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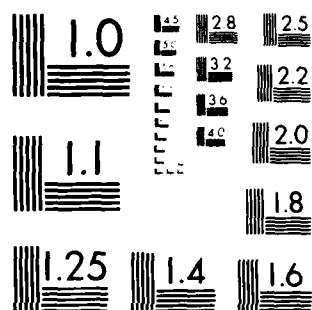
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BY THE COMPTROLLER GENERAL
Report To The Subcommittee
On International Security And Scientific Affairs
Committee On Foreign Affairs
House Of Representatives
OF THE UNITED STATES

Efforts To Improve Management Practices And
Increase Resources At The
Arms Control And Disarmament Agency

Resource reductions at the Arms Control and Disarmament Agency during the past few years caused concerns about its ability to perform several of its legislated duties, including those related to arms control policymaking and research. Because of these concerns, GAO was asked to examine certain aspects of ACDA's operations, including its internal control system, research efforts, and computer-based support activities. In 1983 GAO issued reports on these topics to the Director of ACDA. ACDA agreed to act on most of GAO's recommendations to improve its management in these areas.

Also, ACDA's resource levels have been subsequently increased and efforts have been made to strengthen ACDA's policy role.

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

B-212009

The Honorable Dante B. Fascell, Chairman
The Honorable William S. Broomfield, Ranking
Minority Member
Subcommittee on International Security
and Scientific Affairs
Committee on Foreign Affairs
House of Representatives

In response to the Subcommittee's request of March 31, 1983, we have reviewed several issues related to the ability of the Arms Control and Disarmament Agency (ACDA) to effectively carry out its responsibilities. This report discusses long-standing concerns and recent actions regarding ACDA's policy role and resource levels; adequacy of its internal controls; management of its arms control research program and ACDA's coordination of government-wide arms control research; and development and operation of computer-based support for ACDA programs and activities.

We are sending copies of this report to other interested congressional committees, officials of the agencies involved, and other parties upon request.

Charles A. Bowser
Comptroller General
of the United States



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COMPTROLLER GENERAL'S REPORT
TO THE SUBCOMMITTEE ON
INTERNATIONAL SECURITY AND
SCIENTIFIC AFFAIRS,
COMMITTEE ON FOREIGN AFFAIRS,
UNITED STATES HOUSE OF
REPRESENTATIVES

EFFORTS TO IMPROVE MANAGEMENT
PRACTICES AND INCREASE RESOURCES
AT THE ARMS CONTROL AND
DISARMAMENT AGENCY

D I G E S T

The Arms Control and Disarmament Act of 1961 established the Arms Control and Disarmament Agency (ACDA) as the central U.S. organization for formulating and implementing U.S. arms control policy. ACDA's primary functions also involve arms control negotiations, research, verification, and public information. Over the years, concerns have been expressed periodically by some Members of Congress about ACDA's ability to perform its functions, most often focusing on ACDA's policy role and the adequacy of its resources.

Concerns over ACDA's ability to perform some of its legislated duties prompted a request from the Subcommittee on International Security and Scientific Affairs, House Committee on Foreign Affairs, for GAO to review the extent to which ACDA was fulfilling several of its legislated duties, including those related to arms control policymaking and research. After GAO testified before the Subcommittee in March 1983, the Subcommittee's Chairman and Ranking Minority Member requested that GAO continue the development of the issues it had testified on, including those related to adequacy of ACDA's internal controls, the management of its arms control research programs, and the development and operation of computer-based support for its programs and activities. (See appendix.)

In September 1983, GAO issued a series of three reports to the Director, ACDA, addressing the management improvement opportunities in each of these three areas. This report to the Subcommittee summarizes those three reports, including ACDA's official comments and GAO's evaluation of them, and describes certain recent actions taken by ACDA in response to the reports' findings. This report also discusses longstanding concerns about, and recent actions on, ACDA's resource levels and policy role.

LONGSTANDING CONCERNS ABOUT ACDA'S
POLICY ROLE AND RESOURCE LEVELS

As a result of their concerns regarding ACDA's policy role, some Members of Congress have occasionally sought to enhance ACDA's influence. ACDA officials and outside observers generally agree that the Agency's influence is largely dependent on the ACDA Director's relationship with the President and the Secretary of State. However, good relationships between these officials cannot be legislatively mandated. Congressional attention has instead focused on the Agency's role in two of the executive branch's formal decisionmaking mechanisms--the interagency groups and the National Security Council.

Interagency groups have representation from interested agencies and function as policy-making bodies in many areas, including arms control. These groups address and help set policy for the Strategic Arms Reduction Talks, Intermediate-range Nuclear Forces negotiations, arms transfers, anti-satellite warfare, and other issues. In the past, ACDA had chaired some arms control-related interagency groups. However, ACDA began losing its formal leadership positions in 1969. Until recently, ACDA chaired none of the various arms control-related interagency groups, although it remained a member of them and chaired some of the lower-ranked working groups. All of the arms control-related interagency groups were instead chaired by the Departments of State or Defense. In mid-1983, the Director of ACDA expressed concern about his agency's lack of a leadership role and indicated that ACDA would again seek chair positions. ACDA has since begun to co-chair two of the more than 20 interagency groups and committees it participates in. (See p. 3.)

Continuing congressional concern about the lack of a sustained ACDA role on the National Security Council has twice prompted legislation involving the Director's relationship to the Council. In 1975, the ACDA Director was established as the Council's principal arms control adviser. In 1983, the Congress mandated that the Director attend Council meetings involving arms control-related subjects. (See p. 4.)

ACDA's resource levels for funding and personnel have fluctuated over time and, in recent years, have been declining without related reductions in ACDA's legislated responsibilities. In its 1984-85 authorization report for ACDA, the House Committee on Foreign Affairs expressed concerns regarding ACDA's resource levels. In August 1983, the administration asked for both staffing and funding increases for ACDA, with a fiscal year 1984 budget level set at more than \$2 million over the \$16.4 million it had previously requested. The Congress subsequently authorized a fiscal year 1984 budget level of \$20.9 million, about \$4.5 million more than the administration's initial request. These budget levels exclude a proposed program transfer from the Department of Energy to ACDA because the Congress has twice rejected the proposal. (See p. 5.)

The Congress has acted since 1961 to broaden the Agency's mandate and arms control activity has recently increased. The funding constraints ACDA has faced in recent years emphasize the need for efficient and effective management of its operations.

ACDA can, and should, improve its current management practices. The following sections summarize our findings regarding ACDA management opportunities in the areas of:

- internal controls, including internal audit;
- the Agency's external research program and coordination of government-wide arms control research; and
- automatic data processing and operations analysis activities.

NEED FOR INTERNAL CONTROL IMPROVEMENTS

In April 1983, when GAO began the review underlying its report on ACDA's internal controls (GAO/NSIAD-83-68, Sept. 30, 1983), ACDA had yet to comply with an Office of Management and Budget (OMB) directive prescribing policies and standards to be followed by executive

branch agencies in designing, installing, and maintaining their internal control systems. GAO found that ACDA needed to implement key internal control requirements such as assigning responsibility for internal control. ACDA began to do so while GAO's work was in progress. (See p. 9.)

GAO also found (see p. 10) that ACDA has not had the expanded-scope internal audit coverage it needs. ACDA does not have an internal audit staff and the limited audit services it obtains from other agencies did not meet OMB requirements. If expanded-scope internal audit coverage had been available, it might have helped identify certain matters for top management attention, such as

- differences in assigned versus performed arms control verification activities, and

- noncompliance with various OMB directives on internal controls, internal audit, and security of automated information systems.

GAO recommended that the Director, ACDA, take a series of actions designed to address the matters discussed, including implementing key internal control requirements and establishing expanded-scope internal audit coverage. In September 1983 ACDA agreed to act on most of the recommendations. As of March 1984, ACDA and the General Services Administration were developing an expanded-scope audit plan for possible use at ACDA. (See p. 14.)

BETTER MANAGEMENT AND MORE
COORDINATION OF ARMS CONTROL
RESEARCH NEEDED

In another report (GAO/NSIAD-83-67, Sept. 30, 1983), GAO found that ACDA needed to improve the management of the arms control research done for it by others--external research--and to either fulfill its responsibility for coordinating arms control research throughout the government or ask to be relieved of this responsibility. (See p. 17.)

External research funding uncertainties have complicated planning and operating the program. Research funding, which has been declining over time, peaked at about \$6 million in fiscal year 1966 and fell to a low of about \$1 million in fiscal year 1975. The fiscal year 1984 research budget, set initially at approximately \$1.1 million, was authorized at about \$1.5 million. The declining research budget had previously caused some bureaus to scale back their research efforts and to forego desirable research. In addition, since at least 1978, ACDA has periodically held funds for research projects in reserve until late in the fiscal year, in part to fund unforeseen needs in areas other than research. (See p. 18.)

The external research program also was found to have several management problems, such as the absence of criteria for selecting projects, no routine use of available information for identifying related research being done elsewhere, and inadequate preparation and use of research contractor evaluations. (See pp. 19 and 20.)

Under its responsibilities in the Act and the administrative directive for coordinating arms control research, ACDA is required to develop and keep current a government-wide arms control research program. However, it does not do so. ACDA does not oversee other agencies' research and the agencies do not routinely seek ACDA's advice about research they want to do. Also, ACDA does not prepare a required inventory of arms control research activities. ACDA officials say they lack the resources and the "clout" to do what is required. (See p. 21.)

GAO recommended that the Director, ACDA, take a series of actions designed to correct the problems discussed, including setting project selection criteria, improving the preparation and use of research contractor evaluations, defining the scope of arms control research, estimating the resources needed to perform effective government-wide coordination, and determining whether ACDA will perform its coordination role or ask to be relieved of this responsibility. ACDA told GAO in September 1983 that GAO's report would be useful in reviews it was initiating on external research

planning and procedures and on coordination of federal arms control research. ACDA also said it was taking action to correct the other problems noted by GAO. A subsequent review by a consulting firm contracted by ACDA generally confirmed GAO's findings, and, in February 1984, the ACDA Director announced several changes in the external research program. (See p. 24.)

BETTER MANAGEMENT OF AUTOMATIC
DATA PROCESSING AND OPERATIONS
ANALYSIS NEEDED

ACDA has used automatic data processing and operations analysis for more than 15 years. At the end of fiscal year 1982, however, it abolished its Office of Operations Analysis, retitled and transferred the analysts to other parts of ACDA, and gave up its largest computer. ACDA said that abolishing the office was a necessary part of a series of actions to achieve a fiscal year 1983 OMB-imposed budget reduction of \$1.3 million. In its report on ACDA's computer activities (GAO/NSIAD-83-66, Sept. 30, 1983), GAO noted that about \$683,000 in savings could be attributed to changes ACDA made in operations analysis and computer support. (See p. 27.)

Overall, GAO found that ACDA does not adequately plan for, or evaluate the use of, data processing systems. ACDA does not have a comprehensive automatic data processing plan and its present informal means for planning for computer support are inadequate. Fundamental planning improvements are needed to afford management a supportable basis for making computer resource decisions. (See p. 28.)

Since 1981 ACDA had deemphasized and reduced its operations analysis capabilities. Agency officials disagree among themselves over whether this reduced level of capabilities would diminish the Agency's abilities to carry out its operations analysis functions in the future. GAO was unable to determine the correctness of either viewpoint partly because insufficient documentation precluded an objective determination of the merits of the abolished office or of alternate arrangements for obtaining operations analysis services. However, ACDA had neither thoroughly evaluated

the operations analysis capabilities required in the future to fulfill its mission, nor decided how such requirements would best be met. Periodic, Agency-wide planning for operations analysis would help provide officials with some assurance that demands for such analyses would be met. (See p. 31.)

GAO recommended that the Director, ACDA, correct the problems discussed by developing a comprehensive automatic data processing planning process, implementing guidance on computer services cost accounting, establishing a computer security program, and periodically assessing ACDA's operations analysis needs and adjusting capabilities if necessary. In September 1983, ACDA stated that the report would be helpful and that ACDA was initiating reviews of its computer planning procedures, computer security, requirements for operations analysis, and the information management requirements of the Paperwork Reduction Act of 1980. (ACDA did not comment on GAO's recommendation that ACDA implement a computer cost accounting system that complies with executive branch guidance. GAO believes that such a system is needed and that its specific features should be considered during the Agency's reviews.) In February 1984, the Director of ACDA informed two Senate and House subcommittees that an internal review of GAO's report and other factors had resulted in establishment of an augmented operations analysis unit within ACDA's Verification and Intelligence Bureau. (See p. 34.)

MATTER FOR CONSIDERATION
BY THE CONGRESS

In its 1983 report on ACDA's management of arms control research, GAO discussed ACDA's practice of using research funds for other purposes. This practice has been conducted for a number of years, most recently to help avoid personnel reductions when ACDA's overall funding was cut back. Because this practice could result in inadequate support for arms control research, the Congress may want to consider designating a portion of ACDA's funding for the external research program. (See pp. 18 and 24.)

GAO did not obtain official agency comments on this report. However, comments were obtained on the three reports that GAO issued to the Director of ACDA on September 30, 1983. The reports and ACDA's comments are summarized in this report.

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APPENDIX

Letter dated March 31, 1983, from the Chairman and Ranking Minority Member, Subcommittee on International Security and Scientific Affairs, Committee on Foreign Affairs, U.S. House of Representatives	36
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ABBREVIATIONS

ACDA	Arms Control and Disarmament Agency
ADP	Automatic Data Processing
CS	Computer Services Group
DOD	Department of Defense
GAO	General Accounting Office
GSA	General Services Administration
INF	Intermediate-range Nuclear Forces
NSC	National Security Council
OA	Office of Operations Analysis
OMB	Office of Management and Budget
SALT	Strategic Arms Limitation Talks
START	Strategic Arms Reduction Talks
VI	Bureau of Verification and Intelligence

CHAPTER 1

INTRODUCTION

In January 1983, the House Foreign Affairs Committee's Subcommittee on International Security and Scientific Affairs asked us for assistance in preparing for the Arms Control and Disarmament Agency's (ACDA) fiscal years 1984 and 1985 budget authorization hearings. The Subcommittee was interested in determining the extent to which ACDA was fulfilling several of its legislated duties, including those related to arms control policymaking and research. In March 1983, we testified before the Subcommittee on ACDA's ability to carry out its major responsibilities.¹ Our testimony focused on ACDA's role in formulating arms control policy and conducting negotiations; managing research needed to support these efforts; performing its arms control verification functions; carrying out some of its general management activities; and reducing its computer capabilities.

Following our testimony, the Chairman and Ranking Minority Member of the Subcommittee requested that we continue our work at ACDA and complete the development of the issues we had presented in our testimony, such as

- adequacy of ACDA's internal controls,
- management of ACDA's arms control research program, and
- development and operation of computer-based support for ACDA's programs and activities.

They asked that we report on each issue as it was developed. Accordingly, we issued a series of reports to the Director, ACDA.² Those reports are summarized in chapters 2, 3, and 4.

¹Statement of Frank C. Conahan, Director, International Division, before the Subcommittee on March 24, 1983.

²Need for Internal Control Improvements at ACDA, Including Adequate Internal Audit Coverage, (GAO/NSIAD-83-68), Sept. 30, 1983.

ACDA's Coordination of Federal Arms Control Research and Management of Its External Research Program Still Need Improvement, (GAO/NSIAD-83-67), Sept. 30, 1983.

Need to Improve Management of ACDA's Automatic Data Processing and Operations Analysis Functions, (GAO/NSIAD-83-66), Sept. 30, 1983.

ACDA'S RESPONSIBILITIES

The 1961 Arms Control and Disarmament Act established that ACDA be the central U.S. arms control and disarmament³ policy agency. ACDA was intended to have the primary role in U.S. arms control policymaking. The Act specifies that:

"The formulation and implementation of United States arms control and disarmament policy in a manner which will promote the national security can best be ensured by a central organization charged by statute with primary responsibility for this field."

According to the Act, ACDA must have such a position within the government that it can (1) provide recommendations on U.S. arms control policy to the President, the Secretary of State, other executive branch officials, and the Congress, and (2) assess the foreign policy, national security, and economic effects of these recommendations. The Act also states that ACDA must be able to provide the scientific, political, military, and other types of information essential to realistic arms control policies. Moreover, the Director of ACDA is authorized and directed to prepare for the President, the Secretary of State, and the heads of other appropriate agencies, recommendations on U.S. arms control policy.

The Act authorizes ACDA, under the direction of the President and the Secretary of State, to perform four primary functions. Specifically, ACDA is to

- conduct, support, and coordinate arms control research;
- prepare and manage U.S. arms control negotiations;
- prepare, operate, or, as appropriate, direct U.S. participation in "control systems"⁴; and
- disseminate and coordinate public information on arms control.

Since 1975 the Congress has enacted additional legislation that requires ACDA's

³Henceforth referred to as "arms control."

⁴"Control systems" are considered by ACDA as systems relating to the verification of arms control agreements.

- participation in the assessment and export of U.S. weapons systems;
- involvement in controlling nuclear exports; and
- reports to the Congress on the verifiability of arms control proposals and treaties.

LONGSTANDING CONCERNS ABOUT AND RECENT ACTIONS ON ACDA'S POLICY ROLE AND RESOURCE LEVELS

Since enactment of the Arms Control and Disarmament Act, some Members of Congress periodically have expressed concerns about ACDA's ability to fulfill its legislated responsibilities. Most often such members have questioned ACDA's policy influence within the government and the adequacy of the Agency's resources. In 1983, the House Foreign Affairs Committee's Subcommittee on International Security and Scientific Affairs held budget authorization hearings to help assess whether concerns regarding ACDA's policy role and resources were justified. The Committee's report concluded that there were deficiencies in both areas.

ACDA's policy role

As a result of their concerns regarding ACDA's policy role, some Members of Congress have occasionally sought to enhance ACDA's influence. ACDA officials and outside observers generally agree that the Agency's influence is largely dependent on the ACDA Director's relationship with the President and the Secretary of State. However, good relationships between these officials cannot be legislatively mandated. Congressional attention has instead focused on the Agency's role in two of the executive branch's formal decisionmaking mechanisms--the interagency groups and the National Security Council (NSC).

Interagency groups

The executive branch uses interagency groups to help formulate policy in many areas, including arms control. In the past, ACDA had chaired some arms control interagency groups. At the time of our fieldwork, however, ACDA chaired none of the interagency groups and only a handful of the working groups which support them.

According to a 1981 analysis prepared by ACDA's General Counsel, ACDA initially chaired various arms control policymaking groups. However, ACDA began losing the leaderships of those groups in 1969. Through the 1970's ACDA did not lead the principal arms control groups, although it did chair various non-policymaking groups for negotiation "backstopping."

ACDA presently participates in over 20 different interagency groups and committees and about as many working level groups. The groups cover such arms control-related matters as the Strategic Arms Reduction Talks (START), the Intermediate-range Nuclear Forces (INF) talks, anti-satellite warfare, export control, arms transfers, and nuclear non-proliferation. ACDA chaired none of these interagency groups at the time of our fieldwork, although it did chair four of the lower-ranked working groups.⁵ The Department of State and the Department of Defense (DOD) chaired the principal arms control-related interagency groups.

Some ACDA officials believed that ACDA can adequately influence the interagency groups without chairing them because

--the chair does not automatically confer great influence;

--a number of knowledgeable ACDA analysts are assigned to work on arms control issues in the groups; and

--ACDA prepares most of the draft papers in certain key working groups.

Notwithstanding this belief by some Agency officials, ACDA has tried to regain the chairs of at least some groups. We were told by a senior ACDA official that such an attempt was made by the ACDA Director in 1981. After our March 1983 testimony before the Subcommittee on International Security and Scientific Affairs pointed out the lack of ACDA chairmanships of the arms control policymaking groups, the House Foreign Affairs Committee noted that this situation was "unacceptable and verges on violation of ACDA statutory responsibilities." The Committee considered ACDA chairmanship of appropriate arms control policy and working groups to be "essential" if ACDA were to fulfill its responsibilities and satisfy the intent of the Congress.

The new Director of ACDA informed the Subcommittee in May 1983 that the lack of ACDA chairmanships concerned him and that he would attempt to "work that out." ACDA subsequently assumed the co-chair of the interagency policy groups for outer space and for anti-satellite warfare.

ACDA and the NSC

Congressional concern regarding ACDA's policy role has twice led to legislation involving the ACDA Director's relationship to

⁵The four working groups were those on the Standing Consultative Commission, the International Atomic Energy Agency Safeguards Action Plan, Arms Control Impact Statements, and Confidence Building Measures.

the NSC. In 1975, the Congress established the ACDA Director as the principal arms control adviser to the NSC. In 1983, concerned that the ACDA Director should be involved in NSC meetings which directly or indirectly concern arms control matters, the Congress mandated that the Director attend NSC meetings involving weapons procurement, arms sales, the defense budget, and arms control matters.

ACDA's resource levels

Over the years ACDA's resource levels--for both funding and personnel--have fluctuated. In 1981, the trend again turned downward and concern was expressed by some Members of Congress about the impact of the lower levels on ACDA's fulfilling its responsibilities.

Funding

Following its establishment, ACDA's budget increased each year until fiscal year 1966, when funding was about \$10 million. From then to fiscal year 1974, annual budget levels fluctuated around an average of \$9.1 million, falling to about \$8 million in 1974. Subsequently, budgets rose rather steadily to a fiscal year 1981 level of more than \$18 million. The budget level then declined over the following two years.⁶

The Congress was originally asked to authorize fiscal year 1984 funding of \$16.4 million for ACDA (excluding a proposed program transfer from the Department of Energy).⁷ This request represented a slight increase over the total 1983 ACDA budget. The Director of ACDA characterized the requested 1984-85 authorization levels as "adequate", but said that "they are very lean budgets, ones without reserves whatsoever, and should really not be reduced below the requested levels." During the House authorization hearings in the spring of 1983, Subcommittee members raised bipartisan concern about the requested budget levels, focusing on the impact of the proposed funding levels on particular ACDA functions.

⁶According to the Director, ACDA's initial fiscal year 1983 budget level was 7.9 percent less than the year before. After a supplemental request for \$564,000 was approved by the Congress, ACDA's fiscal year 1983 budget authority was actually 4.5 percent less than in fiscal year 1982.

⁷The Reduced Enrichment for Research and Test Reactors program is a Department of Energy project intended to develop a low-enriched nuclear fuel to replace weapons-grade material in research and test reactors throughout the world. The administration proposed including funds for the project in ACDA's fiscal years 1983 and 1984 budgets. The Congress twice rejected this proposal.

In August 1983, the President asked the Congress to increase ACDA's fiscal 1984 budget by about \$2.1 million over the level initially requested "to invigorate the Agency." The Congress subsequently provided a 1984 budget increase of about \$4.5 million over the initially requested level by authorizing about \$20.9 million and \$21.9 million for fiscal years 1984 and 1985, respectively.

Personnel

In recent years the number of positions at ACDA declined and vacancies continued for long periods in high-level positions. However, ACDA's responsibilities were not reduced. To the contrary, arms control activity increased in recent years with new concurrent initiatives such as START and INF; evolving issues such as anti-ballistic missile technologies, anti-satellite warfare and new strategic systems; and increasing levels of conventional arms transfers.

Following its establishment, ACDA's authorized fulltime permanent personnel level generally rose until it peaked at 189 in fiscal year 1969. By fiscal year 1974 it had fallen to 156. It subsequently rose to 199 by fiscal years 1979-80. However, by fiscal year 1983 it had fallen to 154--the lowest level since ACDA's first operating year. The administration initially requested this level again for fiscal year 1984. According to the ACDA Director ACDA absorbed a 16 percent decrease in personnel from January 1981 to October 1982.

ACDA's personnel situation has also included prolonged vacancies in high-level management positions. During much of 1983 the Agency had about 30 percent of its top management slots vacant or filled only on an acting basis. From January 1981 to June 1983, ACDA had no confirmed Deputy Director. Also, the Agency had no confirmed Director for a combined total of 8 months since January 1981.

ACDA's personnel shortages apparently affected ACDA's performance. According to Agency officials, ACDA was understaffed and its expertise was often devoted to supporting competing demands. ACDA bureaus claimed they had experienced difficulty in staffing negotiation delegations and providing backstopping support in Washington for the delegations. In addition, the Assistant Director for the Bureau of Verification and Intelligence informed us that, because of personnel shortages, he was unable to adequately perform all of his verification responsibilities related to (1) coordinating with other groups, (2) commenting on verification material sent to him for review, and (3) ensuring that verification matters were adequately considered for all arms control issues.

The administration has recognized ACDA's personnel problems. In May 1983 the new ACDA Director said that his goals for the Agency were "to staff it up and settle it down from the personnel

turmoil that...it has endured over the past months in particular, and even a larger period of time in general..." In August 1983 the White House announced amended personnel requests providing an additional 25 positions over the next 2 years.⁸ Also, most of ACDA's top management positions are now filled, including all but one of its senior positions.

Need for efficient and effective management

The Congress has acted since 1961 to broaden the Agency's mandate and arms control activity has recently increased. The funding constraints ACDA has faced in recent years emphasize the need for efficient and effective management of its operations.

ACDA can, and should, improve its current management practices. The following chapters summarize the findings of our three September 30, 1983 reports regarding ACDA management opportunities in the areas of:

- internal controls, including internal audit;
- the Agency's external research program and coordination of government-wide arms control research; and
- automatic data processing and operations analysis activities.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to develop information on ACDA's policy role and resource levels, and to evaluate ACDA's

- compliance with legislative and administrative directives on internal controls, including internal audit;
- management of its external research program⁹ and its coordination of all federal arms control research;

⁸The administration also requested legislation to upgrade several top ACDA positions--the Deputy Director, Assistant Directors, and the START and INF Negotiators--to Executive Levels III and IV.

⁹External research is research done for ACDA by others, in contrast to research done in-house by ACDA's own employees.

--justification for abolishing its Office of Operations Analysis (OA)¹⁰; and

--planning and operation of computer-based support activities.

We interviewed officials and examined documents of ACDA; the Departments of State, Defense, Energy, and Commerce; the Office of Management and Budget (OMB); and the General Services Administration (GSA). We also analyzed legislation, executive orders, and OMB directives related to internal controls, research activities, and management of computer resources.

In reviewing ACDA's external research program, we were principally concerned with the overall policies and procedures implementing the program. We did not attempt to evaluate individual contracts or research projects. Also, we did not address the research activities of ACDA's own employees.

ACDA's justification for abolishing OA had two principal components--budget savings and OA's alleged inefficiency. We were unable to objectively assess this latter claim because of an absence of adequate records needed to determine the degree of OA's responsiveness to other ACDA organizational units. Also, in our analysis of ACDA's claimed budget savings, we generally relied on ACDA's explanations of how savings were measured. We did not verify the accuracy of claimed costs or savings by examining source documents.

Our work was done in accordance with generally accepted government audit standards, except that, as requested by the Subcommittee, we did not obtain official agency comments on this report. However, we did receive official comments on our three September 30, 1983 reports to the Director, ACDA. Those comments, and our evaluation of them, are summarized in the final sections of chapters 2, 3, and 4. These sections also include more recent information concerning actions announced in 1984 by ACDA in response to our three reports. We did not verify this information.

¹⁰Operations analysis (also known as operations research) has been defined as "a scientific method of providing executive departments with a quantitative basis for decisions regarding operations under their control," and as "the application of scientific methods and techniques to decisionmaking problems." Operations analysts use computers as tools to help solve difficult problems.

CHAPTER 2

NEED FOR INTERNAL CONTROL IMPROVEMENTS, INCLUDING ADEQUATE INTERNAL AUDIT COVERAGE

Since the early 1950's, executive branch agencies have been responsible for maintaining internal controls over operations, including providing internal audit coverage. Over the years, we have issued numerous publications to guide agencies in establishing and maintaining their internal control systems. In October 1981, OMB issued Circular A-123, which prescribes policies and standards to be followed by executive branch agencies in designing, installing, and maintaining internal control systems. More recently, the Federal Managers' Financial Integrity Act of 1982 (32 U.S.C. §3512) has increased attention on improving controls over government operations. The Act requires that agencies' internal control systems be designed in accordance with our standards, and that the heads of executive agencies periodically evaluate and annually report on these systems. Executive agency awareness of weaknesses in existing controls and identification of such weaknesses for corrective action are of primary importance.

Although relatively small, ACDA is an executive branch agency, obligated to comply fully with legislative and administrative requirements related to internal controls and audit. We found that ACDA needs to implement additional requirements for internal control.

ACDA NEEDS TO IMPLEMENT ADDITIONAL INTERNAL CONTROL REQUIREMENTS

As a forerunner to the Federal Managers' Financial Integrity Act, OMB Circular A-123 identified many basic design features and standards for internal control systems. The Act directs new emphasis on the need to strengthen internal controls. Among other things, the Act required that agencies' internal control systems be (1) established in accordance with GAO standards, and (2) periodically evaluated and annually reported on by the heads of executive agencies, in accordance with OMB guidelines. In March 1983 OMB revised A-123 to provide policy guidance to be used by executive branch agencies in evaluating, improving, and reporting on internal controls in their program and administrative activities.

Implementation of A-123 by agencies would better enable them to meet the GAO standards. For example, a favorable evaluation would be more likely if adequate, written, organizational documentation--called for by A-123--were in place. We therefore focused on A-123 implementation because problems in this area would affect ACDA's ability to comply with the standard set by GAO pursuant to the Act.

When our work was started, ACDA had yet to implement A-123. After our review began, ACDA met with OMB officials concerning ACDA's planned program for compliance and

- established an Internal Control Committee to coordinate guidance, develop procedures for conducting reviews, and supervise review and assessment activity;
- assigned responsibility for internal control to key officials; and
- prepared an internal control plan.

Also, ACDA told us during our review that it planned to conduct vulnerability assessments and internal control reviews, and to report their results to the Director.

ACDA HAS NOT HAD THE EXPANDED-SCOPE
INTERNAL AUDIT COVERAGE IT NEEDS

In March 1978, OMB issued Circular A-73, Audit of Federal Operations and Programs (revised June 20, 1983), in order to (1) promote audit practices, (2) achieve more efficient use of audit staff, (3) improve coordination of audits, and (4) emphasize the need for early audit of new or substantially changed programs. Although A-73 applies to all audit functions of every executive branch agency, ACDA has not implemented its provisions.

ACDA's internal audit
coverage is inadequate

ACDA currently has no internal audit staff and its very limited internal audit coverage falls short of meeting A-73 requirements. A small imprest fund and some research contracts have been audited for ACDA by other agencies. Also, GSA audits ACDA financial transactions on a limited basis.

ACDA officials informed us that an internal audit function would not be effective because (1) ACDA is small, and (2) audits by GAO and others are adequate for ACDA's type of operations and relatively small appropriation. We disagree, principally because A-73 applies to all executive branch departments and agencies. Moreover, adequate internal audit coverage would result in management benefits. ACDA officials believed that ACDA has operated successfully for more than 20 years with minimum internal audit coverage and, consequently, saw increased costs and limited benefits from expanding such coverage. Although establishing adequate expanded-scope internal audit coverage would increase ACDA costs, our work in ACDA provides numerous illustrations of potential benefits. For example, the following situations are typical of those that could be addressed under expanded-scope audits of agency programs and activities; none would be addressed under the type and level of internal audit coverage ACDA now obtains.

Out-of-date policies and
procedures in the official
ACDA Manual and Instructions

Although ACDA has issued at least 26 Instructions and 61 Notices on administrative procedures since October 1981, most documentation governing the structure and operation of ACDA was outdated. The Manual's most recent update was in 1978, and more than 60 percent of the Instructions have needed revision for more than 4 years. In addition, functional statements of the responsibilities of organizational units had not been formally updated since a major reorganization in October 1981. ACDA officials told us that the Manual would be updated.

Differences in the duties assigned
versus those performed

ACDA's functional statement for arms control verification activities assigns them to the Bureau of Verification and Intelligence (VI). However, other bureaus were performing verification activities instead of VI. Specifically, ACDA's Assistant Director for VI stated that the Bureau was not

- meeting all the responsibilities identified in VI functional statements,
- reviewing all the verification papers which other organizations in ACDA prepare, or

--attending high-level meetings on verification issues.

ACDA has indicated its intent to enhance VI's capability as the focus for its verification work.

ACDA's authorizing legislation
needs more thorough study

Laws passed by the Congress are important elements of internal control because they authorize agencies to carry out government functions and can establish the extent to which such functions are to be performed. A standard starting point for defining and assigning responsibilities is a thorough legislative study to determine what a law requires. Legislative analyses are important criteria for measuring agency resource utilization and performance.

ACDA's General Counsel told us that comprehensive legislative analyses have not been done. The General Counsel could provide only two limited-scope analyses, dealing with (1) ACDA authority to participate in interagency groups and (2) the congressionally mandated titles of the ACDA Assistant Directors. After our fieldwork was completed, we found an additional analysis ACDA did in 1977 of its obligations under the then-new Section 37 of the Arms Control and Disarmament Act, which specifies that the Director report to the Congress on the verifiability of arms control proposals and agreements.

Without thorough legislative analyses, ACDA does not have a defensible basis for concluding that it is meeting its responsibilities and mandates. In commenting on a draft of our 1983 report, ACDA agreed to determine the need for additional legislative analyses.

Section 37 reporting to the Congress
and noncompliance with administrative
requirements

ACDA has not provided the Congress reports on a timely basis on the verifiability of some significant arms control proposals under Section 37(a)(1) of the Arms Control and Disarmament Act (22 U.S.C. §2577(a)(1)), which provides that the Director of ACDA furnish verification reports on arms control proposals to the Congress on a timely basis, or upon a request by an appropriate committee of the Congress. Reports for significant proposals have not been provided for the Mutual and Balanced Force Reductions and INF negotiations. However, on two occasions (February 1978 and

November 1982) a report has been submitted upon request to a committee of the Congress, in keeping with Section 37(a)(1).

In recent years ACDA has not provided OMB with the arms control research reports required by Executive Order 11044, nor has it implemented various OMB directives, such as A-73, A-123, and A-71 (Transmittal Memorandum Number 1) on Security of Federal Automated Information Systems.

Past GAO work

Our past work yields further examples of the types of issues that can be developed under expanded-scope audits and brought to ACDA management's attention for corrective action. In our March 17, 1980, report entitled Coordination of Federal Arms Control Research Programs To Be Improved (ID-80-6), we discussed

- ACDA's failure to implement required government-wide research coordination procedures, and
- the uncertainties in the scope of research to be coordinated.

The report also pointed out that ACDA needed to improve management of its own external research program.

More recently, in our January 25, 1983 report entitled RECOVER: A Potentially Useful Technology for Nuclear Safeguards, But Greater International Commitment Is Needed (GAO/ID-83-9), we pointed out that

- the REMote CONTinual VERification system, designed by ACDA and costing over \$4.0 million through 1982, had an uncertain future;
- ACDA lacked in-house capability to develop the system; and
- the project was behind schedule by as much as 2 to 3 years.

VARIOUS APPROACHES TO OBTAIN INTERNAL AUDIT COVERAGE

ACDA must decide what type of arrangement would best ensure effective internal audit coverage in compliance with legal and administrative requirements. Federal agencies, including small

ones like ACDA, generally provide internal audit coverage by establishing an organization and hiring staff. If ACDA does not elect to do so, it could contract for expanded-scope audit services with the inspector general organization of another federal agency, with GSA, or with a non-federal organization (such as a public accounting or management consulting firm).

Using an alternative to an in-house organization would not eliminate or reduce ACDA's responsibilities under A-73, A-123, or other internal control directives. For example, ACDA would still be responsible for (1) seeing that the contractor met applicable audit standards, (2) developing the annual audit plan required by A-73, and (3) establishing and implementing other policies and procedures related to internal control, including internal audit.

CONCLUSIONS

Although ACDA has recognized the need to comply with internal control requirements and has taken some action, it must do more, especially in regards to adequate internal audit coverage--an important internal control element. We have long advocated the benefits of effective internal audit to good management. The problems discussed above clearly illustrate situations which internal audit coverage--either in-house or contractual--could bring to management's attention.

AGENCY ACTIONS AND OUR EVALUATION

In our September 30, 1983 report to the Director, ACDA, we recommended that he

- establish an internal control system which accords with legislative requirements and administrative directives;
- establish internal audit coverage in accordance with the requirements of 31 U.S.C. §3512, and of OMB A-73, Audit of Federal Operations and Programs; and
- correct the matters discussed in the report related to the Manual and Instructions, differences in assigned versus performed verification duties, ACDA's legislative authorities, and Section 37 (a)(1) of the Arms Control and Disarmament Act.

In commenting on these recommendations, ACDA agreed to act on most of them. It indicated, for example, that (1) it had begun to improve internal controls; (2) GSA would provide expanded-scope internal audit coverage; (3) ACDA's General Counsel would review existing legislative analyses and recommend to the Director additional analyses as appropriate; and (4) VI's resources would be increased to enable it to perform assigned verification duties.

In December 1983, the Director of ACDA notified the President that an evaluation of ACDA's accounting and administrative control system had been performed in accordance with A-123 and found that the system had provided reasonable assurance that its objectives had been achieved, within certain limits. In February 1984, an ACDA official informed us that vulnerability assessments had been prepared with the assistance of a major accounting firm and that ACDA had virtually completed actions to comply with A-123.

As of March 1984, ACDA and GSA were continuing efforts to develop an expanded-scope audit plan for GSA's use at ACDA, but had yet to agree upon one. ACDA efforts to acquire audit coverage should not be limited to GSA if this agency is unable to provide adequate resources. ACDA management should pursue the other alternatives discussed above until sufficient controls and audit coverage are acquired to satisfy the requirements of 31 U.S.C. § 3512.

ACDA believes that it has fulfilled its responsibilities under Section 37(a)(1) of the Arms Control and Disarmament Act. ACDA's comments implied that the Director is not required to provide verification reports under Section 37(a)(1) because such a requirement would interfere with the President's responsibility for arms control negotiations. ACDA stated that the Director has provided reports when directed by the President and that all congressional committee requests for reports have been met. However, based on information we obtained from ACDA, the Agency has issued only two reports under Section 37(a)(1), both at the request of the Senate Foreign Relations Committee. These reports were a February 23, 1978 report on the then-ongoing Strategic Arms Limitations Talks (SALT II) and a November 18, 1982 report on START. ACDA also furnished us with information that it had provided a Section 37 verification report concerning the U.S.-U.S.S.R. Treaty on Limitation of Strategic Offensive Arms and its Protocol (which resulted from SALT II) to the House Permanent Select Committee on Intelligence. However, the report was furnished on July 18, 1979, 1 month after the United States had signed the treaty. Although the treaty still needed the advice and consent of the Senate to become effective under U.S. law, it was no longer a "proposal" because negotiations had been concluded.

Notwithstanding these reports--provided in response to congressional committee requests--ACDA has provided no verification reports to the Congress itself on "a timely basis," pursuant to Section 37(a)(1). We have no evidence that the Director of ACDA provided such reports to the Congress through briefings, meetings, or other written or oral communications, although several major arms control negotiations have taken place since Section 37 was enacted in 1977. For example, no reports have been furnished with respect to negotiations concerning INF and Mutual and Balanced Force Reductions.

CHAPTER 3

COORDINATION OF FEDERAL ARMS CONTROL RESEARCH AND MANAGEMENT OF THE EXTERNAL RESEARCH PROGRAM STILL NEED IMPROVEMENT

ACDA needs to improve the operation of its external research program. The same or similar problems which we found hindering the research program's efficient operation in 1980 were still present when we conducted our fieldwork in 1983.¹ For example, ACDA's external research program had no formal project selection criteria, little internal coordination, no routine review of available research listings to help avoid project duplication, and inadequate use of contractor evaluations.

In addition, ACDA is not meeting its responsibilities to coordinate all arms control research within the federal government, as specified in the Arms Control and Disarmament Act and Executive Order 11044.

MANAGEMENT DIFFICULTIES PERSIST IN ACDA'S EXTERNAL RESEARCH PROGRAM

In 1980, we reported on a series of problems ACDA had in managing its external research program. At that time, ACDA had just begun to direct its program through a central External Research Council. Since then, ACDA has abolished the Council and the problems we identified persist. These problems could hamper ACDA's ability to effectively use its limited and uncertain research funding.

Corrective action terminated

In his response to our 1980 report, ACDA's Director generally agreed that problems existed. He stated that a new External Research Council had been established to improve external research program management. This 14-member advisory Council was ACDA's forum for all matters related to the external research program from August 1979 until October 1981. The ACDA Director and Deputy Director made final decisions on the research program.

Although ACDA officials agreed that the Council was a good concept and that it improved intra-agency coordination and awareness of research projects, most attributed serious problems to it. Officials described it as "acrimonious" and said the time, effort,

¹See our report, Coordination of Federal Arms Control Research Program To Be Improved, (ID-80-6) March 17, 1980.

and paperwork needed to support the program were excessive. After the current administration came into office, a Deputy Director-designate abolished the Council. He believed that research programming should be a line bureau responsibility and that the Council was not working.

At the time of our fieldwork, the process for selecting external research projects and allocating funding involved a selection committee of the Assistant Directors, the Deputy Director, and the Administrative Director. According to an Assistant Director, this was essentially the same process that existed before the Council was created.

Funding of research is limited
and, sometimes, uncertain

Uncertainties over external research program funding levels have made planning and operating the program difficult. The overall decline in the research budget has prevented the funding of some desirable, if not urgent, projects. Moreover, once overall ACDA funding has been appropriated, ACDA has limited its research program by using research funds for other purposes and by holding funds until late in the fiscal year.

Research funding
has been declining

ACDA funding for external research has been declining. The research budget, which fell from a peak of \$6 million in fiscal year 1966 to a low of about \$1 million in fiscal year 1975, was initially set at about \$1.1 million for fiscal year 1984. At this level, research would have comprised less than 7 percent of the originally proposed fiscal year 1984 budget, down from a high of 58 percent of the Agency budget in fiscal year 1966. The fiscal year 1984 budget authorized by the Congress increased research funding to slightly more than 7 percent--about \$1.5 million. Furthermore, because inflation causes the loss of purchasing power over time, the fiscal year 1983 research program's \$1.15 million had the purchasing power of less than \$950,000 in 1980 dollars. In 1980 the program's budget was about \$3.8 million.

The declining budget had caused some bureaus to scale back research efforts and forego initiating studies which ACDA officials identified as desirable. Two areas so identified were nuclear test ban verification and chemical weapons.

Even after research funds have been appropriated, they can be transferred to meet other Agency needs. In fiscal year 1982, after having obligated nearly its full research budget for the previous 2 years, ACDA obligated 11.5 percent less (amounting to

\$248,000) than originally programmed for research. ACDA used more than half of this sum for non-research needs. For some time now, ACDA has reduced its research budget and diverted research funds to avoid personnel reductions. In 1978, ACDA's Director told a congressional committee that the Agency had diverted funds from research to meet personnel costs. More recently, the research budget was cut to avoid reductions-in-force.

Research funds committed
late in the fiscal year

ACDA still held funds for research projects in reserve until late in the fiscal year. For the first two-thirds of fiscal year 1983, ACDA obligated only 31 percent of its research funds. In some cases, ACDA deliberately held back funding for research earlier in the year, while in other cases late funding resulted from the timing of the projects involved.

ACDA has institutionalized holding back funds for research and other needs in a Director's Reserve Fund. Established under a former Director, it is to be used for high priority, quick turn-around projects, or, if not required for that purpose, for lower priority projects or those needing more money than expected. However, the fund is not designated exclusively for research needs.

ACDA lacks criteria for
systematically selecting
research projects

At the time of our fieldwork, the participants in ACDA's research selection process stated that either no formal criteria existed or that they did not know what criteria the Director or his Deputy used to select projects. A former Deputy Director-designate identified his selection criteria as "what things could assist in the job; what would help ongoing or imminent negotiations." A Division Director told us that criteria for selecting projects were probably based on the "feelings" of top management about the needs and performance of the bureaus. However, few top officials have served at ACDA long enough to know the Agency's needs. At the time of our fieldwork, only one official had served in the Office of the Director for as long as 2 years, and he said he had only a limited perspective on the research program. Moreover, this official subsequently left the Agency.

Little systematic coordina-
tion of research occurs

A number of ACDA's organizational units are interested in the same research areas. However, other than the Assistant Directors' project selection meetings, little formal coordination is required

or occurs inside ACDA. Instead, research coordination is left to each organization. Monthly "Status Reports" on research projects circulate throughout the Agency, but ACDA directives do not require that research planning documents be sent to all bureaus.

The effectiveness of coordination to review ACDA research for duplication during the selection and budget process is uncertain. Officials identified as "checks" in the system have limited review capabilities. Furthermore, the Contracting Officer, identified by ACDA officials as the person who should spot redundancies, is less involved and informed about the system now than in the past.

ACDA does not use available listings to identify related research

While planning projects, ACDA Project Officers still do not routinely use available listings to identify research related to their proposed efforts. Many use informal measures for identifying related research, which consist largely of talking to contacts in other agencies and attending interagency meetings. Some officials did not know about the data base listings which are available throughout the government. ACDA Project Officers were concerned that reviewing data base listings would divert resources from other work.

Preparation and use of contractor evaluations are inadequate

ACDA's use of formal contractor evaluations is inadequate. Project Officers fill out evaluation forms to judge contractors' performance and to provide a record for negotiating future work. Since November 1979, Project Officers have been required to complete the two-page "Contractor Evaluation Statement" at the conclusion of each research contract. To a large extent, however, the evaluations were either not being completed or were being completed improperly. A review of ACDA records indicated that almost a fourth of the required evaluations have not been prepared. Of those available, some were not sufficiently detailed. Moreover, it was not clear whether Project Officers were effectively using evaluations to become aware of prior performances by individual contractors. Apparently, only the Contracting Officer and an assistant routinely read the evaluations in order to prepare for contract negotiations.

Finally, although the evaluation process requires the Project Officer to discuss anticipated value and use of the contract results to the government, it requires no follow-up to determine what use ultimately was made of the research results.

ACDA IS NOT FULFILLING ITS
GOVERNMENT-WIDE RESEARCH ROLE

ACDA is not meeting its mandate to coordinate all arms control research within the federal government, as specified in the Arms Control and Disarmament Act and Executive Order 11044. In addition, limited access to other agencies' information would hinder ACDA if it attempted to carry out its coordination responsibilities. ACDA also has not followed through on commitments it made in response to our 1980 report on arms control research.

ACDA is not complying with its
research coordinating mandate

ACDA has arms control research coordination responsibilities under the Arms Control and Disarmament Act.² Executive Order 11044 requires ACDA to

- develop and keep current a comprehensive and balanced program of arms control and disarmament research needed to be done throughout the government;
- advise other agencies as to their respective participation in this arms control research program in order "to produce harmonious action" and prevent duplication of effort;
- maintain a continuing inventory of federal activities related to the planned program of arms control research; and
- submit periodically a consolidated schedule and evaluation of such arms control research activities to OMB.

ACDA meets none of these requirements. ACDA's Assistant General Counsel acknowledges that the Act and the executive order are not "being literally complied with." As far as he knows, agencies do not submit reports to ACDA on their arms control research. ACDA

²Under the Act the Director is authorized and directed to insure the acquisition of a fund of theoretical and practical knowledge concerning disarmament. To carry out this objective, he is also authorized, under the direction of the President, to coordinate research by or for other government agencies in accordance with procedures established under Section 35 of the Act.

could not provide us with evidence to demonstrate that it has complied with the requirements of the Act and the executive order since 1974. Moreover, officials at both OMB and ACDA knew nothing of the periodic schedule required to be sent to OMB, even though ACDA continues to list the schedule among its reporting requirements. Furthermore, ACDA neither oversees other agencies' research, nor do other agencies routinely seek ACDA's advice on their research efforts.

ACDA officials said that they are not coordinating research activities because:

- OMB had directed ACDA to stop preparing the schedule on arms control research 10 years ago.
- The scope of arms control research has not been adequately determined.
- Ad hoc, informal coordination arrangements with other agencies, especially through interagency groups, keep participants adequately informed.
- ACDA has never had sufficient resources or "clout" to do any additional coordination or to direct other agencies' research.

Constrained access to agencies' information impairs ACDA's planning for arms control research

Limited access to other agencies' information impairs ACDA's arms control research planning and would hinder ACDA if it attempted to carry out its coordination responsibilities. Planning information on research is not shared a great deal between the agencies, according to one DOD official who has never seen ACDA's lists of proposed projects nor shown ACDA his lists. In order to ensure access to such information, ACDA sometimes contributes funds to other agencies' research.

ACDA did not follow through on its previous commitments

We concluded in our 1980 report that ACDA had not fulfilled its coordination responsibilities. We recommended that the Director should either fulfill his coordination responsibilities or urge the Congress to amend the Act and seek to have the executive order revised or rescinded.

The Director of ACDA at the time stated that, to the extent adequate coordination may be lacking, a remedy would be sought. He said that the affected agencies and OMB would meet to ensure that ACDA's legislated coordination requirements would be met in a practical and workable manner. However, ACDA, DOD, and OMB officials could not provide evidence that such a meeting ever occurred.

According to an official who helped prepare ACDA's response to our 1980 recommendations, there was no particular follow-up to the report. An Assistant General Counsel said that changing the Act is not a priority on his list of legislative actions. Although he stated he was sure that he had drafted language for changing the Act, ACDA could not find any such document in its files.

CONCLUSIONS

After dismantling the mechanism established to direct research activities, ACDA continues to have management problems similar to those noted in our 1980 report. Although the Agency may not need to resurrect the External Research Council, it should formalize a process that will help in

- developing research proposals with a clear understanding of Agency goals,
- planning and coordinating research activities throughout the Agency,
- identifying and eliminating duplication in research projects, and
- evaluating research efforts and results adequately.

ACDA still is not complying with the Arms Control and Disarmament Act or Executive Order 11044, which detail its responsibilities for coordinating all federal arms control research. Although ACDA recognizes that it has certain government-wide research responsibilities, it has been unconcerned about its inability to fulfill them and has not followed through on its previous commitment to resolve problems with its federal arms control research role.

ACDA should first determine the scope and cost to effectively implement its federal research coordination role and, then, either implement its research mandate or, failing to receive from the Congress adequate resources necessary to implement the mandate, ask the Congress to amend the Act and seek to have the executive order revised or rescinded.

MATTER FOR CONSIDERATION
BY THE CONGRESS

In responding to our September 30, 1983 report, ACDA stated that its ability to reprogram funds is an essential management tool for quickly adjusting to changing needs and that external research is one of few budget categories which is available to help achieve such adjustments. We recognize that, given the kinds of responsibilities ACDA has, unexpected needs can arise. However, this practice could result in inadequate support for arms control research.

Therefore, to assure that ACDA's external arms control research program is adequately supported in the future, the Congress may want to consider specifically designating a portion of ACDA's funds for the external research program.

AGENCY ACTIONS

In the 1983 report to the Director, ACDA, we essentially repeated the thrust of our 1980 recommendation, designed to have ACDA perform its coordination role or urge the Congress to amend the Act and seek to have the executive order revised or rescinded. We also recommended that the Director, ACDA,

- establish criteria for use by bureaus in their development and selection of research projects;
- require Project Officers to use available listings of federal government research in order to more comprehensively identify research related to proposed projects;
- direct that contractor evaluations be properly completed, that they include specific discussions of any problems with the contractors, and that they be used to assess proposed contractors' prior performances;
- establish a follow-up tracking system to determine the actual use made of ACDA research products over a designated period of time;
- define the scope of arms control research being conducted by or for the federal government, after consulting with the Secretaries

of State, Defense, Energy, and Commerce, and the Directors of the Central Intelligence Agency and of other affected agencies;

- estimate the resources ACDA needs to effectively coordinate federal arms control research, based on the defined scope; and
- determine whether ACDA will carry out its federal coordination role or seek relief from the requirements, after defining scope and estimating resources.

In his September 9, 1983 comments for both OMB and ACDA, the Director of the Agency said that the report would be useful to him in two reviews he was initiating. The first covered external research planning and procedures and the second involved coordination of federal arms control research. The Director also noted that ACDA would amend instructions for Project Officers to require that they use all readily available data bases to identify research related to their projects. He also stated that ACDA would ensure that all required contractor evaluations are completed appropriately and that ACDA would review the content of evaluation statements to identify needed revisions. If necessary, he noted, ACDA either would institute new coordinating procedures for government-wide arms control research or would "seek legislative relief" to eliminate the coordination requirement.

During the fall of 1983, a consulting firm under contract to ACDA reviewed the Agency's external research program. The firm's final report, issued in February 1984, concluded that our findings were generally valid. On February 6, 1984, the Director of ACDA announced his decision to establish a Research Review Board under the Deputy Director. The Board's mission includes

- conferring with the Assistant Directors and Office Heads and reviewing proposed research projects;
- developing a program budget structure for external research based on ACDA's purposes, objectives, and priorities (rather than on organizational sponsor), and identifying issues of importance to ACDA over the next five years, key decisions to be made, and information that would be needed or desirable for such decisions; and

--meeting periodically to review progress on current research.

Among other actions, the Director also specified questions to be addressed in project justifications and directed that the relevant bureau or office provide the Director and Deputy Director a report on a project's findings and direct relevance to ACDA within 30 days of the project's completion.

A DOD official who reviewed our draft report commented that an ACDA reassessment of its federal arms control research coordination role would be useful, but that DOD would oppose any reinterpretation of ACDA's role which allowed ACDA to tell DOD how to operate its research programs.

CHAPTER 4

NEED TO IMPROVE MANAGEMENT OF COMPUTER-BASED SUPPORT FUNCTIONS

ACDA has not adequately planned its automatic data processing (ADP) support activities or complied with OMB guidance on computer security. Management decisions have been made without comprehensive knowledge of the Agency's ADP needs or of the cost and performance of its ADP systems. Although this lack of information does not necessarily mean that ACDA's past ADP management decisions have been wrong, it does raise questions about the scope and focus of ACDA's current computer-based support activities.

One such activity involves operations analysis. Here, too, ACDA had not thoroughly evaluated its needs at the time of our fieldwork. Moreover, ACDA officials at varying levels of management within ACDA disagreed among themselves about the adequacy of the level and organizational arrangement of ACDA's operations analysis support.

EVOLUTION OF ADP AND OPERATIONS ANALYSIS ACTIVITIES

Under the Arms Control and Disarmament Act, ACDA "must have the capacity to provide the essential scientific, economic, political, military, psychological, and technological information upon which realistic arms control and disarmament policy must be based." ACDA uses ADP for analysis of arms control issues; retrieval of information on negotiations, arms transfers, and nuclear materials; and administration. Fiscal year 1983 and 1984 ADP costs were estimated by ACDA at \$300,000 and \$573,000, respectively.¹

ACDA began using ADP and operations analysis over 15 years ago. By 1970 ACDA had established an Operations Analysis Division in one of its bureaus. Although it initially relied on commercial timesharing services for computer support, ACDA purchased a small Wang computer in 1976. In 1977 ACDA replaced the Division with the Office of Operations Analysis (OA), which was responsible for quantitative and interdisciplinary studies and reported directly

¹However, these estimates do not include some cost elements we consider ADP costs. For example, they do not include the cost of a data retrieval system run on a Department of State computer (budgeted at \$55,000 in fiscal year 1983), or the cost of a secure enclosure for ACDA's Wang computer (about \$91,000 in fiscal year 1983).

to the Office of the Director. In 1979 ACDA, in an effort to further decrease its use of commercial computer services, entered into a 7-year lease-purchase contract for a Digital Equipment Corporation DEC-20 computer.

At the end of fiscal year 1982, ACDA reversed this trend of increasing ADP and operations analysis capabilities by abolishing OA, transferring OA analysts to other ACDA organizations, and giving up the DEC and other ADP resources. ACDA also returned OA's detailees to their home agencies and reduced its use of leased office space. These and other actions were intended to help ACDA achieve about an 8 percent cost savings. In total, ACDA claims that it saved over \$1.3 million in fiscal year 1983. We estimate that, of this amount, about \$683,000 is attributable to the OA changes and reductions in computer support. ACDA disagrees with our revision of its estimate. (ACDA's position and our analysis are presented in detail in GAO/NSIAD-83-66, September 30, 1983.)

Some ACDA officials stated that OA was an inefficient organization, unresponsive to bureaus' needs. Some opponents of the abolishment believed that charges of inefficiency against OA were politically inspired. We could not evaluate OA's efficiency due to the lack of available records to support an objective determination.

At the time of our fieldwork in mid-1983, ACDA had (1) a small Wang computer, (2) reimbursable agreements for access to computers at the United States Railway Association and the Department of State, and (3) arrangements for some access to DOD resources.² A small Computer Services Group (CS) located within the Verification and Intelligence Bureau operated the Wang computer and was charged with providing computer support to ACDA. One former OA official in VI was responsible for providing centralized operations analysis support to ACDA. Other former OA analysts worked in various bureaus throughout the Agency.

ACDA DOES NOT HAVE THE
COMPREHENSIVE ADP MANAGEMENT IT NEEDS

ACDA does not adequately plan for or evaluate the use of ADP systems. Moreover, it is not complying with OMB guidance on computer security. As a result, ACDA management cannot be sure

²In January 1984 ACDA took delivery of a VAX-11/750 computer to be put in operation by mid-1984. The VAX will eventually supersede both the Wang and the access agreement with the United States Railway Association.

that (1) the level of resources employed is appropriate, (2) resources are directed to applications with the greatest potential for improving mission performance or productivity, or (3) computerized information is adequately protected from accidental loss.

Improvements needed in
ADP planning

Over the years we have emphasized the need for federal agencies to establish a comprehensive planning process which would ensure that ADP resources are used in the best way to support agency missions and programs. Such a planning process would

- require top management involvement in each of the agency's major organizational units;
- cover a time period consistent with that of the agency programs requiring data processing support;
- identify opportunities for improving productivity or effectiveness, based on the agency's missions and programs, and on changes in ADP technology;
- validate and set priorities for meeting identified needs through cost/benefit studies;
- develop a strategy for meeting needs, establish criteria for measuring performance against the plan's objectives, establish decision points when performance would be assessed, and assign responsibility for implementing the plan; and
- provide for review by the internal audit staff, or by some other means, to ensure that the plan supports mission requirements and that estimates are reasonable and based on factual information.

ACDA has not had a comprehensive ADP plan. ACDA maintained that it had accomplished ADP planning through the budget process and ad hoc studies. However, ACDA's budget process does not (1) establish milestones for implementing plans, performance criteria for measuring how well a plan has met its objectives, or decision points for assessing performance; (2) directly involve user and

data processing management; or (3) provide well-supported justifications of stated needs. The Budget and Accounting Officer told us that ongoing projects received only a cursory review and, essentially, were funded at the previous year's level with an adjustment for inflation. Cost/benefit studies were seldom, if ever, prepared.

At the time of our fieldwork ACDA was studying a potential computer acquisition. ACDA had carried out similar ad hoc studies in the past when contemplating major equipment purchases. Although studies of proposed equipment purchases are valuable planning tools, they cannot replace a comprehensive, continuous ADP planning process which periodically compares existing and planned capabilities.

Better information on cost and performance of ADP systems is needed

ACDA has not complied with OMB guidance on ADP cost accounting and does not require data processing users to periodically report how well existing ADP systems are meeting their requirements.

ACDA does not have information on ADP costs needed to plan for and evaluate the use of ADP resources. OMB Circular A-121, which implements our Federal Government Accounting Pamphlet Number 4, Guidelines for Accounting for Automatic Data Processing, requires agencies to account for or estimate the total cost of each software program and the cost of providing computer services to each user. ACDA has not complied with these requirements. Compiling this information would help ACDA to:

- assess the full costs of user requests,
- evaluate the relative worth of current and proposed systems,
- make informed decisions as to whether systems should be designed and operated in-house or by outside sources,
- measure efficiency and effectiveness of ADP services, and
- foster cost-consciousness among ADP users.

In addition to inadequate cost information, ACDA has no system for periodically contacting data processing users regarding their satisfaction with current systems, changes they would like

made, or systems that no longer meet their needs and should be terminated. Although users are free to raise concerns through the chain of command to their bureau heads, we believe that actively soliciting feedback from them is necessary because users have no incentive to ask that unneeded systems be terminated when they are not responsible for establishing and maintaining these systems.

ACDA has not complied with
OMB guidance on computer security

Transmittal Memorandum Number 1 to OMB Circular A-71 requires the head of each executive branch agency to establish a computer security program, and sets minimum requirements for these programs. ACDA has not complied with this guidance.

The Chief of CS believed that, although there were no written policies or procedures regarding computer security, personnel under his supervision took appropriate steps to safeguard data. Because he had not been assigned responsibility for implementing the OMB guidance, however, he believed he lacked authority to require all Agency users to take similar steps. He stated that valuable data may be lost because backup copies of programs and files are not always maintained.

ACDA OFFICIALS DISAGREE OVER
OPERATIONS ANALYSIS: A THOROUGH
REVIEW OF NEEDS COULD HELP

There was no consensus among ACDA officials on whether the reduced level of operations analysis capability following OA's abolishment and other actions was sufficient to meet the Agency's needs. ACDA had not thoroughly assessed what operations analysis capabilities would be required in the future to fulfill its mission, or decided how these requirements would best be met. Periodic, ACDA-wide planning for this support function would give management some assurance that it has the appropriate organization and resources to meet changing demands for operations analysis.

No consensus within ACDA
on operations analysis

A 1982 reduction of ACDA's operations analysis capabilities led to disagreement among ACDA officials over its impact and the role operations analysis should play in the future. A thorough examination of these issues by the ACDA directorate could help resolve this disagreement.

At the end of fiscal year 1982, ACDA reduced its operations analysis capabilities by

- abolishing OA, transferring OA's analytical staff to positions within the bureaus, giving them new titles, and in some cases, assigning them duties not related to operations analysis;
- cancelling the DEC contract;
- giving up access to large strategic exchange models located at a contractor facility; and
- shelving two computerized models which were used to estimate the effect of major disruptions on a nation's economy and the budgetary impact of arms control decisions.

At the time of our fieldwork we found that ACDA officials at various levels disagreed over whether the reduced level of operations analysis capabilities and the existing organizational structure would reduce the Agency's ability to carry out its functions in the future. Some officials believed ACDA's ability to fulfill its mission could suffer if its operations analysis capabilities were not augmented or reorganized; others did not.

Some officials maintained that operations analysis was less important to ACDA than in the past, and that recent reductions helped bring capabilities into line with the Agency's needs. Other officials disagreed, and believed that ACDA's capabilities were not adequate to maintain its influence in the interagency policy-making process.

Moreover, some officials believed that a decentralized arrangement improves operations analyst efficiency. Others maintained that a centralized operations analysis group would enhance efficiency, provide an independent viewpoint on bureau products, and anticipate the bureaus' future needs.

We could not determine the correctness of either point of view regarding the abolishment of OA due to (1) a lack of available documentation to objectively determine the merits of OA, current arrangements, and possible future arrangements, and (2) the subjective nature of many of the opposing arguments.

ACDA has not thoroughly evaluated its operations analysis needs

In our report to the Director of ACDA we noted that ACDA had not thoroughly evaluated the operations analysis capabilities required in the future to fulfill its mission, nor had it decided

how such requirements would be best met. Periodic, Agency-wide planning for this support function would provide some assurance that changing demands for operations analysis could be met.

Planning efforts related to operations analysis have been essentially limited, ad hoc exercises. Because planning for operations analysis may be complex (the demand is said by some government officials to be very uneven and difficult to predict), reliance on sporadic or ad hoc planning exercises tends to increase the likelihood that demands will arise unforeseen or that unnecessary resources will be maintained indefinitely.

In periodically determining the extent and nature of operations analysis capabilities needed by ACDA to fulfill all aspects of its mandate under the Arms Control and Disarmament Act, the Director should consider a number of key factors, including the

- expected scope and type of ACDA activities, given its legislative authorities;
- current and future needs of ACDA's bureaus and other consumers of operations analysis support;
- degree to which ACDA needs the capability to adequately and independently evaluate the arms control-related positions and analyses of other U.S. agencies; and
- opportunity to develop greater access to operations analysis capabilities of other agencies, including DOD.

After identifying ACDA's operations analysis needs, the Director must resolve the question of organizational arrangement.

CONCLUSIONS

ACDA must improve all aspects of its ADP management, so that the Agency can assure itself that ADP resources are adequate and that they are directed to their best use. ACDA also needs to comply with OMB directives on ADP security. Although more formal management mechanisms are needed, they need not be expensive or overly burdensome. A small agency, like ACDA, should not require the complex procedures used by a much larger department or agency.

ACDA officials disagreed among themselves as to the potential impact of the level of operations analysis resources and organizational structure at the time of our fieldwork. Because, in part,

of a lack of adequate records, we could not adequately analyze the relative merits of these various points of view. Nonetheless, a number of officials indicated at least some degree of concern regarding ACDA's operations analysis capabilities. Because of this concern, as well as the potential difficulties in predicting demand for operations analysis support services, we believe that ACDA should periodically and systematically plan for operations analysis. Such planning should help ACDA ensure that it will have the resources it will need to meet its responsibilities without maintaining unnecessary capabilities.

AGENCY ACTIONS AND OUR EVALUATION

In our report to the Director of ACDA, we recommended that he

- develop a comprehensive ADP planning process, which requires top management involvement, well-supported justification of stated needs, and periodic feedback from users;
- implement an ADP cost accounting system which complies with A-121;
- establish a computer security program which complies with Transmittal Memorandum Number 1 to A-71; and
- periodically review and assess ACDA's operations analysis needs and capabilities, and determine what adjustments in allocated resources, organizational structures, and access to other agencies' resources are required to best meet identified needs.

In his September 12, 1983 comments on these recommendations, the Director of ACDA informed us that the report would be helpful to ACDA in its review of its operating procedures and practices. Moreover, the Director noted that he was initiating ACDA reviews on (1) ADP planning procedures, (2) computer security, (3) the Agency's requirements for operations analysis, and (4) implementation of the information management requirements of the Paperwork Reduction Act of 1980. The Director did not respond to our recommendation that the Agency implement an ADP cost accounting system which complies with OMB Circular A-121. We believe that such a system is needed and its specific features should be considered by ACDA in its reviews of ADP management.

In February 1984, the Director informed the Senate and House Subcommittees on Commerce, Justice, State, and the Judiciary that, on December 9, 1983, he had directed an internal review of (1) our report, (2) resources needed to meet ACDA program requirements, and (3) procedures and management structures to achieve effective operations research for ACDA's maximum benefit. As a result of that review, he approved

- establishing an operations analysis organization within VI, with overall ADP and operations analysis responsibilities;
- augmenting the operations analysis staff by transferring an analyst to VI and establishing two new positions; and
- increasing the fiscal year 1984 computer budget by \$80,000.

DOD, in its September 1983 comments, took no position regarding our findings and recommendations. An OMB official informed us that OMB concurred with ACDA's September 1983 comments.

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CHIEF OF STAFF

Congress of the United States

Committee on Foreign Affairs

House of Representatives
Washington, D.C. 20515

March 31, 1983

Mr. Charles A. Bowsher
Comptroller General of the
United States
441 G Street, N.W.
Room 7026
Washington, D.C. 20548

Dear Mr. Bowsher:

In January of this year, the Subcommittee on International Security and Scientific Affairs asked your staff for assistance in preparing for hearings this Spring on the fiscal year 1984-1985 authorization request for the Arms Control and Disarmament Agency (ACDA). After reviewing the information furnished by your staff, we asked the General Accounting Office to testify on the first day of the hearings. Mr. Frank Conahan testified before the subcommittee on March 24, and presented a number of pertinent issues bearing on ACDA's ability to effectively carry out its responsibilities as mandated by law.

We would like your staff to continue its work and complete the development of the issues presented by Mr. Conahan regarding ACDA, such as:

- adequacy of its internal controls;
- management of its arms control research programs;
and
- development and operation of computer-based support for its programs and activities.

We would appreciate the final report on these, as well as other matters which may arise, be available to the subcommittee by no later than this September. We recognize, however, that ACDA should take corrective actions as soon as possible.

Mr. Charles Bowsher

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Therefore, interim reports by your staff should continue to be submitted to the subcommittee on these issues as they are developed.

This request should be coordinated with Mr. Ivo Spalatin, Staff Director of the subcommittee.

Thanking you for your attention to this request, we are

Sincerely yours,


Chairman


Ranking Minority Member

CJZ/WSB:isj

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