

D O C U M E N T E D B R I E F I N G



*Incentives to Undertake
Sourcing Studies in the
Air Force*

*Laura H. Baldwin, Frank Camm,
Edward G. Keating, Ellen M. Pint*

Project AIR FORCE

19981005 101

DTIC QUALITY INSPECTED 4

The research reported here was sponsored by the United States Air Force under Contract F49642-96-C-0001. Further information may be obtained from the Strategic Planning Division, Directorate of Plans, Hq USAF.

ISBN: 0-8330-2638-0

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Published 1998 by RAND
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1333 H St., N.W., Washington, D.C. 20005-4707

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*Laura H. Baldwin, Frank Camm,
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*Prepared for the
United States Air Force*

DB-240-AF

Project AIR FORCE

PREFACE

As part of ongoing research to assist the Air Force in its outsourcing and privatization efforts, RAND's Project AIR FORCE was asked to examine the incentives for participants in the sourcing process (encompassing A-76 cost comparisons and direct conversions). The goal of this research is to suggest how process participants can best be induced to start and complete cost-effective sourcing studies that will help the Air Force reduce the cost of support activities without reducing military capability or quality of life.

This briefing should interest managers and analysts involved with outsourcing and privatization in the Air Force. It also should interest support services managers and contracting officials in other military departments and in the Office of the Secretary of Defense.

This work is part of the project "Improving Readiness Through Increased Access to Private Sources of Support" in the Resource Management and System Acquisition Program of Project AIR FORCE. Project AIR FORCE, a division of RAND, is the Air Force federally funded research and development center (FFRDC) for studies and analyses. It provides the Air Force with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future aerospace forces. Research is performed in three programs: Strategy and Doctrine, Force Modernization and Employment, and Resource Management and System Acquisition. The project was sponsored by the Deputy Chief of Staff for Installations and Logistics, Headquarters, USAF.

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SUMMARY

This documented briefing examines the incentives for participants in the Air Force's sourcing process (encompassing A-76 cost comparisons and direct conversions). The goal of this research is to suggest how process participants can best be induced to start and complete cost-effective sourcing studies that will help the Air Force reduce the cost of support activities without reducing military capability or quality of life.

The most effective financial incentive to undertake sourcing studies that we have identified is the operations and maintenance (O&M) cuts that have been allocated to the Air Force's major commands (MAJCOMs). Such cuts provide strong incentives for commands to reduce support costs either by conducting sourcing studies or by using methods such as process improvement. The Air Staff faces an important challenge, however, to determine the least-harmful allocation of O&M cuts across its commands. The MAJCOMs must also delegate incentives to their wing commanders and functional personnel, who play important roles both in identifying activities to be competed and in conducting sourcing studies. These incentives can include performance evaluations, sharing in savings from sourcing studies, budget or personnel cuts, assistance with conducting sourcing studies, and greater competition among installations to provide services.

SOURCING PARTICIPANTS

As a first step in this research, we identified the participants in the Air Force's sourcing process. A variety of people play important roles both in identifying activities to be studied and in conducting sourcing studies. Pressure to undertake studies often comes from external sources, such as the Department of Defense (DoD) and Congress, who are urging the Air Force to reduce support costs and to conduct sourcing studies. Within the Air Force, personnel are involved at the Air Staff, MAJCOM, and installation levels. At these levels, decisionmakers in the direct chain of command (e.g., wing commanders) and experts associated with specific functions (e.g., civil engineers) play key roles.

The Air Staff focuses on the generation of cost savings in support activities to pay for force modernization. The Air Staff believes that sourcing studies are one way to generate these savings, but the Air Staff is

dependent upon command and installation personnel to identify activities for review and to complete sourcing studies successfully.

Following a change in the law that formerly gave authority to wing commanders to identify activities to be competed and to conduct sourcing studies, the Air Staff shifted this authority to the MAJCOM leadership. The MAJCOMs have also been given a financial incentive to conduct sourcing studies through operations and maintenance (O&M) budget cuts that reflect target savings from sourcing studies over the next five years. MAJCOM leadership, however, is largely dependent on its functional employees to identify prospective studies and on installation-level personnel to complete them successfully.

The top priority of most functional employees is the maintenance of readiness. Therefore, they often fear that sourcing studies will result in a reduction in readiness: Studies displace personnel from their normal duties, and can result in a distracting transition to contractor support or to a new government organization. Functional employees are also concerned that sourcing studies will lead to a reduction in government authorizations in a function and thereby reduce functional career opportunities for military or civilian personnel. Moreover, functional personnel offer expertise about study opportunities that cannot be easily replaced.

The goal of wing commanders is to accomplish their mission within budget. There is no direct reward for reducing costs unless savings can be spent on other activities before budgets are reprogrammed. Because sourcing studies are often lengthy, wing commanders may face the short-run disruption studies that cause, with any resulting cost savings coming after their tenure.

Finally, installation personnel are threatened by job loss from sourcing studies, but without their cooperation successful completion of sourcing studies may be difficult. The Fiscal Year (FY) 1991 Appropriations Act placed time limits on sourcing studies. Since sourcing studies that exceed time limits are canceled, these limits may provide incentive for installation personnel to delay the completion of studies and thereby preserve the status quo.

CURRENT INCENTIVES FOR SOURCING STUDIES

The starting point of this research was an analysis of the "Threshold Savings Incentive." When wing commanders had responsibility for conducting sourcing studies, it was thought that the Air Force's budgeting process gave them a reward when they completed sourcing studies that

reduced costs by more than the threshold savings rate, historically 20 percent. Studies were expected to save 20 percent, so the budget process projected a 20 percent savings in the activity being studied. If realized savings exceeded 20 percent, the wing commander was allowed to keep the additional savings until reprogramming occurred. The argument has been advanced that this "Threshold Savings Incentive" should now apply to the MAJCOMs as it previously applied to wing commanders. However, two major objections follow.

First, a study would have to result in savings considerably higher than 20 percent in the short term for the Threshold Savings Incentive to reward the command, considering the substantial study costs the command must bear. The Air Force's history of completed sourcing studies suggests a wide variance in estimated savings rates. Thus, the MAJCOM could not be certain an individual study would provide a positive reward under the Threshold Savings Incentive. The MAJCOMs face a disincentive to conduct sourcing studies that might result in savings of less than 20 percent, even though these studies would reduce Air Force support costs.

Second, and more important, our current understanding is that command-level O&M cuts would supersede the Threshold Savings Incentive. The MAJCOMs' budgets have already been cut in anticipation of savings from sourcing studies. Hence, when a completed study reduces costs, no reprogramming should occur until the command has achieved its targeted O&M savings.

This arrangement provides a much stronger financial incentive to commands than the Threshold Savings Incentive. As long as a command has not achieved its targeted savings, all cost reductions resulting from sourcing studies benefit the command. Thus, O&M budget cuts align the incentives of MAJCOMs with the interests of the Air Force; any study that results in positive savings (net of study costs) is beneficial to the command.

FUTURE DIRECTIONS

Taking a step back, we considered the properties of an ideal Air Staff-designed incentive scheme for MAJCOMs. An ideal scheme would, for instance, benefit a command that reduces its costs. Looking beyond sourcing studies, the command should benefit from any approach that reduces support costs.

Predetermined budget cuts fit the criteria of a desirable approach. Once a budget cut has been determined, all incremental savings accrue to the command. To serve as incentive, budget cuts must be "predetermined";

after a cut is allocated to a command, it cannot be adjusted on the basis of the command's response. Incentive effects would be quite harmful if, for instance, the Air Staff reallocated additional budget cuts to commands that lowered their costs quickly, and gave additional funds to commands that were unable to achieve targeted savings.

The determination of appropriate command-level budget cuts is a difficult challenge. The Air Staff clearly does not wish to punish its efficient commands nor spare its most wasteful. Yardsticks or metrics comparing installations and commands may help the Air Staff identify appropriate targets for budget cuts. For example, implementation of Activity-Based Costing (ABC) may identify Air Force installations and commands with above-average costs for similar support activities. The Air Staff can also play an important role in pushing the DoD and Congress to eliminate regulations that impair command and installation efficiency.

Another issue in the context of sourcing studies is who should pay for them. We currently do not believe the Air Staff should directly pay for sourcing studies, because funds that are set aside would simply be deducted from the MAJCOMs' O&M budgets. Commands are likely to have better information about the cost-effectiveness of specific studies, and so should decide which studies to fund. However, this is an empirical question. MAJCOMs may not have sufficient incentives to invest in sourcing studies; activities that have common benefits to all MAJCOMs might be more effectively executed if explicitly funded by the Air Staff.

We also examined how MAJCOMs might provide incentives to wing commanders and functional personnel. Although predetermined budget cuts create desirable incentives at the MAJCOM level, such an approach does not directly solve the MAJCOMs' challenges in motivating installations and functional personnel. Financial incentives could be delegated to wing commanders, or cuts in personnel authorizations could be delegated to functions. However, it would be inappropriate for commands simply to "salami slice" budget or personnel cuts across installations or functions. These cuts should be based on the relative efficiency of installations in conducting comparable activities. Similar incentives might be achieved by generating competition among installations to perform services regionally, or by targeting the least efficient activities for sourcing studies. The performance review process might also be used to encourage favorable outcomes. Command-level "tiger teams" or external consultants might be helpful in selecting activities to study and conducting or assisting with sourcing studies. However, the provision of incentives from MAJCOMs to installations and functional personnel remains a challenge.

CONCLUSIONS

Our current understanding of Air Force budgeting policy is that the Threshold Savings Incentive should be irrelevant until commands achieve the projected savings that have already been cut from their O&M budgets. In any case, the Threshold Savings Incentive is an imperfect incentive for cost savings, because studies would only benefit commands if they saved considerably more than the threshold. Fortunately, the MAJCOM O&M budget cuts that have superseded the Threshold Savings Incentive provide commands with excellent incentives to reduce support costs—not only through sourcing studies, but also through approaches such as process improvement. The Air Staff, however, faces difficult challenges in determining the appropriate amount to cut MAJCOM budgets. Also, commands face difficulties in motivating their functional and installation personnel to target and complete sourcing studies.

ACKNOWLEDGMENTS

Carl Dahlman, Sam Kleinman, Francois Melese, Nancy Moore, Carla Tighe, Derek Trunkey, and John Wallace made helpful comments on this work. In addition, we appreciate the insights of personnel at Air Mobility Command (AMC) headquarters, Scott Air Force Base. John Halliday of RAND provided a helpful review of this document. Regina Sandberg provided secretarial support.

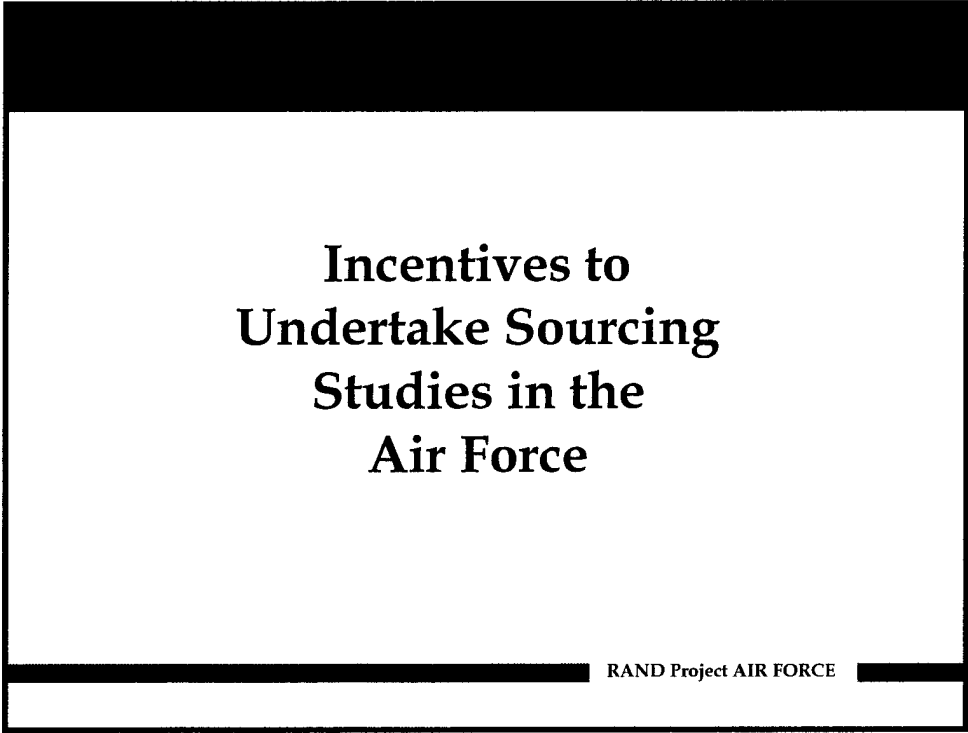
This research was presented at a RAND Logistics Lunch on June 27, 1997, and at the Western Economics Association conference in Seattle on July 12, 1997. It was briefed to Colonel Rick Stearman and his staff at AMC/XPQO on July 17, 1997, and Colonel Len Campbell and Jerry Maatta of the Air Staff Outsourcing and Privatization Office (AF/XPMS) on July 18, 1997. The research benefited from comments and suggestions received in each of these forums.

Of course, any remaining errors are the authors' responsibility.

ABBREVIATIONS AND ACRONYMS

ABC	Activity-Based Costing
AETC	Air Education and Training Command
AMC	Air Mobility Command
BOS	Base operating support
CAMIS	Commercial Activity Management Information System
DoD	Department of Defense
FFRDC	Federally funded research and development center
FY	Fiscal year
MAJCOM	Major command
MEO	Most Efficient Organization
O&M	Operations and maintenance
OMB	Office of Management and Budget
POM	Program Objectives Memorandum
PWS	Performance Work Statement
QDR	Quadrennial Defense Review
UTC	Unit type code

1. INTRODUCTION



**Incentives to
Undertake Sourcing
Studies in the
Air Force**

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INCENTIVES TO UNDERTAKE SOURCING STUDIES IN THE AIR FORCE

This briefing presents results of Project AIR FORCE research on incentives to pursue Air Force sourcing studies. The Air Force is under considerable pressure from the Department of Defense (DoD) to conduct more sourcing studies¹ to help reduce costs. However, as we will discuss, some Air Force personnel whose cooperation is currently needed to conduct sourcing studies have limited incentives to help bring such studies to completion.

¹ As defined here, sourcing studies include both A-76 competitions, through which contractors compete with organic providers of support services, and direct conversions to contractor provision of services. Office of Management and Budget (OMB) Circular A-76 sets forth regulations governing such studies. A-76 competitions are required whenever an activity employs 11 or more government civilians. Activities performed exclusively by military personnel, or by a workforce that includes fewer than 11 civilian personnel, may be directly converted.

The most effective financial incentive to undertake sourcing studies that we have identified is the operations and maintenance (O&M) cuts that have been allocated to the Air Force's major commands (MAJCOMs). Such cuts provide strong incentive for commands to economize, both through conducting sourcing studies and through other approaches. The Air Staff faces an important challenge, however, in determining the least-harmful allocation of O&M cuts across its commands. Other types of incentives, such as performance evaluations, cuts in personnel authorizations, or greater competition among installations, may be needed to motivate functional and installation personnel to participate more effectively in sourcing studies.

Outline

- ➔ • Sourcing participants
- Current incentives for sourcing studies
- Future directions

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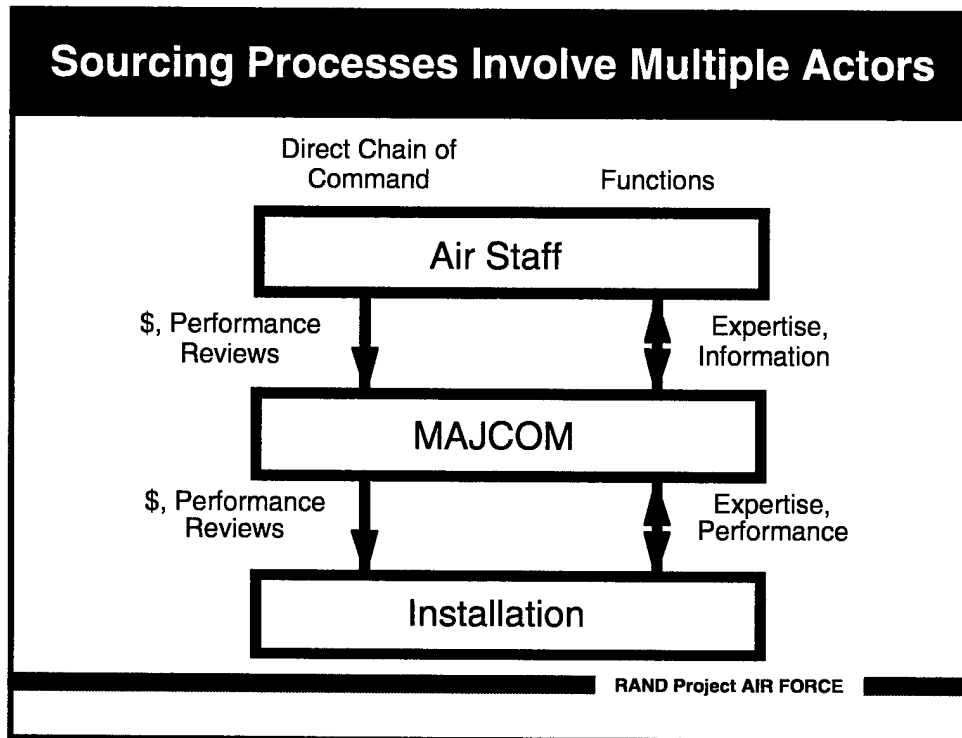
This briefing is organized into three sections.

In the first section, we examine the goals of various individuals involved in the sourcing process and how those goals affect their willingness to participate in sourcing studies. Since commands are not the only decisionmakers in the sourcing process, we must also consider MAJCOM functional personnel, wing commanders, and other installation personnel.

In the second section, we discuss financial incentives that currently exist in the Air Force to undertake sourcing studies. These include a "Threshold Savings Incentive" that rewards commands for sourcing studies that result in savings exceeding a threshold rate, currently 20 percent, and O&M budget cuts that have been delegated to MAJCOMs to capture projected savings from sourcing studies.

In the final section, we discuss the properties of an ideal incentive scheme for MAJCOMs to achieve support cost savings. O&M budget cuts have many of these desirable properties, provided that they are determined in advance and reflect savings that are achievable without reducing readiness. We also discuss how sourcing studies should be funded and how incentives can be provided by MAJCOMs to functional and installation personnel.

2. SOURCING PARTICIPANTS



SOURCING PROCESSES INVOLVE MULTIPLE ACTORS

Sourcing studies involve multiple participants. Two channels of influence affect sourcing decisions in the Air Force. The first is the chain of command that flows from one commander to the next through each level of the Air Force. These commanders ultimately choose activities to review for potential outsourcing and are responsible for conducting sourcing studies. The second runs through each functional community (for example, civil engineering or logistics) represented at each level of the Air Force. Each function provides expertise relevant to sourcing decisions that affect its community.

Within this context, pressure to conduct sourcing studies now largely emanates from the Air Staff (and, in turn, from the Department of Defense (DoD)). The ultimate purpose of these sourcing studies, in a period of constrained defense budgets, is to reduce support costs so that more funds can be spent on procurement, which has so far borne the brunt of defense spending cuts. Pressure to conduct sourcing studies has been conveyed

from the Air Staff to the MAJCOMs through leadership and through O&M budget cuts related to projected savings from sourcing competitions. In order to achieve sourcing goals, MAJCOMs must rely on their own functional personnel as well as commanders and functional personnel at the installation level.

The current involvement of MAJCOMs in the sourcing process is somewhat outside the recent historical norm. The Fiscal Year (FY) 1989 National Defense Authorization Act specified that installation commanders had sole authority to determine which activities to study. This stipulation, however, expired September 30, 1995. Since then, MAJCOMs have assumed a more central role both in determining which sourcing studies to undertake, and in coordinating installation-level efforts to meet command-wide sourcing goals.

MAJCOM functional personnel are typically better informed than MAJCOM leadership about which sourcing studies are likely to be most profitable. That is why, for example, under the Air Force's "Jump Start" initiative, they were asked to identify which military and civilian authorizations (or billets) in their functions should be opened to study. At the same time, as we discuss subsequently, MAJCOM functional personnel want to preserve their career fields and therefore may be reluctant to give up authorizations. As a result, MAJCOM leadership can find it challenging to induce the enthusiastic participation of functional personnel.

In addition, installation personnel are involved in sourcing studies. Though wing commanders no longer have sole authority to initiate studies, installation offices such as manpower, civilian personnel, and contracting are involved in defining the work to be competed and the in-house bid. Wing commanders are instrumental in ensuring that installation-level activities are completed in a timely manner.

As discussed in Keating, Camm, and Hanks (1997) and Keating (1997), sourcing studies have statutory time limits. Unhappy installation-level personnel, particularly those employed in the function being studied, may be able to stall studies and cause their cancellation. Given the dramatic changes in how the Air Force views sourcing reviews, we cannot predict how common cancellations will be in the future.

The next group of charts discusses the goals and incentives of these disparate actors in greater detail.

The Air Staff Wants Funds for Modernization

- **QDR relies on infrastructure cost savings to offset the costs of force modernization**
- **Sourcing studies are thought to be an effective approach**
- **Sourcing imperatives and O&M budget cuts have been transmitted to commands**

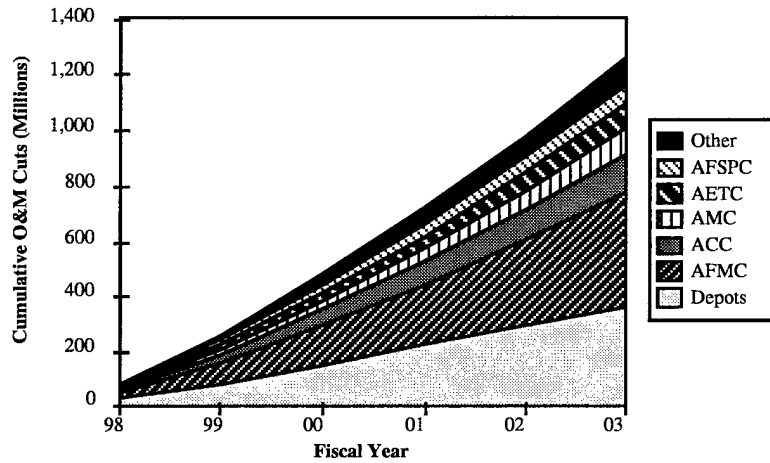
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THE AIR STAFF WANTS FUNDS FOR MODERNIZATION

The Air Staff has been placed under considerable pressure to generate infrastructure cost savings. The Quadrennial Defense Review (QDR) (1997), for instance, relies upon infrastructure savings to help fund weapon system modernization.

Sourcing studies are thought to be a good way to generate cost savings without unnecessarily degrading military capability or the quality of life in the force. Hence, the Air Staff has instructed MAJCOMs to identify activities to be competed, and to undertake an extensive series of new sourcing studies. The Air Staff has allocated O&M budget cuts to MAJCOMs through the FY98 Program Objectives Memorandum (POM) to reflect projected savings from sourcing studies.

MAJCOM Budgets Have Been Cut



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MAJCOM BUDGETS HAVE BEEN CUT

This figure plots the cumulative planned O&M cuts allocated by the Air Staff to the various commands as of December 12, 1996. These O&M cuts reach an annual total of \$1.255 billion Air Force-wide in 2003. Cuts may increase in future defense budgets, however, in the wake of the QDR.

It is unclear what will happen to commands that are unable to fulfill these budget cuts. Readiness could fall, or commands that fail to achieve their targets may have their budgets partially restored.

MAJCOM Leadership Has Sourcing Responsibility

- **Budget cuts and Dorn reductions require action, but readiness must be maintained**
- **Study costs are borne by the MAJCOMs, despite budget cuts**
- **MAJCOMs must rely on**
 - **Information from functionals about which billets to compete**
 - **Leadership from wing commanders to complete studies**
 - **Input from installation personnel for PWS and MEO**

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MAJCOM LEADERSHIP HAS SOURCING RESPONSIBILITY

The Air Staff has allocated O&M budget cuts to the MAJCOMs. MAJCOMs have also been required to make separate Civilian Drawdown Initiative or "Dorn" manpower reductions. Both of these factors push MAJCOM leadership to undertake sourcing studies in an effort to maintain readiness using fewer personnel and less money.

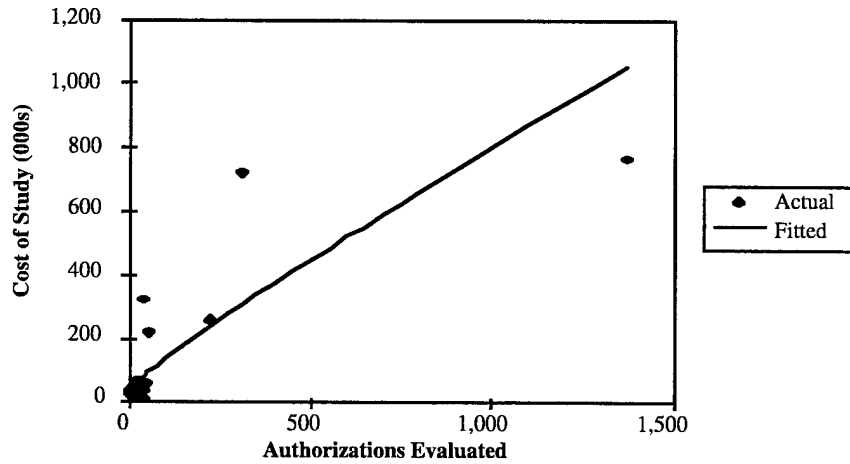
Unfortunately from a MAJCOM perspective, the costs of undertaking sourcing studies must be funded through the MAJCOM's O&M budget. These are the same discretionary budgets that have already been cut to accommodate the desire for new weapon systems. To some extent, these study costs accrue in the form of redirected staff time and effort rather than directly increased expenditures. However, the reallocation of staff time is an important opportunity cost, because personnel are precluded from performing other valuable functions.

Further, the MAJCOM leadership is often informationally disadvantaged. The leadership frequently must rely on MAJCOM functional personnel to identify the best areas for study and on installation personnel to execute those studies. The wing commander ensures that the study progresses

according to schedule, and installation personnel construct both the Performance Work Statement (PWS), which is the workscope that forms the basis of bids, and the Most Efficient Organization (MEO), which is the in-house bid. As we note subsequently, however, MAJCOM functional personnel and installation personnel are not always enthusiastic about sourcing studies because the studies may result in lost jobs or reduced opportunities for them.

MAJCOM leadership has two possible options for reducing these incentive problems. First, it could try to design incentives to motivate functional and installation personnel to participate more effectively in sourcing studies. Second, it could endeavor to learn more about installation support services in order to overcome its informational disadvantage—for example, by comparing performance and cost information on support services across installations. We discuss these options in greater detail below.

Sourcing Study Costs Can Be Considerable



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SOURCING STUDY COSTS CAN BE CONSIDERABLE

As noted, MAJCOMs bear the cost of undertaking sourcing studies.

To learn more about the magnitude of these costs, we analyzed 20 completed Air Force sourcing studies in the July 1, 1996 version of the Commercial Activity Management Information System (CAMIS). These studies date back to October 1, 1990 (when the Air Force started tracking the costs of studies). According to CAMIS, the cost per completed study ranged from \$13,000 to \$766,000, with a mean of \$140,000 and a median of \$40,000.² These studies evaluated 6 to 1,369 authorizations with a median of 24. Hence, the number of authorizations evaluated is highly right-skewed.

To reduce the disproportionate influence of outlying data points caused by right-skewed data, we estimated a regression of the form

² These cost figures cannot be adjusted for inflation because CAMIS does not indicate when the actual study expenditures were made. As noted above, some portion of these costs may represent the opportunity costs of redirected staff time as opposed to direct increases in expenditures.

$$\sqrt{\text{Cost}} = a + b\sqrt{\text{Authorizations}} + \varepsilon$$

with cost in thousands of dollars. The resulting point estimates (shown with standard errors in parentheses) were

a: 3.70 (1.26)

b: 0.77 (0.12)

The R-squared statistic was 0.71, indicating that approximately 71 percent of the variance in study costs is explained by this equation. These results suggest that a 50-authorization study would cost about \$85,000 to conduct, while a 100-authorization study would cost about \$130,000 to complete.

This figure plots the actual authorization and cost combinations in the data as well as our nonlinear fitted estimation from the data. It is not our intent to use this small sample to develop precise estimates of the cost of future studies. Rather, we suggest that future studies may be costly in terms of O&M funds or diverted staff time. Also, note that actual costs can vary considerably from the fitted curve. Commands may face substantial uncertainty about the cost of conducting sourcing studies.

Functions Do Not Directly Benefit From Sourcing Studies

- **Goals of functional personnel:**
 - Maintain readiness
 - Maintain expertise in function
 - Maintain adequate career paths for military and civilian personnel
- **Authorizations in career field are likely to shrink as a result of sourcing studies**
- **Functionals may not be aggressive in suggesting:**
 - Authorizations to compete
 - How to redesign processes to improve performance

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FUNCTIONS DO NOT DIRECTLY BENEFIT FROM SOURCING STUDIES

MAJCOM- or installation-level functional personnel perceive considerable disadvantages to sourcing studies in their bailiwicks. The primary goal of the functional personnel who provide direct support to operating units is the maintenance of readiness through their expertise. Other goals of functional organizations include maintaining expertise in their function and maintaining career paths for military and civilian personnel. Thus, functional personnel may see sourcing initiatives as a threat because they may fear that contractor support could reduce readiness. Further, they know that the number of authorizations in a career field is likely to shrink as a result of a completed study, whether contractors or government-employed civilians win a cost comparison. Military functional personnel may fear that their career field authorizations will be concentrated in smaller numbers in less desirable locations, or perhaps ultimately eliminated or merged with other functions. Authorizations and promotion opportunities for civilian functional personnel may also be reduced.

Therefore, functional personnel may try to protect authorizations in their functions by keeping them designated as “inherently governmental,” which precludes sourcing studies for those billets. They may also be reluctant to try to streamline business processes in ways that eliminate authorizations.

Wing Commanders Have Short Time Horizons

- **Wing commanders must maintain readiness and meet training schedules on limited O&M budgets**
- **Wing commanders seek O&M savings only when they can use them for other activities**
- **Short tours of duty and lengthy competitions mean they incur study costs, but benefits are realized after they leave**

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WING COMMANDERS HAVE SHORT TIME HORIZONS

Wing commanders have responsibility for maintaining readiness and achieving their training requirements on a limited O&M budget. Wing commanders do not receive any direct reward for reducing costs unless savings can be spent on other activities before the wing's budget is reprogrammed; their typical focus is on short-term fulfillment of their flying-hour programs.

However, because wing commanders have short tours of duty relative to the typical duration of a sourcing study, the benefits associated with a study begun by one wing commander will likely accrue to a subsequent commander.

Installation Personnel Must Help Execute Studies

- **Input from installation personnel is needed to tailor PWS and develop MEO**
- **Installation personnel are threatened by loss of jobs**
 - **Opportunities to work for the winning contractor are limited if they help with the sourcing process**
 - **They may underbid on the MEO to preserve jobs**
 - **They may delay studies because cancellation would preserve the status quo**

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INSTALLATION PERSONNEL MUST HELP EXECUTE STUDIES

Ultimately, even if a study is initiated at a higher level, installation personnel must participate extensively. Template PWSs must be tailored to fit local mission and circumstances. Also, personnel in the activity being studied must help develop the MEO bid.

At the same time, however, these personnel feel threatened by a potential loss of jobs if a contractor wins the competition or the MEO reduces the number of personnel authorizations. They may be reluctant to assist with the development of the PWS or MEO so their opportunities to work for a winning contractor are not limited. They may also underbid on the MEO in order to preserve some civilian jobs. Finally, installation personnel have incentives to delay study completion in order to invoke the FY91 Appropriations Act that placed time limits on the duration of sourcing studies. If studies are not completed within these time limits, they are automatically canceled. Military personnel may feel somewhat less threatened by a sourcing study, since they could move to a similar position at another installation, and are less likely to be interested in contractor employment opportunities in the near term.

Robbert, Gates, and Elliott (1997) note that sourcing studies put considerable stress on installations. The local civilian personnel office, for instance, bears a particular burden. Employee churn increases as permanent employees in studied activities have incentives to move to other jobs and temporary employees often are hired to replace them.

Thus, personnel at the installation level often perceive few—if any—benefits to conducting a sourcing study. This opposition can be troubling and may increase the costs associated with sourcing studies, especially if it culminates in study cancellation because of delays.

3. CURRENT INCENTIVES FOR SOURCING STUDIES

Outline

- Sourcing participants
- ➔ • **Current incentives for sourcing studies**
- Future directions

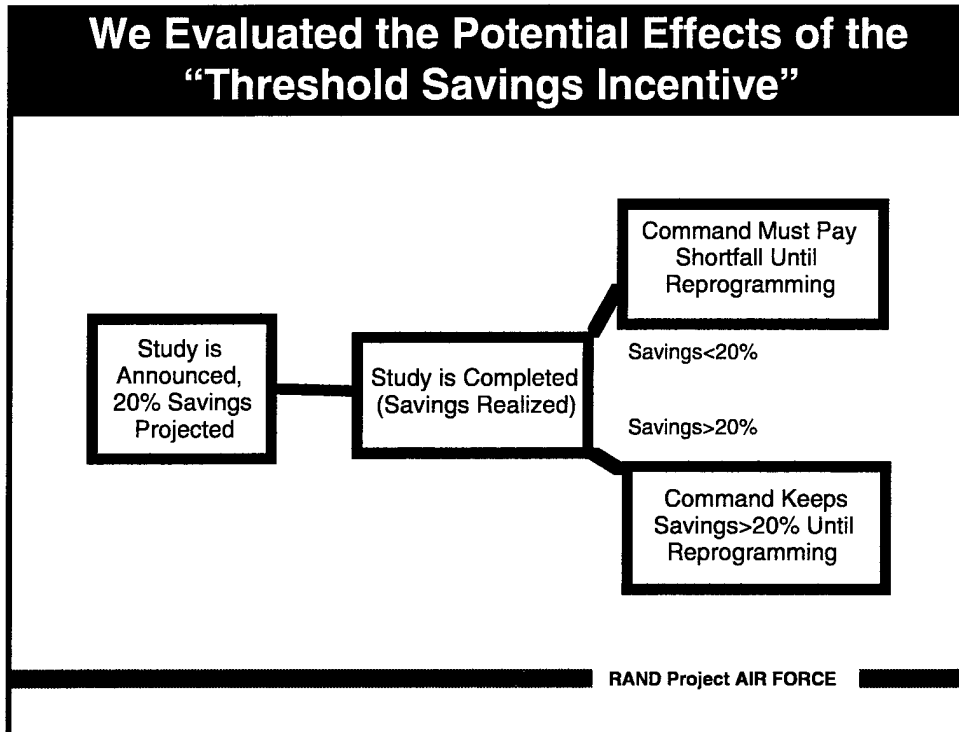
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OUTLINE

The Air Force has had trouble motivating personnel to initiate and complete sourcing studies. In this section, we discuss the financial incentives for MAJCOMs to undertake studies.

This section starts by examining an implicit incentive, which we label the "Threshold Savings Incentive," that arises from the budgeting process. This incentive previously applied to wing commanders when they controlled sourcing studies, and is currently supposed to apply to MAJCOMs. In principle, this incentive may cause commands to eschew sourcing studies that could benefit the Air Force because the projected savings, net of the cost of conducting studies, would be lower than the threshold level. We argue, however, that this incentive has been superseded by O&M budget cuts allocated to MAJCOMs to reflect expected savings from sourcing studies. These O&M cuts provide a more

effective incentive for commands to reduce expenditures through sourcing studies and other approaches.



WE EVALUATED THE POTENTIAL EFFECTS OF THE “THRESHOLD SAVINGS INCENTIVE”

RAND was initially asked to evaluate the effects of the budgeting process on MAJCOM incentives to conduct sourcing studies. We refer to these effects as the “Threshold Savings Incentive” because the command benefits only if actual savings from the sourcing study exceed budgeted savings.³ This diagram summarizes how we understand this incentive to work.

When wing commanders controlled the sourcing process for installation activities, the Threshold Savings Incentive applied to installation O&M budgets. When an A-76 cost comparison or direct conversion was announced, a 20 percent savings for that function or activity was deducted from the affected command’s budget, starting two years later (or whenever the study was expected to be completed). Twenty percent has traditionally been the Air Force’s projected rate of savings from sourcing

³ “Threshold Savings Incentive” is not a formal or technical designation. We simply use this label to describe the implicit financial incentive to conduct sourcing studies that is thought to arise from the budgeting process.

studies. We therefore use 20 percent as the “threshold” throughout this briefing. Note that the 20 percent budget cut occurred as a result of the study announcement; the study was not, under this scenario, a response to a 20 percent budget cut.

If a completed study resulted in savings that exceeded the projected 20 percent, the installation kept the additional savings until the next budget adjustment. If savings fell below 20 percent, however, the installation bore the burden until the next budget adjustment.⁴ It is important to note that this 20 percent threshold was not chosen to create an incentive. Rather, the incentive was a byproduct of the normal budgeting process.

This Threshold Savings Incentive is now assumed to provide a financial incentive for MAJCOMs to undertake A-76 cost comparisons and direct conversions.

⁴ Melese (1997) would categorize the Threshold Savings Incentive as a form of “gain-sharing.” Under gain-sharing, a portion of any near-term savings is temporarily rebated to the saving activity. He argues that gain-sharing arrangements may not provide sufficient incentives to undertake activities that lead to long-term savings because of the temporary nature of the rebate.

The Cost of Conducting a Study Raises the Effective Threshold

Example:

50 Civilian Authorizations	\$ 2,000,000
20% Projected Savings	\$ 400,000
Estimated Study Cost	\$ 85,000

Break-even Savings % with One Year Lag (no discounting)	24%
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THE COST OF CONDUCTING A STUDY RAISES THE EFFECTIVE THRESHOLD

Because of the cost of conducting sourcing studies, these studies must result in significant savings for MAJCOMs to break even under the Threshold Savings Incentive.

This chart presents a stylized example of a study that examines 50 government-employed civilian authorizations. Assuming their salaries and benefits currently average \$40,000 per year, \$400,000 in annual savings would be projected. If, as we estimate from the CAMIS data, this study would cost the MAJCOM \$85,000 to undertake, the MAJCOM would only benefit from the Threshold Savings Incentive if the realized savings from the study exceeded 24 percent, assuming that any savings above the threshold would be reprogrammed away after a year.⁵

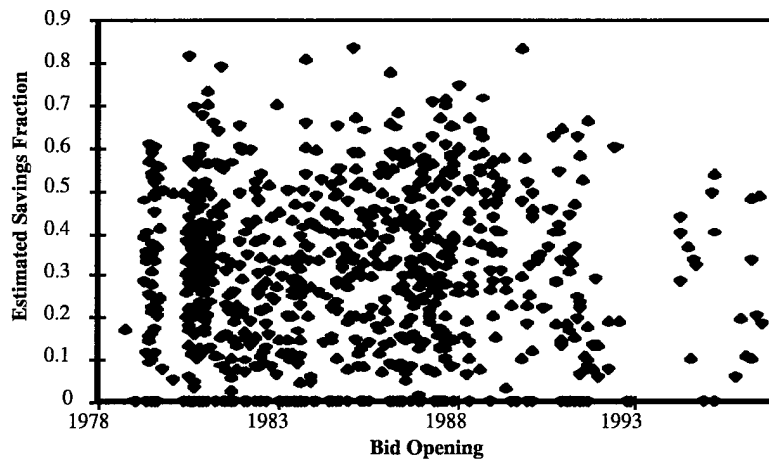
In addition, budget reprogramming occurs constantly within and across commands. It seems likely that additional savings would be noticed and

⁵ This calculation ignores the possibility of study cancellation and omits discounting (which is relevant, since the \$85,000 study cost would precede any savings).

recaptured fairly quickly. The shorter the period of time the MAJCOMs are allowed to keep any savings above the threshold level, the larger the savings required to break even. (Note, however, that the Air Force benefits from any level of savings that is greater than the study cost and enjoys these benefits over the entire life of the contract or MEO.)

As the next chart demonstrates, we estimate that at least 40 percent of completed Air Force studies have resulted in savings of less than 25 percent. Thus, under the Threshold Savings Incentive, MAJCOMs would not have had a financial incentive to undertake these studies, even though many of them generated cost savings for the Air Force.

Projected Savings from Sourcing Studies Have Varied Extensively



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PROJECTED SAVINGS FROM SOURCING STUDIES HAVE VARIED EXTENSIVELY

To put the Threshold Savings Incentive break-even rates into context, we analyzed the Air Force's sourcing-study history in CAMIS.

Though CAMIS contains a data field for projected cost savings from each completed study, this field is generally empty. Instead, we used the following procedure to estimate the savings accruing from sourcing studies. The bid of the winning contractor or MEO represents projected post-study costs. To estimate the pre-study costs of performing the activity, we calculated the cost per government employee in the MEO (the MEO bid divided by the number of authorizations requested). We then multiplied that ratio by the number of pre-study government employee authorizations to derive an estimate of pre-study costs. Costs of undertaking studies are not included, since these data are missing for most studies.⁶

⁶ This procedure is similar to that used by Marcus (1993) and Tighe et al. (1996).

This chart shows projected savings as a percentage of pre-study costs for 852 completed Air Force studies from 1978 to 1996. The estimated savings were as great as 83 percent, but the mode (most common outcome) was zero savings. The median study was estimated to have reduced costs by approximately 29 percent. About 40 percent of the completed studies were estimated to have reduced costs by less than 25 percent. There were four studies that were found to have resulted in cost increases; they are omitted from this chart.⁷

We are extremely wary of these projected cost savings. As noted, we had to use a cost-change estimation procedure that assumes the cost per government employee is the same before and after the study. However, prior to the study, the activity may have involved either a mixture of military and civilian personnel or a different mixture of civilian pay grades. In addition, we think that the dispersion of projected savings in this figure is highly suspicious; it seems counterintuitive that realized savings rates could vary so much. It is unclear whether the scope, quality, and type of work performed by the winning contractor or MEO corresponds closely to that performed by government employees before the study. Work could have been transferred, for instance, to other, non-studied portions of the installation.

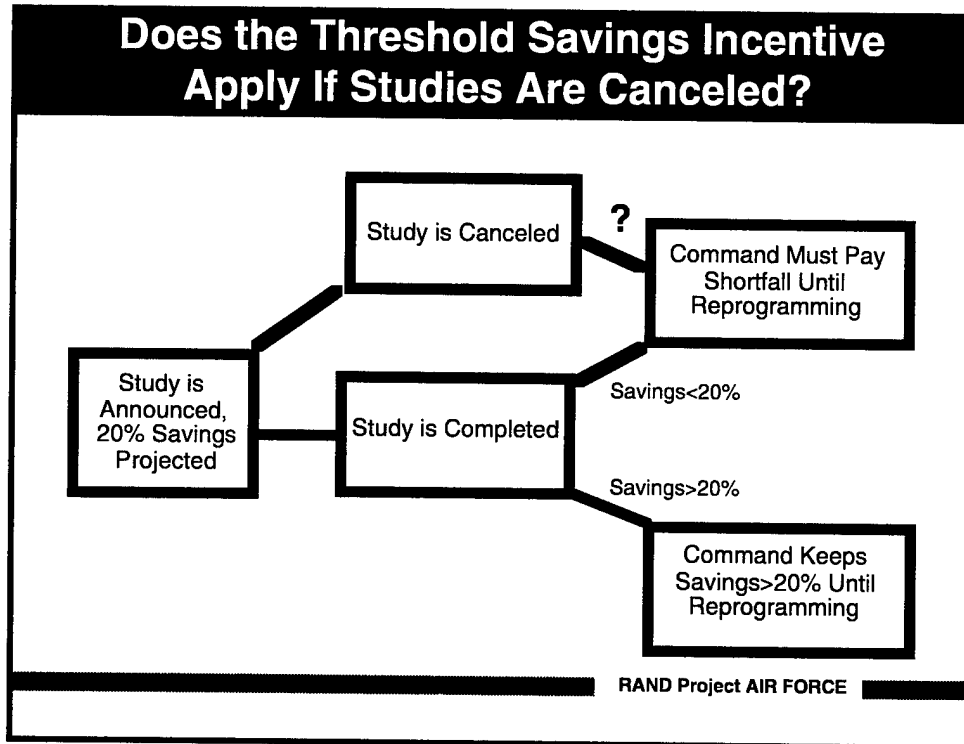
Robbert, Gates, and Elliott (1997) suggest that similar estimates of projected savings from sourcing studies may be exaggerated. They note that the rights of government employees to displace more junior staff ("bumping" and "retreating") and to retain their original pay and grade when transferred to a lower position ("saved pay and grade") may result in an increase in the average grade and salary structure of a winning MEO or of noncontracted functions at an installation. Also, post-study costs may increase when a contractor wins the competition if the contract is modified over time. Even if the MEO wins, costs may increase if the MEO finds it is unable to perform the activity using the proposed level of resources. The savings estimates shown above do not include these possible additional costs.

It is also unclear whether analysis of past savings rates is germane to current studies, particularly if the Air Force runs different types or sizes of studies than it has historically undertaken.

In any case, considerable ex ante uncertainty apparently exists regarding the cost savings that will result from a sourcing study. There is a substantial probability that savings net of study costs will fall below 20

⁷ The CAMIS database does not provide enough information to determine how sourcing studies could result in some of the very high estimated savings rates shown in this chart.

percent. In this case, the studying command will be penalized under the Threshold Savings Incentive. This possibility may create a disincentive for commands to initiate some sourcing studies that might be beneficial to the Air Force as a whole.



DOES THE THRESHOLD SAVINGS INCENTIVE APPLY IF STUDIES ARE CANCELED?

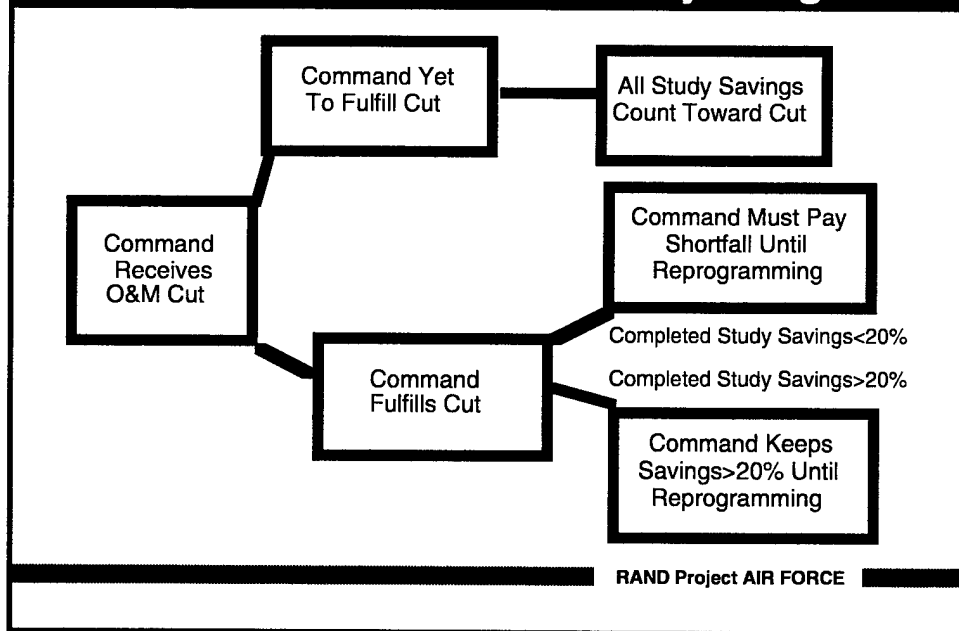
It is unclear whether the Threshold Savings Incentive remains in effect if a sourcing study is canceled. If reprogramming does not occur between study cancellation and the projected study completion date, a canceled study may have the same budgetary ramifications as a completed study that yields no savings (i.e., the command must absorb the 20 percent budget cut for the activity until budget reprogramming occurs).

Keating, Camm, and Hanks' (1997) analysis of CAMIS data indicates that the cancellation rate of Air Force sourcing studies between FY78 and July 1996 was approximately 30 percent. They observe an increase in the cancellation rate beginning in FY91 because the Appropriations Act for that year mandated a two-year time limit on single-function studies and a four-year time limit on multifunction studies. The Act was applied retroactively to ongoing studies that exceeded the limits. Prior to FY91, study durations in excess of seven years were observed.

We cannot predict future cancellation rates. They likely will depend on future Air Force policies regarding outsourcing and cancellations. Incentives to cancel should fall when the command can retain the full

savings generated by a study, when the command pays for the study using its own discretionary O&M funds, and when cancellations are noted negatively in the performance reviews of those responsible for the study. We return to these issues in a broader context below.

Threshold Savings Incentive Should Be On Hold Until Commands Satisfy Budget Cuts



THRESHOLD SAVINGS INCENTIVE SHOULD BE ON HOLD UNTIL COMMANDS SATISFY BUDGET CUTS

In the past, the Threshold Savings Incentive applied to installations because they had the sole authority to initiate sourcing studies. Since MAJCOMs' O&M budgets have been cut to reflect projected savings from sourcing studies, MAJCOMs—rather than installations—feel pressure to undertake sourcing initiatives as a way to maintain readiness on a tighter budget. Therefore, the Threshold Savings Incentive may no longer function as it once did.

Since O&M cuts have already been made to reflect future savings from sourcing studies and other initiatives, additional budget cuts reflecting projected savings from individual studies should not be implemented. Thus, the Threshold Savings Incentive should not be relevant to a command until it has achieved the targeted level of O&M savings for the applicable fiscal year. Furthermore, no additional budget reprogramming of savings above the threshold level should occur to reflect the impact of successful studies until a command has achieved its targeted O&M cuts.

The O&M budget cuts allow the commands to capture the entirety (up to the budget cut levels) of the savings resulting from sourcing studies.

However, these cuts do not create incentives for other players in the sourcing process.

MAJCOMs might still use the Threshold Savings Incentive to motivate installation personnel to undertake their roles in the sourcing process. However, we will argue below that other types of incentives are likely to be more effective.

O&M Cuts Create a Stronger Financial Incentive for Commands

- **Commands keep all gains from studies (up to their budgeted O&M savings)**
- **Any study that reduces costs is beneficial (not just those with savings above threshold rate)**

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O&M CUTS CREATE A STRONGER FINANCIAL INCENTIVE FOR COMMANDS

One advantage of O&M cuts is that they provide an excellent incentive to commands to economize in order to avoid reducing readiness (assuming that commands don't believe that achieving the budgeted O&M savings will simply result in more cuts or that failure to economize will result in a budget increase).

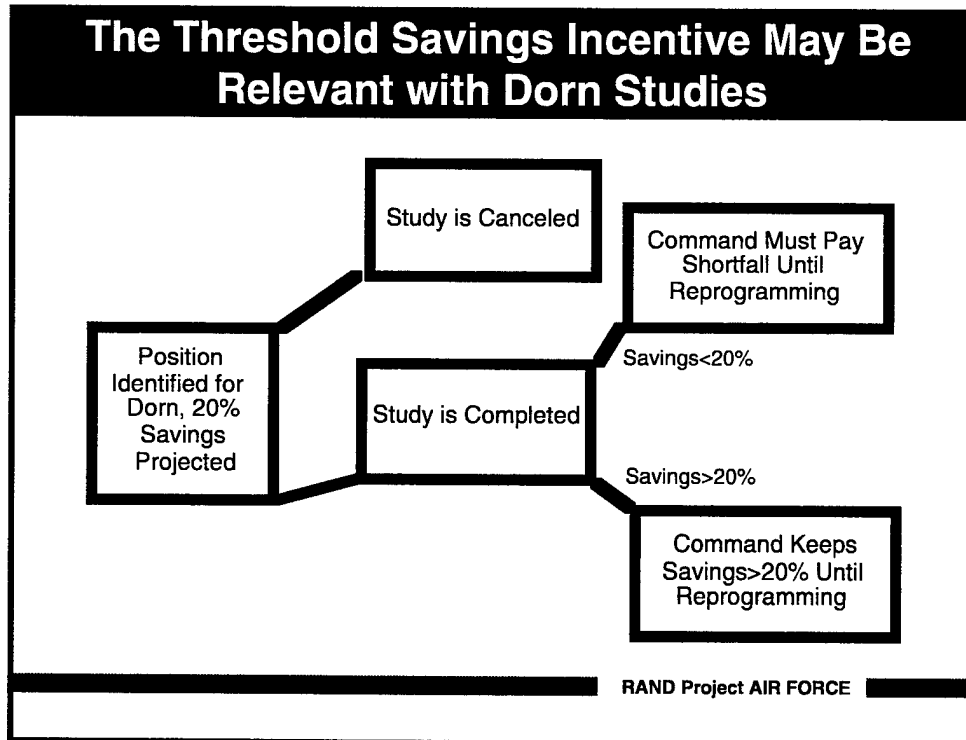
Since additional budget reprogramming should not occur unless a command's O&M savings have been achieved, a command that has not yet attained its targeted savings captures all the gains accruing from sourcing studies.⁸ O&M cuts also have the virtue of making any study that results in positive savings (net of study costs) beneficial to the MAJCOM. One could imagine studies that would save considerable sums in absolute terms, but would not achieve the 20 percent net savings required for the command to benefit under the Threshold Savings Incentive. But commands are penalized for such studies under the

⁸ Melese (1997) would categorize this approach as "success-sharing" if any future reprogramming allowed commands to keep a share of study cost-savings permanently.

Threshold Savings Incentive, even though the Air Force would benefit from them.

In fact, commands benefit from any cost-saving activities. Other initiatives, such as business process improvements that allow commands to operate at lower costs, would also help maintain readiness within a lower O&M budget.

It is unclear whether a MAJCOM that has achieved its budgeted current year O&M savings, but still faces future year budget cuts, is subject to reprogramming for additional studies in the current fiscal year. This type of reprogramming would create a disincentive for MAJCOMs to try to exceed targeted savings in any fiscal year, and could potentially delay savings to the Air Force.



THE THRESHOLD SAVINGS INCENTIVE MAY BE RELEVANT WITH DORN STUDIES

A further complication results from the Dorn manpower reductions that MAJCOMs must satisfy before any savings from sourcing studies can count toward the FY98 POM savings targets.⁹ The Dorn initiative mandates workforce reductions, but does not result in corresponding O&M budget cuts. Therefore, the Threshold Savings Incentive may be relevant for sourcing studies associated with the Dorn manpower reductions.

Many of the other incentive issues we discussed are not relevant to Dorn studies. For example, MAJCOM functional participation now has little importance, since the authorizations to be studied have already been identified. Furthermore, Dorn reductions may not involve cost comparison studies; many are direct conversions from military to contractor provision.

⁹The Dorn manpower reductions are a separate set of civilian personnel reductions advanced by former Undersecretary of Defense for Personnel and Readiness Edwin Dorn.

4. FUTURE DIRECTIONS

Outline

- Sourcing participants
- Current incentives for sourcing studies
- ➔ • Future directions

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In this final section, we discuss the ideal properties of a sourcing study incentive scheme that aligns the incentives of decisionmakers in the sourcing process with the cost-saving goals of Air Force leadership. Predetermined O&M budget cuts have many of these ideal properties at the MAJCOM level, provided that the allocated cuts are based on current levels of operating efficiency rather than being an equal percentage to each command. Yardstick comparisons of support costs across installations—such as costs per flying hour, base operating support costs per square foot of building space, or costs per person served—could help identify the most appropriate targets for budget cuts.

MAJCOMs should continue to bear the cost of conducting sourcing studies, since the commands are responsible for choosing activities to be studied. The commands are then likely to choose activities for study only if the expected cost savings are greater than the cost of the study.

Finally, we discuss how MAJCOMs might provide incentives to wing commanders and functional personnel to participate in sourcing studies. These incentives could include:

- Allocating O&M budget cuts to wing commanders
- Sharing cost savings with wing commanders
- Allocating cuts in personnel authorizations to functional personnel.

Additionally, both wing commanders and functional personnel might be motivated by including participation in sourcing studies in personnel evaluations. Alternatively, MAJCOMs could create teams of experts to help installations conduct sourcing studies, or could induce competition among installations to provide support services regionally.

An Ideal Scheme Maximizes Commands' Incentive to Reduce Support Costs

The properties of an ideal incentive scheme include:

- **Leaving commands better off when they reduce support costs**
- **Maximizing infrastructure efficiency**
- **Rewarding all types of cost reductions, not just sourcing studies**

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AN IDEAL SCHEME MAXIMIZES COMMANDS' INCENTIVE TO REDUCE SUPPORT COSTS

An ideal scheme gives commands the maximum possible incentive to find cost-effective approaches to reduce their O&M expenditures while maintaining readiness. A necessary condition for such an incentive scheme is to reward a command when it corrects inefficiencies in infrastructure management and operation.

As noted above, an exclusive focus on sourcing studies to reduce costs may be myopic. Steps toward infrastructure efficiencies may include, but are not limited to, sourcing studies. Other approaches may be more appropriate in specific circumstances. For example, the level of some services could be reduced at installations without hampering readiness, or process improvement could reduce the costs of activities that are not eligible for sourcing studies. Inter-installation coordination of service provision might also be a source of cost savings.

Outsourcing may be infeasible or highly undesirable in some cases. For example, the need for specific skills or assets in certain kinds of support

activities may make organic provision more attractive, or require a sole-source provider.¹⁰ Alternatively, military necessity may preclude civilian or contractor provision. Yet, increased efficiency may still be feasible even when one is constrained to have provision in government facilities, by government civilian or military employees, or by a monopoly contractor with proprietary technology.

¹⁰ See Pint and Baldwin (1997).

Predetermined Command Budget Cuts Provide Good Incentives

- **Commands benefit from sourcing studies and other cost-saving approaches**
- **Air Staff generates funds**
- **Do not cut command budgets in response to study announcements**

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PREDETERMINED COMMAND BUDGET CUTS PROVIDE GOOD INCENTIVES

Predetermined command budget cuts fit most of the criteria of an ideal incentive scheme. Once a cut is imposed, any subsequent cost savings that result from command initiatives accrue to the command. Furthermore, the Air Staff generates the funding it needs with reduced disruption and cost.

It is important to emphasize that the effectiveness of this incentive scheme depends on the predetermined nature of these budget cuts. Once budget cuts are announced, the Air Staff must be able to make a credible commitment not to adjust them within the relevant time frame. Command incentives would be nullified, or even reversed, if the MAJCOM believed that achieving budgeted O&M savings would result in further cuts or that failure to reduce support costs would result in supplemental funding. It is unclear in the current volatile budgetary environment whether the Air Staff can make such a commitment.

There are a number of additional caveats to this approach. First, budget cuts cannot continue indefinitely without affecting the level of services and, ultimately, readiness. Cuts must be achievable while maintaining an

adequate level of support services. Second, predetermined MAJCOM budget cuts may have limited value if they are allocated to commands without regard for current levels of efficiency, or if commands, in turn, proportionally allocate (“salami slice”) their O&M budget cuts to their subordinate installations. (This issue is discussed in greater detail below.) Third, regulations may prevent commands from implementing many potentially beneficial changes, e.g., current regulations preclude sourcing studies for security guards and fire departments. The Air Staff has an important role to play in helping convince the DoD and Congress that regulatory relief would be beneficial.

Provided that these caveats can be overcome, predetermined budget cuts have much in common with optimal incentive schemes discussed in the economics literature on regulation and principal-agent relationships. In this case, the Air Staff is the “principal” that is delegating a task to its “agents,” the MAJCOMs. If the principal and its agents have similar attitudes toward risk, the agents can be motivated to achieve savings optimally by passing on the full value of the desired savings in the form of budget cuts.¹¹

Similarly, the literature on price-cap regulation suggests that regulated industries can be motivated to reduce costs if they are allowed to keep any cost savings after meeting the price-cap target (and required to bear any losses if they fail to meet the price-cap target) over a fixed period of time. However, the price-cap target must be set so that the necessary cost savings can be achieved without reducing the level of service.¹²

¹¹ See, for example, Holmstrom (1979).

¹² See Vickers and Yarrow (1988), chapter 4; and Pint (1992).

Determining the Appropriate Budget Cuts Is a Difficult Challenge

- O&M budget cuts should be allocated to
 - Reward the most efficient commands
 - Penalize wasteful commands
- Concentrating cuts on nondeployable authorizations may not be appropriate
- Yardsticks or performance metrics could be used to evaluate commands' relative efficiency

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DETERMINING THE APPROPRIATE BUDGET CUTS IS A DIFFICULT CHALLENGE

Given the desirability of predetermined budget cuts, a central challenge for the Air Staff is the allocation of such cuts among commands. Good incentives are simply a necessary condition for effective policy. They are not sufficient. Good incentives emanating from predetermined budget cuts might not offset the damage done to readiness by a misguided budget cut for a specific command.

Due to political pressure and comparative ease of implementation, the traditional DoD approach is to "salami slice" budget cuts across commands, i.e., to apply the same percentage cuts to each command regardless of current levels of efficiency. However, such an approach could be inappropriate in this setting. It would seem to be ineffective and unfair to allocate budget cuts proportionally both to efficient commands (and their installations) and to inefficient commands.¹³

¹³ Lowe and Melese (1993) note the drawbacks of across-the-board budget cuts and discuss some alternative approaches.

It has been argued that the Air Staff should focus its cuts on installations that do not have large numbers of deployable unit type code (UTC) taskings. The Air Force's Jump Start exercise reflects this view. However, contractors have participated extensively and successfully in past deployments, e.g., Brown and Root in Haiti, so such limitations in focus may be too narrow.¹⁴

We recommend that the Air Staff develop yardsticks or metrics to compare commands and their installations so that future budget cuts are targeted toward the least-efficient organizations. We explore this idea in greater detail below.

¹⁴ See Gallay and Horne (1996). Gourley (1997) suggests that there will be expanded contractor support on the digitized battlefield.

Yardstick Measures Can Be Used to Compare Installations or Commands

- **Yardstick performance metrics can help to**
 - **Flag high-cost installations or commands**
 - **Suggest areas for future budget cuts**
 - **Identify the most efficient installations to provide regionalized services**
- **Activity-based costing could help define yardsticks**

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YARDSTICK MEASURES CAN BE USED TO COMPARE INSTALLATIONS OR COMMANDS

The Air Force should consider developing yardstick measures to compare the performance of commands and their installations. Expenditures per flying hour, expenditures per trained pilot, the cost of base operating support (BOS) per building square foot, and (for some functions) the cost per person served are all possible yardsticks.

Such an approach is compatible with unit budgets that are based on service-wide average costs. For example, Camm et al. (1982) note that the Army developed its budgets based on a measure of costs per flying hour for installations that housed helicopters.

No yardstick is unequivocally "fair"; all installations are different, and local idiosyncrasies can create differences in reported costs for similar functions. However, such yardsticks can offer suggestions of where budget cuts can most appropriately occur. Allowances may be needed for deviations from yardstick performance metrics, but budget cuts based on these metrics are likely to be an improvement over proportional cuts.

The Air Force may also find it beneficial to regionalize provision of some services, such as administrative services. In these cases, yardstick measures can help identify the installations that are the most efficient providers of those services. For example, the Air Force already employs regionalized engine repair at "Queen Bee" maintenance facilities.

The Air Force's current appropriation-based accounting system is likely to be inappropriate for defining and calculating such yardstick measures. Activity-Based Costing (ABC), which attempts to assign both direct and indirect costs to outputs, may prove to be a more valuable management tool.

MAJCOMs Pay for Sourcing Studies Either Directly or Indirectly

- **Increasing cost subsidies for sourcing studies would result in larger O&M cuts**
 - **Cost subsidies turn MAJCOM discretionary funds into earmarked funds**
- **However, MAJCOM commanders may not have sufficient incentives to make cost-reducing investments**

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MAJCOMS PAY FOR SOURCING STUDIES EITHER DIRECTLY OR INDIRECTLY

MAJCOMs strongly feel that the Air Staff should subsidize the cost of conducting sourcing studies. However, in the current budget environment, any such expenditure by the Air Staff would likely be offset by additional cuts to MAJCOM O&M budgets.

Such a transfer of funds would simply turn current MAJCOM discretionary funds into funds that are earmarked for sourcing studies. This transformation would not appear to be in the best interest of commands. In addition, by forcing the MAJCOMs, which are the direct beneficiaries of sourcing studies, to pay for those studies, the Air Force reduces the risk that resources will be applied to unprofitable studies.

The Air Force could benefit from earmarked funding to MAJCOMs to perform sourcing studies if MAJCOM commanders do not take a sufficiently long-term view. Because MAJCOM commanders have short tenures relative to the duration of many sourcing studies, they may be unwilling to invest command resources in training and other activities that might reduce the cost of conducting sourcing studies in the future. In addition, they may not have sufficient incentives to invest in activities or

information-gathering that would benefit all commands. Earmarked funding may provide incentives to make those investments that would reduce the resources needed to achieve the Air Force's desired level of savings. However, in practice, the MAJCOMs are likely to have better information than the Air Staff about the costs and benefits of conducting sourcing studies on their installations, and are thus better positioned to make decisions about funding studies.

Therefore, our presumption is that the Air Staff should not explicitly earmark funding for command-initiated studies. However, this is an empirical question. It is possible that future evidence will suggest that sourcing is more effectively undertaken if explicitly funded by the Air Staff.

MAJCOMs Still Face Incentive Challenges with Their Functionals and Installations

- Budgetary incentives cannot be delegated to functional employees, but could be used to motivate wing commanders
- MAJCOMs could reward participation in cost-saving activities in performance reviews
- MAJCOMs may delegate authorization cuts or assign quotas for competition to functionals
- MAJCOM "tiger teams" could expedite studies at installations

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MAJCOMS STILL FACE INCENTIVE CHALLENGES WITH THEIR FUNCTIONAL PERSONNEL AND INSTALLATIONS

Preplanned O&M cuts may help the Air Staff give effective incentives to MAJCOMs to cut their support costs. However, the MAJCOMs, in turn, will continue to face the challenge of motivating their functional and installation personnel to implement expenditure reductions.

Generally speaking, MAJCOMs can significantly reduce their infrastructure costs only by reducing support costs at individual installations. MAJCOMs could choose to pass through the budgetary incentives created by cuts in their O&M budgets by allocating these cuts to specific installations. Like the MAJCOMs, installations would then benefit, dollar for dollar, from any actions they take to reduce costs.

However, the risk of damage with such cuts, e.g., through "salami slicing," rises when MAJCOMs allocate them to specific locations. In addition, individual installations may not have the expertise to identify enough targets for cost savings as budget cuts accumulate over the POM period. In particular, MAJCOMs should be better able than installations to identify opportunities to cut costs by coordinating the provision of

services across installations, either by regionalizing services or bundling functions for sourcing studies. Hence, it would not be appropriate for the MAJCOMs to create the same direct, "high-powered" financial incentives for their installations that the Air Staff has created for the MAJCOMs.

Allocating some portion of budget cuts or cost savings to wing commanders may help motivate them to reduce support costs.¹⁵

However, financial incentives may not be sufficient to motivate wing commanders to conduct sourcing studies if their tenures are shorter than the typical duration of a study.

Budgetary incentives do not directly affect functional personnel, even though their expertise is needed to identify activities for sourcing studies. Therefore, MAJCOMs may find it useful to implement nonmonetary incentives to induce functional personnel to participate more willingly in sourcing studies.

A potential method to motivate both functional and installation personnel would be to include participation in cost-savings activities in performance reviews. For example, MAJCOMs could require functional personnel to participate in a sourcing study, or wing commanders to initiate or complete a study, in order to be eligible for promotion to leadership positions. However, effective implementation of such an incentive would require support for sourcing studies from both MAJCOM and functional leadership.

In lieu of budget incentives, MAJCOMs could assign to functional groups either cuts in authorized billets or quotas on the number of billets to review for potential outsourcing. This would provide similar incentives to functional personnel that O&M cuts provide to the MAJCOMs. However, as with O&M cuts, implementation of personnel cuts or quotas raises concerns about their allocation across functional groups. These cuts should also be allocated on the basis of efficiency rather than proportionally across functions.

If the Air Force moves toward studies that encompass larger numbers of billets, individual installations may have limited opportunities to build experience with sourcing studies. To build and exploit expertise over time, MAJCOMs might benefit from setting up "tiger teams" of sourcing experts to help installations conduct sourcing studies. These teams could provide expertise on writing PWSs and developing MEO bids, rather than each installation being required to "reinvent the wheel" when it conducts a sourcing study. The Air Education and Training Command (AETC) has

¹⁵ Tighe, Trunkey, and Kleinman (1996) recommend that installations should be allowed to keep a share of the savings from sourcing studies for a limited time.

such a cadre of experts. An added advantage could accrue if contractors perceive studies to be more fair when they are administered by somewhat disinterested command-level personnel. Of course, "tiger teams" themselves are costly, so MAJCOMs might wish to examine AETC's experiences more carefully before following this approach. Alternatively, MAJCOMs might bring in external consultants with expertise in analyzing support functions to identify activities for sourcing studies, or to recommend targets for budget or personnel reductions.

Further Efficiencies May Result from Interinstallation Competition

- **Give funding directly to customers?**
- **Allow installations to compete for workload?**
- **Allow installations to compete to avoid formal sourcing studies?**

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FURTHER EFFICIENCIES MAY RESULT FROM INTERINSTALLATION COMPETITION

Where the predetermined budget cuts proposed in this document do not result in satisfactory outcomes, the Air Force might consider more-assertive reforms. Greater competition among installations or other support service providers could create additional incentives for them to reduce costs.

One possibility would be to allow wings to use the O&M budgets that currently fund local services to “shop” among different installations for the most cost-effective provision of these services. High-cost installations would lose their customers, whereas efficient installations would expand their service provision. As a result, interinstallation competition could reduce the costs of providing services for the Air Force, or even for DoD as a whole.

History suggests, however, that the Air Force may be unable to make a commitment to such a policy. Although competition could be introduced for some stock-funded activities, customers typically are constrained to use one supply source, and are not allowed to search for alternative, lower-cost supply sources. For example, in the early 1990s, DoD gave

funding to customers to buy depot-level repair services rather than directly funding the depots to provide the same services. However, the Air Force undermined the potential competitive benefits of this policy by not giving customers full freedom to choose alternative providers for depot-level repair services, and even precluding competition among the depots for customers' repair workloads.¹⁶

A more subtle form of competition could help induce improvement at installations without requiring the Air Force to move workload from one base to another. The Air Force could measure the cost-effectiveness of specific activities across installations using performance yardsticks, as discussed above. It could then require sourcing studies to be conducted at the installations with the least cost-effective support activities of each type. The threat of a sourcing study could induce organic service providers to develop more cost-effective processes without the costs, tangible and intangible, of formal sourcing studies. It might also create incentives for functional personnel to share information about best practices across installations.

There are vital implementation issues associated with the introduction of more competition to provide support services. For example, the Air Force's current accounting system does not readily identify the costs of specific installation activities. Hence, determination of installation-level prices by provider installations or levels of cost-effectiveness would require better management information systems.

Interinstallation competition could clearly provide increased motivation for efficiency and cost reduction, however.

¹⁶ See Baldwin and Gotz (forthcoming).

Conclusions

- **Preplanned O&M cuts have good incentive effects**
 - **“Threshold Savings Incentive” should be irrelevant, given O&M cuts**
- **The Air Staff’s challenge is calculating appropriate O&M cuts**
 - **More accurate cost information is needed**
- **MAJCOMs must delegate incentives to functional and installation personnel**

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To summarize, preplanned O&M cuts provide much better incentives for commands to reduce support costs than the “Threshold Savings Incentive” approach. (Steps to economize may include process improvements and regionalization of services as well as sourcing studies.) Correctly allocated O&M cuts have the desirable quality of aligning MAJCOM goals with those of the Air Force leadership.

The challenge for the Air Staff is to determine the appropriate allocation of O&M cuts. Proportional cuts across commands are inappropriate if some commands are currently more efficient than others at providing support services. It would also be counterproductive to impose additional budget cuts on commands that are successful in reducing support costs, and to increase the budgets of commands that fail to reduce costs. Yardstick comparisons of costs per flying hour, per square foot of building space, or per person served are needed to identify the least-efficient support activities and to calculate the budget cuts that should be required of each command. More accurate information on support costs obtained through Activity-Based Costing would help facilitate these comparisons.

The Air Staff can also perform a valuable service by identifying and helping waive or eliminate legal or regulatory impediments to efficient command and installation operations.

Until more information is available, we do not recommend that the Air Staff directly fund cost-comparison studies. Commands should have more accurate information about the cost-effectiveness of particular sourcing studies.

Even though budget cuts may serve as effective incentives, MAJCOMs still face a difficult challenge in motivating their wing commanders and functional personnel to assist in completing sourcing studies and achieving the desired cost savings without reducing readiness.

Delegating the MAJCOM's entire O&M budget cut to installations is unlikely to be an effective incentive, since installations may lack the experience and resources either to identify activities for sourcing studies or to conduct competitions. However, some type of financial incentive, such as allocating a portion of budget cuts or sharing cost savings with installations, could help motivate wing commanders to reduce support costs. Similarly, functional personnel might be motivated to participate in sourcing studies by allocating personnel cuts or quotas for the number of billets to be competed by each function. However, budget or personnel targets must be allocated on the basis of efficiency rather than "salami slicing."

Both wing commanders and functional personnel might be motivated to participate more enthusiastically in sourcing studies if such behavior were rewarded in personnel evaluations. Greater competition might be created among installations to provide support services—either by allowing the most efficient activities to provide services for a group of installations, or by using performance yardsticks to identify the least efficient activities and then requiring sourcing studies for those activities.

Finally, MAJCOMs could reduce the burden of sourcing studies on wing commanders and installation personnel by creating "tiger teams" of sourcing experts to help installations conduct studies, or by hiring external consultants to identify activities and conduct sourcing studies.

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