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## A Framework for Choosing Defense Forces

Richmond M. Lloyd

Dino A. Lorenzini

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*Choosing defense forces has become increasingly complex because of the interaction of political, military and economic factors, both domestic and international. The choices are further complicated by the bureaucratic and organizational influences that pervade the decisionmaking process. In dealing with these important influences, the rational approach to making force choice decisions is often clouded or overlooked while special-interest issues are debated. To ensure the most effective use of limited resources in meeting national security objectives, a logical structure for organizing the important force planning elements is essential. This article examines these elements in a simplified framework and describes their interaction and importance.*

## **A FRAMEWORK FOR CHOOSING DEFENSE FORCES**

by

**Richmond M. Lloyd**

and

**Dino A. Lorenzini, Lt. Col., U.S. Air Force**

The most difficult military problem to resolve is that of establishing a security system, as inexpensively as possible in time of peace, capable of transforming itself very rapidly into a powerful force in case of the danger of aggression.

- General Andre Beaufre<sup>1</sup>

**Introduction.** Today the need for quality and clarity in our force planning decisions is greater than ever. The steady growth of Soviet military capability relative to that of the United States reduces our margin for error. Higher quality and more timely decisions must be made if we hope to achieve the efficiency necessary to compete with the Soviets, who devote over 50 percent more resources to defense than does the United States.<sup>2</sup> Lack of a clear set of prioritized objectives and a consistent military strategy may lead to our merely reacting

to structuring our choices based on long-range interests. Thus, as our margin for error has grown smaller and the risks of military or political defeat have grown larger, the consequences of force planning errors made in peacetime have become more critical than ever.

Making the best force choice decision in a free society is a difficult and lengthy process. It entails a consideration of numerous international and domestic factors, including political, military and economic influences. The sheer number of ideas, concepts, opinions and differing points of view to be considered can be confusing if one does not have a useful framework for organizing key factors. Because planning involves a prediction of the future, there is considerable uncertainty and room for disagreement in making logical choices about how forces should be structured, organized, and equipped to meet future security requirements. Unfortunately, there is rarely a single right answer. Equally valid arguments are often made

for widely different choices depending on the objectives sought and the assumptions made about enemy intentions, technological advances, and future political and economic conditions. Thus, difficult choices, based on limited information and an uncertain future, must be made.

While recognizing that organizational interests and bureaucratic politics play important roles in the final selection of defense forces, this article presents a rational framework for the formulation of requirements and the evaluation of alternative force choices. This framework represents a compromise between the complexity of reality and simplicity to aid in understanding. It attempts to identify the most essential elements in force planning and to represent their dominant interrelationships. These elements and relationships are illustrated in Figure 1.<sup>5</sup>

The framework takes a top-down approach by starting with national interests and objectives and proceeding down to the detailed assessments that are made to assist decisionmakers in the selection of forces for the periodic updates to the Five Year Defense Program (FYDP). The explanation of terms included with this framework provides a basis for common understanding and assists in sorting the essential force planning concepts from the many peripheral arguments that all too often become the center of discussion.

The purpose of presenting this framework is to provide a tool for understanding the concepts of force planning, and not to describe the actual process itself. It provides an approach for organizing one's thinking for the planning of future military forces. Taken in that light, it can be: (1) an aid to evaluating the arguments of military strategists or force planners; and (2) a starting point for developing alternative approaches to structuring major force planning decisions.

**Scope.** Force planning can be defined as the process of establishing military requirements based on an appraisal of the security needs of the nation, and selecting military forces to meet those requirements within fiscal limitations. These requirements are sometimes divided into strategic, theater nuclear, conventional and contingency categories. Alternatively, regional, mission area, or Service-oriented categories can be used. In any case, the scope of military force planning is so large that it is generally treated in manageable components. In an attempt to establish the general underpinnings for all force-related issues, some degree of exactness in the choice of terminology and examples has been sacrificed.

Throughout this paper two major themes underlie the discussion of force planning concepts: (1) the allocation of scarce resources, and (2) the relationship among ends, means and risks. There will never be enough resources to satisfy all wants; there are always more needs to be filled than there are national assets available to fill them. Thus, requirements must be prioritized, decisions made, and scarce resources allocated to the most critical needs.

To obtain the most from our limited national resources, we must determine where we want to go (objectives) and how we plan to get there (strategy). The importance of these intuitively obvious ideas sometimes gets lost in the process of making detailed assessments and specific weapon system decisions. It may be necessary to adjust our military objectives (ends) to fit within the forces available (means) to accomplish them. A mismatch between these two force planning elements poses some danger (risk) to our security interests.

For purposes of discussion the force planning framework given in Figure 1 is divided into two sections: *strategic choices* and *force choices*. Strategic choices involve the identification of national interests, national objectives,

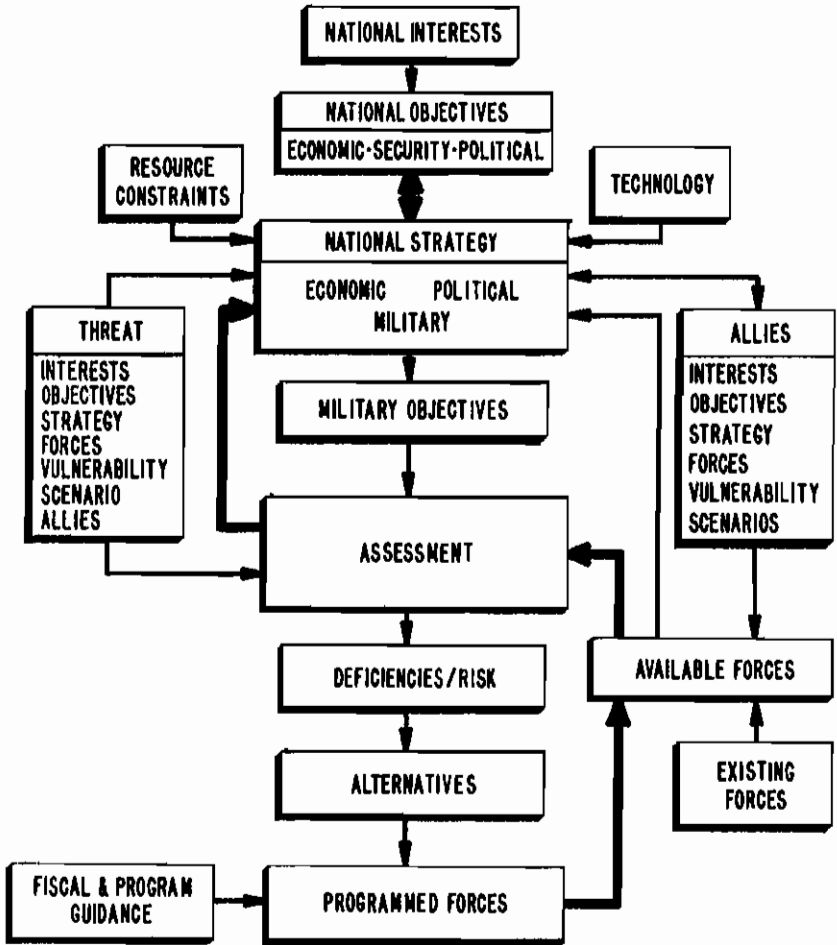


Fig.1—Force Planning Framework

the supporting national strategy and military objectives. Force choices involve an assessment of military objectives, threat and available forces in order to identify deficiencies that result when a specific fiscal limit is applied to the acquisition of defense forces. Each of these two basic choices has a major feedback loop that is depicted by the heavy lines in Figure 1. These lines indicate the iterative nature of the force planning process. Assessments play an important role in force planning, as this is where strategic and force choices tend to come together. Other feedback loops and other relationships between elements are evident in practice, but are omitted for simplicity.

**Strategic Choices.** The basic assumptions, scenarios and constraints that are introduced in the formulation of national interests, objectives and strategy establish the course of successive decisions. Thus, it is essential that these choices be clearly defined prior to the development of force choices. The formulation of national strategy is perhaps the most difficult because it requires the consideration of many interrelated factors. In meeting our national objectives, national strategy should consider the interests and objectives of our friends and enemies, constraints imposed upon our human, industrial and material resources, and the technology that we can reasonably expect to have available during the time period of interest. At times it may become necessary to change our national objectives when it becomes evident that we can no longer support them with the chosen strategy and forces available.

**National Interests.** At the highest level of abstraction, national interests are the wellspring from which national objectives and a grand strategy flow. National interests are the most important wants and needs of a nation.

The overriding national interests are normally stated in terms of national survival and well-being. Preservation of our territorial integrity, freedom, independence, political institutions and honor are fundamental to our survival as a nation. Maintenance of the economic well-being and overall quality of life of the American people are also considered important national interests. A corollary interest is the survival of our allies—notably Western Europe and Japan. We are a nation whose national survival is inextricably linked to that of our allies by historic, political, economic and cultural ties.

Although there is no single document in which our national interests are compiled, it is possible to identify them from the reports written and speeches given by our national leaders. In his 1980 State of the Union address President Carter indicated that free world access to foreign oil was a vital interest of the United States. A vital interest normally implies that we will use military force if necessary to ensure its achievement. Secondary interests imply less of a commitment of national resource.

**National Objectives.** Whereas national interests define the basic, nonnegotiable needs of a nation, national objectives spell out what a country is trying to do. These objectives are sometimes referred to as national policies, aims, or purposes. National objectives are the goals that a nation seeks in order to advance, support or defend its national interests. They are generally described in three broad categories—economic, security, and political—although other categories such as social, ideological, or technological are also used.

An example of a political objective of the United States is "to foster an international environment that is conducive to the maintenance of world peace and stability and in which the

United States, its allies, and its friends can pursue their national objectives in security and freedom."<sup>4</sup>

An economic objective of the United States is "to promote a system of free and open trade which will enable the U.S. to benefit from those areas in which it has a relative productive advantage."<sup>5</sup>

A security objective of the United States is to "preserve the United States as a free nation with its fundamental institutions and values intact."<sup>6</sup>

These brief examples address the highest level of abstraction and provide only a starting point for the strategist. Detailed objectives must be formulated and prioritized for particular situations in which U.S. interests are involved.

**National Strategy.** Strategy is a word that is often used but little understood. It has taken on so many meanings in different publications that it is important to set the context for its use here.

Beaufre has defined strategy as "The art of applying force so that it makes the most effective contribution toward achieving the ends set by political policy."<sup>7</sup> He goes on to state,

The aim of strategy is to fulfill the objective laid down by policy, making the best use of the resources available . . . The art of strategy consists in choosing the most suitable means from those available and so orchestrating their results that they combine to produce a psychological pressure sufficient to achieve the moral effect required.<sup>8</sup>

Another author states that,

National strategy fuses all the powers of a nation, during peace as well as war, to attain national interests and objectives. Within that context, there is an overall political strategy, which addresses both international and internal issues; an economic strategy, both

foreign and domestic; a national military strategy; and so on. Each component influences national security immediately or tangentially.<sup>9</sup>

National strategy, as used in this article, refers to the overall approach or master plan for accomplishing our national objectives through a combination of military, political, economic, diplomatic or psychological means. These tools are the basic instruments of our national power. Our strategic choices indicate how we choose to employ these instruments in the pursuit of our national objectives. Specifically our military strategy involves basic choices between a continental or maritime approach, an alliance or an isolationist arrangement, a deterrent or a "warfighting" emphasis, a forward deployment or a rapid reinforcement posture, and so on. These strategic choices, and the assumptions we make about them, establish limits on lower level decisions. Thus, in the top-down force planning approach suggested by the framework given here, the military strategy that is initially selected sets the bounds in which successive force choice decisions are made.

**Military Objectives.** Military objectives flow from our overall military strategy. They are the link between strategy and force structure. For example, in response to the strategic nuclear threat our national security objective is "nuclear deterrence." Our plan for achieving this important national objective is referred to as a "countervailing strategy."<sup>10</sup> This means that the United States intends to carry out a broad range of retaliatory attacks in response to a Soviet attack so as to deny the Soviet Union any possible gain from initiating a nuclear war.

Our military objectives to implement this countervailing strategy include: (1) the deterrence of a nuclear attack on the United States and its allies; (2) the

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maintenance of essential equivalence; (3) the maintenance of both long-term and crisis stability; and (4) the prevention of a Soviet victory in the event deterrence fails.<sup>11</sup> These objectives become the starting point for a more explicit determination of the military requirements for our strategic nuclear forces.

**Force Choices.** Once overall military strategy and objectives are determined it is possible to assess our ability to carry out that strategy given the availability of forces and the projected enemy threat. These assessments can take various forms, from detailed analytical treatments of opposing forces to a seasoned judgment that intuitively integrates the nonquantifiable factors of war. But whatever the form, any force assessment should somehow include the essential elements of military objectives, threat and available forces. Deficiencies identified by the overall assessment are often described in terms of military risks. These risks may be reduced by judicious selection of alternative forces. Final decisions about which forces to include in the next Five Year Defense Program are conditioned by fiscal and program guidance that is consistent with overall national objectives. These decisions may lead to an emphasis on improved readiness at the expense of weapon modernization, or on strategic forces over additional general-purpose forces. These choices are largely governed by an assessment of the risk assumed by not investing in foregone opportunities.

The entire force choice process should be dynamic in order to adapt to changing conditions. Different force planning elements are considered in varying degrees both inside and outside of the Defense Department. By design, the entire process must come together at least once a year with the preparation of the Five Year Defense Program.

This, however, is not the final word, as

Congress will modify the choices to reflect the public and political moods of the time. Modifications and supplemental budget changes are also requested by the Services during the year as necessary to meet unexpected contingencies.

Each of the force choice elements is considered in more detail in the following sections.

**Threat.** A description of the threat is an essential element of any force planning assessment. Threat assessments can be global or regional, immediate or future, nuclear or conventional, and so on, depending on the ground rules or assumptions. A useful organization of the threat description can be made in terms of capabilities, intentions and circumstances. Enemy vulnerabilities can also be added to this list.<sup>12</sup>

Capabilities refer to the physical ability of a potential enemy to impose its will on other nations. This can be measured in six factors: (1) demographic; (2) geographic; (3) economic; (4) historical-psychological-sociological; (5) organizational-administrative; and (6) military.<sup>13</sup> The military capability of a nation is often described by the number and quality of weapons and armed forces personnel, command and control features, deployment patterns, readiness level, mobilization ability, etc.

Assessing the capability of military forces can be extremely difficult. A simple accounting of the numbers and types of forces is not always available, and the effectiveness of forces is not easily measured. For example, the debate over ratification of SALT II has emphasized the problem of verifying the numbers and effectiveness of Soviet strategic nuclear weapons.

Important economic and political factors are also difficult to obtain and to interpret. Communist countries, in particular, conceal or purposefully distort basic economic data that is

commonly available in Western nations. Economic and political problems are not freely reported in the censored press. Recent projections by the Central Intelligence Agency of potential energy and manpower shortages in the Soviet Union are important considerations, but are difficult to assess with any degree of certainty.<sup>14</sup>

Intentions refer to what an enemy plans to do, such as initiating an attack. Knowledge of another's intentions is considerably more vague and uncertain than is knowledge of capabilities. Determination of intentions includes an examination of the enemy's national interests, objectives and strategy. Just as U.S. intentions are difficult to assess, so too are enemy intentions difficult to assess for many of the same reasons. National leaders do not articulate their intentions unambiguously, nor do they act consistently with their stated intentions. Recent debate over continuation of détente with the Soviet Union has focused on Soviet intentions. Is the Soviet Union using détente only as a means to achieve world domination? Or does the Soviet Union seriously desire peaceful coexistence with the West?<sup>15</sup>

Even when an enemy has the capability to threaten our vital interests, and military action is the best available option, circumstances may prevent him from doing so. Soviet concern over the actions of China weighs heavily in her decision to initiate a NATO/Warsaw Pact conflict. Whether or not the United States is tied down in major operations in Korea, the Caribbean or the Persian Gulf also influences that decision. Circumstances can also cause a nation with little hope of defeating another nation to launch a military attack. The Japanese attack on Pearl Harbor was motivated by Japan's need to preserve resource supplies and by the U.S. war against Germany. Certainly Japan alone could never expect to defeat

the United States. Another example of the importance of circumstances overriding concerns for military capabilities was the 1973 Arab-Israeli War. President Sadat of Egypt needed to force a resumption of the negotiation process with Israel and to demonstrate some progress to the Egyptian people in regaining the Sinai Peninsula.<sup>16</sup>

Although selected scenarios are important tools in threat analysis, they can easily be misused in planning military forces. Optimizing forces to the specifics of one scenario may be painfully disappointing if the enemy selects an alternative approach that capitalizes on our vulnerabilities. In the 1960s the United States adopted a NATO scenario that assumed a 23-day warning time for planning purposes. Military planners soon treated this warning time as a rigid fact.<sup>17</sup>

Extreme positions should also be avoided. There is a tendency to assume the worst case by giving the enemy the benefit of the doubt. Military planners tend to be conservative by assigning higher effectiveness to enemy forces. Also, being intimately familiar with the shortcomings and limitations of friendly forces, they tend to undervalue those capabilities. In addition to assessing the capabilities of the enemy, its vulnerabilities should also be identified. In this way opportunities to exploit them can be sought in the overall defense strategy. Offensive measures can be identified to supplant reactive and defensive ones that can result from a preoccupation with enemy strengths and initiatives.

**Available Forces.** Another major input to the continuing assessment process is a description of the military forces that would be available to engage in future conflicts. These forces include: (1) existing forces (active and reserve) minus those that are scheduled for retirement; (2) forces programmed to become operational during the time of



interest; and (3) force contributions that can be expected from our allies in specific situations.

Existing forces provide a convenient baseline to which additions and deletions can be made. Given the extended life and long procurement leadtimes for many weapon systems today, existing forces inevitably form a major part of the force structure far into the future. Force modernization choices are actually made "on the margin" as our force structure is not built from the ground up each year. Thus, although military strategy and objectives should determine our selection of forces, it is also true that existing forces largely determine our overall strategy and our ability to meet specific military objectives.

Naval vessels in particular highlight these realities. The aircraft carrier *Vinson* is entering the fleet in 1981, 8 years after the procurement decision was made, and is expected to be in the fleet until the year 2010, and possibly until 2025 if subjected to a Service Life Extension Program. It is interesting to reflect on what the world situation will be like in 2010 and to imagine how *Vinson* will contribute to our security requirements then. What naval strategy will be developed to use carrier assets 30 or more years from now? Interestingly, the aircraft carrier *Midway* is today home-ported in Japan, the very country it was designed to defeat 35 years ago.

Existing operational forces have another effect on our ability to meet the threat. The cost of manning, operating and maintaining them comes at the expense of force modernization. Thus, the balance between operating existing forces to increase current readiness and procuring new forces to improve future capability is a key issue on how limited resources are to be spent each year.

The expected contribution of our allies is a critically important element to consider in how we allocate our

resources. However, it is something over which we have less control. Allied capabilities, intentions and circumstances should be taken into account. Their national interests and objectives come first, and it is only when those interests and objectives are compatible with our own that we can include allied forces in the accomplishment of our military objectives. For example, in planning for a NATO/Warsaw Pact conflict, should French forces be included? Including France in assessing the balance can alter the results significantly, particularly if the comparison is based on manpower.<sup>18</sup> Also, what contributions can be expected if Western access to Persian Gulf oil or mineral resources is threatened?

In counting forces, only those forces that can be expected to be brought to bear in a timely manner should be included. This is an extremely difficult task owing to uncertainty in future manpower and budget levels, allied interests, state of force readiness, deployment, and the duration of the conflict. As with each step of the force planning process, assumptions must be made in order to deal with these uncertainties in making the necessary assessments.

**Assessment.** Force planning assessments comprise a complex series of analyses that consider the capabilities of U.S. and allied forces to support the national strategy when opposed by the expected threat. The results of these assessments are the identification of deficiencies in available forces and the indication of risks inherent in current programs. These assessment exercises serve as a basis for formulating changes to the programmed forces. This appraisal process leads to the decisions that eventually reallocate funds among the service programs within fiscal guidelines. Deficiencies are corrected by making incremental changes in aircraft,

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ship, tank and other procurement programs. The revised programs are then used as the basis for future force structure.<sup>19</sup>

In making these assessments, defense planners must consider what we want to do (objective), how we plan to do it (strategy), what we are up against (threat), and what is available to do it (forces). Both qualitative and quantitative assessments are useful in comparing opposing forces and strategies. Qualitative factors include such things as leadership, training, morale, logistics, intelligence, technology and initiative. Quantitative factors include order-of-battle, firepower, mobility, survivability, accuracy, range, weapons effects and a host of other measurable quantities.

In the analysis of quantitative factors, use is made of counting, modeling and gaming. Counting the type and numbers of opposing forces has limited use, but is a necessary first step. Both static counts and dynamic attrition methods are used. Questions naturally arise concerning which forces should be counted, whether comparisons should be symmetrical (like forces) or asymmetrical (opposing forces), how can double counting be avoided, how are organizational aspects accounted for, how are firepower and mobility differences treated, and how are variations of strategy dealt with? Various techniques and assumptions have been developed to deal with these issues. As an example, the Army uses the concept of Armored Division Equivalents (ADE) to scale numerically the combat effectiveness of different division structures.<sup>20</sup>

Models of combat situations are used to determine the ability of military forces to carry out specific missions. The effectiveness of individual weapons and tactics are tested. The analytical model allows the analyst to extend the results of his investigation to complex interactions among many weapon systems. In effect, models reduce the extremely complex nature of combat to

a relatively simple mathematical form. While this can significantly enhance one's understanding of the cause-effect relationships involved, it can also mask the true complexity and uncertainty that will always exist in the reality of war. Used with caution, however, analytical models are indispensable aids to assessing military capabilities.

War gaming is a systematic method for studying military problems that introduces the human decision element into an assessment. A dictionary definition of a war game is "a simulation, by whatever means, of a military operation involving two or more opposing forces, conducted using rules, data and procedures designed to depict an actual or assumed real life situation."<sup>21</sup> Simulated warfare provides a means of gaining experience, identifying errors or shortcomings, and improving skills without paying the penalties of the real war. War games provide valuable insight into the capabilities and employment of planned forces.

Political-military simulations can establish the feasibility of various strategies and test the outcome of particular scenarios. The effectiveness of postulated forces and deployment patterns can be evaluated in this dynamic setting that incorporates the elements of maneuver, chance and human limitations.

Of course, all forms of war games are not without their limitations. Each play of a game is only one of many possible sequences of events and decisions. The fact that both friendly and enemy forces are played by one side should also give pause before conclusions are drawn.

Throughout the assessment process there is always the danger that the limitations of key assumptions and constraints will not be fully appreciated. Subjective judgments are made in the creation and application of all quantitative assessments. One must not

be swayed to equating the validity of the outcome with the precision of the results.

**Deficiencies and Risk.** Through the qualitative and quantitative assessment of strategy, objectives, forces and threat, deficiencies in our force structure and military strategy are identified. Insufficient numbers of people or weapons, low combat effectiveness or kill probability, inadequate logistics elements, lagging technological capabilities, or the inability to move and sustain forces may be identified. The net result of these deficiencies is that risks must be assumed until improvements can be made.

Risk can be broadly described as the difference between desired ends (military objectives) and what can be achieved with available means (strategy and forces). To choose military forces effectively, risks must be analyzed, assessed and managed.

Risk analysis involves the identification and quantification of factors affecting the desired outcome. In particular, the probability of failure and the consequence of failure should be analytically addressed if various levels of risks are to be assessed and managed.

Risk assessment should consider what the overall implications are of the identified deficiencies. How risks are to be measured and described must also be decided. Several alternative measures of risk include rapidity of success, ability to conduct simultaneous engagements, and likelihood of success.<sup>22</sup> In each case, the meaning of "success" must be defined. Risk assessments highlight areas requiring attention in terms of programming actions.

To minimize their effect, risks must also be managed. For crucial uncertainties, additional information may be sought to reduce them. Budgets may be raised to lower the overall risk of failure.

Limited resources may be reallocated

among mission areas, accepting increased risks in some areas in order to reduce the risks in others. At the highest level of planning, a nation may accept higher levels of security risks to achieve other political or social development objectives.

**Alternatives and Programmed Forces.** The final and most difficult step in force planning is to select from alternative forces the number, type and mix of weapons systems and platforms needed to correct deficiencies in our forces and to minimize risks, keeping in mind the requirement to maintain balanced force levels and fiscal realism. This is accomplished each year in the preparation of the Five Year Defense Program. This programmed force is fiscally constrained but the hope is that it fulfills the most critical aspects of the national defense strategy.

The Planning, Programming and Budgeting System (PPBS) is the formal mechanism used by the Defense Department to establish the Five Year Defense Program (FYDP). This document lists how the defense budget will be allocated over the next 5 years. Although the FYDP is the end result of a long and involved process, it should not be regarded as a definitive statement of U.S. choices of military forces for the future. The analysis and debate, both public and internal, surrounding the multitude of decisions that shape future defense forces play a significant role in force planning. Thus, force programming should be thought of in its larger context, involving the Executive Department, Congress, the media, academia and the American public.

**Fiscal and Program Guidance.**

The entire force planning process can be viewed as a resource allocation problem. The Five Year Defense Program is the result of a long PPBS cycle whose objective is to decide how limited resources are to be allocated

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among competing priorities. An early step in the PPBS cycle is the issuance of fiscal, policy and programming guidance by the Secretary of Defense to the military services in the form of the Consolidated Guidance. This guidance reflects the Administration's desired priorities for the coming year.

Five different levels of resource allocation affect the amount and mix of resources applied to defense.<sup>23</sup> First, there is consideration of the nation's total resources and how they are to be shared between the private and public sectors. Concerns with inflation, slow growth, unemployment, and budget deficits have been the focus of debate at this level during the 1970s.

The second level of resource allocation occurs between defense and social programs within the federal budget. Competing economic, political, and security objectives strongly influence these resource allocation decisions. Thus, defense planners must articulate well their legitimate needs to meet the nation's national security objectives. It is also necessary that a realistic appraisal be made of the future availability of defense funds. Too often defense plans assume budgets will rise in the future to correct current deficiencies. A declining share of the federal budget went to defense during the early 1970s because of antiwar, isolationist feelings and efforts to curb inflation. Consequently, force modernization plans were continually shifted to the later years of the Five Year Defense Program. The mood of the nation as it enters the 1980s appears more conducive to considering a shift of resources from nondefense to defense programs, but the ensuing debate will be long, arduous and uncertain in outcome. The fiscal guidance given to the Department of Defense is the result of decisions made at the above two levels.

A third level of resource allocation occurs when each Service's share of the

defense budget is determined. Initial shares are given in the Consolidated Guidance. Concerns over roles and missions may surface at this time. Changing defense priorities have an important effect. The Carter administration's emphasis on modernizing strategic nuclear and NATO forces meant less resources for other contingencies. This had its greatest effect on Navy and Marine Corps modernization efforts. Recent concern over unrest in the Greater Middle East and a rapid deployment force capability may prompt a reallocation of future budget shares.

Within each Service a fourth major resource allocation must be made among each of the appropriation accounts. Should funds be provided for manpower, operations and maintenance to ensure current readiness? Or should funds be provided for procurement to implement force modernization plans? In the early 1970s, the Navy purposely cut in half the size of the fleet in an effort to provide funds for shipbuilding. During the later half of the 1970s, the Army accepted reduced manpower and material readiness to pay for weapons procurement and repositioning of equipment for NATO.

Finally, a fifth level of allocation occurs when alternative force choices are made within the procurement accounts of each Service. Should Army divisions be light or heavy? Should the Navy build a large number of small carriers or fewer large carriers? Should the Air Force procure air-launched cruise missiles for an upgraded B-52 or invest in a new manned penetrating bomber?

**Feedback and Iteration.** This description of the force planning framework considered each element in a step-by-step fashion. This is not meant to imply that force planning is a rigid sequential process. In reality, elements

are considered to various degrees by different groups at different times. Feedback and iteration exist at all levels. Consideration of too many feedback loops would complicate the diagram and destroy the usefulness of the framework. Thus, only three feedback loops are highlighted.

The heavy lines in the upper portion of Figure 1 emphasize the need for feedback and iteration in making strategic choices. Military, political and economic assessments may indicate the need to revise the initial choice of national strategy in order to satisfy the national objectives. It may also be necessary to review the national objectives to ensure that more has not been attempted than the available resources, technology and forces can accomplish.

The heavy lines in the lower portion of Figure 1 emphasize the need to reassess the ability of available forces to carry out the desired military objectives after programmed forces have been added. Alternative forces can be evaluated in order to determine the most cost-effective choice.

Finally, the assessment element forms the link between strategic and force choices. The limitations or deficiencies of a military strategy may become apparent only after forces have been chosen to carry it out. Where a strategy-force mismatch exists, either the forces must be increased, the strategy revised, or the objectives lowered.

**Conclusion.** This article presents an organized framework for choosing defense forces. As such, it is intended to serve as a useful starting point for the consideration of complex force planning issues. Political, bureaucratic and organizational factors often obscure the important rational elements of force planning decisions. In light of a growing Soviet military threat and increasing competition for scarce resources,

choosing the best defense forces is more crucial now than ever before. Our margin for error is shrinking, demanding that precise and thorough consideration be given to the key elements of force planning.

Because of the complexities involved in force planning and the numerous uncertainties that make precise evaluation difficult, clear-cut choices are seldom achieved. Consequently, the final programming decisions are often made in an atmosphere of political bargaining and organizational advocacy. It is incumbent upon those involved in national defense to have some rational approach for considering the numerous

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**BIOGRAPHIC SUMMARY**



Richmond Lloyd, Professor of Management at the Naval War College since 1973, was educated at the University of Chicago and the University of Rochester, earning the Ph.D. degree from the latter. He has served in the

Center for Naval Analysis and been a consultant to the Chief Naval Education and Training. His fields of specialization are economics, logistics, operations research, and operations management.

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**BIOGRAPHIC SUMMARY**



Lieutenant Colonel Dino A. Lorenzini, an Air Force Academy graduate, holds advanced degrees in Business Administration and Management from Auburn University and Astronautical Engineering from MIT,

receiving his Doctorate of Science degree from the latter. He has served in several Air Force engineering, research, and program management positions. His papers include *NAVSTAR Field Testing and Analysis of Joint Service Acquisition Programs*. He is now serving on the Management Department faculty of the Naval War College.

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force planning elements in order to make timely and informed judgments on complex force choice issues. In

addition, it is essential that they be able to communicate those issues to the American public clearly and concisely.

### NOTES

1. Andre Beaufre, *Strategy for Tomorrow* (New York: Crane, Russak, 1974), p. 71.
2. The Soviet Union devoted 11 to 12 percent of its gross national product to defense throughout the 1970s compared to 8 percent in 1970 and 5 percent in 1979 for the United States. In 1979, Soviet defense expenditures exceeded those of the United States by 50 percent when measured in dollars. See: National Foreign Assessment Center Report, *Soviet and U.S. Defense Activities, 1970-79: A Dollar Cost Comparison* (Central Intelligence Agency, January 1980), pp. 3-5.
3. This diagram is an adaptation of the Force Structure Assessment Methodology given in NWP-1 (Rev. A), *Strategic Concepts of the U.S. Navy* (Washington: Dept. of the Navy, 1978).
4. *Ibid.*, p. 1-2-1.
5. *Ibid.*
6. *Ibid.*, p. 1-2-2.
7. Andre Beaufre, *An Introduction to Strategy* (New York: Praeger, 1965), p. 22.
8. *Ibid.*, p. 24.
9. John M. Collins, *Grand Strategy* (Annapolis: Naval Institute Press, 1974), p. 14.
10. U.S. Dept. of Defense, *Annual Report—Department of Defense, Fiscal Year 1981* (Washington: 1980), p. 65.
11. *Ibid.*, p. 68.
12. Frederick H. Hartmann, *The Relations of Nations* (New York: Macmillan, 1978), p. 259.
13. *Ibid.*, p. 45.
14. Geoffrey L. Schleifer, *The Soviet Economy in 1978-79 and Prospects for 1980* (National Foreign Assessment Center: CIA, May 1980).
15. Daniel Yergin, "Politics and Soviet-American Trade," *Foreign Affairs*, April 1977, p. 527.
16. Anwar Sadat, *Search for Identity* (New York: Harper & Row, 1978).
17. CBO Report, *Assessing the NATO/Warsaw Pact Military Balance* (Washington: U.S. Govt. Print. Off., 1977), p. 22.
18. *Ibid.*, p. 10.
19. NWP-1, p. 1-5-1.
20. *CBO Report*, pp. 53-63.
21. Alfred H. Hausrath, *Venture Simulation in War, Business, and Politics* (New York: McGraw-Hill, 1971), p. 8.
22. James L. Holloway, *CNO Report-FY-1979* (Washington: Department of the Navy, March 1978), p. 30.
23. Paul H. Nitze and Leonard Sullivan, Jr., *Securing the Seas* (Boulder, Colo.: Westview Press, 1979), pp. 319-336.

