IV. WAR MANAGEMENT: SELECTED REQUIREMENTS

FOR POLITICAL-MILITARY PLANNING

A. COMMAND AND CONTROL AT THE PRESIDENTIAL LEVEL

The preceding sections have indicated that war aims may be modified and redefined under wartime conditions, as choices are made between alternative courses of action. Decisions on methods of securing national objectives would also be made during a war. The importance to the nation of every major decisions relevant to the conduct of nuclear war means that the President must discharge his duties as Commander-in-Chief in a manner unparalleled in US history. To be most effective, the President must have readily available his principal military and civilian advisors, together with a supporting staff and adequate information. Assurance of survivability of this command group is also an essential element. It would insure continuity of command, whatever the developing intensity of war. In the event of a surprise nuclear attack on the US, it would make certain that the President or his successor could select and order the appropriate retaliatory attack.

The Concept of a National Command Center

To meet the above requirements, it appears necessary that there be a National Command Center organized, equipped, and staffed in such a manner that at any time it would be prepared to support the President. The National Military Command System, organized in the Department of Defense, is composed of a National Military Command Center, a hardened alternate, and several mobile command posts. Other agencies of the government have established operational centers in their own headquarters and in relocation sites.
These several systems do not appear fully to meet the President’s requirements. If the concept of the National Command Center is accepted, Presidential guidance would be required as to the scope of its mission.

Information Required

A National Command Center must have that information on which the Presidential Authority would base decisions. This information concerns status and deployment of enemy and US and Allied forces and weapons, as well as the internal situation in the US and in enemy and Allied countries. Centralized control requires that this information be available to the National Command Center in considerable detail, and to permit timely decision when seconds count heavily. It must be real-time information. Because such a Center cannot possibly have the staff available to analyze the raw data there must be provision for its being reduced to manageable proportions and displayed for the decision-maker.

In the event of a nuclear attack on the US, the first information needed by decision-makers would be confirmation that such an attack had taken place. Examples of detailed information needed are: Origin of the attack? Are the attacking forces aircraft? Missiles? Is the attack continuing or does it seem likely to continue? What is the nature of the attack? All-out? Counterforce? Ambiguous? Are national command, control and communications systems being attacked? What is the pattern of attack world-wide?

In the case of a discriminate US pre-emptive attack, the critical information needed for decision-makers would be the extent of damage to Soviet retaliatory forces and indications of the probable type of Soviet response. And, finally, evaluation of all possible information concerning the post-attack situation on both sides would be required in order to plan for the use of pre-planned reserves, reprogramming of forces, and use of other residual military forces.

An important difference between escalation at low levels of intensity and the major strategic nuclear exchange is that in the former, much more time would generally be allowed for collection and analysis of information prior to decision. At each critical decision point--of which there would be many in an escalating war--information on the situation of...
US forces which would require or justify escalation would be essential as would an intelligence estimate of the probable results of escalation, including the attitude of Allies.

Acquiring Information

Prior to hostilities and up through heightening tensions, the flow of information through regular channels would continue. Naturally as tensions grew, the already closed nature of the Soviet Union would become more and more a barrier to the gathering facilities, and some communication channels would be severed. It is likely that, after the outbreak of a nuclear war, most time-sensitive information required for decision-making would be primarily obtainable through reconnaissance, and other types of intelligence information would diminish. Post-attack reconnaissance would also be extremely important to the decision-maker.

Though a wide range of intelligence would be available, it would come from a variety of sources and would be fed to a number of different agencies. If Presidential Authority is to make effective use of all such intelligence, the data must be correlated, analyzed, sorted and fed to this Authority in a useable form. Under present plans, this is to be done in the NMCC, but a great many problems must be resolved if a completely integrated picture is to be available for the National Command Authority.

In the management of war, no amount of automation can replace the human element. In the field of intelligence, for example, the study of "indicators" demands trained evaluators. But it is also true that the feasibility of precise centralized control or management of a war of the future will depend, to a large extent, on the combining of intelligence with data handling equipment and communications facilities.

Another critical parameter needs special emphasis and that is the time factor. Today, the criterion for timeliness appears to depend more on the degree of sophistication of the information desired, and what is possible in that light, rather than on a realistic estimate of what delay is permissible. In nuclear war, the time factor must be specified, and the degree of sophistication will be
determined by what is attainable within that time period. All efforts must be directed towards improving the information that can be obtained in the minimum time specified by the user.

In summary, it is essential to have systems which will provide the Presidential Authority with:

a. Timely information—immediately in some cases.
b. Information in a manageable amount and in a useable form.
c. Information in several places to insure survivability.

At the present time each service, and even segments within services, have looked at their peculiar reconnaissance needs and have designed, and in some cases put into operation, systems that answer their peculiar requirements. In consideration of the needs of the Presidential Authority in the management and termination role, coordination at the national level is essential. Any system designed to provide the information required by the Presidential Authority must not only consider what data is already being gathered or available, but based on stated needs, must plan on interfacing future systems with existing ones to insure coverage as well as insuring that separate source data is compared wherever possible to enhance accuracy.

Communicating With the Enemy

Managing and terminating a nuclear war is, at the minimum, a bilateral affair. More typically it involves several nations on both sides of the conflict. In the interest of limiting and terminating a nuclear conflict, direct plain or coded language communications between the warring sides and within the alliances would be essential. All the war scenarios in this report assumed uninterrupted tele-communication facilities between enemy and Allied governments. Today, should a general nuclear war occur, direct communications between the US and the Soviet government would not survive. Yet any breakdown in communications between the central authorities of the countries involved, even for a temporary period, could result in a prolongation
of the war and possibly in an unnecessary escalation. Uninterrupted tele-communications channels would permit negotiations in general war which would otherwise be impossible.

Communication, of course, involves more than verbal exchanges. Impressions will be transmitted by the target system attacked, the rate of escalation, the magnitude of the attack, the types of weapons systems employed, and by virtually every other characteristic of a nuclear attack. What must be recognized, however, is the potential for misinterpretation of signals and the hazards this presents in managing a war or trying to induce the opponent to play the game by our rules.

It may be true that, in the future, improvements in weapons and command and control may provide the discrimination we need but it is apparent that a nuclear war, or even an incipient nuclear war, probably cannot be managed, much less terminated, unless there is continuous direct contact with enemy authorities and an unprecedented absence of ambiguity.
B. TARGETING

Previous sections have brought out the special importance to war management and termination of discriminating use of nuclear weapons, of conserving strategic forces for post-war requirements, and of having flexibility in attack options. This section reviews the role of targeting as it relates to these three areas and identifies specific problems which the planner should explore. It is recognized that there may be important effects on existing targeting.

Recent JCS guidance established broad strategic objectives. "United States plans for nuclear offensive operations in the event of general war will be designed to achieve, in concert with other US and allied offensive and defensive operations, the objectives listed below:

"a. Destruction or neutralization of the military capabilities of the enemy, while retaining ready, survivable, effective, and controlled US strategic capabilities adequate to assure, to the maximum extent possible, retention of US military superiority over the enemy, or any potential enemies, at any point during or after the war.

"b. Minimum damage to the US and its Allies, and in all events, limitation of such damage to a level consistent with national survival and independence.

"c. Bring the war to an end on the most advantageous possible terms for the US and its Allies."

Utilizing these objectives, a Single Integrated Operational Plan (SIOP) is developed under the guidance of the Director of Strategic Target Planning. This plan results in five basic attack options. It also utilizes all strategic nuclear forces against targets arranged in a priority list. A strategic reserve is not explicitly specified for retargeting or striking new targets due principally to stringent associated criteria for high probability of target destruction. A strategic reserve could result from withholding attacks on certain countries or by use of a lesser option than an all-out attack.
Planning Concept

A concept of facilitating war management and termination through target planning should take account of SIOP as the starting point. The target options prescribed by JCS policy guidance have been developed to provide some targeting flexibility for the onset of hostilities, but previous sections of this report suggest that the war management problem requires a close look at a wider spectrum of war intensity, including the execution of strategic attacks in the periods before and after the execution of any of the present SIOP options.

The following considerations are pertinent to target planning as a tool of war management and termination: The war scenarios show that, as a general rule, the amount and degree of ad hoc target planning possible will be inversely proportional to the degree of intensity of hostilities. In an escalating situation or low intensity war, ad hoc target planning in support of war management decisions may be extensive; at the high end of the scale a massive exchange would severely reduce targeting flexibility. Rapid escalation of the kind described in War "B" could, of course, reduce greatly the time available for shifts in targeting plans.

Another consideration relates to the interaction of targeting criteria with the other war management tools. For example, a decision to assign priority to specified targets (or, conversely, withhold weapons) in the interests of war management could be subject to reversal or severe modification as the result of reconnaissance or offers to negotiate.

Finally, targeting exclusively to enhance achievement of war-time objectives would not necessarily complement actions relating to terminal or post-hostility phases.

The above suggests that target planning might be based on the following principles:

a. Compatibility with existing strategic target options developed in support of national targeting policies.

b. A retargeting capability of some weapons systems which will present alternatives at key turning points of a war.
c. Timely application against pre-planned target categories to support decisions taken.

It is the intent of the last two points to put target planning in a more dynamic military-political framework than appears to be the case today.

Target planning along these lines can be useful in support of war management and termination. However, as a corollary to the preceding discussion of positive aspects for target planning, it seems necessary to deal with certain concepts which deserve critical appraisal. One is the idea of "communication by explosion," wherein the exclusion of some targets and the assault of others is presumed to convey special meaning. On a limited scale, this may be feasible. But, aside from the fact that a dialogue of this nature is inherently an ambiguous means of communication, there are some practical aspects of such action which invite attention. The collocation of many military targets to industrial installations and population centers on which the Soviets place values unknown to US planners is a case in point. Undoubtedly, in the future greater degrees of accuracy will obtain, but there will be some targets which cannot be destroyed without fogging the issue of US attack objectives.

Another related concept is that of demonstration to lend credence to stated or implied force capabilities. Again, on a limited scale, this concept may be feasible. It may even be extremely important after a large-scale nuclear exchange has occurred. However, in all instances it would have to be exercised with extreme discretion to preclude force attrition or unacceptable degradation of alert status. As an applied technique, demonstrations of capability also could introduce the ambiguity inherent in the concept of communication by explosion.

In short, it should be recognized that execution of pre-planned target options is not by its nature a very subtle tool of intra-war negotiation. To ascribe such virtues to targeting could be misleading to planners in this area. Rather it seems more desirable to base planning on the relatively simple principles listed earlier.
Planning Applications

The identification of target categories in the context of their sensitivity to war-management decision points may be quite helpful for target planners. It appears desirable to come to grips with the specifics of the targets themselves, and only incidentally with the specifics of what force application is appropriate for a given situation. The remainder of this discussion therefore probes primarily at relationships between war management decisions and various categories of targets, and secondarily, at the methods of force application to obtain war objectives.

As a starting point, the general characteristics of military targets deserve mention. SIOP planning is addressed to fixed targets of both soft and hard configuration. A proportion of these types now and in the future can be characterized as imprecisely located targets. Other may acquire operational mobility as technological advances overcome lessened reliability and slower reaction. These characteristics can have varying relationships to the types of wars and to decision points. Given relative numerical superiority of surviving strategic weapons, after a Soviet attack, US target planning would probably concentrate on precisely fixed, soft military targets and on surviving Soviet urban-industrial complexes to the exclusion of those imprecisely located targets to insure economy of force expenditures and, thus, to retain a credible deterrent during ensuing negotiations. Future weapon systems and better reconnaissance might require the provision of weapons for targets discovered during the course of the war and for categories of targets to be struck to bring pressure while negotiating for termination.

In particular, wars of lesser intensity, scaled down through a US pre-empt situation to an escalation type, would seem to require a capability to attack imprecisely located and mobile targets as well as portions of total categories. For example, at one point in the escalation scenario the US decision was to threaten to destroy six selected Soviet targets as a condition for war termination. A political action of this type would rely heavily on assurances from the target planner that the selected targets were in fact highly vulnerable, i.e., fixed, soft, and/or located with high confidence and located away from population centers. Innumerable variations on the aspect of target characteristics
can be constructed for each of the different decision points and war situations. From the above examples it seems reasonable to conclude that if such tactics were adopted, pre-war consideration should be devoted to constructing options which could be meaningful in both a military and political sense.

An equally critical aspect of target categories is their relative sensitivity to negotiations and/or proclamations undertaken by the US Presidential Authority. Certain categories may be not only time-sensitive in a purely military sense, but also sensitive to political actions undertaken by the US in pursuit of intra-war objectives. One case is the Soviet IR/MRB force, which is the primary Soviet force for strategic attack against Europe and, as such, would figure heavily in US decisions to escalate past the phase of tactical nuclear war. US estimates project this force into the 1970s with essentially a high proportion of soft, fixed launchers. Alternative field-type sites are also possible for back-up actions. For purposes of purely military targeting, this category presents relatively straightforward, though difficult, planning problems. But as a target of political negotiations which seek to limit or terminate hostilities at a low intensity of escalation, the force is extremely unstable. A US cease-fire ultimatum to the Soviets predicated on a threat against this target category might trigger Soviet employment of the force in the belief that the ultimatum was issued merely to screen or justify an inevitable US assault. On the other hand, a shoot first, talk later action might be convincing proof of US intent to escalate to the point necessary to impose its war aims.

In any case the target planner would be obliged to pre-plan the US/NATO capability (or lack of capability), to back up such an ultimatum, to suggest alternative target categories which fit the ultimatum with a better probability of military success, or, in the event of a Soviet trigger response, to plan the commitment of weapon systems in anticipation of a new decision point.

Numerous other categories can be identified as sensitive, depending on the decision point reached, the substance of US military responses, and the form of US political pronouncements. Examples of such categories might be Arctic staging bases, regional nuclear storage sites, and USSR submarine bases, to name only a few. It can be concluded that even
for a relatively few target categories it could be of value to develop a considerable number of options which might be used should escalation to limited strategic attack be required.

The foregoing has dealt with the problem of target category sensitivity to the threat or application of nuclear weapons as a lever for military/political management of US intra-war objectives. There remains, at least for an escalation type of war, an area of target planning which lacks the benefit even of SIOP-type preparations. It is conceivable that transition from conventional action to nuclear engagement of targets should take account of intermediate options possible with conventional, BW/CW, and other munitions which may be developed through time. As with nuclear weapon systems, target planning addressed to these types must rest solidly on a proven military capability to inflict destruction or neutralization. To the extent that this capability is limited, war management target planning based on the capability would be proportionately constrained. It is suggested that at least some of the decision points which could arise in the course of escalation deserve the target planner's attention for weapon system applications of conventional, BW/CW, and other munitions. The decision to use tactical nuclear weapons should consider the advantages to be gained in comparison to these weapons.

Summary

Using SIOP, both for background and as a starting point, the feasibility of tasking the target function with an additional role of war management and termination support has been examined conceptually and, to a limited degree, in its possible applications. We conclude that this capability can be achieved in advance of hostilities by a series of practical measures.

a. Revised SIOP guidance to require, within the present framework of options, a set of sub-options addressed to intra-war decision points.

b. Target planning which examines the capability of conventional, BW and CW systems against categories here-tofore examined only as candidates for nuclear attack.
c. A continuing review of weapon system characteristics in the context of their usefulness to intra-war target planning.

d. Introduction of more comprehensive political inputs into SIOP guidance.
C. FORCES FOR MANAGEMENT AND TERMINATION OF WAR

In the course of the study it became clear that some modification or improvement in US planning for the intra-war and termination phases and in capabilities of portions of selected weapon systems would enhance the US military capability to control the course of the war and to perform more effectively critical tasks during the terminal phase or initial post-war periods.

In the strategic nuclear phases of the three prototype wars in this study there are several illustrations of requirements for military actions not planned for in the SIOP. For example, in the all-out nuclear exchange scenario, it was pointed out that the most critical period for possible contingent action would occur at the "natural" point of termination—i.e., when the initial pre-planned strikes of both sides had been completed. Even though both US and USSR (also, presumably Communist China, Western Europe and Satellites) homelands would be heavily damaged, both sides would have residual forces.

With its residual military forces the Soviet might continue its efforts to seize all of Europe. Or, it might seek to hold various countries hostage for economic reasons—and Communist China might endeavor at this time to seize much of Southeast Asia. The US also would have residual forces which could be used not only to assist with reconstitution of our homeland, but also to fight as needed. In such a situation, it would be essential that these residual US forces had the capability to defeat the Soviet efforts. Effective application of residual military force involves planning which includes pre-war, intra-war, and war termination tasks.

Review of current war plans in regard to post-SIOP exchange combat shows this to be a "grey" area which is largely unexplored. US plans call for regrouping of residual forces under the unified commanders to carry out orders of surviving national command authority. It is difficult to envision how to plan for this phase of war. Yet it is essential that planning take into account the requirement to locate and destroy, or neutralize remaining enemy forces.

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With regard to weapon systems themselves, the study re-emphasizes the need for survivable nuclear retaliatory forces. The study also suggests that effective war management requires selected elements of US strategic forces which have a capability to attack hard and soft military or civilian targets in a discriminate manner. As suggested in the European war scenario, a capability to attack in such a manner might be the only means to force the Soviet leaders to realize the time had come to accept an end to the war — the only alternative would be national suicide.

To accomplish the above, there must be a substantial improvement in accuracy in the selected system (or systems). Accuracy must be combined with a family of yields and adequate number of clean weapons to permit precise surface bursts against hardened targets without the consequent high fallout casualty effect. The system must have a high degree of reliability, especially if an effort is being made to impress the enemy with US capability. It is self-evident that missiles would not be the best systems in all cases; manned systems should be considered for a place in the discriminate attack role. Manned systems would be most useful if such an attack were called for on targets which were imprecisely located, or if a visual demonstration of capability to penetrate over enemy territory were believed useful.

A special problem in terms of managing escalation is the threat posed by the Soviet IR/MRBM forces to US and Allied bases and urban-industrial complexes around the periphery of the Sino-Soviet Bloc. This is a special problem because the IR/MRBMs are theater-threatening weapons which are located within the USSR. Whenever they are used the principle of homeland sanctuary for the USSR is compromised. And for the US to attack these Soviet missiles while the war was restricted to a theater would have the same effect, doubly so if they were attacked by US based ICBMs. Yet so long as these forces remained intact, they would represent a powerful pressure in any war termination or armistice negotiations.

Another problem highlighted by this study is that of countering the Soviet missile launching submarines. It would seem logical that a portion of this force might be withheld or at least not be committed to the initial phases of the war and would then become a residual threat. Its destruction would be a very difficult task. However, with
destruction of enemy submarine bases and communication links, the Soviet ability to control and support its residual submarines could be lessened. Concentrated use of surviving ASW forces, together with reconnaissance, denying use of any ports, and destruction of Soviet trawlers could slowly tighten the noose on the Soviet submarine menace. Another approach to this problem in the terminal phases of a war would be to communicate with surviving Soviet national authority, informing it that unless their missile submarines were recalled to designated ports and disarmed, the US would continue nuclear strikes. The essential point is that without adequate US measures to reduce the SLBM threat, the USSR not only retains a capability to strike the US homeland, but is also provided with a potent tool at the negotiating table.

Regardless of the type war the control of our forces though the terminal phase is of such importance that an opportunity for successful negotiation may be lost without it. Significant in this consideration is the control and redirection needed, particularly as weight is added to the attack. A command structure must extend out to the force elements, either directly, through Airborne Command Posts accompanying the force as it approaches the Soviet Union, or indirectly, through communication between command and bombers or reconnaissance aircraft. The possibility of equipping some fraction of the force with automatic communications relay capabilities must also be considered.

Special Requirements for Reconnaissance Systems

Regardless of the course a war may take our knowledge of the enemy must continue at all stages from pre-hostilities to the long indefinable period of policing subsequent to termination. Reconnaissance then, in a variety of forms, becomes a vital factor in the problem under discussion. A quick look at the possible systems, their limitations, the data required in various phases of the war as well as the "state of the art" reveals that with proper emphasis, our capability in this regard can be definitely enhanced.

In the pre-hostilities environment, satellites could perform a highly essential reconnaissance function. Use of satellites employing high resolution radar might improve the timeliness of the data by eliminating such limitations as day/night considerations, cloud cover and seasonal sun
angles. Electronic readout capability combined with onboard processing of acquired data to reduce the volume of information required to be read out could also do much to improve timeliness.

During periods of conflict or intra-war, different systems may be required. The vulnerability of the satellite must be taken into consideration. Even with the improvements outlined above, unless the capability exists to vary ephemeris, vulnerability is extremely high. Here a manned vehicle may enter the picture or at least radical protective countermeasures for the satellite must be investigated. A multisensor vehicle whether satellite or aerodynamic would appear optimum to obtain the varied types of desirable information. Specifically, we will need to know such information as: Did our initial attack destroy assigned targets, are there any which survived (particularly time-sensitive targets), what forces remain, status and location of any such forces, bomb damage assessment, etc?

As war progresses to later stages including that following a cease-fire or an armistice, we might desire to obtain the following information: The degree of control being exercised over Soviet and Satellite forces, actions being carried out by other bloc nations, Allied activities, availability of communications, extent of damage to Soviet cities, and indications of impending hostile acts. Are our stipulations being carried out, are Soviet submarines returning and disarming, etc? To the extent that these require active reconnaissance, the vehicle might again be different. We might want our surveillance to be completely overt to demonstrate to the populace our ability to be present. A look-shoot capability may be necessary to police against hostile actions.

Finally, reconnaissance may prove to be the optimum method of determining our own residual capability or assessing damage to the US as well as Allied territory. In view of the rapid advances in the field of reconnaissance, this should be investigated, possibly as a back-up to other systems now contemplated for this task.

The point to be made here is that a mix of systems is apparently indicated, and it is equally obvious that a coordinated effort will be required if such optimum systems are to be attained. In view of ever-present budgetary limitations, such coordination should also be aimed at
investigating the capability of some systems to provide answers to several problem areas. Flexibility, coordination and coverage of all requirements are the keys to success. The needs of the military services and other governmental agencies, as well as Presidential Authority, must be kept in mind at all times, and the problems attendant to the management and termination of wars must also always receive consideration.

Summary

In summary, three main points emerge—namely (1) there is a requirement for more comprehensive analysis and planning of the intra-war and terminal phases of a conflict, (2) the need for increased analysis and emphasis on characteristics of military force required to handle tasks in the intra-war and war termination aspects. In this respect, there is the need to war game a number of such war situations and thereby to attain a keener insight regarding the forces our nation requires in order to be as certain as possible that we actually can carry out such post-nuclear attack tasks, (3) a vital need for a mix of reconnaissance and of the information-gathering systems designed and built to handle pre-war, intra-war, and post-war tasks.