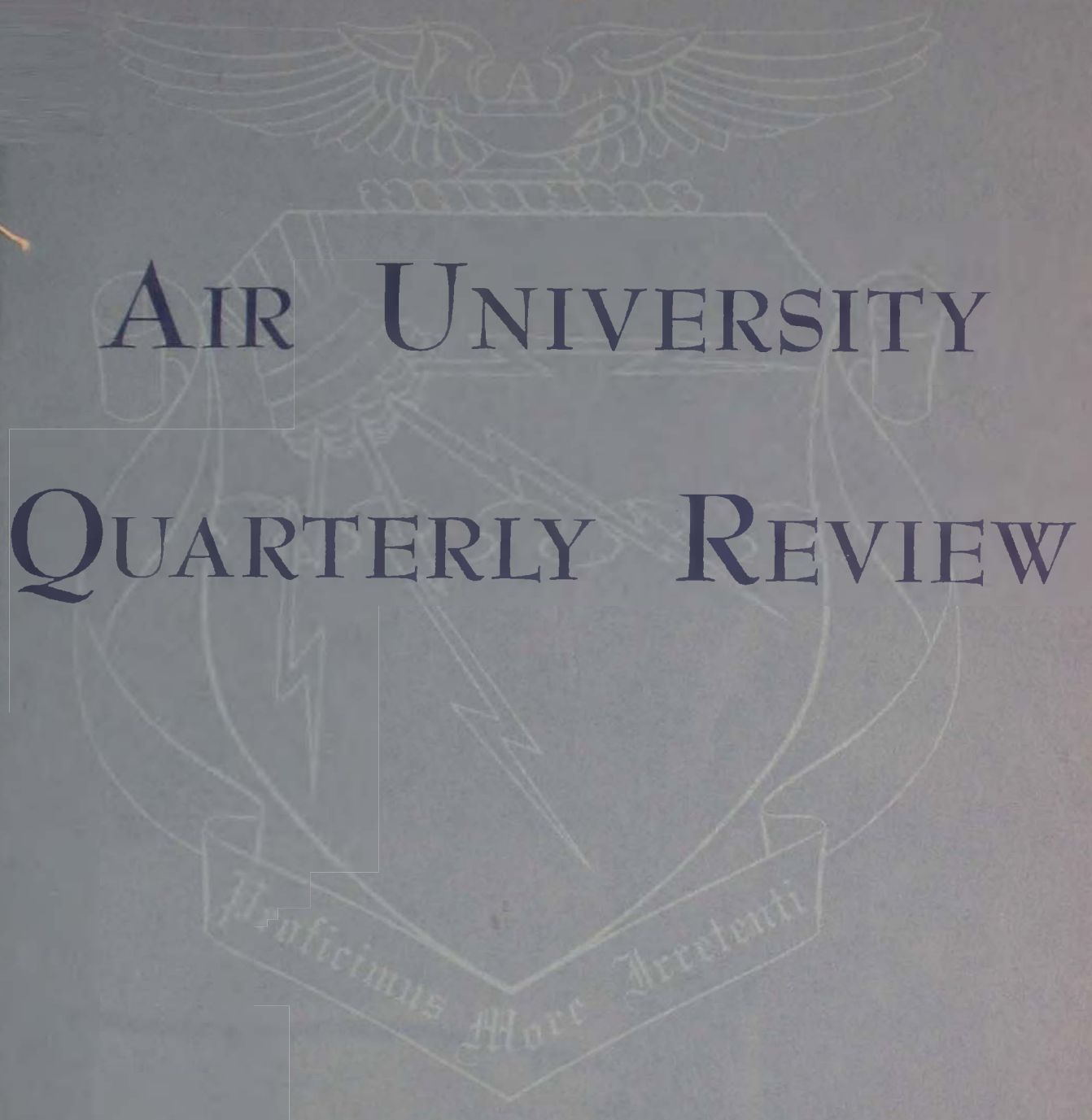
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