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Obstacles to the Termination of Air Force Activities

Paul T. Hill, Thomas K. Glennan, Jr.,
Susan J. Bodilly

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A Project AIR FORCE report
prepared for the
United States Air Force



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PREFACE

The current budget crisis has abruptly ended the growth in defense spending. The military services now face the possibility of major reductions in funding. To meet the requirements of the 1985 Gramm-Rudman Act, the armed services may be forced to cut severely a relatively small number of procurement and research and development accounts. Some large and important programs will have to be terminated to make these cuts.

Although the Air Force has terminated marginal programs from time to time, it has not been forced to use the termination of major programs as a way to reduce its budget. Consequently, the Air Force planning and budgeting processes are not designed to produce termination decisions.

In early 1983, the Air Force Director of Plans asked Rand to investigate the problems of termination in the Air Force. He wanted to know specifically why the Air Force has difficulty terminating activities and what it might do to increase its ability to terminate.

This report presents the Rand research findings on the present obstacles to the Air Force's use of termination. The report neither advocates termination for its own sake nor argues for its use in a particular case. Rather, it suggests how, if the Air Force leadership concludes that termination is necessary, the Air Force can surmount the obstacles.¹

The study was conducted as a direct assistance effort for the Air Force under the Project AIR FORCE Resource Management Program.

¹A companion Note analyzes the methods used by private-sector firms that have terminated major product lines. See *Twelve Case Studies of Terminations and Divestitures by Business Firms*, by Susan J. Bodilly, N-2339-AF, forthcoming.

SUMMARY

This report analyzes the obstacles to the Air Force's use of termination as a management option and suggests how the Air Force might surmount these obstacles. The analysis is based on a review of (1) the literature on the barriers that private-sector firms and government agencies face in trying to terminate major activities; (2) the Air Force's corporate planning and resource-allocation process (including interviews with senior officers who had been involved in past efforts to terminate major activities); and (3) the experience of large private firms that had terminated or divested major activities.

Common themes in the private-sector case studies provide insights into the reasons for the Air Force's difficulty in terminating activities and suggest steps that it might take if it deems termination advisable.

The internal obstacles to termination in the Air Force resemble those encountered by virtually all large organizations. In the Air Force, these obstacles include the severe constraints imposed by past budgetary commitments; the absence of compelling criteria for program termination; the incrementalism fostered by the programming and resource-allocation process; the deference to experts and established activities; the reliance on advocacy by the major commands; and, finally, individual officers' career incentives.

In addition to these almost universal internal obstacles, the Air Force faces some unique external ones that are probably even more formidable. Specifically, all decisions on the funding and conduct of programs require the approval of the Office of the Secretary of Defense (OSD) and ultimately of the President and Congress. The Air Force may neither establish nor terminate large programs solely at its own discretion.

The lack of ultimate authority means that the Air Force must persuade authoritative outsiders (particularly OSD, the White House, and Congress) that a termination is warranted. It must also maintain public support for the Air Force's mission and confidence in current management. Finally, it should coordinate termination actions with the other services when their procurement and operational activities are interdependent with those of the Air Force.

Although the report paints a discouraging picture of the risks and costs to the Air Force (or any other organization) of terminating an activity, the difficulty of termination does not constitute a definitive argument against it. The imperative that led to the study in the first place remains: **Because of the increasing imbalance between**

commitments and resources, the Air Force may be forced to terminate some activities.

Moreover, vital new needs or irresistible new opportunities may encourage the Air Force to rethink its priorities and terminate old activities to make way for new ones. Finally, the Air Force may conclude that initiating its own terminations may be the only way to keep control over basic decisions about its missions and character.

If and when the Air Force leadership concludes that the termination of a major activity is a promising or necessary management option, the report suggests that it be guided by the following considerations:

- 1. Major terminations should result from decisions about what the Air Force most needs to do, not from decisions on what should be cut.**

If budgetary or other imperatives compel the Air Force to consider termination, more is required than a simple hunt for poor performers. Whether an activity deserves to be continued or terminated depends on its contribution to Air Force strategies and missions, not on its performance relative to initial expectations, the advice of military specialists, and tradition.

- 2. Termination involves a delicate and complicated internal political process; it takes time to work out.**

The top leadership should begin the process of corporate strategy building and priority setting as soon as it sees that future Air Force resources will not cover commitments. The process requires strong and attentive leadership from the Chief of Staff and the Secretary. They must lead the search for a new strategy, build consensus among the senior Air Staff and major command leadership, and overcome recalcitrant opposition. Only a powerful Chief is likely to succeed. He should begin terminations early in his term as Chief.

- 3. The program objectives memorandum (POM) and other routine Air Force management processes can implement terminations, but they cannot initiate them.**

Without the decisive intervention of top Air Force management, the POM and other routine processes will adjust to resource constraints through across-the-board cuts that will deplete all programs. The POM and similar processes are excellent for staff work, but staff work cannot produce major changes in strategy or priorities.

4. When circumstances demand termination, the external obstacles may prove less formidable.

Congress, the White House, and OSD are likely to be fully aware of any major discrepancies between the Air Force's commitments and its resources. They may call for terminations or try to impose them on the Air Force. If so, they will no longer constitute obstacles to termination. But they will threaten the Air Force's ability to use termination as a calculated part of its own strategy.

5. To retain control of the termination process, the Air Force must present terminations as integral parts of new strategies, not as goods in themselves.

Terminations will lead to criticism from Congress and the public unless they are presented as means to higher ends, e.g., the implementation of new strategies or the maintenance of existing capabilities with a newly configured, leaner force.

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We thank the dozens of Air Force officers and civilians who answered our questions and commented on our ideas. This study could not have been done without their help. We also thank our Rand colleagues George Tanham, David Ochmanek, Donald Palmer, and Erma Packman, whose suggestions greatly improved the report.

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I. INTRODUCTION

With the enactment of the Gramm-Rudman Act in late 1985, the entire federal government entered a period of sharp fiscal retrenchment. Required cuts in domestic spending may be so large that they can be made only through the elimination of major federal programs. The burden of spending reductions threatens to fall heavily on defense, particularly on procurement in research and development (R&D) programs that are defined as discretionary. Like the domestic side of the government, the Department of Defense may be unable to make the necessary reductions without eliminating major programs. Since the Air Force now spends about one-third of the defense budget, it is unlikely to escape the pressure for program termination.

The research for this report was done before the deficit reduction process was established, but at a time when the need for such measures was becoming apparent. In early 1983, the Air Force Director of Plans asked Rand to investigate the problems of termination in the Air Force. He knew that termination can serve important purposes. It can release previously committed resources to support more urgent new starts. It can enable the Air Force to absorb budget cuts without making across-the-board reductions that cripple all programs. It can simplify the program structure so that managers can focus their attention more productively. And it can signal a change of strategy to internal and external audiences.

The Director of Plans knew also that the Air Force had seldom been able to decide to terminate major programs. He wanted to know specifically why this was the case and what the Air Force might do to increase its ability to terminate. Like most successful and complex organizations, the Air Force hesitates to consider termination a primary management option. Organizations avoid termination because it requires painful internal decisions and involves real external risks. Some organizations overcome these obstacles, however, and use termination as a highly effective management technique.

This report presents our research findings about the barriers to the Air Force's use of termination as a management option. We neither advocate termination for its own sake nor argue for its use in a particular case. Rather, we point out the obstacles to termination and try to indicate how, if the Air Force leadership concludes that termination is necessary, it can surmount these obstacles.

Pursuing a three-part research strategy, we first reviewed the extensive literature on the barriers that private-sector firms and government agencies face in trying to terminate important activities. The review provided a framework of ideas that would guide our analysis of the Air Force.

Second, we studied the Air Force's corporate planning and resource-allocation process and interviewed senior officers who had been involved in past efforts to terminate important activities. We interviewed over 100 officers, ranging in rank from captain to lieutenant general, in the Air Staff and in the major commands (Tactical Air [TAC], Strategic Air [SAC], Systems [AFSC], and Logistics [AFLC]). The interviews helped us to identify the barriers to termination that are specific to the Air Force.

Third, we reviewed the experience of large private firms that had terminated or divested activities that had once been the main source of their income and corporate identity. This review helped us to develop specific ideas about how the obstacles to termination can be overcome.

In Sec. II of this report, we present conclusions drawn from our review of the literature on the obstacles to termination and the experience of private-sector firms in terminating activities. Section III identifies the obstacles implicit in the Air Force's mission and internal organization and those created by its relationship to the Department of Defense and Congress. The final section discusses the considerations that should guide the Air Force leadership when it concludes that the termination of a major activity is a promising or necessary management option.

II. LESSONS FROM THE LITERATURE ON TERMINATION

We assessed the considerable literature on termination in the public and private sectors for its relevance to the Air Force. The public-sector literature focuses largely on the termination of local social services and public facilities; only a few sources deal directly with the cancellation of major defense programs or the closing of military bases. The private-sector literature includes numerous business school case studies describing the successes of private-sector firms in terminating or divesting major business activities.

OBSTACLES TO TERMINATION

The literature review enabled us to formulate the following five propositions about the obstacles that most organizations must surmount before they can terminate an activity. We state these propositions in universal terms, as if they applied equally to all types of organizations—public and private, defense and domestic. We did not test their universal applicability; they do, however, pass the test of plausibility and logical consistency with the literature that we reviewed. Moreover, as the discussion in Sec. III will demonstrate, they help to explain the difficulty that the Air Force faces in initiating terminations.

1. The criteria on which to base the decision to terminate are difficult to develop and apply.

Termination represents a change in direction—the abandonment of a method or activity that once filled a need defined by organizational goals. Except when motivated by an absolute performance failure, the decision to terminate cannot be deduced from the same premises that led to the activity's initiation. Thus, except when senior management sees an important new need or explicitly changes corporate goals, it has trouble finding criteria on which to base a decision to terminate. As the experience of private firms illustrates, such decisions usually involve internal organizational struggle and major uncertainties for corporate leaders.

2. Organizational incentives discourage the free flow of information needed for the decision to terminate.

Leaders of small staff or line units and midlevel staff members have little incentive to give management all the performance information it needs for confident decisionmaking. Middle managers know that such information enables their superiors to make decisions that middle managers would prefer to make themselves. It also puts at risk the resources that middle managers command, as top managers act on broader objectives than middle managers and will move resources from one activity to another in pursuit of those objectives.

Top managers can create countervailing incentives by setting quotas for termination by each subunit or establishing bounties for information leading to termination. But these strategies are difficult to engineer and frequently unpopular with middle managers. Most top managers ultimately settle for less information than they would like to have.

3. Personal commitments and career interests create resistance to termination.

Employees at all levels naturally believe that their own continued employment and chances for promotion are tied to the success of the project on which they work. The best people enjoy their work and form strong loyalties to their project. Specialized workers may fear that they will no longer be needed if their activity is terminated. Nonspecialized workers may fear that termination will lead to reduction in the work force.

Ambitious employees know that their chance to come to the attention of people who may promote them depends on the perceived importance of the project on which they are working. Any suggestion that an activity is of such low priority that it should be terminated is seen as threatening. No one wants to associate with a problem activity. Finally, the high-level managers who initiated or established a project fear the effect that its acknowledged failure might have on their reputations.

4. Organizational politics strengthens the resistance to termination.

The supporters of an existing activity—those who initiate it and hope to get credit for its success, those who are supposed to benefit from it (i.e., clients and constituents), and those who manage and conduct it—constitute a potent political force within the organization.

They have a strong incentive to organize against termination, they know one another and probably work well together, and they will in most cases succeed in forestalling termination.

Those who stand to benefit from a termination are much more diverse and difficult to organize. Virtually everyone in the organization may hope that some of the resources freed by the termination of an activity will come to them, but the expected value of anyone's gain is low. The diffuseness of benefits usually means that no one has the incentive to campaign strongly in favor of a particular termination. Other things equal, the opponents of a termination constitute a far more potent political force than the proponents.

5. Top managers must pay high personal costs in time and stress to achieve termination.

The real and psychological costs of termination deter its use. Overcoming opposition to termination requires top managers to build internal consensus and to use due process in making decisions.

The theoretical essays and case reports that we read all stressed the idea that anything hard to start is hard to stop. In large government organizations and multidivisional firms, various management echelons and functional specialists carefully review all decisions to initiate new activities. Termination requires the undoing of all those approvals. This requirement greatly increases the number of people who must be convinced and gives supporters of the threatened activity opportunities for advocacy. The larger the business or government agency, the higher the transaction cost of termination.

Some decisions hurt valued employees and strain personal relationships. Managers who expect to be in their jobs for a long time may think the benefits are worth the price, but those who expect to be in another job when the benefits of termination are realized will not. Top managers are even less likely to suggest termination if they are personally identified with the activity or if termination might reflect adversely on their own performance.

SUCCESSFUL PRIVATE-SECTOR TERMINATIONS

Despite the obstacles, large business firms sometimes succeed in terminating important activities. To learn how private organizations bearing at least some resemblance to the Air Force were able to overcome the obstacles to termination, we examined case studies of large, complex firms that had divested product lines that had once been the core of their business. We obtained these case studies from the

Harvard, Stanford, and Dartmouth business schools and from textbooks. Of some 70 termination cases that fit our general criteria, only the 12 shown in the table provided enough information about the termination process to be used.¹

Table

CASE STUDIES OF TERMINATIONS USED IN THIS REPORT

Corporation and Date of Action	Business or Product Terminated	Purpose and/or Result
American Motors Corp. 1954-1961	Hudson and Nash medium car lines; plants; RANCO, Inc.	To enter small car market
Boise Cascade Corp. 1971-1976 1973—	International operations; realty; urban development business	To reduce debt; lost \$20M in selling assets, but finally recovered
Cap Bakeries, Inc. ^a 1966-1971	Talsentex Mexican food subsidiary	To reduce financial drain; had short-term loss
Chrysler Corp. 1970-1978	International operations	To enable investment in new car line
Curtis Publishing Co. 1961-1970	Bantam Books; Grosset & Dunlap, Inc.; printing and paper businesses	To avoid bankruptcy; divested overhead businesses
Firestone Tire and Rubber Co. 1973-1978	Swiss Pratteln plant operations	To reduce costs by closing plant; paid employees Fr6.5M in settlements
General Mills, Inc. 1961-1977	Feed and flour milling businesses; post-WWII acquisitions	To streamline; entered consumer products market competitively
General Motors Corp. 1970-1978	Several large car lines	To remain competitive with foreign competition
McCord Corp. 1960-1967	Automotive radiators	To end long-term drain; had \$2.4M short-term loss
Pillsbury Corp. 1972-1977	Souverain Cellars; Pillsbury Farms; others	To compete in growing consumer food market
Whittaker Corp. 1964-1972	55 diverse businesses	To reduce core to improve cohesiveness and operations
Xerox Corp. 1965-1978	Xerox Data Systems	To increase cohesiveness of firm; lost \$84M in 1975

^aCap is the pseudonym of a multimillion dollar producer of baked goods.

¹These cases are analyzed in Susan J. Bodilly, *Twelve Case Studies of Terminations and Divestitures by Business Firms*, N-2339-AF, forthcoming.

Obviously, these firms and the Air Force face somewhat different problems. Profitability and market share data provide sharp criteria for judging the performance of businesses. The intangibles of defense strategy offer a considerably less definitive basis for assessing Air Force activities. Moreover, few external forces can force a firm to make a particular decision, whereas many outsiders can impose decisions on the Air Force.

Nevertheless, common themes in the private-sector case studies both provide insights into the reasons for the Air Force's difficulty in terminating activities and suggest steps that it might take to achieve terminations if it deems such actions advisable or necessary. The following five propositions summarize the lessons of the case studies:

1. The decision to terminate or to divest an activity is usually undertaken in the context of a change in overall corporate strategy. The recognition of the need for a change in strategy begins the decisionmaking process that leads to termination.
2. The decision to terminate an important activity can seldom be made directly on the merits (or demerits) of the activity in question. A termination decision is almost always part of a group of decisions that includes an important new start or a major refocusing of effort.
3. The chief executive officer, or someone close to him, plays a crucial role in the strategy development and termination process.
4. The key steps in the decision to terminate an activity include
 - Obtaining new information (beyond that usually used for budgetary decisions) about the firm's performance and market
 - Initiating a special activity to produce information (outside the routine corporate planning and budgeting processes)
 - Extending the top management's control of policy
 - Increasing efforts to develop and maintain goal consensus within the firm.
5. The termination often involves near-term losses or costs that must be absorbed in order to obtain the long-term benefits.

III. OBSTACLES TO TERMINATION IN THE AIR FORCE

This section identifies the obstacles that the Air Force must surmount if it is to terminate a program. Using the framework of obstacles set forth in Sec. II, we analyze how the Air Force decides which programs it will undertake and how it will fund them. We distinguish between the internal barriers arising from the organization and missions of the Air Force and the external barriers resulting from the status of the Air Force as a component of the Department of Defense.

Because the Air Force is a governmental organization, it is tightly controlled by outside executive and legislative authorities. External obstacles therefore limit autonomous Air Force action. But because the Air Force can change only the internal obstacles, we address them first.

INTERNAL OBSTACLES

The internal obstacles to termination in the Air Force resemble those encountered by virtually all large organizations. In the Air Force these obstacles include the constraints imposed by past budgetary commitments; the absence of compelling criteria for program termination; the incrementalism fostered by the programming and resource-allocation process; the deference to experts and established activities; the reliance on advocacy; and, finally, individual officers' career incentives.

Past Commitments

Past commitments severely constrain Air Force decisions on programs and budgets. In a given year, a major portion of the Air Force budget will go for enlisted pay and benefits; rent; fuel; maintenance of buildings, runways, and equipment; spare parts for operational equipment; and the completion of multiyear purchases. Marginal adjustments may be made in some of these categories, but all have minimum feasible expenditure levels and claim a major share of available funds.

An examination of some broad budget categories suggests the strength of these constraints. In FY 1986, the Air Force's total obligational authority (TOA) was \$100.3 billion (before Gramm-Rudman

reductions).¹ Appropriations total \$20.6 billion for military pay and benefits, \$22.9 billion for operation and maintenance, and \$0.9 billion for housing.² Some \$40.1 billion are available for the purchase of aircraft, missiles, and other equipment, over one-third of which is committed to a few large systems, the production schedules of which had already been established under close public and congressional scrutiny.

Additional amounts are committed to smaller systems considered indispensable to the effectiveness of existing or near-future forces. Even in apparently flexible areas like research and development, most of the budget of over \$13.8 billion is committed to the maintenance of crucial facilities and equipment. Staff officers responsible for the Systems Command's budget estimated its fixed "door opening" costs to be more than 50 percent of the R&D budget.

Although the Air Force funds nearly 700 separate programs, most of its money goes to a small number of large, well-entrenched activities that underwrite basic Air Force strategy. The abrupt termination of any of these "big ticket" items would profoundly affect USAF force structure capabilities.

Many smaller programs support these indispensable activities. Even the termination of small programs, however, would require extensive analysis and consultation and entail significant disruption. In light of the relatively small amount of funds involved, the complexity of the termination process is a major obstacle to the termination of small programs.

Absence of Clear Criteria for Program Support or Termination

The lack of compelling criteria creates a second important barrier to termination for the Air Force. The essential mission of a military service in peacetime is to prepare for contingencies that cannot be well understood in advance. National political objectives—of both the United States and its potential adversaries—are subject to change, as are nations' technological capacities and military tactics. This fundamental uncertainty complicates the establishment of criteria for a given activity, let alone the entire force structure.

Thus, the need to deter and prepare for events that are of overriding importance but are unlikely to happen, for example, a Soviet attack on our European allies or the U.S. homeland, drives the program and

¹The TOA is the *authority* to make commitments to spend money in the current or future years; it differs from *outlays*, which are the actual expenditures made in a given year.

²USAF Comptroller's Office, ACBMP, April 16, 1986.

budget. The U.S. experience since 1970 illustrates the essential unpredictability of the uses of military force. In crises requiring military action—e.g., the Vietnam war, the efforts to rescue the *Pueblo* crew and the Iranian hostages, the Grenada operation, and the peace-keeping mission in Lebanon—equipment and tactics developed for other purposes had to be adapted to the circumstances.

Under the circumstances, Air Force leaders are understandably reluctant to consider any capability unnecessary. Prudence requires the Air Force to maintain as many options as possible, and thus it encourages the initiation of new activities and the maintenance of old ones and discourages termination.

The difficulty of establishing a simple criterion for the termination of Air Force programs can be illustrated by considering two weapon procurement programs. The first has met all of its performance goals and is producing weapons at or below the originally estimated unit cost; the second has consistently been behind schedule and over cost, and is only marginally effective. Although the first program could justifiably be called a success and the second a failure, the Air Force might be better served by terminating the first and continuing the second.

If, for example, the first program produces a weapon for which an even better alternative exists or which has become obsolescent owing to changes in threat or tactics, it should be terminated regardless of whether it is meeting cost and performance goals. If the second program represents the best or only available way of performing a vital mission, it should be continued regardless of cost and performance.

Incrementalism

By design, the programming and resource-allocation processes rely heavily on the views and expertise of mission commanders and functional specialists. Guidance from the Office of the Secretary of Defense (OSD) and the Chief of Staff and Staff of the Air Force sets general boundaries, but the vast majority of decisions about program content and funds are resolved through staff work and internal negotiations.

The Air Force makes its annual request for funds to the Secretary of Defense in a program objectives memorandum (POM). It calls its current process the "open POM," meaning that the deliberations and ultimate grounds for decisions are visible to all interested parties. The most important interested parties are the major commands (MAJCOMs). Their program proposals are the starting point for all subsequent deliberations; their representatives may participate in all

POM-related meetings of the panels, Program Review Committee, Air Staff Board, and Air Force Council. The opinions and appeals of the MAJCOM commanders are solicited and taken seriously by the Air Force Council.

Open bargaining processes, such as the POM, usually produce conservative decisions. They seldom achieve major changes in strategy or fundamental realignments of power among the participants. They protect and sustain existing activities rather than create new ones; critics of existing activities have little influence.

The Air Force resource-allocation process works incrementally because both the size of previous spending commitments and the entrenched interests of MAJCOMs and key Air Staff units make sudden revolutionary changes impossible. Wildavsky's description of OMB's budgetmaking as a process of muddling through applies equally well to the Air Force.³ But muddling through does not mean that the Air Force budget is made without an enormous amount of analysis.

The POM and all of its programs are scrutinized in great detail over and over again by the Air Force, and again by OSD. The process works incrementally as it trades off among legitimate and important demands. Because the Air Force has several indispensable missions, it can establish no hierarchy of importance. Thus, the needs asserted by MAJCOMs and functional specialists who carry out these indispensable missions cannot be easily dismissed, and as many as possible must be funded at some level.

Deference to Experts and Traditional Activities

The Air Force employs experts in a vast array of military specialties. It also relies on R&D experts of all kinds to identify and create technologies that will maintain its future effectiveness. Air Force leaders cannot and do not claim to have greater expertise in all fields than the specialists who work in them. Like most organizations that rely on technical and operational experts, the Air Force gives its experts as much autonomy as possible. Although the Air Staff scrutinizes and may overrule the recommendations of the specialists, it cannot forgo their expertise.

The resource-allocation process reflects this deference to specialists. Specialized personnel and technical organizations—the MAJCOMs and some of their major subunits—control most of the information about needs, costs, and program performance that decisionmakers need.

³See Aaron Wildavsky, *The Politics of the Budgetary Process*, 2d ed., Little, Brown and Co., 1974.

The interests of the MAJCOMs differ greatly from those of the POM process managers. The POM managers cope with resource limits by moving funds among programs; the MAJCOMs try to ensure that, at a minimum, no funds move from their programs. The MAJCOMs try to protect their programs by regulating the flow of information to the POM process. They have a strong incentive to provide information that supports programs and to play down detrimental information.

Reliance on Advocacy

The resource-allocation process is indeed open at every stage to the influence of the major operating commands. The system encourages advocacy, and decisions are ultimately made through negotiation among competing claimants. Left undisturbed, such a system allocates resources along the lines defined by the vector sum of competing forces. Decisions do not represent the calculations of a single decision-maker; they are derived from a process rather than designed to fit some explicit rationale or strategy.

The effects of advocacy budgeting are clearest when the Air Force has to adjust to cuts in its overall budget. In this case, cuts are shared by a large number of programs rather than concentrated on a few; a disinclination to create winners and losers prevails. The openness of the POM process has increased the willingness of units competing for funds to abide by the decisions reached in the POM. At the same time, it reinforces the negotiation process, which is unlikely to result in terminations.

Career Incentives and Personal Commitments

As is the case in most organizations, career incentives in the Air Force lead individual officers to seek a narrower set of goals than the service as a whole may seek. Tactical aviators, for example, seek to promote the operational effectiveness and independence of fighter aircraft, with limited concern for the needs of the strategic or mobility forces. Within the Air Staff, different units promote the interests of research and development, operational readiness, personnel quality and satisfaction, etc.

Transitory factors, such as the personalities of individual MAJCOM and Air Staff leaders, can strongly affect the process, as can personal friendships and inspired political tactics. But the basic incentives people have in their jobs do not change.

Individuals are encouraged to see the interests of the whole organization in light of the interests of their own unit; they reluctantly accept

actions that threaten activities central to their group's mission. The arduous process of initiating and sustaining programs in a resource-constrained and competitive environment builds high levels of emotional commitment among those who sponsor and support the activity. When terminations are considered, such commitments can become extremely important obstacles.

Control over assignments and promotions gives the MAJCOMs additional leverage. An officer assigned to duty in the Pentagon is in a sense on loan from a MAJCOM, to which he or she expects to return in two or three years. Such officers must serve the Air Staff well, but they must at the same time avoid offending their MAJCOM leaders. Since most program element monitors (PEMs) are assigned to programs of importance to their MAJCOMs, their careers can rise or fall with the fortunes of their program. Other participants in the Board process are also beholden to their MAJCOMs.

The norms strongly favor honest and competent performance in Air Staff. Nonetheless, Air Staff participants in the resource-allocation process must be aware of and support their MAJCOM's interests.

Costs to Senior Managers

Terminations may impose heavy costs on senior Air Force managers. As in other large organizations, managers in the Air Force must devote considerable time and energy to building internal consensus in favor of a major change in policy.

For a Chief of Staff or Secretary of the Air Force who must convince a four-star MAJCOM commander of the need to terminate a key mission capability, the costs can be extremely high. The costs to senior leaders of dealing with interests outside the Air Force may be even higher. In fact, the risks involved in bargaining with outside interests may well be the most important obstacle to termination faced by the Air Force.

EXTERNAL OBSTACLES

While virtually all large organizations encounter the foregoing difficulties in some form, the Air Force faces some additional—and probably more formidable—obstacles. As a component of the Department of Defense, the Air Force may neither establish nor terminate large programs solely at its own discretion. Decisions on the funding and conduct of programs require the approval of the Office of the Secretary of Defense and ultimately of the President and Congress.

The ability of authoritative outsiders to block a termination decision constitutes a formidable obstacle. The Air Force can propose or initiate a termination, but it does not make the ultimate decision to terminate. The lack of final authority adds the following obstacles:

- The need to persuade authoritative outsiders (particularly the Office of the Secretary of Defense, the White House, and congressional committees) that a termination is warranted
- The need to maintain public support for the Air Force's mission and confidence in current management
- The need to coordinate termination actions with the other services when their procurement and operational activities are interdependent with those of the Air Force.

Authoritative Outsiders

Several layers of executive branch bureaucracy and legislative committee organization oversee the Air Force. Each superordinate unit—the Office of the Joint Chiefs of Staff, the Office of the Secretary of Defense, the National Security Council, and the Office of Management and Budget in the executive branch, and the House and Senate Armed Services and Appropriations committees in the legislative branch—must approve major Air Force program and funding decisions. The need to consult each of these units before it can terminate a major activity imposes heavy transaction costs on the Air Force.

Our interviews revealed many instances of higher authorities—usually OSD and Congress—protecting activities that the Air Force wanted to terminate. The OSD reviews the Air Force's annual program and budget proposals and may direct that particular activities be initiated, emphasized, or saved from termination.

Like the Air Force, OSD has informal groups that share an interest in a particular kind of weapons system, support activity, or concept of military operations. These groups may protect their interests by pressing the Air Force to sustain related programs. Air Force advocates of an activity may collaborate with their OSD counterparts when it has fared poorly in the Air Force's budget deliberations.

Occasionally, the Air Force leadership *games* the DOD budget negotiations by proposing to terminate activities that have strong defenders in OSD. If OSD cares enough about the threatened activities, it will ensure their survival by increasing the Air Force budget.

If the Air Force proposes to terminate an activity that OSD favors or is indifferent to, OSD is likely to exact some price from the Air Force in return for its approval. That price—which may be high or low

depending on the issue and the current state of relations between OSD and the Air Force—creates the obstacle to termination.

The Air Force must also bargain with members of Congress. Weapons systems and bases mean money and jobs for constituencies, and a congressman who wants to stay in office will resist a termination that affects his district. Even if a termination is unavoidable, an affected member of Congress can negotiate compensating increases in other activities of his district. The costs of the compensating activities are further obstacles to termination.

Public Support and Confidence

This obstacle is made of the stuff of democratic government: the need to appear competent at all times, in the face of ambitious reporters and politicians hungry for evidence of official mismanagement. Any government agency risks recriminations if it terminates an activity that it once claimed it needed.

The adversarial nature of defense decisionmaking leaves little room for trial and error. The competition for funds forces advocates to make strong and positive claims about the value of all programs. With the exception of relatively small amounts of money set aside for basic R&D, most activities must be presented as certain winners, indispensable to national security.

Thus, terminations can appear to the public as something more serious than simply the abandonment of a speculative investment or an obsolete activity. Unless service leaders can demonstrate otherwise, terminations will be seen as evidence of poor military judgment, bad management, or squandering of public funds.

Economists teach that decisionmakers should ignore sunk costs, but public officials are seldom free to do so. Public officials get funds by creating confidence in their organization's expertise and by making promises about the performance of the assets to be purchased. Expenditures or activities that prove unnecessary or fail to perform as promised are political liabilities.

To avoid adverse political repercussions, service leaders must carefully prepare and present the case for termination. Because they cannot simply abandon their original rationale for the activity, the case can be hard to make: The activity must be shown to have been a prudent investment in the past, but unnecessary now, thanks to wholly unpredictable changes in the threat or technology.

Such cases are not impossible to make, and some Air Force leaders have been reasonably adept at making them. But the cases have to be carefully constructed and developed over time in congressional

testimony and other public statements. The presentation must be carried by a few top officials, say, the Chief and Vice Chief of Staff, the Secretary of the Air Force, the Deputy Chiefs of Staff for R&D and Operations, and a few four-star heads of major operating commands. The orchestration of their efforts and the use of their time cost dearly. The Air Force must count such costs in deciding whether a termination effort is worthwhile.

Coordination With Other Services

The reliance of the other armed services on Air Force equipment or assistance further deters termination. The Air Force procures some equipment in common with each of the other services, for example, communications gear with the Army and Navy and missiles and other munitions with the Navy. If the Air Force were to stop buying a jointly procured weapons system, the unit costs to the other service might increase drastically. The other services also rely on the Air Force for key functions: moving troops and equipment for the Army, communication and reconnaissance for the Army and Marines, close air support for Army troops, and cruise missile attacks against Soviet shipping for the Navy.

These service interdependencies have grown over the years, as defense planners have recognized the need for combined arms strategies and defense reformers have tried to save money by mandating joint development and testing of military hardware. The other services therefore have major stakes in many Air Force activities, and the Air Force has difficulty terminating what another service still needs. Thus, to terminate an activity, the Air Force must first determine whether another service has a stake in it.

The Air Force can, of course, try to get another service to do without a particular activity or assume responsibility for it. But other services are as unwilling as the Air Force to do without a capability that they might need in wartime; moreover, no other service can afford to pick up a responsibility abandoned by the Air Force unless its budget is increased commensurately. This second factor cripples many termination efforts.

The main motivation for termination is to eliminate an activity so that the Air Force can invest in a more pressing effort. The Air Force would benefit little if it were to abandon an activity or mission without freeing up new resources, but no other service is likely to assume a new responsibility unless it is assured of a compensating budget increase.

A termination negotiation might prove beneficial if the other service could conduct the activity more cheaply than the Air Force, or if an

outside authority (e.g., OSD) promised to increase the other service's budget without decreasing the Air Force's. But the difficulty of negotiating an arrangement with the other services and OSD severely hinders termination.

IV. CONCLUSIONS

We have painted a discouraging picture of the risks and costs to the Air Force (or any other organization) of terminating an activity. But the difficulty of termination does not constitute a definitive argument against it.

The imperative that led to the study in the first place remains: The increasing imbalance between commitments and resources may force the Air Force to terminate some activities. Moreover, vital new needs or irresistible new opportunities may encourage the Air Force to rethink its priorities and terminate old activities to make way for new ones. Finally, the Air Force may conclude that initiating its own terminations may be the only way to keep control over basic decisions about its missions and character.

We present below some broad conclusions that should guide the Air Force leadership when it decides that major terminations are necessary. The conclusions are meant to help Air Force leaders approach termination with a good understanding of what the process entails and what might defeat it. We do not recommend specific schedules, tactics, or incentives because any such prescriptions would be misleading. Everything about the termination process—timing, negotiations, staff work, and implementation—depends on the specific situation. Top managers must create and sustain their own processes, rather than apply standard procedures.

1. Major terminations should result from decisions about what the Air Force most needs to do, not from decisions on what should be cut out.

If budgetary or other imperatives compel the Air Force to consider termination, more is required than a simple hunt for poor performers. Whether an activity deserves to be continued or terminated depends on its contribution to Air Force strategies and missions, not on its performance relative to initial expectations, the advice of military specialists, and tradition.

2. Termination involves a delicate and complicated internal political process; it takes time to work out.

The top leadership should begin the process of strategy building and priority setting as soon as it sees that future Air Force resources will

not cover commitments. The process requires strong and attentive leadership from the Chief of Staff and the Secretary. They must lead the search for a new strategy, build consensus among the senior MAJCOM and Air Staff leadership, and eliminate recalcitrant opposition. Only a powerful Chief is likely to succeed. He should begin terminations early in his term as Chief.

3. The POM and other routine Air Force management processes can implement terminations, but they cannot initiate them.

Without the decisive intervention of top Air Force management, the POM and other routine processes will adjust to resource constraints through across-the-board cuts that will deplete all programs. The POM and similar processes are excellent for staff work, but staff work cannot produce major changes in strategy or priorities.

4. When circumstances demand termination, the external obstacles may prove less formidable.

Congress, the White House, and OSD are likely to be fully aware of any major discrepancies between the Air Force's commitments and its resources. They may call for terminations or try to impose them on the Air Force. If so, they will no longer constitute obstacles to termination. But they will threaten the Air Force's ability to use termination as a calculated part of its own strategy.

5. To retain control of the termination process, the Air Force must present terminations as an integral part of the effort to obtain new capabilities or implement new strategies, not as goods in themselves.

Terminations will lead to criticism from Congress and the public unless they are presented as means to higher ends, e.g., the implementation of new strategies or the maintenance of existing capabilities with a newly configured, leaner force.

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