

RAND

Strategies to Tasks

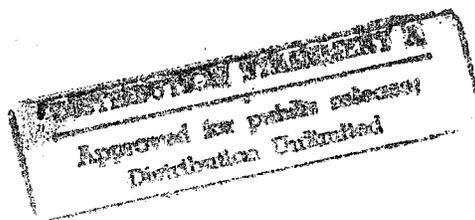
*A Framework for
Linking Means and Ends*

David E. Thaler



19950303 084

Project AIR FORCE



The research reported here was sponsored by the United States Air Force under Contract F49620-91-C-0003. Further information may be obtained from the Strategic Planning Division, Directorate of Plans, Hq USAF or the Department of Defense.

ISBN: 0-8330-1461-7

RAND is a nonprofit institution that seeks to improve public policy through research and analysis. RAND's publications do not necessarily reflect the opinions or policies of its research sponsors.

Published 1993 by RAND
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
To obtain information about RAND studies or to order documents,
call Distribution Services, (310) 451-7002

RAND

Strategies to Tasks
A Framework for
Linking Means and Ends

David E. Thaler

Prepared for the
United States Air Force

Project AIR FORCE

Approved for public release; distribution unlimited

PREFACE

In a briefing intended to set a tone for Air Force planning, General Merrill McPeak, Chief of Staff of the Air Force, called 1993 the "Year of Equipping." To underwrite this emphasis on "equipping," General McPeak ordered his staff to develop a plan to guide the modernization of the Air Force out to the year 2015. He stressed that this plan should "take a fresh *strategies-to-tasks* approach to ensure we have identified the right requirements" (emphasis added).

Responding to this directive, Colonel Charles Miller, Director of Strategic Planning in the Air Staff's Directorate of Plans (AF/XOXP), called on RAND as the originator of the strategies-to-tasks framework to prepare a briefing and a detailed primer describing the framework. This report results from that tasking.

The briefing, entitled *The "Strategies-to-Tasks" Framework*, was presented at the Air Force's Modernization Planning Conference on March 23, 1993. It is included as an appendix to this document. Three other RAND reports are recommended reading on the subject of relating the framework to a reinvigorated process for enhancing military capabilities: *A New Concept for Streamlining Up-Front Planning*, MR-271-AF, 1993; *A Framework for Enhancing Operational Capabilities*, R-4043-AF, 1991; and *A Framework for Defense Planning*, R-3721-AF, 1989.

This report is part of a direct support effort for the Air Force under the Force Structure Project of the Strategy, Doctrine, and Force Structure Program of Project AIR FORCE. It should be of interest to planners and decisionmakers in the Services and the Department of Defense and to Congress.

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/ _____	
Availability Codes	
Dist	Avail and/or Special
A-1	

CONTENTS

Preface	iii
Figures	vii
Summary	ix
Acknowledgments	xiii
Chapter One	
INTRODUCTION	1
Chapter Two	
A HIERARCHY OF OBJECTIVES	3
Objectives at the National Level	3
Objectives at the Theater Level	6
Strategies Link Levels of Objectives	7
Chapter Three	
CONCEPTS FOR PLANNING AND PROSECUTING CAMPAIGNS	9
Theater Level: Generating and Adjusting a Campaign Plan	10
Operational Level: The Concept of Employment for Achieving an Operational Objective	12
Engagement Level: Operational Concept for Accomplishing an Operational Task	12
Exemplar: An Operational Concept for Destroying Hardened Airbase-Support Facilities	15
A Word About Support Activities	19

Chapter Four	
CONCLUDING REMARKS	21
Appendix A: OPERATIONAL OBJECTIVES AND TASKS	23
Appendix B: THE "STRATEGIES-TO-TASKS" FRAMEWORK: A BRIEFING	37

FIGURES

S.1. Hierarchy of Objectives (“Strategies to Tasks”)	x
1. Hierarchy of Objectives (“Strategies to Tasks”)	4
2. Generic Concept for Developing and Adjusting Campaign Plans (Theater Battle Management)	11
3. Generic Operational Concept for Accomplishing an Operational Task	13
4. Functions and Related Information Combining in an Operational Concept for Destroying Hardened Airbase-Support Facilities	16
5. Alternative Systems and Organizations That Perform Functions in Operational Concept for Destroying Hardened Airbase-Support Facilities	18

SUMMARY

The purpose of this document is to describe the “strategies-to-tasks” framework. Strategies to tasks provides an audit trail from the broadest national objectives and strategies down to operational activities at the tactical engagement level. The framework explicitly disaggregates these activities into key functional elements encompassing the tactics, organizations, and systems that enable the successful execution of missions; it also gives high visibility to the interrelationships among these elements. It is meant to help identify high-priority needs for improved operational capabilities. By specifying the role played by individual systems in *operational concepts*, the framework can be a useful tool for force planning. It can help expose systems and functions necessary for executing missions, and it links them hierarchically to national objectives. It can also provide an operationally oriented basis for making informed choices and tradeoffs among system concepts.

The framework, displayed in Figure S.1, establishes the link between means and ends through a hierarchy of objectives. With this hierarchy, one can track the relationship between broad objectives and strategies that the President defines to operational tasks that force elements accomplish, and do so in only four steps—from national security objectives to national military objectives, from national military objectives to campaign objectives, from campaign objectives to operational objectives, and finally, from operational objectives to operational tasks.

In common parlance, an objective is attained through the implementation of a strategy. For instance, one may deter North Korea from

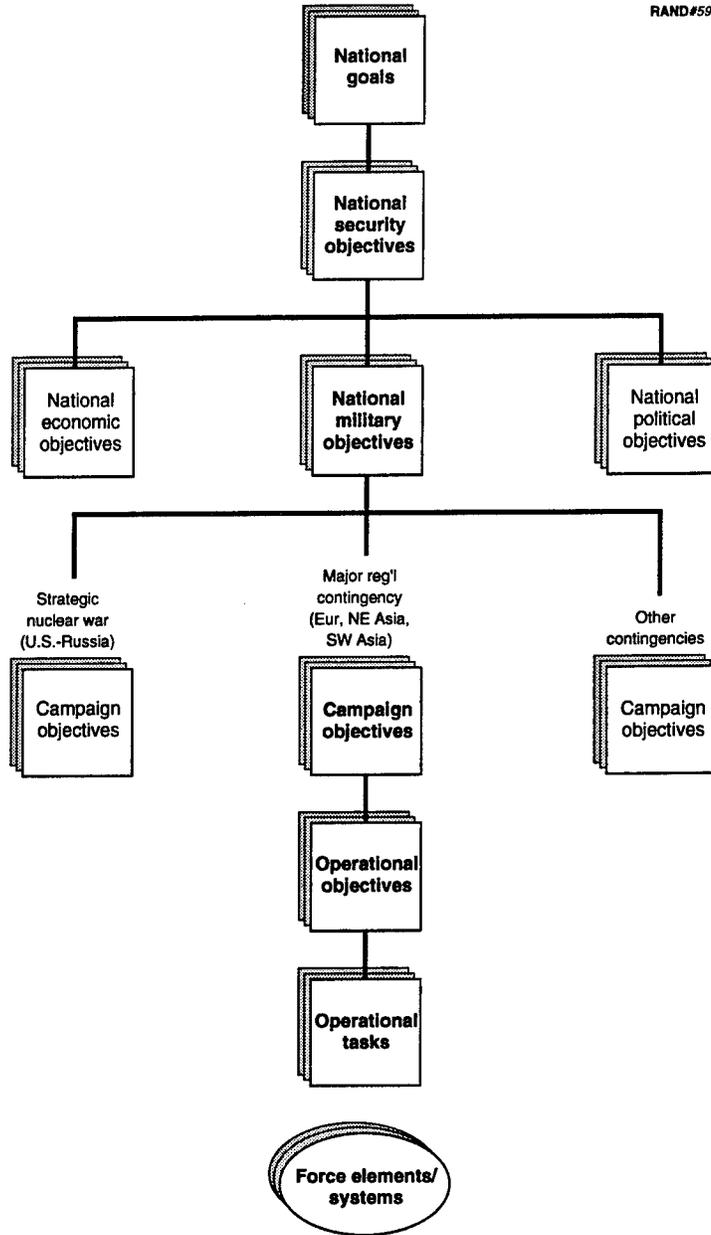


Figure S.1—Hierarchy of Objectives (“Strategies to Tasks”)

attacking South Korea through the strategy of maintaining a strong forward military presence and isolating North Korea diplomatically. The strategies-to-tasks framework recognizes that the strategy for achieving the overall objective of deterring North Korea actually consists of a statement of supporting objectives (“maintain a strong forward military presence,” “isolate North Korea diplomatically”) at a subordinate level. The President views maintaining a forward presence as part of his *strategy* for deterring North Korea; alternatively, the Commander in Chief of the Pacific Command views it as a key *objective* that he must underwrite in his area of responsibility. In other words, objectives *cascade*—what is a strategy at one level becomes objectives at the next-lower level; hence the concept of a hierarchy of objectives.

Applying the strategies-to-tasks framework will benefit the Services in a number of ways:

- **Strategies to tasks will help the Services better understand and communicate how their activities support the nation’s security needs.**

By providing a clear audit trail between high-level national objectives and the capabilities of specific systems, the framework can help justify resource allocation choices.

- **Strategies to tasks can serve as a common frame of reference for disparate communities within each Service and between the Services.**

The framework is specifically designed to be blind to Service and system in statements of objectives and tasks. In particular, statements of “Air Force” or “Navy” objectives and tasks are discouraged; only *operational* objectives and tasks for which the Air Force and Navy may organize, equip, and train force elements to achieve are permitted. Furthermore, the *operational concept* provides a means for these communities to “sing from the same sheet of music”—to help all understand where each fits in the larger scheme.

- **The framework provides a structure for assessing tradeoffs between alternative means of accomplishing operational tasks, achieving operational objectives, and winning campaigns.**

To support these assessments, strategies to tasks can provide insights into how modeling efforts apply at each level of the hierarchy of objectives.

- **The Services can use the strategies-to-tasks framework to reinvigorate the process for enhancing military capabilities.**

The framework should be used for up-front planning to focus Service efforts in developing new *operational concepts* to enhance the military capabilities of the United States. Thereby, the Services can create operationally oriented modernization plans that are clearly and logically derived from the nation's security objectives.

ACKNOWLEDGMENTS

The author is indebted to RAND colleagues Glenn Kent, David Shlapak, and Fred Frostic, and to Col. Charles Miller (AF/XOXP), for providing guidance and encouragement during the intense, time-compressed effort that resulted in this report and the briefing. Lt. Gen. Kent, who has been the author's mentor and inspiration, created the strategies-to-tasks framework and presented the briefing that appears in Appendix B of this document. The author is also grateful to Ted Warner, formerly of RAND, for his countenance and insights. Dr. Warner and David Ochmanek, also formerly of RAND, joined Lt. Gen. Kent in developing and refining this framework over the years. Finally, the author thanks Paul Bracken and Bryan Gabbard of RAND for conducting technical reviews of the draft report. What is useful in this document is as much a product of the wisdom of these people as it is the author's.

INTRODUCTION

This report describes the “strategies-to-tasks” framework. Strategies to tasks is designed to provide an audit trail from the broadest national objectives down to operational activities at the tactical engagement level. It explicitly disaggregates these activities into key functional elements encompassing the tactics, organizations, and systems that enable the successful execution of missions; it also gives high visibility to the interrelationships among these elements. By helping to identify high-priority needs for improved capabilities, and by specifying the roles played by individual systems in the execution of missions, strategies to tasks can be a useful tool for force planning. It can help expose systems and functions necessary for executing missions, and it links them hierarchically to national objectives. It can also provide an operationally oriented basis for defining new operational concepts and for making informed choices and tradeoffs among system concepts.¹

The purpose of this report is to describe the strategies-to-tasks framework in some detail. Chapter Two traces the hierarchy of objectives that connects broad national goals to tasks that military forces accomplish. Then, Chapter Three lays out concepts for planning and prosecuting campaigns at the strategic, operational, and tactical levels—focusing especially on the latter. Finally, Chapter Four offers concluding remarks. Appendix A provides a comprehen-

¹For an in-depth treatment of how the framework relates to how the Department of Defense develops new operational concepts to enhance military capability, see Glenn A. Kent and David E. Thaler, *A New Concept for Streamlining Up-Front Planning*, MR-271-AF, 1993.

2 Strategies to Tasks: A Framework for Linking Means and Ends

sive list of campaign and operational objectives and operational tasks. Appendix B consists of the strategies-to-tasks briefing presented to the Air Force's Modernization Planning Conference on March 23, 1993.

A HIERARCHY OF OBJECTIVES

The strategies-to-tasks framework, displayed in Figure 1, establishes the link between means and ends through a hierarchy of objectives. The statements on the left side of Figure 1 are examples of objectives at each level of the hierarchy. These statements follow a single stream; e.g., one gains air superiority, among other things, by suppressing the generation of enemy air sorties. Relevant documents and plans appear on the right side of the figure. Campaign plans, concepts of employment, and operational concepts are discussed in detail in Chapter Three.

OBJECTIVES AT THE NATIONAL LEVEL

National goals appear at the top of the hierarchy. National goals are statements of the nation's most fundamental values and define the *raison d'être* of its government. They are found in such basic documents as the U.S. Constitution and are enduring and constant regardless of the geopolitical environment. For example, the Preamble to the Constitution requires that the U.S. government shall "provide for the common defense, promote the general welfare, and secure the blessings of liberty..."; these are national goals.

The President and his advisers set forth the *national security objectives*—in the congressionally mandated *National Security Strategy of the United States* and elsewhere—toward which U.S. national power is applied in support of these goals. National security objectives are formulated and defined in light of U.S. interests on one hand and threats or dangers to or opportunities for advancing those interests

4 Strategies to Tasks: A Framework for Linking Means and Ends

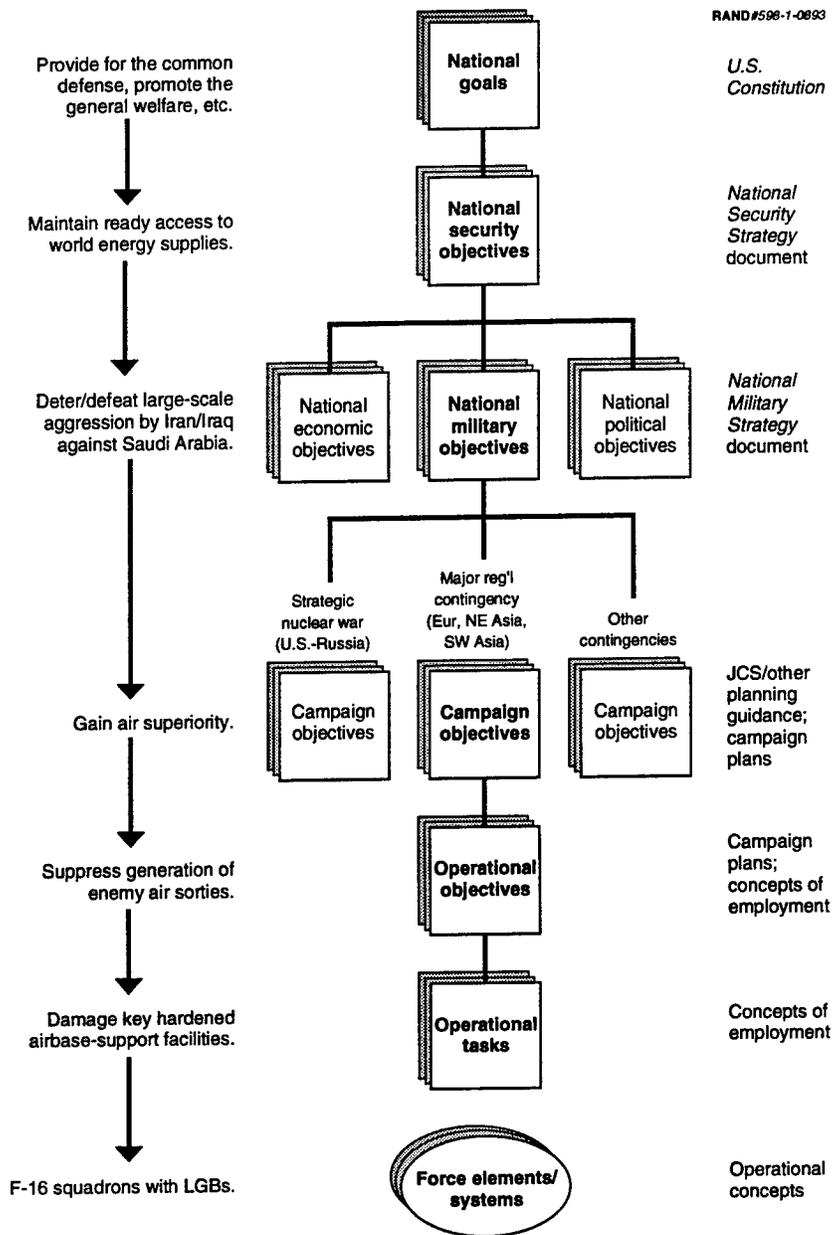


Figure 1—Hierarchy of Objectives (“Strategies to Tasks”)

on the other. For example, several national security objectives that ensure the national goals quoted above are

- Maintain ready access to world energy supplies.
- Deter, or should that fail, defeat aggression against the United States, its allies, and friends.
- Counter threats short of war to the security of the United States and its citizens and interests, including terrorism.
- Strengthen strategic stability.

The Secretary of Defense and the Chairman of the Joint Chiefs of Staff set forth *national military objectives* in the *National Military Strategy*. National military objectives describe how the military component of national power is to be applied to maintain or attain national security objectives. Military objectives, like political and economic objectives, often are specific to a region and take into account the nature of the threat to U.S. interests in that region as well as the capabilities of local U.S. allies.¹ Examples of national military objectives for maintaining ready access to world energy supplies include

- Deter/defeat large-scale aggression by Iran or Iraq against Saudi Arabia and other Persian Gulf states.
- Deter/defeat military threats to key shipping lanes.

The nature of the threat to U.S. interests is similar, at least in a broad sense, in various regions; for instance, the United States in past years has feared large-scale military aggression against U.S. interests in Europe, Northeast Asia, and Southwest Asia (commonly termed "major regional contingencies").

The *National Military Strategy* also defines the basic foundations and general principles upon which U.S. military forces will be maintained and, if necessary, deployed and employed. One principle used for force sizing, for example, could include the capability to respond adequately to two major regional contingencies.

¹The 1992 *National Military Strategy* states on page 11 that "we are focusing our planning efforts on regions of potential conflict."

OBJECTIVES AT THE THEATER LEVEL

To deter or defeat a large-scale attack against a U.S. friend or ally—in this case, an Iranian or Iraqi attack against Saudi Arabia—theater combatant commanders define *campaign objectives* to guide in a broad sense the posturing and employment of forces in this situation. Examples of campaign objectives for defeating an Iranian or Iraqi assault against Saudi Arabia are

- Gain air superiority or supremacy.
- Deter/prevent attacks on U.S. forces and allied assets with weapons of mass destruction.
- Halt invading armies.
- Gain sea control.
- Reduce the aggressor's long-term military capability.

Combatant and component commanders (officers commanding the land, sea, and air forces operating in an AOR) define *operational objectives* that describe more specific activities for attaining the national military and campaign objectives in the theater. The following operational objectives can be identified for gaining air superiority in this contingency:

- Suppress the generation of enemy air sorties.
- Defeat enemy air attacks.
- Suppress enemy surface-to-air defenses.
- Degrade command and control of enemy air defenses.

The component commanders and their staffs identify alternative, often complementary, *operational tasks* that force elements are to accomplish in order to achieve an operational objective. Operational tasks constitute the building blocks of the application of military power. Here we reach the level of force elements, such as fighter squadrons or artillery batteries. Examples of tasks that might be accomplished to help achieve the operational objective of suppressing the generation of enemy air sorties include

- Crater or mine runways and taxiways.
- Damage aircraft in the open or in revetments.
- Damage aircraft in hardened shelters.
- Damage key hardened support facilities.

It is important to note that these operational objectives and tasks, in addition to all the higher echelons of objectives, *are blind as to the force elements that accomplish them*. Several Services may organize, equip, and train force elements to accomplish the same operational task. For example, all the Services provide assets that accomplish the task of destroying enemy aircraft in flight. "Air Force objectives" or "Army tasks" do not exist in this hierarchy. Thus, statements of objectives and tasks are inherently joint; i.e., they are not Service-specific.

Appendix A provides a comprehensive list of operational objectives and tasks.

STRATEGIES LINK LEVELS OF OBJECTIVES

In common parlance, an objective is attained through the implementation of a strategy. For instance, one may deter North Korea from attacking South Korea through the strategy of maintaining a strong forward military presence and isolating North Korea diplomatically. The strategies-to-tasks framework recognizes that the strategy for achieving the overall objective of deterring North Korea actually consists of a statement of supporting objectives ("maintain a strong forward military presence," "isolate North Korea diplomatically") at a subordinate level. The President views maintaining a forward presence as part of his *strategy* for deterring North Korea; alternatively, the Commander in Chief of the Pacific Command views it as a key *objective* that he must underwrite in his area of responsibility. In other words, objectives *cascade*: what is a strategy at one level becomes objectives at the next-lower level. So even though the framework is called "strategies to tasks," it encourages us to structure our thinking in terms of a hierarchy of objectives.

Obviously, a strategy is not merely a statement of objectives—it also defines *the weight of effort to be applied over time* among objectives at one level to attain the higher-level objective *in a given situation*. Weight of effort refers to the relative priority accorded an objective and the level of resources (forces) allocated toward achieving it. Weight of effort *over time* expresses the notion that these priorities and attendant allocations may change temporally according to the situation. Strategies possess a transitory quality. Although objectives remain relatively constant (e.g., maintaining ready access to world energy supplies will continue as a U.S. national security objective), the strategies for achieving them will change according to many factors—including the theater of conflict, enemy capabilities, U.S. and allied forces available, guidance by national authorities, and so on. Strategies, then, serve as the link between levels of objectives in the hierarchy and provide the context in which the objectives are to be achieved. In fact, just as objectives are expressed hierarchically, so too are strategies.

At the level of national military objectives, for example, the *National Military Strategy* defines the emphasis across campaigns and regions. This emphasis changed quite recently—from Central Europe (responding to the now-defunct Soviet/Warsaw Pact threat) to Southwest and Northeast Asia as well as other regional hotspots. Strategy at this level should also outline in general the campaign objectives to be pursued across these campaigns. Thus, the *National Military Strategy* links national military objectives to campaign objectives in various regions; it also links national military objectives to national security objectives by defining how U.S. military power is to be applied in support of these security objectives.

Chapter Three discusses in detail strategy at the levels of campaign objectives, operational objectives, and operational tasks. It focuses most heavily on operational concepts for accomplishing operational tasks.

**CONCEPTS FOR PLANNING AND PROSECUTING
CAMPAIGNS**

Strategies to tasks identifies three levels at which campaign planning—and once a campaign has begun, its prosecution—is carried out. The highest is the theater, or strategic, level where fundamental decisions are taken about the overall direction of the campaign (with guidance, of course, from the National Command Authority, or NCA). At the operational level, these decisions are transformed into more detailed concepts of employment—the weight of effort to be applied among various operational tasks over time—for achieving operational objectives. Finally, end-to-end operational concepts at the engagement level define the force elements and associated weapon systems, the tactics, and the organizational relationships that are to be utilized in accomplishing individual tasks.¹

The *concept of employment* defines the weight of effort to be applied over time among operational objectives to gain stated campaign objectives in given situations. Moreover, it defines the weight of effort to be applied over time among operational tasks to achieve each operational objective. Operational objectives are thereby linked to *supported* campaign objectives and *supporting* operational tasks.

Finally, alternative *operational concepts* link *supporting* force elements and systems to *supported* operational tasks.

¹See Figure 1.

THEATER LEVEL: GENERATING AND ADJUSTING A CAMPAIGN PLAN

Unified and specified commanders, with the aid of the Services, are directed by the Secretary of Defense and the Joint Chiefs of Staff to underwrite national military objectives in the commanders' areas of responsibility (AORs). Accordingly, a theater commander prepares plans for conducting campaigns in his AOR that generally reflect the kinds of conflict that are possible there.

Campaign plans define strategies at the theater level of campaigns. Campaign objectives outlined in the *National Military Strategy* take center stage in campaign plans. A campaign plan for a given contingency defines the weight of effort over time among campaign objectives in order to attain a specific military objective. The plan also outlines the operational objectives that must be achieved in support of each campaign objective. The campaign plan, therefore, links campaign objectives to both higher- and lower-echelon objectives.

Once a campaign is under way, the theater commander may adjust the campaign plan frequently according to the progress of friendly operations, changes in policy guidance from above, and the status of enemy forces. We term this activity *theater battle management*—defining the weight of effort among operational objectives over time and commanding force elements to accomplish operational tasks accordingly. Component commanders provide aid and advice. The concept for generating a campaign plan and for selecting and adjusting it during conflict is displayed in Figure 2.

In peacetime, various sources provide information on the deployment and activity of enemy forces and allow some insight into enemy intentions. If possible, data are collected on the performance of the adversary's weapon systems, the tactics he uses, and the readiness of his forces. The raw data are then transmitted to assessment centers, where intelligence experts evaluate them. Such centers process, cross-correlate, and evaluate the data, and then present the analysis in a form that can be easily used by the commanders and their staffs. For instance, photographic interpreters cull the appropriate imagery from the vast amounts they receive, perhaps enhancing it to obtain desired information. This information is combined with evaluated data from other sources to produce an overall situation assessment

RAND#598-2-0893

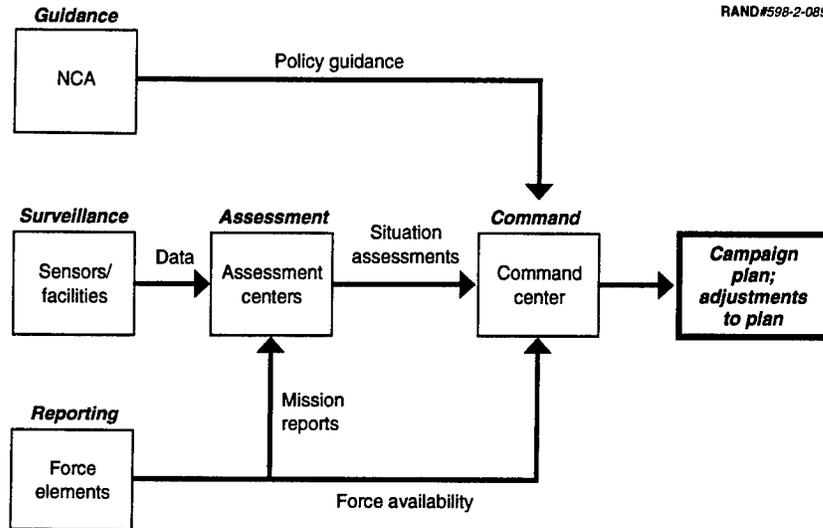


Figure 2—Generic Concept for Developing and Adjusting Campaign Plans (Theater Battle Management)

that includes estimates of the opponent's capabilities, information on the location and activities of his forces, and judgments on potential enemy courses of action. The commander bases his campaign plan on this information, on in-theater U.S. capabilities and those to be brought to bear from the United States, and on the capabilities of local U.S. allies.

These same assessments might be utilized in a crisis to provide indications and warning of an opponent's preparation for attack. Once the war begins, the assessment also includes reports on the recent activities and performance of the adversary's forces and the results of friendly operations. The situation assessment is combined with evaluations of U.S. and allied capabilities in the theater—which change constantly due to both enemy and friendly actions—to enable the commander to adjust his plans in an informed way.

On the basis of these assessments, the theater commander and his subordinates establish the relative weight of effort to be applied over time toward each campaign objective and toward each operational

objective supporting a given campaign objective. They also select the scheme of maneuver of ground forces, apportion and allocate air forces among operational objectives and geographic areas, and direct naval and amphibious operations as appropriate. As the results of enemy and friendly actions pour in, the campaign plan is adjusted in response.

OPERATIONAL LEVEL: THE CONCEPT OF EMPLOYMENT FOR ACHIEVING AN OPERATIONAL OBJECTIVE

The notion of establishing the weight of effort (priorities and force allocations) among objectives continues at the operational level. To implement the directions of the theater commander, component commanders (1) choose concepts of employment that assign weights of effort among tasks for achieving an operational objective and (2) identify more specifically the force elements to be committed against each operational objective. These subordinate commanders will exploit selected data contained in the situation assessment that have been fine-tuned to their particular needs. They draw up integrated attack plans by which the missions are to be carried out, and task control elements to direct execution of these attacks. The theater commander deconflicts competing demands by component commanders for combat forces, surveillance systems, and other assets.

For instance, enemy air sorties may be suppressed by attacking a particular set of airbases. Detailed photographs of these airbases reveal that some enemy aircraft have been moved into hardened shelters, which (let us assume) the commander has no effective means of attacking. He therefore decides to invest most of the effort in accomplishing alternative operational tasks—damaging aircraft parked in the open, cratering runways and taxiways, and destroying key maintenance facilities.

ENGAGEMENT LEVEL: OPERATIONAL CONCEPT FOR ACCOMPLISHING AN OPERATIONAL TASK

Force elements perform operational tasks on the basis of operational concepts that tie together the systems, tactics, and organizational relationships devoted to this mission. Systems typically include

surveillance sensors, computerized devices to cross-correlate and display intelligence data and to assist in the construction and communication of taskings (e.g., the air tasking order, or ATO), weapon platforms (including armored vehicles, naval vessels, and aircraft), weapons, submunitions, and the components that link them. Tactics involve the methods by which platforms attack their intended targets. Organizational relationships describe how various force elements interact—e.g., how battle managers assign specific missions to individual wings, or how pilots in flight receive additional instructions from airborne controllers utilizing near-real-time surveillance information.

Figure 3 is a schematic diagram identifying examples of key functional elements of a generic operational concept for accomplishing an operational task. Obviously, not all operational concepts will fit the same scheme. Our purpose here is to show the substantial value in disaggregating operational activities as a means of identifying the roles of key force elements, systems, and organizations in accomplishing tasks. More importantly, the end-to-end operational concept provides a common frame of reference for disparate communi-

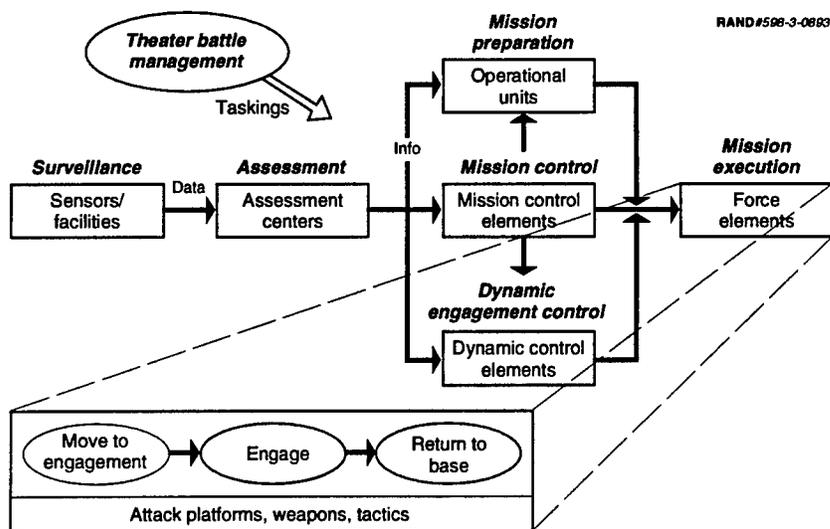


Figure 3—Generic Operational Concept for Accomplishing an Operational Task

ties as they work together to remedy deficiencies in the ability to accomplish these tasks.

The generic operational concept displayed in Figure 3 is disaggregated into six elements: surveillance, assessment, mission control, dynamic engagement control, mission preparation, and mission execution. Surveillance assets collect raw data on the object(s) of the task and relay the data—sometimes indirectly—to assessment centers, often called intelligence fusion centers. Such centers process, cross-correlate, and evaluate the data, before passing this analysis on in a form that can be readily used by the operational units and control elements.

On the basis of this information, operational units engage in detailed mission planning and prepare the attack platforms and munitions. Mission control elements (for example, Air Operations Centers [AOCs], Control and Reporting Centers [CRCs], etc.) may assign attack assets to dynamic control elements (for example, Airborne Warning and Control System [AWACS], Joint Surveillance and Targeting System [JSTARS], Forward Air Controllers [FACs], etc.) in the target area. In a number of cases, dynamic control elements provide real-time assistance in guiding the platforms to their targets. Finally, the dedicated force elements execute the mission. Mission execution is the “business” end of an operational concept and generally involves three phases: move to engagement, engage and kill (and assess results if possible), and, in the case of aircraft, return to base.²

It is through operational concepts for accomplishing operational tasks under varying circumstances that one can demonstrate and assess the contribution of military capabilities to the achievement of theater and national objectives. Systems must perform functions at a level of performance dictated by the operational concept. The concept indicates what is expected of each system or organization to make the concept work. It is on this basis that individual systems can be evaluated in the context of a scenario. In other words, *the performance expected of a system is derived from the operational con-*

²Although we have described the operational concept in an air power context, the same end-to-end process can be used to represent the activities of ground and naval forces as well. This is shown below.

cepts the system helps implement in a specific situation. It is on this basis that choices and tradeoffs with regard to the effectiveness of systems must be made.

Exemplar: An Operational Concept for Destroying Hardened Airbase-Support Facilities

We now offer a detailed example of an operational concept for accomplishing a specific operational task. First, we describe the functions to be performed—and the information necessary to the performance of these functions—in order to implement the operational concept. Then, we describe the concept in terms of alternative systems and organizations that provide the information and/or perform the functions.

Our example is the operational task of damaging or destroying hardened airbase-support facilities—such as avionics support buildings or munitions storage bunkers. This task supports achievement of the operational objective of suppressing the generation of enemy air sorties, which in turn helps attain the campaign objective of gaining air superiority. The task serves as a surrogate for others involving the destruction of fixed, often hardened targets such as command bunkers, fixed SAM sites, aircraft shelters, and bridges.

Figure 4 uses the construct presented in Figure 3 to illustrate the types of information supporting the enabling functions (*italicized phrases*) that combine in an operational concept to destroy hardened airbase-support facilities. The balloons in the figure describe communications between functional elements.

Sensors collect data about the targeted airbase in the form of imaging and signals intelligence. Some of the data are sent in a “raw” (unprocessed) state to assessment centers, while other data are formatted at facilities associated with sensors before being transmitted. At assessment centers, airbase-support facilities and other potential targets are identified and characterized for their dimensions and hardness. Analysts also assess the tempo of operations at the targeted airbase, the occupancy of airbase facilities (e.g., when a maintenance facility is in use), whether the enemy is practicing deception, and which targets have incurred damage from previous attacks.

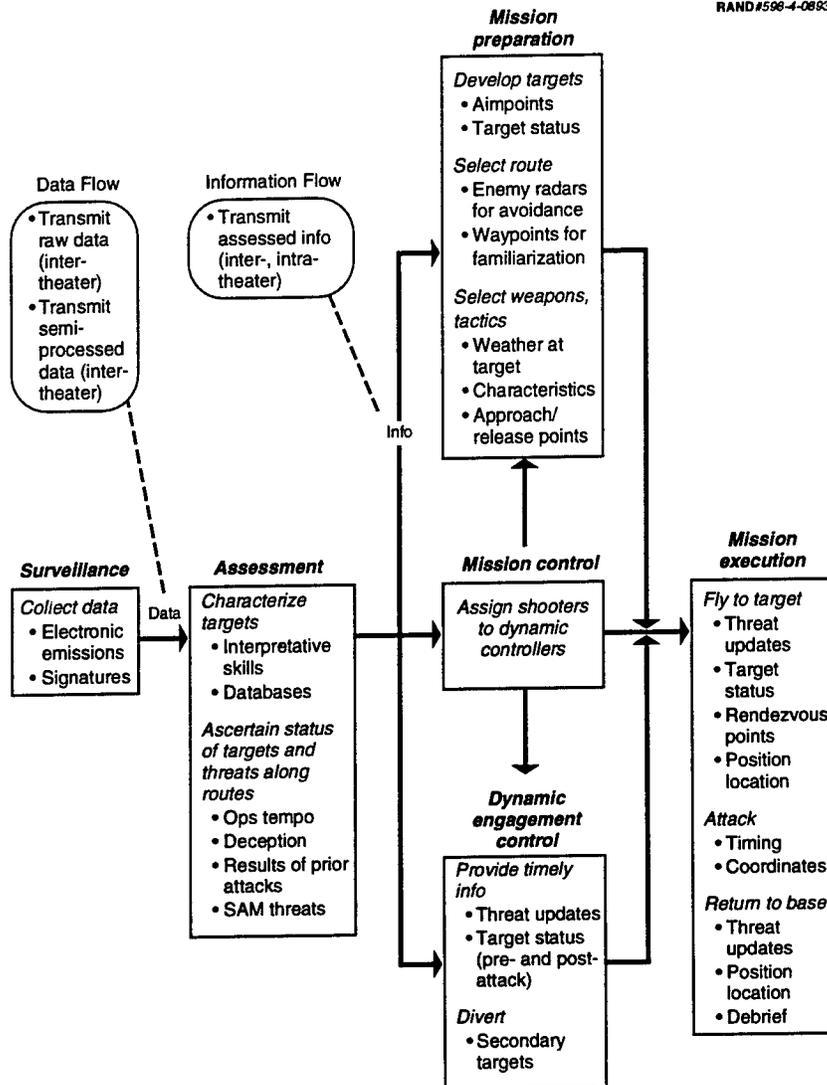


Figure 4—Functions and Related Information Combining in an Operational Concept for Destroying Hardened Airbase-Support Facilities

The assessment center sends this information on to operational units, who further develop individual targets, select routes and weapons, and formulate delivery tactics. Information needed to carry out these functions includes weather along flight routes and over the target, and potential threats from air defenses. In some cases, force control elements may assign shooters to dynamic control platforms while shooters are en route to the target area. During mission execution, attack assets may receive updates from these dynamic control elements on changing or newly emerging threats and on the target's status; additionally, controllers may inform these assets of altered plans and divert them to secondary targets. Attacking units also use position location information to aid in rendezvous, coordination of attack, and navigation to and from the target.

Figure 5 displays each element of the concept as a nonexhaustive menu of alternative current and projected systems and organizations that might be utilized to carry out the functions described above in order to accomplish the task. Systems not yet deployed but potentially available by the year 2000 are displayed in brackets. The paragraphs below describe generally how the capabilities of each system might be applied:

- *Surveillance:* Imagery from SPOT satellites and other platforms, signals intelligence (SIGINT) platforms, and human intelligence (HUMINT) assets help locate key support facilities and monitor the level of activity at the targeted airbase. In the future, remotely-piloted vehicles (RPVs) with advanced tactical reconnaissance pods or SIGINT collection packages might be used to conduct surveillance of the airbase as well. Data are transmitted to assessment centers via satellite or tactical communications.
- *Assessment:* Assessment centers and elements in overseas theaters and in the United States evaluate data collected by sensors. Analysts may identify locations and characteristics of targets. Evaluated data are passed via satellite or other communications paths to operational units and control elements.
- *Mission control:* Mission control elements in the Air Operation Center (AOC) or elsewhere assign shooters to dynamic control elements.

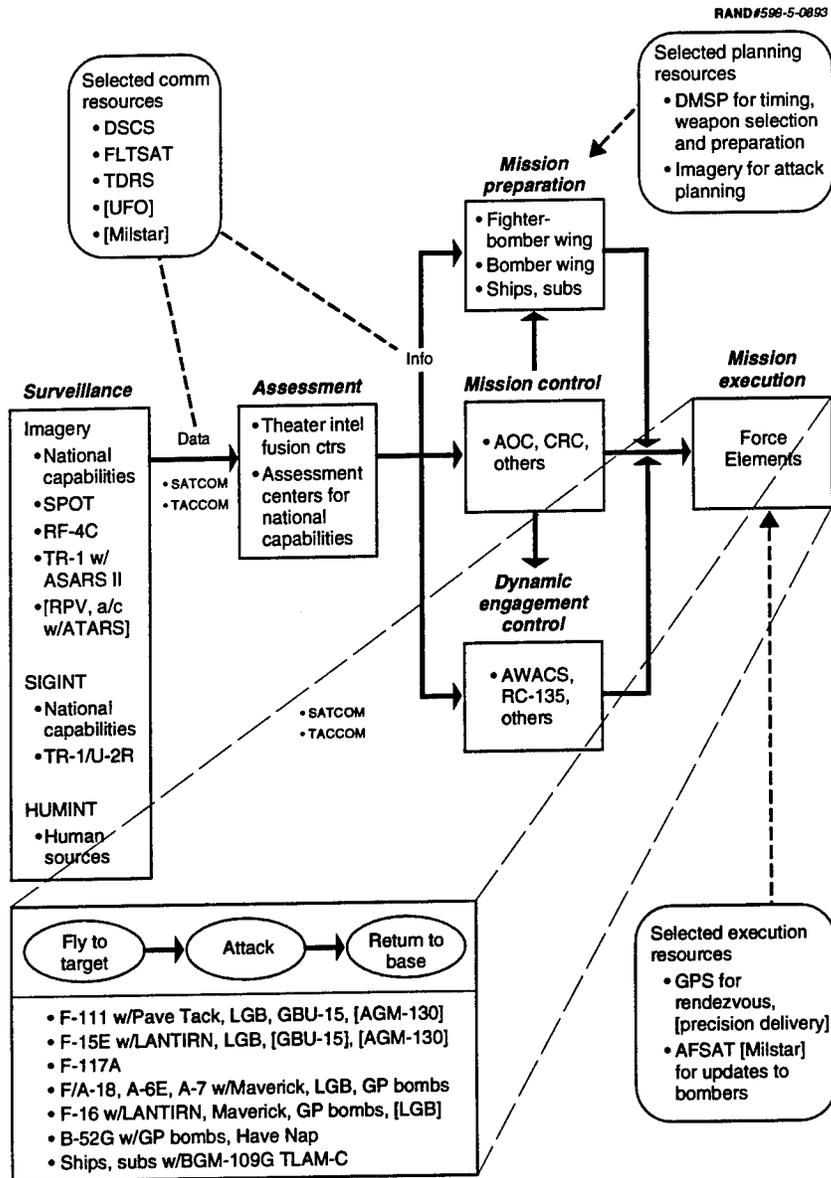


Figure 5—Alternative Systems and Organizations That Perform Functions in Operational Concept for Destroying Hardened Airbase-Support Facilities

- *Dynamic engagement control:* Dynamic control elements aid forces in mission execution by directing those forces to proper targets and by serving as conduits of information from offboard sensors.
- *Mission preparation:* Flight crews in the air wings tasked by battle managers do detailed mission planning—selecting flight routes, finalizing tactics, and selecting ordnance. Some of the resources that might be exploited in preparing the mission include DMSP for anticipated weather conditions, SPOT for target recognition.
- *Mission execution:* Designated force elements fly to target, attack hardened support facilities assigned them, and return to base. Initial bomb damage assessment (BDA) may be performed with information provided by the attackers themselves or derived from various surveillance assets. These force elements may benefit from using GPS navigation satellites.

Once again, the operational concept for accomplishing an operational task defines the functions that systems are expected to perform to implement the concept. It also defines *the level of needed performance*. Hence, alternative systems as well as tradeoffs among performance parameters of a given system must be assessed on the basis of the operational concept(s) they support.

Finally, it is important to take note of a critical aspect of using the operational concept: It serves as common frame of reference and vocabulary for disparate communities. The operational concept can, for example, facilitate communication between the space community and the air combat community, between the intelligence community and the air mobility community, between operators and technologists, and so on. In a broader sense, the operational concept could aid the planning for joint operations among the Services.

A WORD ABOUT SUPPORT ACTIVITIES

In this document, we focus almost exclusively on operational activities. It is critical that we also emphasize the fact that support activities make these operational activities possible. Underlying all opera-

tional concepts is a wide range of support efforts—logistics, training, medical activities, civil engineering, and many others.

We believe that many, if not all, of these activities can be linked to the hierarchy of objectives with careful logic and a little imagination. For example, training is certainly tied directly to the accomplishment of operational tasks. Combat training, in essence, consists of practicing the execution of operational concepts in realistic situations. Engineering activities are linked in a particular theater to the combatant commander's campaign plans. The operational concepts for accomplishing tasks identified in those plans are implemented by force elements, and force elements require a certain supporting infrastructure (buildings, roads, etc.). Even space launch activities—which by and large support forces (satellites) that support *other* forces (tanks, aircraft, etc.)—are amenable to linkage with the hierarchy of objectives: Operational concepts and the relative priorities among the tasks that these concepts support help to define the level of effort desired of space-based capabilities. This in turn helps to define the “traffic” that space launch activities should support over time.

The strategies-to-tasks framework emphasizes—through the operational concept—the benefits of disaggregating operational activities into their essential components or functions. We believe that support activities should be disaggregated in the same fashion. This disaggregation helps to provide a structure for identifying deficiencies in the ability to execute these support activities and for determining tradeoffs between alternative remedies. Moreover, just as the operational concept provides a common frame of reference in the operational sphere, so too can a disaggregation of support activities provide a common frame of reference among disparate communities in the support sphere.

CONCLUDING REMARKS

The care demanded of users of the “strategies-to-tasks” framework is intended to serve a purpose—to help those users internalize a construct that forces them to think in operational, objective-based terms. It requires the application of logic and discipline. It also requires one to use imagination and some art.

Applying the strategies-to-tasks framework will benefit the Services in a number of ways. First, it will help the Services understand and communicate how their activities support the nation’s security needs. By providing a clear audit trail between high-level national objectives and the capabilities of specific systems, the framework can aid in justifying resource allocation choices.

Second, the strategies-to-tasks framework serves as a common frame of reference for different communities within each Service and between the Services. In particular, the operational concept provides a means for these communities to “sing from the same sheet of music”—to help all understand where each fits in the larger scheme.

Third, the framework provides a structure for assessing tradeoffs between alternative means of accomplishing operational tasks, achieving operational objectives, and winning campaigns.

Finally, the Services can use the strategies-to-tasks framework to reinvigorate the process for enhancing military capabilities. The framework should be used for up-front planning to focus Service efforts in developing new operational concepts to enhance the military capabilities of the United States. Thereby, the Services can create

operationally oriented modernization plans that are clearly and logically derived from the nation's security objectives.

OPERATIONAL OBJECTIVES AND TASKS

This appendix contains a list of operational objectives and tasks divided by national military objective. The national military objectives defined here are not exhaustive; rather, they are a means of identifying the most salient objectives and tasks while avoiding redundancy. The final section identifies "backbone" activities (e.g., personnel support, communications, etc.) without which few objectives could be achieved. National military objectives appear in bold. Campaign objectives, primarily identified in the section on MRCs, are italicized. Bulleted phrases refer to operational objectives; supporting operational tasks appear as dashes underneath.

This list is a living document. Planners should select the objectives and tasks to be accomplished and the attendant strategies to fit their particular scenario or conflict and to attain the relevant national military objective.

Deter Russia, others from launching a nuclear attack on the United States

- Provide unambiguous tactical warning and attack assessment (TW/AA) of nuclear attack on U.S.
 - Provide timely tactical warning of ICBM, SLBM, air-breathing attack
 - Provide timely, accurate assessment of ICBM, SLBM, air-breathing attack

[Be prepared in second strike to:]

- **Damage/disrupt enemy theater projection forces, especially away from urban areas, promptly or after ride-out**
 - Destroy selected airbases, army garrisons, naval bases, sites associated with space infrastructure
 - Destroy selected army and command units out of garrison
 - Disrupt lines of communication
- **Eliminate enemy NCA and political leadership promptly or after ride-out**
 - Destroy leadership bunkers
 - Destroy “soft” administrative headquarters
 - Destroy mobile command posts
- **Damage/disrupt enemy war-supporting industry and critical economic infrastructure, especially away from urban areas, promptly or after ride-out**
 - Destroy selected defense-related plants and equipment and other industrial facilities
 - Destroy/disrupt selected power generation facilities, POL storage areas
 - Destroy selected transportation nodes
- **Damage/disrupt enemy nuclear attack forces, especially non-LUA, and their reconstitution base, promptly or after ride-out**
 - Destroy (empty) hardened silos, LCCs, SSBN tunnels
 - Destroy nuclear weapons storage sites
 - Destroy (empty) mobile ICBM garrisons, SSBN ports
 - Destroy mobile ICBMs, mobile CPs, SSBNs at sea
 - Disrupt lines of communication

- **Damage/disrupt key elements of enemy strategic defenses, especially away from urban areas, promptly or after ride-out**
 - Destroy bunkered air defense command and control facilities
 - Destroy/disrupt selected early warning and tracking radars, AWACS and fighter bases, fixed SAMs
 - Destroy/disrupt selected mobile and relocatable SAM systems
- **Disrupt/defeat air-breathing attack on U.S.**
 - Track, integrate, and identify all unknown intruders
 - Destroy/disrupt enemy aircraft
 - Destroy/disrupt enemy cruise missiles
- **Provide survivable, enduring nuclear attack assets and associated C³I during initial and subsequent nuclear attacks on U.S.**
 - Disperse bombers to secondary operating bases
 - Disperse mobile ground and airborne command posts

Protect the United States against accidental, unauthorized, and “third-country” ballistic missile launches

- **Defeat ballistic missiles in flight**
 - Destroy/disrupt ballistic missiles, buses, or RVs in flight (concepts being developed)
 - Provide timely warning of attack to U.S. population
- **Negate third-country ballistic missile capability against the United States**
 - Destroy fixed ballistic missile launchers prior to launch
 - Destroy ballistic missile storage and servicing facilities

Deter or defeat military attacks against U.S. allies, friends, and interests

Gain, maintain air superiority or supremacy

- Defeat enemy air attacks
 - Destroy/disrupt aircraft in flight
 - Destroy/disrupt cruise missiles in flight
 - Disrupt sensors on enemy aircraft and weapons
- Suppress enemy surface-based defenses
 - Destroy/disrupt fixed SAM launchers
 - Destroy/disrupt mobile SAM launchers and anti-aircraft guns
 - Destroy/disrupt tracking and engagement radars
- Suppress generation of enemy air sorties
 - Crater/mine runways and taxiways
 - Destroy aircraft in the open or in revetments
 - Destroy key hardened support facilities
 - Destroy aircraft in hardened shelters
- Degrade enemy command and control of air forces and integrated air defense
 - Destroy command bunkers and other critical nodes
 - Destroy mobile command posts
 - Disrupt communications
 - Destroy/disrupt EW/GCI radars
 - Destroy/disrupt airborne command, control, and surveillance platforms

Counter enemy ballistic missiles

- Suppress the generation of ballistic missile launches

- Damage/destroy TELs in the field and disrupt operations
- Damage/destroy TELs in garrisons and assembly areas
- Damage/destroy fixed TBM launchers
- Destroy TBM storage areas
- Defeat attacking ballistic missiles
 - Destroy/disrupt ballistic missiles in flight (active defense)
 - Provide timely warning of attack to friendly forces (passive defense)

Deny the possession and use of weapons of mass destruction

- Damage/deny facilities for producing and storing weapons of mass destruction
 - Destroy factories and weapon storage sites
 - Block mine entrances
 - Deny enemy access to key sites
- Defeat enemy air attacks
 - Same as above
- Suppress generation of enemy air sorties
 - Same as above
- Suppress the generation of ballistic missile launches
 - Same as above
- Defeat attacking ballistic missiles
 - Same as above

Halt invading armies

- Delay/destroy/disrupt lead units of invading armies
 - Destroy/damage armored and other vehicles on the attack
 - Mine key attack routes

- Destroy helicopters in flight
- Suppress attack helicopter sortie generation from FARRPs
- Destroy/suppress artillery and multiple rocket launchers
- Delay/damage enemy forces and logistic support in the rear
 - Destroy/damage armored and other vehicles in convoys
 - Destroy concentrations of supplies, especially fuel, food, and water
 - Disrupt field logistics sites, transportation nodes, assembly areas
 - Mine roads and railroads
 - Destroy bridges, block tunnels and other choke points
- Provide fire support to friendly forces in close contact with enemy ground forces
 - Destroy/damage armored vehicles near line of contact
 - Disable dismounted troops
 - Destroy/suppress artillery and multiple rocket launchers
- Degrade enemy command and control of ground forces
 - Destroy command bunkers
 - Destroy mobile command posts
 - Disrupt communications
 - Destroy enemy surveillance systems and platforms
 - Disrupt sensors on enemy surveillance platforms

Evict halted armies from friendly territory

- Overrun enemy defensive positions
 - Destroy/damage armored and other vehicles in defensive positions
 - Disable dismounted troops

- Neutralize enemy defense obstacles (mines, fortifications)
- Mine key routes of retreat
- Deny fire support to enemy defenders
 - Destroy/suppress artillery and multiple rocket launchers
 - Destroy helicopters in flight
 - Suppress attack helicopter sortie generation from FARRPs
- Delay/damage enemy forces and logistic support in the rear
 - Same as above
- Degrade enemy command and control of ground forces
 - Same as above

Gain, maintain sea control or denial

- Sink/disable enemy surface vessels and disrupt their operations
 - Sink/disable surface ships at sea and in port
 - Mine ports, choke points, and anchorages
 - Jam/confuse shipborne sensors
- Sink/disable enemy submarines and disrupt their operations
 - Sink/disable submerged submarines
 - Sink/disable surfaced submarines
 - Mine ports, choke points, and anchorages
 - Jam/confuse submarine sensors
- Degrade enemy command and control of naval forces
 - Destroy command bunkers
 - Destroy shipborne command posts
 - Disrupt communications

Gain and secure beachhead

- Assault and overrun enemy shore defenses
 - Land troops ashore
 - Neutralize shoreline defensive obstacles
 - Destroy bunkers and dug-in armored vehicles
 - Disable dismounted troops
 - Secure area
- [Other operational objectives and tasks as appropriate]

Suppress enemy's war-supporting national infrastructure

- Disrupt national POL production, storage, distribution
 - Disrupt/destroy POL refineries
 - Disrupt/destroy POL storage facilities
 - Sever key petroleum pipelines
 - Disrupt off-load sites at ports and transshipment points
 - Disrupt/destroy POL control facilities
- Disrupt national power generation and distribution
 - Disrupt/disable key electrical power plants
 - Destroy hydroelectric facilities
 - Disrupt/disable key substations and transformers
 - Sever power lines
 - Disable/destroy alternative "stand-alone" power sources
 - Disrupt/destroy grid control facilities
- Disrupt national transportation system
 - Disrupt airports, seaports, and transshipment points
 - Disrupt railroad marshalling yards
 - Mine roads and railroads

- Drop bridges
- Disrupt/destroy network control/navigation facilities
- Disrupt national communications system
 - Disrupt/disable key telephone switching centers
 - Disrupt/disable fixed satellite ground stations
 - Sever landlines
 - Disrupt/destroy key communications nodes
- Damage/disrupt enemy's war-supporting industry
 - Destroy defense-related plants and equipment
 - Reduce flow of war-supporting imports

Reduce the will of enemy leadership and troops to continue the fight

- Disrupt political direction of enemy's society, economy, and war effort
 - Destroy/damage key directing organs and leadership cadres
 - Destroy leadership and security facilities
 - Deny information and sow confusion as to friendly plans for deploying and employing forces
- [Operational objectives and tasks associated with "suppress national infrastructure"]
- Reduce motivation of seamen, airmen, and soldiers to resist U.S. actions
 - Disseminate disinformation, propaganda, and warning of impending attacks
 - Create belief that operating combat equipment will bring certain harm
- Delay/damage enemy forces and logistic support in the rear
 - Same as above under "halt invading armies"

Safeguard U.S. citizens and interests abroad from terrorist and other “subnational” threats

- Safeguard U.S. citizens and property overseas in distress situations
 - Extract hostages from hostile territory
 - Force release of hostages in cooperative nations or on the high seas
 - Evacuate U.S. citizens from foreign countries in threatening situations
 - Protect U.S. property overseas in threatening situations
- Insert, sustain, and extract special operations teams in hostile territory
 - Infiltrate teams, equipment, and supplies covertly into hostile territory
 - Provide aerial refueling during covert operations
 - Provide intelligence on enemy ops and to support situation awareness
 - Provide fire support to friendly operations
 - Exfiltrate teams, equipment, and subjects covertly from hostile territory

Reduce the flow of illegal drugs into the United States

- Reduce the foreign capacity to produce and smuggle illegal drugs into the United States
 - Destroy processing facilities and stockpiles of illegal drugs in source countries
 - Disrupt the transportation of illegal drugs in source and transit countries
 - Provide timely intelligence on activities and transportation routes

Aid friendly governments in deterring potential adversaries and combatting insurgent threats to democratic institutions

- Assist host government in improving its military capabilities
 - Train indigenous military personnel in tactics
 - Define appropriate upgraded or new capabilities
 - Facilitate absorption of upgraded or new capabilities

Provide continuous “eyes and ears” globally for the U.S. government

- Provide continuous, accurate information on capabilities and dispositions of forces in areas of interest worldwide
 - Detect and assess threatening changes in disposition of enemy air, land, and maritime forces for warning and cognizance
 - Provide information on characteristics of weapon systems
 - Verify international agreements
 - Provide information on military tactics
 - Provide warning of military activities of interest to the United States

Assist in humanitarian efforts for populations in distress

- Ease immediate suffering of indigenous population due to disaster
 - Restore basic services disrupted by disaster
 - Distribute food and water
 - Erect temporary shelters
 - Provide medical attention to the suffering
 - Secure areas threatened by armed attack

- Search for and rescue persons in distress
 - Rescue persons in areas of difficult ingress/egress (flooding, volcano, fire)
 - Rescue persons trapped in collapsed structures
 - Provide immediate medical attention to the injured

[Operational objectives and tasks supporting many military objectives]

- Airlift personnel and materiel into and within theater of operations
 - Airlift forces and critical support into and within theater
 - Airlift personnel and supplies to disaster-stricken countries
 - Airdrop supplies in remote areas
- Conduct aerial refueling
 - Refuel strategic bombers and airborne command and control assets during nuclear conflict
 - Refuel aircraft flying to, from, and between distant theaters
 - Refuel aircraft moving to attack enemy forces
- Sealift personnel and materiel into and within theater of operations
 - Sealift heavy equipment and supplies into developed theaters
 - Sealift heavy equipment and supplies into austere ports
 - Ferry troops and critical support to shore
- Conduct at-sea refueling and replenishment
 - Refuel vessels at sea
 - Replenish vessels at sea
 - Refuel and replenish vessels at sea covertly

- Sustain the operations of U.S. and allied space assets in the face of enemy disruption attempts
 - Provide survivable satellites
 - Provide connectivity insensitive to interference attempts
 - Provide a secure, robust ground segment
- Defeat enemy ASAT attack (concepts being formulated)
 - Destroy ASATs in flight
 - Disrupt enemy sensors
 - Jam communications and control links
- Destroy/disrupt enemy space assets (concepts being formulated)
 - Destroy/damage satellites
 - Disrupt satellite sensors
- Destroy/damage/disrupt key elements of enemy space infrastructure
 - Destroy/damage satellite and ASAT launch facilities, command centers, surveillance and tracking stations, and satellite storage sites
 - Destroy/damage mobile space surveillance and tracking radars
 - Disrupt communications
- Ensure the maintenance, surge capability, and reconstitution of space assets
 - Redeploy space assets in a timely manner during crisis
 - Launch satellites on a timely basis

“Backbones”—activities underlying most operational objectives and tasks

- Provide materiel and personnel support and services

- Provide adequate training
- Provide timely, accurate surveillance and intelligence of activities of interest worldwide and in space
- Provide secure, reliable communications
- Provide timely, reliable weather support and environmental monitoring
- Provide effective navigation and position location assistance

**THE "STRATEGIES-TO-TASKS" FRAMEWORK:
A BRIEFING**

Purpose and Outline

Purpose of this briefing

- Describe the "strategies- to-tasks" framework

Outline

- **What is "strategies-to-tasks" (STT) and what is it not?**
- A hierarchy of objectives
- The operational concept
- How will it benefit the Air Force?

RAND

STTR-02 (Rev. 00)
Modifed: # :

What Is "Strategies-to-Tasks"?

A construct for thinking in a top-down, operationally oriented manner

Defines *objectives* at the strategic, operational, and tactical levels

- **Objectives are ends (not to be confused with means)**
- **Several Services may organize, equip, and train force elements to accomplish the same objective**

What Is It Not?

STT is not a new idea

- Many people think top-down much of the time
- STT standardizes it and links it rigorously to various levels of authority—from the President down to the wing commander

STT is not a "model"

- One does not provide inputs and expect outputs

It is a way of thinking—requiring application of logic, art form, rigor, and discipline

RAND

STT0002 (Rev) 00
Mod/Sec: /

Outline

- What is "strategies-to-tasks" (STT) and what is it not?
- A hierarchy of objectives
- The operational concept
- How will it benefit the Air Force?

RAND

STTRW2 (Rev) 04
Modifed: // :

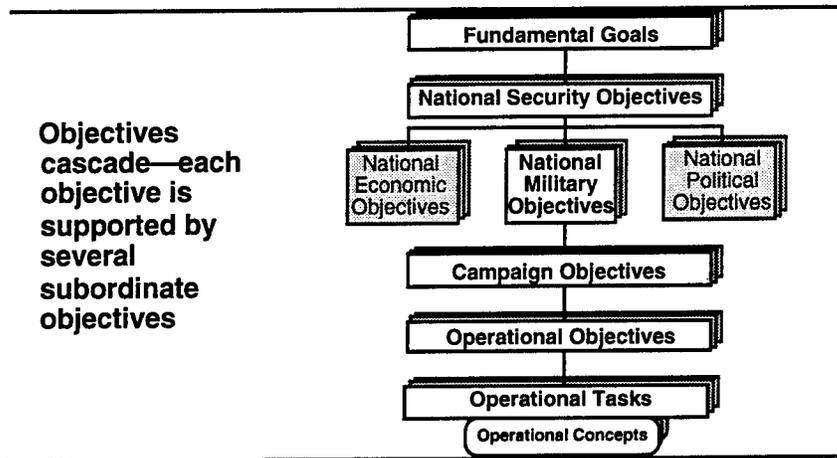
STT Helps the Air Force Think Operationally for Organizing, Equipping, and Training



RAND

STTRM2 (Rev) 99
Modified: 11/02

A Hierarchy of Objectives/Strategies



RAND

ST10442 Objectives
Model: 2.2

Strategies Link Levels of Objectives

National Military Objectives to Attain

- *National Military Strategy*
 - **Defines** emphasis across campaigns and regions
 - **Outlines** campaign objectives to gain

Theater Campaign Objectives to Gain

- *Campaign Plan*
 - **Defines** weight of effort over time among campaign objectives
 - **Outlines** operational objectives to achieve

Operational Objectives to Achieve

- *Concept of Employment*
 - **Defines** weight of effort over time among operational objectives
 - **Defines** weight of effort over time among operational tasks

Operational Tasks to Accomplish

- *Operational Concepts*
 - **Define** how to accomplish operational tasks
-

RAND

STTR442 (Rev) 01
March 01

Fundamental Goals, National Security Objectives, and National Military Objectives

Fundamental goals define basic values and *raison d'etre* of government and are unchanging (the Founding Fathers)

- "...[P]rovide for the common defense, promote the general welfare, and secure the blessings of liberty..."

National security objectives define how fundamental goals will be ensured in light of U.S. interests, threats to those interests, and opportunities for advancing those interests (the President)

- Maintain ready access to world energy supplies

National military objectives define how the military component of national power will be applied to maintain or attain national security objectives (the SecDef and CJCS)

- Deter/defeat large-scale aggression by Iran or Iraq against Saudi Arabia and other Persian Gulf states
-

RAND

STTR462 (Rev) 01
ModBac // :

Exemplar Campaign Objectives (Defined by the Combatant Commanders)

National military objective: Deter/defeat large-scale aggression by Iran or Iraq against Saudi Arabia and other Persian Gulf states

- **Gain air superiority or supremacy**
- **Halt invading armies**
- **Prevent attacks with weapons of mass destruction**
- **Gain sea control**
- **Reduce long-term military capability of aggressor**

RAND

STTR-02 (Rev. 00)
Mod. 1.1

Exemplar Operational Objectives
(Defined by the Combatant and Component Commanders)

Campaign objective: Gain air superiority or supremacy

- **Suppress generation of enemy air sorties**
- **Defeat enemy air attacks**
- **Deny enemy command and control of air forces**
- **Suppress enemy surface-to-air defenses**

Campaign objective: Halt invading armies

- **Delay/damage enemy ground forces in rear**
 - **Destroy/disable enemy ground forces in close contact with friendly forces**
 - **Deny enemy command and control of ground forces**
-

RAND

STTR/02 (Rev) 08
Mod/02 //::

Exemplar Operational Tasks
(Defined by the Component Commanders and Staffs)

Oper'l objective: Suppress generation of enemy air sorties

- **Destroy/damage hardened airbase-support facilities**
- **Destroy aircraft in hardened shelters**
- **Crater/mine runways and taxiways**
- **Destroy aircraft in the open or in revetments**

Oper'l objective: Delay/damage enemy ground forces in rear

- **Destroy/disable armored and other vehicles en marche**
- **Disrupt field logistics sites, transportation nodes**
- **Mine roads and railbeds**
- **Drop bridges**

RAND

ST1B462 (Rev)-00
Mod/Act. // :

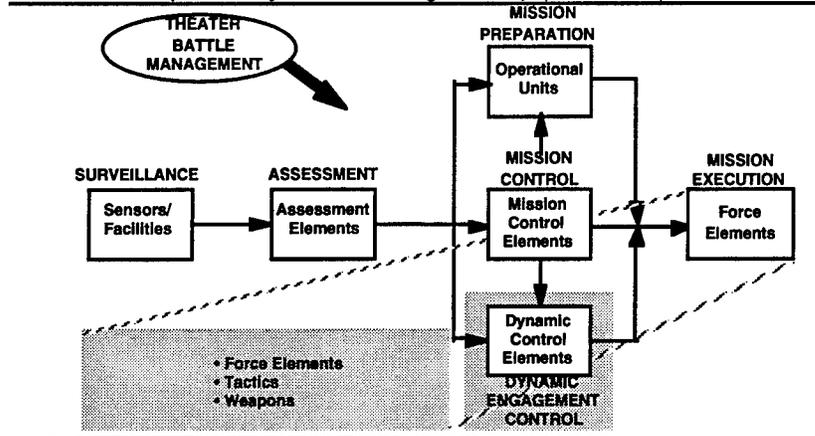
Outline

- What is "strategies-to-tasks" (STT) and what is it not?
- A hierarchy of objectives
- **The operational concept**
- How will it benefit the Air Force?

RAND

STTR-02 (Rev. 04)
Modifed. //:

Force Elements Accomplish Tasks According to End-to-End Operational Concepts (Defined by Those Who Organize, Equip, and Train)



RAND

STTBrief2 (Rev) 01
Mod#ref: 02

Exemplar Elements for Mission Execution and Dynamic Engagement Control

**Operational task: Destroy/disable armored and other
vehicles en marche**

- **Elements**

- **Force Element:** B-1B
- **Tactics:** Stand-off, medium altitude
- **Weapon:** JSOW with Skeet
- **Engagement Ctrl:** JSTARS, sensors aboard B-1B

RAND

STB442 (Rev. 08)
Mod. #:

Exemplar Elements for Mission Execution and Dynamic Engagement Control

Operational task: Destroy/damage enemy TBMs in boost phase

- **Elements**

- **Force Element:** Aircraft equipped with laser
 - **Tactics:** 300-km SO, medium altitude
 - **Weapon:** High-energy laser
 - **Engagement Ctrl:** Air- or space-borne sensors (?)
On-board acquisition and control systems
-

RAND

STRATEGIC (RAND)-00
MOSBYC 11

Outline

- What is "strategies-to-tasks" (STT) and what is it not?
 - A hierarchy of objectives
 - The operational concept
 - How will it benefit the Air Force?
-

RAND

STTRM2 (Kant)-04
Modified: 1/2

Focus Efforts on "Objective-Based" Planning

Objectives are stable, though their relative priorities may change according to interests and/or environment

- ***How* to achieve them depends on assumptions about future threats, opportunities, and capabilities**
- **Arguments of "assumption-based" vs. "capabilities-based" planning miss the point**

All assumptions about threats, opportunities, and capabilities come together to help one define objectives and the strategies for achieving those objectives

RAND

STTR-02 (Rev. 00)
Mach. 7:

Summary of How the Air Force Will Benefit

The "strategies-to-tasks" framework

- **Provides a clear audit trail between high-level national objectives and specific system capabilities**
- **Helps the Air Force understand and communicate how its activities (organizing, equipping, and training) support the nation's security needs**
- **Serves as a common frame of reference for disparate communities**
- **Helps carve out an explicit, crucial role for the Air Force in the process of enhancing military capabilities**

RAND

STTR-02 (Rev. 02)
Version 2.0

Summary of How the Air Force Will Benefit (cont'd)

Provides a framework for thinking about:

- Best operational concept for accomplishing a stated operational task
- Relevance of accomplishing tasks toward achieving a stated operational objective
- Relevance of achieving operational objectives toward gaining a stated campaign objective

Finally...

Helps the Air Force realize that the interface at Milestone I is between operational concepts and programs to develop and acquire systems, *not* between technologies and such programs

RAND

STB/42 (Rev. 99)
Mod/ed: //: