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NUCLEAR WEAPONS AND CHANGING STRATEGIC
OUTLOOKS

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P-811 *XX*

February 27, 1956

Approved for OTS release

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NOTE

The following is a composite of two lectures, one given at the Naval War College on February 6, 1956, and the other at the Army War College on February 20, 1956.

The Army War College lecture was given under the title indicated on this paper, and the Naval War College under the title: "The Influence of Mass Destruction Weapons on Strategy."

The two lectures were not identical but very similar, and the following composite contains practically all the substantive matter of both, with editorial modifications and some additions. Omitted are the introductory pleasantries, which were in each case appropriate to the institution and the circumstances under which the lecture was delivered.

Published in the February, 1957 issue of the Bulletin of the Atomic Scientists.

Almost everyone agrees that armaments are generally unpleasant to support, and that the wars in which they are used are always great evils and sometimes disasters. But our basic problem arises from the fact that we have so far discovered no substitute for force in the governance of international affairs, and we seem not to be on the way of developing one. It has been customary in the past to blame that unhappy fact on the absence of a world government; but in view of the ethnic and other divisions among mankind, and the conflicts of interest and purposes among the various groups, it is difficult to imagine a world government strong enough to prevent wars among its members unless it disposes of a very considerable amount of force -- and often uses it in the process. Anyway, there is no reason to suppose that we are going to get that kind of world government soon enough to solve any of our existing difficulties in maintaining peace and order.

That basic problem is greatly accentuated by the fact that we now have nuclear weapons to contend with, including thermonuclear ones or H-bombs. We can immediately stake out another area of almost universal agreement by stating that if these weapons are used in some future war in a relatively unrestricted manner, especially in an interchange of what we

usually call strategic bombing, then the evil and the disaster associated with war in the past would be so many times multiplied as to reach totally unprecedented and unimaginable levels. There is in this country some difference of opinion as to whether such a war would be the worst of all possible evils or only the second worst -- second, that is, to defeat or total submission without war -- and some, like Mr. Elmer Davis, consider the question important enough to be worth writing a book about. I personally do not find the question interesting, partly because I suspect its importance is exaggerated. I hope shortly to make clear why I think so.

To say that war has now become "impossible" is, however, to deny the evidence of what is going on today in Algeria and on the frontiers of Israel, and of what seems to be going on somewhere at some level of magnitude or intensity at practically all times. It is to suppose also that the status quo can in some mysterious fashion be crystalized for all time, or that it can be appropriately modified whenever necessary without appeals to force, either latent or in action. Certainly it is clear that a deliberate move to change an existing situation in important ways usually occurs only in response to strong pressures, which tend also to provoke comparable counter-pressures. And by "important ways" we mean especially such things as frontier changes, or changes in the dependency status of some national group.

It is true that over the past half-century some frontier

changes have been made peaceably, and that the political status of some peoples has been altered without bloodshed, at least without concurrent or, very recent bloodshed. But during the same period other frontier changes and alterations of political status have occurred only after the shedding of very large amount of blood. There is no present reason to assume that for the future the former pattern will prevail to the complete exclusion of the latter. Obviously, what Professor Harold D. Lasswell has called the "critical level of exacerbation" between states has been raised enormously since 1914, at least among the major powers, and nuclear weapons have no doubt greatly contributed to that rise. A world in which major wars could be provoked or precipitated by national insults, especially by subtle ones like the famous Bismarck telegram of 1870, looks fantastically remote.

But this very fact may encourage one side or the other to fish in troubled waters -- on the assumption that it is not running much risk in doing so. That is especially true when one side comprises the leadership of the Soviet empire, with its doctrinal compulsion always to see how far it can go.

If we admit the relevance of the above remarks and put them together, it would seem to follow that we must be at least as interested in seeking to control or limit war as we have habitually been in seeking to avoid it altogether. We should perhaps be especially suspicious of schemes that seek to accomplish complete avoidance of war through sacrificing

at the outset any hopes of limiting whatever significant hostilities may break out -- schemes, for example, that seek to rest everything on total "deterrence."

Everyone remembers the famous remark of Clemenceau that "war is too important to be left to the generals." War has long been something that involved the whole nation deeply and often desperately, and its proper governance with respect to fundamentals has always been the responsibility of the political leaders of the state -- as Clausewitz, himself a general, so earnestly stressed.

But because of the new weapons the political and social context is now of much more immediate and direct influence upon military affairs than it used to be. Perhaps the single most important proposition one could make about the influence upon strategy of nuclear weapons is that they force one to shift from preoccupation with a purely military context -- which was always too narrow, but for certain purposes useful in the past -- to a wider one that is primarily political and social. For over a century the better writers on strategy have been more or less aware of the fact that "war is a continuation of policy," but even so distinguished a member of that guild as Mahan could legitimately write of naval strategy as though it existed in a separate realm of being. Foch and Douhet were clearly less successful in attempting to consider their own respective branches of land and air strategy in comparable isolation. But the important thing

today is that no one of any intellectual stature would even attempt it. The question of how one fights can never again be separated from the question of what the war is about.

This change greatly accentuates the twin problems of (a) developing the appropriate political skills and insights among the military, and (b) of developing the means by which the political leaders of the state may furnish sound and relevant political guidance to the military planners and commanders. The latter is, for reasons I shall mention presently, much the more difficult problem to solve.

One of the things that has made the development of nuclear weapons historically unique is the speed with which the strategic revolution has been accomplished. Changes in the physical circumstances alone are not the whole sum of the difference. In the main they were predictable at the very outset of the atomic age just over a decade ago, and were in fact being predicted by people whose judgment was entitled to respect. I mean, for example, the predictions that nuclear weapons of all kinds would become cheap, abundant, and individually more powerful.

We knew also that the Soviet Union as well as other states would sooner or later develop an atomic capability, and that apart from inherent wealth there was nothing to keep them from making that capability comparable to ours. We were in a great funk about exact dates and figures, but in the not-so-long run these are immaterial anyway. Certainly they are immaterial

if we are talking about strategy with anything like the reach and scope that Admiral Mahan gave to the study of it a half century ago.

From our point of view, the only noteworthy thing about the relevant changes over the past decade is that they have in almost all instances not only fulfilled early predictions but outrun them. We might for comparison consider some other historical revolutions of comparable though lesser importance, like the introduction of gunpowder and the transition from sail to steam in warships.

So far as the introduction of gunpowder is concerned, its first military use in Europe occurred sometime in the first quarter of the 14th century. But when Joan of Arc stormed the walls of Orleans and then of Paris a full century later, she suffered in both instances wounds from arrows. The art of the armorer continued to flourish and reached its greatest flower towards the end of the 16th century. We cannot say that artillery became really important in battle until the Seven Years War in the middle of the 18th century. And in our own War of Independence even so shrewd a man as Benjamin Franklin, whose 250th birthday we celebrated a month ago, could recommend serious consideration of arming our soldiers with bows and arrows rather than muskets. The gun as we now know it -- an accurate and rapid-fire piece -- dates only from the end of the 19th century, that is, five and a half centuries after the introduction of gunpowder.

By contrast, the very speed with which we have been forced to adjust our thoughts over the brief span of eleven years, in which we have moved from Alamagordo to the situation facing us today, has been one of the major determinants of our strategy. It would be miraculous if there did not exist a very substantial lag in strategic thinking. There is always the problem of bringing minds together in the comprehension of the new order. Strategy in the form of strategic plans is, like legislation, inevitably a broth prepared by many cooks, not all of whom are notable for their wisdom. The involutions and evolutions of the bureaucratic process may be very useful for keeping group thinking on a steady course, but for that very reason it places great obstacles in the way of imaginative and insightful thinking.

The fact that there is a hierarchy of command for each service expedites the reaching of conclusions within the service, although it will not guarantee better conclusions. However, the device of command is not available for bringing together the three services. The President as commander-in-chief and the Secretary of Defense as his appropriate deputy have a certain limited authority to force common conclusions among the services; but for various reasons including good ones, they dare not exercise it very often.

Then we have the further problem of bringing together the strategic conceptions of the alliance or alliances of which we form a part. I think the latter problem is sometimes

exaggerated. I suspect that more than we realize it our allies look to us for cues about what their strategic conceptions ought to be, and our long-term problem is mostly to refrain from behaving in a way that impairs their confidence in us -- which seems, however, not to be easy. But in the shorter term, any attempt on our part to modify our strategy because of new circumstances, or new realizations about existing circumstances, has to counter so much additional burden of preformed commitment and conviction.

Thus the changes in physical circumstance effect, with some measure of lag, changes also in the surrounding intellectual climate -- and in one's own adjustment to that climate. Facts that are at first known only to a few later become known to many. Ideas that are novel and original one year become commonplace the next. Some of these ideas are patently fallacious, and perhaps in time the fallacies are exposed. The area in which controversy exists tends to shift, and one cannot keep one's thinking from being oriented largely towards existing controversy.

Above all, the more complicated a problem is, the more it requires a certain amount of living with it in order that one may comprehend it. It is one thing to make a prediction, even a correct one, and quite another to live for a time with a fact that was once a prediction.

A prime example of how our area of discourse changes from one year to the next, and also of the profound nature of the

change, may be seen in the sudden prominence given to the debate over unlimited versus limited war. The British have provided us, as they often do, with the apt phrases with which to identify the new ideas. In this instance the phrase is "graduated deterrence," which replaces their favorite phrase of yesterday, "broken-backed war." The latter in turn was only a refinement upon a native American product in phrase-making, "massive retaliation."

What a world of difference lies in the conception behind "massive retaliation" or "broken-backed war" on the one hand, and "graduated deterrence" on the other, yet little more than a year or two has intervened between the ascendancy of each! By "ascendancy" I mean intellectual ascendancy, because national and international rearrangements come along much more slowly. The ideas that are being implemented at any one time are likely to be those which enjoyed an intellectual consensus some two or three years ago -- at least the best consensus then available -- and which are now perhaps discredited.

The conception of "massive retaliation" received its clearest exposition not in the speech of January 12, 1954 in which Secretary Dulles made that phrase famous, but rather in the book by Marshal of the Royal Air Force Sir John Slessor, entitled Strategy for the West. The essential idea of the book was that everything from now on must rest on the principle

of deterrence. No line of thinking, let alone of action, must be permitted to impair the value or effectiveness of deterrence. Sir John admitted in one place that Britain could not survive a war in which nuclear weapons were exchanged on a massive scale, yet he nevertheless insisted that Britain must guarantee their being so used in any major war by herself initiating that use!

The idea of deterring aggression by relying on a strategy or strategic policy that is ultimately suicidal is not without precedent, nor is it necessarily without sense. But the precedents are not reassuring, and the amount of sense inherent in the proposal depends, first, on whether it can really be carried through consistently and persistently, and, secondly, whether there are alternative policies available that look less risky. For with a pure deterrence policy a 99 and 44/100 percent reliability is hardly good enough.

I think that the Slessor doctrine fails on both these latter counts. I don't doubt for a moment that Sir John Slessor personally possesses all the intestinal stamina necessary to carry out the policy of deterrence. But he is a member of the military profession, which is supposed to live gallantly and eye death boldly. However, the generality of people in a country like ours or like Britain, including the politicians who make the critical decisions, are likely to take a quite different approach to life and its dangers.

The American populace has always found the thought of war distasteful, even when there was complete assurance that we could win in the end, or anyway come out sound and whole as a nation. But what will the popular attitude be towards a war in which we certainly lack such assurance and even have a fairly persuasive assurance of the opposite? And this country of ours happens also to be a democracy in which the views of the generality of the people tend in the end to be expressed, if not in the immediate crisis decision, then in the selection of the person or persons who will make that decision. And the qualities that make one man a good vote-getter are rather different from those that make another delight in pursuing a "brink-of-war" diplomacy.

Thus, the first weakness of the "all-out-for-deterrence" policy was that it was never really available for execution, except to counter an all-out blow against ourselves. And since there neither is nor can be absolutely any question or choice about what we will do in that extreme case, there is not much profit in talking about it. The real question is, what will we do in lesser cases? What will we do in local and peripheral challenges?

I have not so far mentioned the damage we might do to the enemy if we undertook a strategic exchange. My reason is simply that war has rarely been, and is less likely to be in the future, what my mathematical friends call a zero-sum game; that is, a game where the loss of one is necessarily

the gain of the other. Unless our nuclear strategic attack upon the Soviets has the effect of preventing or critically diminishing their attack upon us, and thus of ending the war in the best possible way, its utility is limited to the final and minimal object of preventing the subjugation of our unhappy survivors. Otherwise the damage it does is mere vengeance, and as such is strategically irrelevant.

I said earlier that the idea of the "broken-backed war" was a refinement on the "massive retaliation" doctrine. Perhaps I should not dismiss it in such an offhand manner, because it is probably true that the idea underlies the basic strategy to which this country and the whole NATO alliance is committed. If so, I think it is too bad, because it seems to me that of the several kinds of war that one can envisage for the future, the one kind that is almost demonstrably impossible is the "broken-backed" variety.

That phrase, which crept into the British Defence White Paper for 1954 -- though both phrase and thought were dropped in the following year -- conveyed a conception of a massive exchange of thermonuclear weapons being followed by a phase of hostilities carried on and presumably decided by whatever resources and conventional forces survived the strategic blows. Notice some of the assumptions involved. First is the assumption that the capabilities of both sides to deliver nuclear weapons strategically will terminate at about the same time, and on a common level of indecisiveness. Second

is the assumption that forces that have been neither trained nor tailored to operate from a basis of extreme austerity in all conceivable respects including communications will be able to take the field and operate successfully despite a hinterland in ruins. There are other bizarre assumptions too, but compared to these they are hardly worth mentioning.

The case for continuing to provide large ground and naval forces should be hung on other and better arguments. To those who point out that I have no proof for the convictions I have expressed, my reply is that the burden of proof lies with those who would explain how fleets will operate, and to what purpose, or how armies will go abroad and take the field, when the major bases, ports, and communications centers from which and through which they would operate, as well as the factories and depots supplying them with their vast stores of gear, are heaps of radioactive rubble. Remember, we are not talking about the comparatively trivial damage suffered by Germany and Japan in World War II.

One cannot distinguish between old forms of war as presumably tried and true, and new forms as untested. For in the context of thermomuclear war, everything is new and every military arm or weapon is essentially untested. Perhaps the least untested or unknown weapon of all is the bomb itself.

In any war in which the United States is engaged, a nuclear strategic bombing phase, if there is one, must be

decisive. It will be decisive not necessarily in the sense that it achieves a victory that is worth talking about or that has any meaning for its survivors, but in the sense that other forms of military action are either without purpose or unfeasible or most likely both.

Perhaps one should except the entirely one-sided strategic bombing campaign, if it could occur. The fact that it succeeded in preventing enemy reaction would confirm its decisiveness, but the side that won so absolute an advantage might nevertheless deem it prudent or expedient or even humane to use ground forces to occupy and police the defeated country. And the fact that it had suffered no critical damage would enable it to do so.

In support of these views, I ask you only to consider that in strategic bombing the capabilities of the offense are already enormous and steadily and rapidly growing larger, while those of the defense have long been greatly outdistanced and show in the not few signs of being able to catch up. Notice also that the capability of the national air defenses depends not alone on technological progress in defensive means as compared with similar and competitive progress in the air offensive arms, but also on how much total resources one is willing to invest in defenses as compared with the offense. An "adequate" air defense of the United States might be technologically feasible but too fabulously expensive to be politically acceptable. And if one erects an adequate

defense against manned bombers, how about the long range ballistic missiles that are sure to be along sooner or later? The prospects for defense against the latter are not hopeless, but they certainly appear grim.

However, it by no means follows from these premises that the next war will be fought predominately, let alone exclusively, by the Strategic Air Command, whether using bombers or rockets or both. On the contrary, if war is to have a rational, political purpose in the sense that Clausewitz made explicit in that famous phrase about war being "a continuation of policy," then SAC is the one kind of power that ought not be used except as a latent governing force that monitors the rules. The providing of an incomparably strong SAC must remain a primary charge on the American defense budget. Nothing can be permitted to displace it in priority. That requirement is certainly one of the most elementary consequences of the existence of thermonuclear weapons. But another consequence of those same weapons is that SAC must remain as far as possible a force in being rather than one in action.

Rear Admiral Sir Anthony Buzzard has done much to make this idea popular with the arresting phrase "graduated deterrence," though he claims no originality either for the phrase or the idea. The idea is indeed several years old, though it is only recently that people have begun to pay much attention to it.

Admiral Buzzard's arguments are perhaps a little unfortunate, because they smack too much of the Mikado's determination "to make the punishment fit the crime." We should really not think of it in these terms at all. We should rather view it in terms of assuring that our military efforts are directed and dedicated to fulfilling the national aims and aspirations rather than to destroying them. A war that destroys the objects for which it is fought may indeed occur, but it certainly ought not to be planned as the object of all our preparations. On the contrary, it is not too much to say that our military planning should mostly be directed towards preventing it from happening.

In using the term "limited war," we are not talking about a return to something. We are talking about something quite new. If wars were limited in ages past, the reasons why they were so have on the whole little relevance for us today. In the past princes may have been inhibited militarily by moral and religious scruples, or by the feeling in any particular instance that the game simply was not worth the candle. Certainly the wars were kept limited by the relatively small margin of the national economic resources available for mobilization, as well as by the relatively small capabilities for destruction that could be purchased with those narrow margins. Even so, there were sometimes wars in which a good deal of damage was done.

Today we speak of limited war in a sense that connotes

a deliberate hobbling of a tremendous power that is already mobilized -- for the sake only of inducing the enemy to hobble himself to comparable degree. We have to admit that it offends against some of the most cherished ideas and doctrines of what we consider to be classic strategy. General MacArthur summed up the incompatibility of the new notions with the older school of military thinking in that most eloquent phrase, "There is no substitute for victory." And incidentally, if it had not been for the Korean War to which he was referring, it would hardly be possible for us today even to imagine such a thing as modern limited war.

There has to be a revolution in ways of thinking about war and peace, among civilians and military alike, before we can even undertake to deal with the many technical problems of limited or peripheral war. That revolution will not be easy to accomplish. It is all very well to outline what reason dictates: that neither the Soviet Union nor the United States wants to destroy the other if in the process it also destroys itself, that every casus belli tends at least to start with a certain geographic identification, and with a conflict of purposes such as can usually be described in modest and particular rather than global terms. All that is necessary, seemingly, is to keep the quarrel limited to the terms on which it began. In the past small powers were sometimes given guarantees that could not be fulfilled except by resort to general war, but presumably that kind of guarantee is now out

of date. Anyway, we must get away from thinking about war and peace in terms of all or nothing. Such is the sweet voice of reason.

But what we come up against immediately is the fact that passion and fear have also been inseparable from war, that the resort to arms is itself enough to stimulate in those who do so a powerful flow of adrenalin, which is needed to promote the forceful handling of those arms. War, in other words, does have an inherent and almost necessary tendency to be orgiastic. But that does not mean that we can afford to surrender to that tendency, or that we must use our reasonable moments during peace to concoct doctrines and strategies that imply lack of reason in war.

Whether techniques of limited war will really be available to us seems to hang also on certain technical questions, above all on the question whether the SAC monitor or governor will be free to function as such. Many people today take it completely for granted that there will be no massive exchange of nuclear weapons simply because both sides will recognize the suicidal consequences of such an exchange, and that the only wars we need to think about are peripheral ones. Perhaps so, but there is no reason to assume that such a condition can be obtained for free. As tensions increase at any time of crisis -- and the outbreak of a "limited war" would certainly be such a crisis -- there will be pressures to get SAC on its way, most of all the pressure of fear that a SAC

restrained is a SAC that is lost, or anyway hopelessly vulnerable. No doubt much can be done to modify the circumstances, perhaps by reducing critically the vulnerability of a grounded SAC.

And if the situation should so develop in the future that the side that makes a surprise attack upon the other destroys the latter's capability to make a meaningful retaliation, then it will be entirely rational to be trigger-happy with one's strategic air power. How could one afford under those circumstances to withhold one's SAC from its critical "blunting mission" while waiting to test other pressures and strategies? But if, on the other hand, the situation is such that neither side can hope to eliminate the retaliatory power of the other, the restraint that was suicidal in the other situation becomes prudent, and it is trigger-happiness that is suicidal!

Now we should be clear on two things: first, that the situation that may actually develop could represent any of a substantial range of variations on the two extreme cases I have just presented, and some of those variants could be greatly to our disadvantage. It is, for example, all too easy to conceive of a situation where the Soviets could launch a successful blunting mission but we could not. Secondly, no situation is entirely preordained by free-wheeling technological development. If we recognize that a secure SAC gives us the priceless advantage of freedom to choose how and when to fight and what strategy to use, then we will

certainly be willing and able to find the means of accomplishing it. The chief barriers are doctrinal, residing in old axioms like "the best defense is a strong offense," etc.

There are other technical problems. For example, there seems to be, on the one hand, a common assumption that nuclear weapons must and will be used tactically and, on the other hand, an assumption that those so used will be relatively small. There are also assumptions about the total numbers to be used, which are usually given in rather modest figures. No one seems to disclose the reasons for these assumptions.

Perhaps it is true that the same kind of interest that dictates the limiting of war through restraining SAC and through confining the area of fighting also dictates the limiting of the weapons used to the smaller sizes. But if so, one must still ask what sanctions will operate to maintain a given size limitation for both belligerents? Militarily it is almost always true that where a small nuclear bomb is good a bigger one is better, and often not appreciably more expensive.

It has been said (by our President, among others) that it is utterly "irrational" to regard a weapon as impermissible simply because it is nuclear; and so it is, except in one important respect -- that it is much easier to distinguish between nuclear and non-nuclear weapons on the battlefield than between different sizes of nuclear. And in order to make work at all anything as arbitrary and forced as limitations

upon war are likely to be, it would seem that one major requirement is that transgressions or violations be very easy to recognize and very difficult to deny. This is not to say that we may not use nuclear weapons in limited war; it only underlines the problem of finding out how we can use them without thereby signaling the abandonment of restraints.

Certainly our military manners respecting weapons and methods will determine whether we have any friends to defend or support in the area in question. Our posture for the containment of Russia is not enhanced if no one wants to be saved by us. In most cases our very involvement in a peripheral war will be due to reasons that are not strategic in the traditional sense of the term, that is, in the sense that the real estate in question has an intrinsic military value. Although an attitude in favor of intervention may seek to justify itself on grounds of long-term strategic interest, the chances are overwhelming that in each specific instance where we are provoked to intervene it will be for reasons that are almost wholly political.

We will intervene to protect a people -- preferably "democratic" but at least independent -- from being overrun by an aggressive power that happens to be also our major enemy. And one does not protect a people by using H-bombs freely about their homes.

We must also avoid conceiving of future war in terms of two opposite extremes, one unrestricted, completely devastating,

and altogether to be avoided; and the other a minor "brushfire." On the contrary, the kinds of war we have to think about and prepare for range from the unrestricted kind through all the conceivable types of limited war, which include the big, the little, and the in-between. After all, Korea itself was limited and peripheral in the usual meaning of those terms, but it was hardly what one would call a "brushfire." Naturally, since we can have a large measure of choice about the kind of a war we would fight and the limitations we would promote or accept -- in other words, a capacity to lay down and enforce some ground rules -- the situation in terms of what we want to prepare for need not be altogether chaotic.

By now you will appreciate why I stressed the proposition, near the outset of this lecture, that the new weapons force a shift in strategic thinking from a strictly military context to a wider one which is predominately political and social. It is no longer enough to imply that the politician makes the decision for or against war, and that the soldier decides how to fight it. The decisions whether we fight and how we fight must be combined military-political decisions, and combined in the fullest possible sense of the term.

We have of course heard a good deal about the necessity of bringing our foreign and our military policies closer together. This is by now a pious banality. The Unification Act was largely justified on the grounds that it would help achieve this end, and of course the National Security Council

which was created by that Act has no other purpose. But my observation is that in so far as anything has been achieved at all, it has been achieved only in the most superficial way. The problem is not simply one of achieving better contact or communication but rather of the real content of understanding which each side brings to what is fundamentally a joint problem.

There exists in America hardly any tradition of intellectual concern with that border area where military problems and political ones meet. If the military approach to strategic problems needs to be extended and leavened by the relevant insights of the statesman, such insights are likely to be undeveloped among those real-life civilians with whom the military actually have to deal. The National Security Council is a monument to an aspiration, and the aspiration is undeniably sound. But whether any real enrichment of strategic thinking has proceeded from it is another question.

Political leaders in both the administration and the Congress are ready enough to be exercised about the size of military budgets, and their intervention in military affairs by ways of cuts or shifts in appropriations, can be far-reaching enough. But at the same time they will pride themselves on not being "armchair strategists," thereby cloaking with virtue an unwillingness to come to intimate grips with military questions.

Even the Secretaries of Defense and of the three services, regarding their jobs as being mainly "administrative," normally

avoid or try to avoid intervention in what they call "strictly military decisions" -- in marked contrast, incidentally, to their British counterparts. And since they are normally selected for talents in other fields than the military, and come and go with great frequency, their modesty is probably for the best.

It is therefore clear that any real expansion of strategic thought embracing the wholly new circumstances which nuclear weapons have produced will have to be developed mostly within the military guild itself. That there are certain institutional inhibitions to such expansion is sufficiently obvious. But the professional military officer is dedicated to a career that requires him to brood on the problems of war, and in that respect he finds himself with very little civilian company. Let it be added that he listens not only indulgently but avidly to any civilian who has anything to say to him in his own field. He is also at the various American war colleges today being given a training designed to expand, among other things, his insights on social and political matters relevant to his art.

Yet however excellent a thing it is to increase the soldier's sophistication on political affairs, such education can be no substitute for adequate guidance from the appropriate political authorities -- if for no other reason than that the latter retain the authority and the responsibility for the ultimate decisions. There is of course at least one other

reason, namely, that good political guidance requires both specialized talent and professional competence.

In short, the problem is much less that of sensitizing the military profession to the relevance of seasoned political thinking, which obviously must be developed elsewhere, than it is of providing on appropriate occasions and at appropriate levels civilians capable of such thinking. The soldier has now been handed a problem that goes far beyond the expertise of any one profession, his own certainly included.

One trouble is that there are now basically three kinds of soldiers -- of the ground, of the sea, and of the air. And never in history have they been further apart in their views on strategic fundamentals. There have always been inter-service rivalries, as well as technical controversies within each service. But these disputes were almost always on tactical questions, and in the context of broad fundamental agreement and understanding were relatively minor. That kind of understanding is manifestly lacking today.

It is hard to say where the keys to these great riddles are to be found, but they will not be found in incantations suggesting the utter rejection of force, the indispensability of immediate world government, or the incorrigible stupidity of practising diplomatists or soldiers. There are comparable incantations on the opposite side, which are no more helpful. We have to get down to relevant particulars. The task is ideologically simple -- to follow consistently an enlightened

self-interest in a world of new and terrible dangers, so that we may avoid equally the peaceable surrender of the things we value or the kind of a war that destroys all of them at once. So stated, the proposition probably wins almost universal consent. All the difficulties are in the specific implementation.