

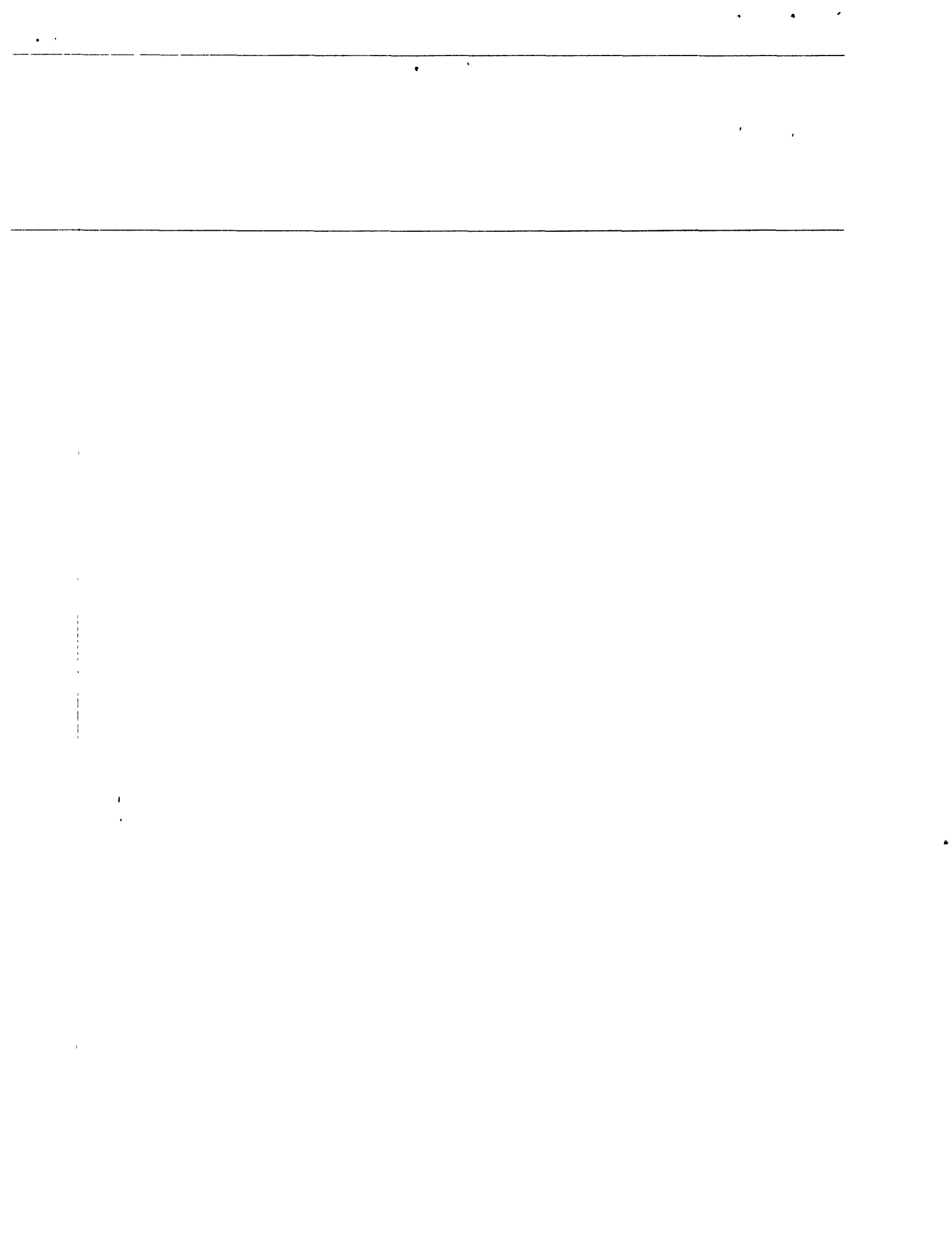
GAO

July 1986

STRATEGIC DEFENSE  
INITIATIVE PROGRAM

Controls Needed Over  
Construction and  
Operational Support  
Funds







United States  
General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-223094

July 24, 1986

The Honorable Caspar W. Weinberger  
The Secretary of Defense

Dear Mr. Secretary.

We recently completed a survey of the Strategic Defense Initiative Organization's (SDIO's) plans for constructing facilities for the Strategic Defense Initiative (SDI) Program.

Our objective was to determine if adequate management controls were in place to identify, plan, review, approve, and notify the Congress of SDIO-funded construction projects. We conducted the survey between July 1985 and January 1986 at SDIO Headquarters and various locations where SDI research is conducted. (See app. III.)

We found that (1) contrary to law, SDIO did not notify the Congress in advance of the expenditure of funds for a construction project that was not previously authorized, (2) contrary to a Department of Defense (DOD) directive, SDIO did not notify the Congress in advance of the expenditure of funds for a construction project at a contractor owned and operated facility undertaken with Research, Development, Test, and Evaluation (RDT&E) funds, and (3) agencies involved in SDI research used RDT&E funds for projects when Military Construction funds should have been used. This occurred because SDIO did not receive adequate or timely information about construction projects from the SDI research agencies (See app. I.)

We also found that SDI research funds were used for operational support such as to repair a roof and to maintain facilities. We found no evidence that the Congress was aware that SDIO funds were used for such items. No specific written policies or controls have been established for operating and maintaining facilities once they are acquired or constructed. (See app. II.)

A number of the problems we identified occurred during SDIO's start-up period. During our work, SDIO began actions to improve its controls over construction projects. On February 19, 1986, SDIO issued guidance for the submission, review, and approval of projects which could help improve its controls.

---

## Background

SDI was initiated after President Reagan called for a broad-based, comprehensive research program to explore and demonstrate key technologies required to defend against ballistic missiles.

In April 1984 the Secretary of Defense chartered SDIO as manager of this major research effort. SDIO is to determine which research efforts will be undertaken, provide the funds to executing agencies to carry out the research, establish agreements as necessary to ensure proper coordination and execution of the program, and communicate the objectives and progress of the SDI program to the Congress and the public. Executing agencies include the three military services, the Defense Nuclear Agency, and the Defense Advanced Research Projects Agency.

SDI research is funded under five program elements. SDIO distributes funds to the executing agencies by these program elements. SDIO and the executing agencies decide on the amount of funds to be distributed to the organizations responsible for work described in work package directives. For fiscal years 1985 and 1986, SDIO received all of its funds from the RDT&E appropriations for Defense Agencies.

SDIO uses the work package directive as its principal management document. In essence, the work package directive is an agreement between SDIO and its executing agencies on the goals and objectives of the research work to be accomplished, measures to be used to evaluate technical achievements, and the financial resources that are allocated by fiscal year to meet the stated technical objectives. Instructions for the preparation of work package directives did not require facility requirements to be described. Executing agencies manage the research work for SDIO within the parameters established by the work package directives.

---

## Improvements Needed in SDIO's Controls Over Construction Projects

When we started our work in July 1985, SDIO relied on executing agencies to notify it of construction projects that are needed to support research efforts and to submit the necessary project documents to SDIO. The agencies did not always notify SDIO and, as a result (1) the Congress was not notified, as required by law in one instance and a DOD directive in another instance, in advance of the expenditure of funds for two military construction projects, and (2) the agencies used RDT&E funds when Military Construction funds should have been used. SDIO did not have a process to provide information to adequately identify, plan, and budget for projects planned by executing agencies to support the SDI program.

---

There seemed to be uncertainty and confusion within the Army and the Air Force organizations regarding the process to be followed in submitting project documents for review by higher authorities and the services' and SDIO's responsibilities in notifying the Congress of the projects. The organizations were familiar with their service requirements, but not how SDIO fit into the project planning, review, and notification process. SDIO needed to provide clearer guidance to its executing agencies regarding their roles in the facilities' planning, review, and notification process to ensure that it receives information on construction projects in a timely manner.

Many of these conditions were discovered when SDIO began an effort in July 1985 to identify facilities planned by its executing agencies. By soliciting information from those agencies and visiting activities where SDIO research is conducted, SDIO's Resource Management officials were told of at least 22 construction projects with an estimated cost of about \$81 million.

At the conclusion of our work, SDIO Resource Management officials had distributed for comment draft guidance for the submission, review, and approval of construction projects. The guidance, issued on February 19, 1986, should help prevent the problems from recurring.

---

## Notification to the Congress

Military construction projects are normally carried out with funds from Military Construction appropriations. Under certain specific conditions, military construction projects may be funded with RDT&E funds.

Under 10 U.S.C. 2802, the Secretary of Defense and the Secretaries of the military departments may carry out military construction projects that have been authorized by law. Ordinarily, this is done through the annual enactment of the Military Construction Authorization Act, with funding for the projects contained in the annual Military Construction Appropriation Act. However, 10 U.S.C. 2805 provides that the Secretary concerned has authority to carry out minor military construction projects that have not been previously authorized in the annual Military Construction Authorization Act. The maximum amount for a minor military construction project has been and is currently set by law at \$1 million.

If the Secretary decides to exercise such authority, with respect to a minor military construction project that cost more than \$500,000, 10 U.S.C. 2805 requires the Secretary to submit a report to the Senate and

---

House Committees on Armed Services and on Appropriations. The report should include the project's justification and its estimated cost. The project may then be carried out only after 21 days have passed or after each committee has approved the project, whichever comes first. The Secretary of Defense has delegated this responsibility to his directors of Defense agencies, including the Director of SDIO. We were informed by DOD counsel that as a matter of policy, DOD ordinarily notifies the Congress of minor military construction projects that exceed \$200,000.

Because SDIO was not established until April 1984, it was difficult, if not impossible, for the Secretary of Defense to request authority for SDIO construction projects during the initial annual authorization and appropriation cycles. Consequently, SDIO construction projects were not included in the Military Construction Authorization Acts for either fiscal year 1985 or 1986.

In one instance, we found that design and construction of a previously unauthorized project with a cost over \$500,000 began before SDIO notified the authorization and appropriation Committees of the Congress. We also found that the Committees had not been notified of other previously unauthorized construction projects planned for fiscal years 1985 and 1986, but construction had not begun at the time we completed our work in January 1986.

Under 10 U.S.C. 2353(a) "A contract of a military department for research and development, or both, may provide for the acquisition or construction by, or furnishing to, the contractor, of research, developmental, or test facilities and equipment that the Secretary of the military department concerned determines to be necessary for the performance of the contract....This subsection does not authorize new construction or improvements having general utility." According to DOD Directive 4275.5, which implements 10 U.S.C. 2353, the Congress must be notified in advance of starting any project involving construction, regardless of the dollar amount, that involves contractor-owned and-operated facilities which are acquired, modernized, expanded, or constructed with research and development funds. We found in one instance that SDIO RDT&E funds were used to perform construction at a contractor owned and operated facility prior to the required Congressional notification.

---

## Use of RDT&E Funds

In other cases, SDIO did not have the opportunity to preclude some agencies from using RDT&E funds for facility design and construction when Military Construction funds should have been used. DOD policy, as expressed in DOD Directive 7040.2, which is consistent with statutory provisions in 10 U.S.C. 2802 and 2807, is to finance all costs associated with the construction of a facility, including planning, design, and construction overhead, from the Military Construction appropriation provided for that purpose. DOD policy, as set forth in DOD Directive 4270.24 and the Budget Guidance Manual, also states that the acquisition or construction of facilities at government owned and operated facilities which cost over \$200,000 should be financed from the Military Construction appropriation. Under 10 U.S.C. 2805 minor military construction projects costing \$200,000 or less can be financed using operations and maintenance funds. Under standard language contained in DOD's annual appropriation act, DOD can also use RDT&E funds to the same extent (up to a maximum of \$200,000) to finance construction projects involving research and development facilities. However, in accordance with the policy expressed in the Budget Guidance Manual, this authority cannot be used to finance construction with RDT&E funds at a contractor-owned facility.

We found that the Army and Air Force had improperly used RDT&E funds for the planning and design of facilities to be constructed with Military Construction appropriations. We also found an Air Force project to convert a warehouse into an office complex, located on a government owned and operated facility with costs exceeding \$200,000, undertaken with RDT&E funds. The Air Force believed that this was proper since the project was subdivided into maintenance, repair, and construction efforts and the construction portion did not exceed the \$200,000 limit. We believe that the efforts were so interrelated that they should have been considered one project and funded under the Military Construction appropriation. This would have been consistent with DOD Directive 4270.24 which states that if all the work on a project is so integrated as to preclude the practical separation of construction from maintenance and repair costs, the entire project should be accomplished as construction.

---

## Conclusions

The problems identified during the course of our survey showed that SDIO needed better control over its facility construction program. They also showed that SDIO needed to provide clearer guidance to its executing agencies regarding the processes to be followed in submitting project

documents for review and approval and the agencies' and SDIO's responsibilities in the planning and review process and in notifying the Congress. We discussed these weaknesses with SDIO Resource Management officials at the conclusion of our work in January 1986 and suggested that they consider (1) establishing a mechanism, such as the work package directive, by which executing agencies can inform SDIO of facilities requirements in sufficient time for SDIO to review, budget for, and notify the Congress of facilities, and (2) providing guidance to the military services and other executing agencies on their roles and responsibilities in the SDI construction program. On February 19, 1986, SDIO issued guidance to its executing agencies for the submission, review, and approval of facility projects in support of the SDI program. The guidance specifies (1) SDIO's and the agencies' responsibilities in the facility planning and execution process, (2) that test support facilities that are required to support SDI research and development efforts are to be identified in work package directives, and (3) that agencies are to submit to SDIO all test facility requirements as part of their annual budget process.

We conclude that SDIO improperly charged its RDT&E accounts for expenditures that should have been charged against Military Construction funds. We note that the House Appropriations Committee report on the fiscal year 1987 Military Construction Appropriation Bill expressed concern that existing laws regarding the funding of construction projects be followed by SDIO. In this regard, the Committee directed that it be notified 30 days prior to the execution of any construction contract for the SDIO regardless of the source of funding. The Committee further directed SDIO to submit a report by January 31, 1987, which details all construction projects funded to date and the source of that funding. Improper charges to the accounts of a federal agency to the extent that they cannot be adjusted in the same fiscal year are required to be reported to the Congress (31 U.S.C. 1351). Therefore, in addition to reporting all relevant facts to the House Appropriations Committee, SDIO should also report them to other appropriate committees.

---

## Controls Needed on the Use of SDIO Funds for Operational Support

During our survey, we became aware that executing agencies, such as the Army's Strategic Defense Command, had used and were planning to continue to use SDIO funds for operation and maintenance of facilities, such as repairing roofs, maintaining grounds, and acquiring transportation assets. In at least one case, use of these funds will not contribute in any way toward accomplishing the SDI research objectives.



SDIO does not have specific written policies regarding the use of its research funds for operational support. We found that work package directives generally did not specify when or to what extent SDIO funds would be used to operate and maintain facilities.

The Congress may not be aware that SDIO research funds are being used for operational support items such as those described above. For example, descriptive summaries provided to the Congress for fiscal years 1985 and 1986 did not describe plans to use research funds for maintaining facilities at Kwajalein Missile Range in the Marshall Islands or for maintaining and protecting the Army's Safeguard missile site in North Dakota.

---

## Conclusions

We believe SDIO needs to establish policies and controls on the use of its funds for operational support of facilities. It could be argued that SDIO should be responsible for providing facility and operational support to carry out its research programs. On the other hand, the availability of SDIO appropriations for such purposes could provide executing agencies the opportunity to remedy maintenance backlogs, improve office conditions, and acquire equipment and transportation assets that normally would not be funded. Moreover, an increasing amount of SDIO resources may be called upon to operate and maintain facilities once constructed, thus diluting the resources available for research.

We also believe that the Congress should be aware of the extent that SDIO appropriations are used for operational support of facilities. We found no evidence that would suggest that Congress is aware that SDIO funds were used for such purposes and that SDIO's cost of operational support could increase in the future.

---

## Recommendations

We recommend that the Secretary of Defense require the Director, SDIO, to:

- Establish (1) policies on the use of SDI funds for operational support and (2) agreements with executing agencies delineating responsibilities for funding operational support of SDIO-funded facilities.
- Describe in budget documents the planned use of RDT&E funds for operational support costs, such as operation and maintenance of facilities and acquisition of transportation assets.

## Agency Comments and Our Evaluation

DOD basically disagreed with our findings, conclusions, and recommendations. In commenting on a draft of this report the DOD said that it agreed that during the early and formative years of the SDIO, the usual turbulence associated with the initiation of a major new program was encountered. DOD recognized that improvements in the identification of test support facilities requirements for SDIO were required at the time we began our work and actions have been taken to improve SDIO's control over its projects.

DOD did not agree that RDT&E funds were improperly used for project design and construction. DOD said that as a result of a thorough review of the SDI construction program and the SDI program management efforts, it determined that funds allocated to the SDI were, and are, properly used to fund its test support facilities and support requirements. DOD also said that it determined that SDIO and executing agencies followed proper procedures with respect to assigned facility related efforts.

Our report recognizes SDIO's actions to improve its controls over construction projects and that a number of the problems we identified occurred during SDIO's start-up period. We continue to believe that (1) contrary to law, SDIO did not notify the Congress in advance of the expenditure of funds for a construction project that was not previously authorized, (2) contrary to a DOD directive, SDIO did not notify the Congress in advance of the expenditure of funds for a project at a contractor owned and operated facility that was undertaken with RDT&E funds and (3) agencies used RDT&E funds for projects when Military Construction funds should have been used.

Although DOD agreed with our recommendation that SDIO examine all SDIO funded construction projects to determine if RDT&E funds were properly used, its concurrence is based on SDIO's already completed review of projects identified in our draft report. According to DOD, that review determined in each case that the appropriate funding source was used consistent with Public Law, DOD policy, and applicable regulatory requirements. Our review of the projects did not come to the same conclusions. We believe SDIO misinterpreted applicable laws and did not follow DOD directives. SDIO should take those actions required by the House Appropriations Committee report on the fiscal year 1987 Military Construction Appropriation Bill. This would include reporting all relevant facts, if accounts cannot be adjusted in the same fiscal year, concerning funds improperly charged to the warehouse conversion at the Los Angeles Air Force Station, California; Development and Evaluation

---

Facility, Hanscom Air Force Base, Massachusetts; Ballistic Missile Defense Test and Evaluation Center, Huntsville, Alabama; and the High Endoatmospheric Defense Interceptor launch complexes at White Sands Missile Range, New Mexico and at Kwajalein Missile Range, Marshall Islands. We also believe DOD should examine other projects in light of the specific legal and policy citations included in this report.

DOD did not agree that RDT&E funds were improperly used for operation and maintenance support requirements. DOD believes that the planned use of funds allocated to the SDIO is adequately described in budget documents already provided to the Congress and that policies and procedures are in place concerning the use of research and development funds for operational support.

We do not question the propriety of operation and maintenance support requirements. We continue to believe that operational support items such as those described in our report are not adequately identified to the Congress. We also continue to believe, as does the Army Strategic Defense Command, that SDIO needs to establish policies on the use of SDI funds for operational support and agreements with executing agencies delineating responsibilities for funding operational support of SDIO funded facilities.

DOD's comments and our evaluation of them are contained in appendix IV.

---

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen of the above four committees and the Chairmen of the House and Senate Committees on Armed Services. We are also sending copies to the Director, Strategic Defense Initiative Organization; the Secretaries of the Army, Navy, and Air Force; the Directors, Defense Nuclear Agency, Defense Advanced

Research Projects Agency, and the Office of Management and Budget;  
and others upon request.

Sincerely yours,

A handwritten signature in black ink that reads "Frank C. Conahan". The signature is written in a cursive style with a large initial 'F' and 'C'.

Frank C. Conahan  
Director



---

# Contents

---

Letter		1
<hr/>		
Appendix I		14
Improvements Needed in SDIO's Controls Over Construction Projects	Efforts to Identify SDI Facility Construction Requirements	14
	Results of Inadequate Controls	18
<hr/>		
Appendix II		23
Controls Needed on the Use of SDIO Funds for Operational Support		
<hr/>		
Appendix III		25
Objectives, Scope, and Methodology		
<hr/>		
Appendix IV		27
Comments From the Director, Strategic Defense Initiative Organization	GAO Comments	39
<hr/>		
Tables		
	Table I.1: Construction Projects Identified by SDIO as of October 10, 1985	16
	Table I.2: Construction Projects Identified During SDIO Visits	17

---

**Abbreviations**

DOD	Department of Defense
GAO	General Accounting Office
MC	Military Construction
RDT&E	Research, Development, Test and Evaluation
SDI	Strategic Defense Initiative
SDIO	Strategic Defense Initiative Organization

# Improvements Needed in SDIO's Controls Over Construction Projects

Over the years, the Congress and federal agencies have recognized the need for effective controls over the construction of facilities. The permanent and immobile nature of a facility requires careful appraisal of many important factors, such as cost, size, location, long-range plans, environmental considerations, and energy conservation.

Recognizing this need, DOD and the military services have established guidelines in the form of directives and regulations to provide the framework for effective controls over facility construction. Essential attributes of a facility construction program include:

1. A continuous, coordinated process for identifying and planning current and future facility needs.
2. Comprehensive reviews of facility plans to examine alternatives, fully consider technological changes, and assign priorities.
3. An orderly process for programming and budgeting facility design and construction in concert with mission requirements and priorities.
4. Coordination with other DOD agencies and activities responsible for reviewing and controlling facility design and construction.
5. Assurance that the Congress, to carry out its oversight responsibilities, is notified in advance of facility design and construction that were not previously authorized by law.

## Efforts to Identify SDI Facility Construction Requirements

In July 1985 an official within SDIO's Resource Management Office was made responsible for planning and programming for resources needed to construct facilities in support of the SDI research program. SDIO recognized that it did not have adequate information to identify, plan, and budget for its facility construction needs. SDIO relies on executing agencies to inform it of construction projects and to submit the necessary project documents to SDIO for approval. But, the agencies did not always inform SDIO and, in some cases, the information was received too late for budgeting purposes. By October 1985, 10 construction projects, with an estimated cost of \$59.6 million, had been identified and incorporated into the fiscal years 1986 through 1988 programs. (See table I.1.) SDIO had decided that nine of these projects would be funded from Military Construction appropriations and one project would be funded from RDT&E appropriations. Two of the 10 projects were subsequently deferred by SDIO.



---

**Appendix I  
Improvements Needed in SDIO's Controls  
Over Construction Projects**

---

SDIO's list of projects was not complete. SDIO officials and GAO evaluators identified at least 12 other ongoing or planned construction projects during visits to various military and civilian activities that are conducting SDIO-funded research. (See table I.2.) Executing agencies planned to use SDIO's RDT&E appropriated funds to construct all but one of these facilities during fiscal years 1985 through 1988.<sup>1</sup> Most of the projects, estimated to cost \$21.4 million, involve modifications, extensions, or conversions of existing facilities.<sup>2</sup>

The fact that such measures were needed to identify construction projects makes it apparent that a more systematic process was needed. SDI research efforts are so dispersed among different agencies and activities that it would be surprising to expect all facility requirements to surface to SDIO without a structured means of accumulating the information.

Work package directives are SDIO's primary documents for managing and budgeting funds for research. But instructions for the preparation of work package directives did not require facility requirements to be described, and they seldom were. If SDIO managers and executing agencies were to describe their facility requirements in work package directives, SDIO would be able to (1) better evaluate the need for planned facilities, (2) program funds to support design and construction, and (3) promote timely submission of project documents and advance notification to the Congress of construction projects that were not previously authorized by law.

---

<sup>1</sup>The costs of two projects were to be divided between SDIO and the Air Force

<sup>2</sup>Military construction as defined by 10 U S C 2801 includes any construction, development, conversion, or extension of any kind carried out with respect to a military installation

**Appendix I  
Improvements Needed in SDIO's Controls  
Over Construction Projects**

**Table I.1: Construction Projects Identified by SDIO as of October 10, 1985**

Dollars in millions

<b>Project title</b>	<b>Location</b>	<b>Executing agency</b>	<b>Type of funds</b>	<b>Design year<sup>a</sup></b>	<b>Estimated design cost</b>	<b>Construction year<sup>b</sup></b>	<b>Estimated construction costs</b>
Accelerated Test Stand Upgrade	Los Alamos, NM	Army	RDT&E	1986	\$ 960	1986	\$15 300
Intermediate Range Booster System Launch Complex	Pacific Test Range Kauai, HI	Army	MC <sup>c</sup>	1986	232	1986	2 991 <sup>d</sup>
Braduskill Interceptor Concept Launch Complex	Kwajalein Missile Range	Army	MC	1986	160	1987	1 428
Los Angeles Air Force Station System Management and Engineering Facility	Los Angeles CA	Air Force	MC	1986	1 500	1987	15 000
SDI Development and Evaluation Facility	Hanscom Air Force Base MA	Air Force	MC	1986	670	1987	6 700 <sup>e</sup>
Beryllium Propellant Facility	Edwards Air Force Base, CA	Air Force	MC	1986	430	1987	4 300
High Endoatmospheric Defense Interceptor Launch Complex	White Sands Missile Range, NM	Army	MC	1986	115	1987	2 100
Exoatmospheric Reentry Interceptor Subsystem Launch Complex	Kwajalein Missile Range	Army	MC	1986	450	1988	4 458
Instrumentation Complex	Wake Island	Army	MC	1986	450	1988	4 315
Designating Optical Tracker Launch Complex	Kwajalein Missile Range	Army	MC	1986	180	1988	3 051
<b>Total</b>					<b>\$5.147</b>		<b>\$59.643</b>

<sup>a</sup>Design year is the fiscal year that design is started on a construction project

<sup>b</sup>Construction year is the fiscal year that funds are made available for construction

<sup>c</sup>Military Construction

<sup>d</sup>Project subsequently deferred until fiscal year 1987

<sup>e</sup>Project subsequently deferred indefinitely by SDIO

**Appendix I  
Improvements Needed in SDIO's Controls  
Over Construction Projects**

**Table I.2: Construction Projects Identified During SDIO Visits**

Dollars in millions

<b>Project title</b>	<b>Location</b>	<b>Executing agency</b>	<b>Type of funds</b>	<b>Program year</b>	<b>Estimated construction costs</b>
Conversion of Warehouse to Office Complex	Los Angeles Air Force Station, CA	Air Force	RDT&E	1985	\$ 0 561
Modifications to MIT/Lincoln Laboratory's Kilnbrook Building	Lincoln Laboratory Lexington, MA	Army	RDT&E	1985	125
Addition to Electronic Research Laboratory—Building 1302C	Lincoln Laboratory Lexington, MA	Air Force	RDT&E	1985	2 679 <sup>a</sup>
Addition to ALCOR Facility	Kwajalein Missile Range	Army	RDT&E	1986	483
Addition to Electronic Research Laboratory—Building 1312L	Lincoln Laboratory Lexington, MA	Air Force	RDT&E	1986	1 787 <sup>b</sup>
Extension to Air Force Maui Optical Station	Maui, HI	Air Force	RDT&E	1986	800 <sup>c</sup>
Modifications and Additions for a Ground Test of Accelerator Facility	Los Alamos, NM	Army	RDT&E	1986	3 244
High Resolution Atomic Beam Facility	Los Alamos, NM	Air Force	RDT&E	1986	331
Modifications to Free Electron Laser Facility	Los Alamos, NM	Army	RDT&E	1987	.
Construction of Laboratory Facility for SDIO	Los Alamos, NM	Army	RDT&E	1987	3 000
Construction of Office Complex Supporting SDIO	Los Alamos, NM	Army	RDT&E	1987	5 000
Office and Shop Space, Warehouse, Utility Lines, and Improved Drainage	White Sands Missile Range, NM	Army	MC <sup>e</sup>	1988	3 409
<b>Total</b>					<b>\$21.419</b>

<sup>a</sup>Costs to be divided between SDIO (40%) and Air Force (60%)

<sup>b</sup>Costs to be divided between SDIO (67%) and Air Force (33%)

<sup>c</sup>Costs based on discussions with agency officials during visits by SDIO officials and GAO evaluators to Los Alamos National Laboratory, New Mexico and Maui, Hawaii

<sup>d</sup>Cost data not available

<sup>e</sup>Military Construction

The need for SDIO guidance regarding the processes executing agencies are to follow in submitting project documents and the agencies' responsibilities vis-a-vis SDIO's in the facilities' planning and review process and in notifying the Congress of planned projects became evident during our discussions with Army and Air Force officials. These officials were aware of their own agencies' processes and requirements but expressed uncertainty regarding the processes to be followed for SDIO facility construction efforts and the responsibilities of their agencies.

---

## **Results of Inadequate Controls**

Because SDIO was unaware of planned construction projects, it did not have the opportunity to (1) notify the Congress in advance of the expenditure of funds for a previously unauthorized construction project, as required by law, (2) notify the Congress in advance of the expenditure of funds for a construction project at a contractor owned and operated facility undertaken with RDT&E funds, as required by a DOD directive, and (3) preclude some executing agencies from using RDT&E funds for design and construction when Military Construction funds should have been used.

---

## **Failure to Notify the Congress**

We found that funds had been spent to start construction of two projects without the necessary congressional notifications. In addition, the Congress was not notified of other unauthorized projects that executing agencies planned for fiscal years 1985 and 1986 but for which construction had not begun. SDIO was preparing the necessary notifications at the conclusion of our work.

Under 10 U.S.C. 2802, the Secretary of Defense and the Secretaries of the military departments may carry out military construction projects that have been authorized by law. Ordinarily, this is done through the annual enactment of the Military Construction Authorization Act, with funding for the projects contained in the annual Military Construction Appropriation Act. However, 10 U.S.C. 2805 provides that the Secretary concerned has the authority to carry out minor military construction projects that have not been previously authorized in the annual Military Construction Authorization Act. The maximum amount for a minor military construction project has been and is currently set by law at \$1 million.

If the Secretary decides to exercise such authority, with respect to a minor military construction project that costs more than \$500,000, 10 U.S.C. 2805 requires the Secretary to submit a report to the Senate and

House Committees on Armed Services and on Appropriations. The report should include the project's justification and its estimated cost. The project may then be carried out only after 21 days have passed or after each Committee has approved the project, whichever comes first. According to DOD Directive 4275.5, directors of DOD agencies, such as SDIO, are responsible for ensuring that the Congress is notified of all facility projects involving construction. We were informed by DOD counsel that as a matter of policy, DOD ordinarily notifies the Congress of minor military construction projects that exceed \$200,000.

Advance notification is important because it allows the Congress to carry out its oversight responsibilities. For example, in May 1985, SDIO notified the House and Senate Committees on Armed Services and on Appropriations that it intended to use fiscal year 1985 RDT&E funds to construct a \$16.2 million neutral particle beam accelerator facility at Los Alamos National Laboratory, New Mexico. In response, the Chairman, Subcommittee on Defense, House Committee on Appropriations, acting on behalf of the Committee, directed SDIO to discontinue its planned obligation of these funds for this facility because (1) the Committee was unwilling to approve initial funding for any major project prior to a full review during the normal congressional budget justification process and (2) the need for funding for the accelerator would be questionable if the pace of the directed energy research continued to be slowed.

For one previously unauthorized project, construction had begun without the notification to the Congress required by 10 U.S.C. 2805 because SDIO was not aware of the project. The project involved converting a warehouse into an office complex at Los Angeles Air Force Station, as discussed at greater length on pages 21 and 22.

For another project, we found that the Congress had not been notified prior to the expenditure of RDT&E funds as required by DOD Directive 4275.5. The directive, which implements 10 U.S.C. 2353, requires that the Congress be notified in advance of starting any project involving construction using RDT&E funds at a contractor-owned facility regardless of the dollar amount. Under this directive and 10 U.S.C. 2353, RDT&E funds can be used for construction involving specialized research and development facilities determined to be necessary for the performance of a contract for a military department. The construction project involved alterations to a rented office building near Lincoln Laboratory in Lexington, Massachusetts. The U.S. Army Strategic Defense Command authorized the Massachusetts Institute of Technology's Lincoln

Laboratory to initiate a \$4.3-million research effort which included installing a computer system and making alterations to a rented office building that it occupied. The alterations were estimated to cost \$125,000 and included constructing partitions, ceilings, and raised flooring; installing air conditioning and fire safety equipment; and providing special security measures.

We also found that the Congress had not been notified of other previously unauthorized construction projects planned for fiscal years 1985 and 1986, but construction had not begun at the time we completed our work. Project data forms were not included in the fiscal year 1985 budget because SDIO was not established until April 1984, after the Secretary of Defense was required by law to submit the request for the fiscal year Military Construction authorization

Facility engineering officials told us that project data forms were not included in the fiscal year 1986 budget justification because only a few months were available to prepare and submit the documentation. As a result, SDIO construction projects were not included in the Military Construction Authorization Act for fiscal year 1986. At the conclusion of our work, an SDIO Resource Management official told us that the necessary documentation was being prepared to notify the House and Senate authorization and appropriations committees of these projects.

---

**Improper Use of RDT&E  
Funds**

During our work, we found several instances where RDT&E funds were used for design and construction efforts when Military Construction funds should have been used. Under 10 U.S.C. 2807, DOD is authorized to carry out construction design using Military Construction funds, within amounts appropriated for such purposes, in connection with military construction projects not previously authorized by law.

DOD policy, as expressed in DOD Directive 7040.2, which is consistent with statutory provisions in 10 U.S.C. 2802 and 2807, states that costs associated with the construction of a facility, including planning, design, and construction overhead, are to be financed from the Military Construction appropriation provided for that purpose. This does not cover advance planning which includes such functions as developing the requirements and master plan for a military construction project, conducting alternative site studies, developing and validating the necessary documentation prior to commencing project design, preparing preliminary engineering analyses and studies, and similar activities. According to the explanation of the Senate Committee on Armed Services when 10

---

**Appendix I  
Improvements Needed in SDIO's Controls  
Over Construction Projects**

---

U.S.C. 2807 was enacted in 1982, these types of advance planning activities should be funded from the operations and maintenance accounts or, by extension, when the construction of research and development facilities is involved, from the RDT&E account. However, we found that both the Army and the Air Force were using RDT&E funds for specific project planning and design, beyond the advance planning stage, of facilities to be constructed with Military Construction funds.

Before seeking SDIO's approval, the Army Strategic Defense Command (1) instructed the Corps of Engineers to begin planning and design efforts on three projects<sup>3</sup> and (2) obligated about \$1.7 million in RDT&E funds for these projects. Some funds were spent. When the Command did seek SDIO's approval, SDIO decided that Military Construction, rather than RDT&E, funds would be used to construct the facilities and that one of the three projects would be postponed indefinitely.

At the conclusion of our survey, Strategic Defense Command officials told us they were taking action to deobligate about \$882,000.

Similarly, the Air Force's Electronic Systems Division spent \$76,500 in RDT&E funds to complete initial design of a Development Evaluation Facility at Hanscom Air Force Base, Massachusetts. At the time of our visit, project officials indicated that the architect/engineer had completed project design to the 35-percent level. SDIO had included this facility in its fiscal year 1987 Military Construction program. Air Force officials responsible for the project said they used RDT&E funds to meet critical construction milestones, but SDIO recently decided to postpone the project indefinitely because requirements were not defined sufficiently. Officials from SDIO's Resource Management Office were not aware that RDT&E funds had been spent for design efforts.

In addition, SDIO was not aware that the Air Force's Space Division was spending \$560,900 of fiscal year 1985 RDT&E funds to convert a warehouse into an office complex at the Los Angeles Air Force Station, California. The Space Division subdivided the project into three separate efforts: (1) alter building 80 — \$138,500, (2) repair building 80 — \$340,500, and (3) maintain building 80 — \$81,900. As stated earlier, construction projects to be located on military installations and costing

---

<sup>3</sup>The Ballistic Missile Defense Test and Evaluation Center, Huntsville, Alabama, and the High Endoatmospheric Defense Interceptor launch complexes at White Sands Missile Range, New Mexico, and at Kwajalein Missile Range, Marshall Islands

more than \$200,000 should be funded with Military Construction appropriations. Under authority contained in 10 U.S.C. 2805 and DOD's annual appropriation, minor military construction projects costing \$200,000 or less can be funded using Operation and Maintenance funds or, when research and development facilities are involved, RDT&E funds. RDT&E appropriations were used because Space Division officials considered only the alteration project, estimated to cost less than \$200,000, to be construction. SDIO was not aware of the project because Space Division officials had not notified them.

Space Division officials interpreted Air Force regulations as allowing the total effort to be subdivided into maintenance, repair, and alteration projects. In our opinion, subdividing this project and using RDT&E appropriations was questionable because the repair, alteration, and maintenance efforts were so interrelated that separating alteration from maintenance and repair was not possible. For example, the repair effort included replacement of ceilings, windows, doors, and air-conditioning and electrical systems, including interior wiring and lights; repair of plumbing and roof; and installation of carpeting. The alteration effort included the installation of ceilings, an air-conditioning unit, plumbing, and interior wiring, including office outlets and lights. The maintenance effort included exterior and interior painting and caulking of windows and doors. Under DOD Directive 4270.24, if all of the work on a project "is so integrated as to preclude practical separation of construction from maintenance or repair costs, the entire project shall be accomplished as construction." If this had been done, the total cost of the project would have exceeded the \$500,000 limit on minor military construction and thus DOD would have been required to notify the Congress before construction began.

Executing agencies planned other projects that appear to meet the DOD criteria—construction projects to be located on military installations and cost more than \$200,000—for Military Construction, but the agencies planned to use RDT&E funds. Examples include (1) \$483,000 for an extension to the ALCOR facility at Kwajalein Missile Range, (2) \$4.5 million in additions to the research laboratories at Lincoln Laboratories at Hanscom Air Force Base, Massachusetts, and (3) \$800,000 for an extension to the Air Force's Maui Optical Station in Hawaii.



# Controls Needed on the Use of SDIO Funds for Operational Support

We found that executing agencies had used and were planning to continue to use SDIO research funds to operate and maintain facilities.

It could be argued that SDIO should be responsible for providing facility and operational support to carry out its research programs. For example, government and contractor personnel need office space; test facilities need to be maintained; and a means to transport personnel to and from remote test sites is essential for conducting tests. Conversely, the availability of SDIO appropriations for such purposes could provide executing agencies the opportunity to remedy maintenance backlogs, improve office conditions, satisfy operational responsibilities, and acquire equipment and transportation assets that normally would not be funded. Moreover, an increasing amount of SDIO resources may be called upon to operate and maintain facilities once constructed, thus diluting the resources available for research.

We found that executing agencies had spent or were planning to spend SDIO funds on a variety of operational support activities. For example,

- In fiscal year 1985, the Army Strategic Defense Command obligated \$1 million of SDIO funds to repair and replace the roof of the Meck Island Control Building at Kwajalein Missile Range. Although the building will not likely be used for SDIO research until 1988, Army officials believed the roof replacement was necessary to preserve it for SDIO's future use.
- Each year the Army Strategic Defense Command pays the U.S. Fish and Wildlife Service about \$100,000 in SDIO funds to maintain and protect the Army's Safeguard missile site in North Dakota. The missile site, previously operated by the Command, was deactivated in 1976 when the United States decided it was no longer cost effective to operate. The maintenance and protection is funded by SDIO as part of its funding responsibility for the Command.
- The Army spent about \$100,000 of SDIO funds in fiscal year 1985 to repair and alter an office building at the Army Strategic Defense Command in Huntsville, Alabama.
- White Sands Missile Range officials informed SDIO Resource Management officials in November 1985 that additional warehouses and water and utility lines and improved drainage systems will be needed to accommodate expanded use of a laser facility for SDI research projects. White Sands' officials said that SDIO funds will be needed to pay for these improvements.
- Kwajalein Missile Range officials informed SDIO Resource Management officials in November 1985 that SDIO funds may be needed to purchase a high speed, 200 passenger ferry, at a cost of about \$3 5 million. The

ferry would be needed to transport personnel working on SDI research projects between their homes on Kwajalein Island and their work sites on Meck Island. In commenting on our draft report, DOD stated that SDIO has no planned use of RDT&E funds for the acquisition of transportation assets. Moreover, if the acquisition of specific equipment is required to support the SDI program at the range, it would be funded under the provisions of DOD Directive 3200.11 and such acquisition would be reported.

SDIO is responsible for establishing necessary policies and agreements to ensure proper coordination and execution of the SDI program. Although work package directives describe the tasks to be performed against a technical objective, the directives are not sufficiently descriptive to delineate support responsibilities of executing agencies. As SDIO's principal management document, it would appear that work package directives would be a good mechanism to delineate support responsibilities with some agencies or on some programs.

The Congress has supported a clear delineation of responsibilities between SDIO and executing agencies. During fiscal year 1986 hearings the Subcommittee on Defense, House Committee on Appropriations, stated that formal management policies or directives were necessary to form a clear basis for service relationships and responsibilities, reporting expectations, budget development, and other aspects of SDIO management.

We found no evidence to show that the Congress is aware that SDIO funds have been used for operational support items such as those described. For example, the congressional descriptive summaries for fiscal years 1985 and 1986 did not describe plans to use RDT&E funds for any of the items listed. Because the cost of these items could increase in the future as facilities are built and acquired to support the SDI research program, such information is needed to assist the Congress in carrying out its oversight responsibilities.

# Objectives, Scope, and Methodology

Our objective was to determine if adequate management controls were in place to identify, plan, review, approve, and notify the Congress of SDIO funded construction projects.

We conducted our survey in accordance with generally accepted government auditing standards during the period July 1985 through January 1986 at the

- Strategic Defense Initiative Organization, Washington, D.C.;
- U.S. Air Force Electronic Systems Division, Hanscom Air Force Base, Massachusetts;
- U.S. Air Force Maui Optical Station, Hawaii;
- U.S. Air Force Space Division, Los Angeles, California;
- U.S. Army Strategic Defense Command, Huntsville, Alabama;
- U.S. Army Corps of Engineers, Pacific Ocean Division, Fort Shafter, Hawaii;
- U.S. Navy Pacific Test Range, Barking Sands, Hawaii;
- Kwajalein Missile Range, Marshall Islands;
- Los Alamos National Laboratory, Department of Energy, Los Alamos, New Mexico;
- Massachusetts Institute of Technology (MIT)/Lincoln Laboratory, Lexington, Massachusetts; and
- White Sands Missile Range, New Mexico.

We reviewed planning documents, work package directives, military construction project approval documents, correspondence, and other pertinent documents relating to design and construction efforts. Because no formal SDIO procedures existed for approval and funding of construction projects, we used applicable DOD directives and regulations and statutes to evaluate the procedures and processes that should be followed.

We accompanied officials from SDIO's Resource Management Office to various locations where SDIO facilities are planned. We discussed with SDIO and agency officials the status of SDIO-funded facilities and current SDIO procedures and practices pertaining to facility construction. We did not attempt to identify all SDIO facilities planned or under construction but relied on SDIO and executing agency officials to inform us of facility construction projects planned or underway. Additional facilities may have been identified if we had expanded our survey and visited other locations where SDIO funds were used.

During our work, we became aware that SDIO funds were used for facility and operational support efforts, such as facility maintenance

---

and repair. However, we did not attempt to determine the extent to which this occurred.

# Comments From the Director, Strategic Defense Initiative Organization

Note GAO comments supplementing those in the report text appear at the end of this appendix



DEPARTMENT OF DEFENSE  
STRATEGIC DEFENSE INITIATIVE ORGANIZATION  
WASHINGTON, DC 20301-7100

23 MAY 1986

D

Mr. Frank C. Conahan  
Director, National Security and  
International Affairs Division  
U.S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report entitled, "SDI Program Controls Needed Over Construction and Operational Support Funds," dated April 7, 1986, OSD Case No. 6985, GAO Code 392135.

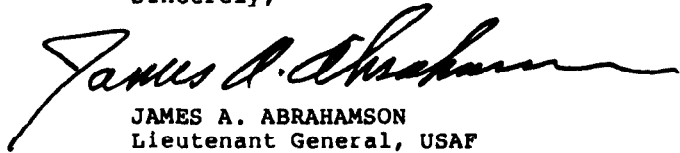
The Department agrees in part with the report's findings and recommendations. The DoD agrees that during the early and formative years of the Strategic Defense Initiative Organization (SDIO), the usual turbulence associated with the initiation of a major new program was encountered. The DoD recognized improvements in the identification of test support facilities requirements for SDIO were required at the time GAO began its work. At that time, as recognized by the GAO, actions were undertaken to streamline the project identification process consistent with overall SDI program objectives. The DoD agrees that these actions have, and will continue to, improve SDIO control over its projects.

The DoD does not agree, however, that Research, Development, Test and Evaluation (RDT&E) funds were improperly used for project design, construction or operation and maintenance support requirements. A thorough review of the SDI construction program and the SDI program management efforts, which contains operations and maintenance and other overhead costs, was recently completed. As a result of that review, the DoD has determined that funds allocated to the SDI were, and are, properly used to fund its test support facilities and support requirements. The DoD has also determined that SDIO and executing agencies followed proper procedures with respect to assigned facility related efforts.

**Appendix IV  
Comments From the Director, Strategic  
Defense Initiative Organization**

The findings and recommendations are addressed in greater detail in the enclosed comments. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,



**JAMES A. ABRAHAMSON  
Lieutenant General, USAF  
Director, Strategic Defense  
Initiative Organization**

**Enclosure**

DEPARTMENT OF DEFENSE COMMENTS  
ON GAO DRAFT REPORT

DATED APRIL 7, 1986 (GAO CODE 392135)

"SDI PROGRAM CONTROLS NEEDED OVER CONSTRUCTION  
AND OPERATIONAL SUPPORT FUNDS"

OSD CASE 6985

\* \* \* \* \*

FINDINGS

- o **FINDING A: Improvements Needed in the Strategic Defense Initiative Organization's (SDIO) Controls Over Construction Projects.** The GAO reported that initially, the SDIO recognized it did not have adequate information to identify, plan and budget for its facility construction needs, and relied on the executing agencies to inform it of construction projects and submit the necessary documents for approval. According to GAO, by October 1985, ten construction projects, with an estimated cost of \$59.6 million, had been identified and incorporated into the FY 1986 through FY 1988 programs. During subsequent joint visits to research activities by SDIO and GAO officials, however, the GAO found the list to be incomplete, with an additional 12 ongoing or planned construction projects identified, at an estimated cost of \$21.4 million. As a result, the GAO found (1) the SDIO did not have an opportunity to notify the Congress of previously unauthorized projects; (2) some executing agencies had used RDT&E funds for design and construction when Military Construction funds should have been used; and (3) some construction projects were delayed. (See Findings B through D). The GAO also found that there seemed to be uncertainty and confusion within the Army and Air Force regarding the process to be followed in submitting project documents and notifying the Congress of SDIO projects, which the GAO concluded indicated a need for the SDIO to provide clearer guidance to its executing agencies. The GAO pointed out, however, that many of these conditions were discovered previously by the SDIO, and on February 19, 1986, the SDIO issued guidance to the agencies covering the submission, review and approval of facility projects in support of the SDI program. The GAO concluded that this guidance should help prevent the problems identified from reoccurring. (pp. 1-3 and 5, Letter; and pp. 9-13, Appendix I, GAO Draft Report).

1

Now on pp 1-6 and 14-18

Appendix IV  
Comments From the Director, Strategic  
Defense Initiative Organization

**DoD POSITION:** Partially concur. The GAO correctly asserts that SDIO has not followed the "normal" processing procedures. As noted by the GAO, a number of the problems did occur during SDIO's start-up period. However, it must be stressed that the SDIO has followed authorized expedite procedures and has complied with funding thresholds established by Congress.

See comment 1

During the formative years of SDIO, the usual turbulence associated with any major new program was encountered. However, the SDIO was not afforded the long lead-time normally associated with construction projects of other established Military Services and Defense Agencies. The formative years were challenging and fast paced. Initial efforts focused on program structure, identification of resource requirements and the reallocation of those resources relative to program goals. In some instances major adjustments in Services and Agencies technology activities transferred to the SDIO were required. As these changes occurred, it became necessary to realign the near term construction program commensurate with test and evaluation requirements and construction affordability.

See comment 2

Near term facility modifications and new construction requirements (FY 1985-FY 1988) subsumed or initiated by the SDIO totalled approximately twenty-two (22) projects at an estimated cost of \$81.1 million. Twelve of these projects were not identified to the SDIO because of program adjustments and the potential for Service funding. As noted by the GAO, timely submission of project data forms for inclusion in the fiscal year 1985 budget submission was not possible, as the SDIO was not organized until April 1984, four months after the President's submission of the budget to the Congress.

See comment 3

Furthermore, the SDIO did not receive its first funding appropriation until FY 1985, and had to use expeditious, but authorized methods to ensure the continuing progress of critical program components. These methods had to be used to support construction requirements, given the normal long-lead budget process relative to military construction. The Congress has realized in the past that some programs of high priority may require expeditious handling and has established procedures and thresholds, as specified in applicable DoD policy and Military Services regulatory guidance.

See comment 4



Appendix IV  
Comments From the Director, Strategic  
Defense Initiative Organization

ee comment 5

As a result of joint visits to several research activities, the GAO reported (1) the SDIO did not have an opportunity to notify the Congress of previously unauthorized projects; (2) that Research, Development, Test and Evaluation (RDT&E) funds were improperly used; and (3) some construction projects were delayed (See Finding B through D). The DOD does not agree that funds were improperly used or that projects were delayed for the reasons cited by the GAO. Further discussion regarding these and other findings is provided in the applicable DoD comments to each finding.

ee comment 6

There may have been some temporary disruption in processing project documentation, however, as pointed out by the GAO this condition was known by the SDIO and positive action was taken. As previously stated, the usual turbulence associated with the establishment of any major new program requires time and considerable effort to overcome. To accomplish everything at the very outset would have been impractical, if not impossible. In the early years, organizational procedures are governed by Public Law, established policy and implementing guidance from the Office, Secretary of Defense. Because legal and policy requirements are not immediately repeated by internal implementing directives (SDIO was not officially established as a Defense Agency with authority to write directives, etc., until March 1986), does not diminish the basic requirement for compliance nor does it lead to the conclusion that the requirements were unknown. The DoD agrees with the GAO that actions taken by the SDIO should help prevent the reoccurrence of the administrative problems in the future.

- o **FINDING B: The Congress Was Not Notified Of Previously Unauthorized Projects.** The GAO reported that Public Law 97-214 requires the Secretary of Defense to submit a report to the Committees on Armed Services and Appropriations covering construction projects not previously authorized. The GAO identified two instances, however, where the design and construction of previously unauthorized projects began before the SDIO notified the Committees. The GAO also identified two other projects planned for FY 1985, and FY 1986, where Congress had not been notified, but pointed out that construction had not begun as of January 1986. The GAO concluded that this failure to report was one result of the SDIO's inadequate controls over its construction projects. (pp. 1 and 3-4, Letter; and pp. 13-15, Appendix I, GAO Draft Report).

ow on pp 1, 3-4, and 18-20

See comment 7

**DoD POSITION:** Partially concur. The DoD agrees that Public Law 97-214 does require the Secretary of Defense to submit a report or notification to the Committees on Armed Services and Appropriations covering construction project not previously authorized, however, the DoD does not agree the report was required in the cited cases.

The GAO identified two instances where the design and construction of previously unauthorized projects began before the SDIO notified the Committees. The GAO indicated that the SDIO was not aware of these projects, therefore, they were not reported. Since the construction portion of the two projects mentioned by the GAO for which Congressional notification was not accomplished amounted to less than \$200,000 each, a report was not required. (Congress has authorized the Department of Defense to implement construction below the \$200,000 level without specific project notification). As indicated in DoD Directive 4270.24, only projects over \$200,000 must be documented via the detailed Military Construction Data Form (DD Form 1391) to explain the specific construction efforts.

The Congress has allowed this threshold because of the multitude of small projects that are needed to conduct normal DoD business. For example, one project cited by the GAO was to modify an existing facility at a cost of \$125,000 to house a computer room, and the second was to convert a warehouse into office space in which the construction portion was \$138,500.

See comment 8

The GAO also identified two other projects planned for FY 1985 and FY 1986 where Congress had not been notified. Based on the provisions of Section 2807 of 10 USC, however, the DoD does not agree that notification is always required prior to initiation of project planning. Section 2807 states that notification is required prior to award of Architect-Engineering contracts for project design in excess of \$300,000. As noted by GAO, construction had not begun on the projects in question, therefore, Congressional notification was not yet required. For both projects, the DoD plans to provide any required Congressional notification prior to initiation of construction.

- **FINDING C: Agencies Improperly Used Research, Development, Test and Evaluation (RDT&E) Funds for Design and Construction.** According to the GAO, it is DoD policy, consistent with Public Law 97-214, to finance all costs associated with the construction of a facility from the Military Construction Appropriation. In addition, the GAO

reported that DoD policy requires acquisition or construction at Government-owned, Government-operated facilities costing over \$200,000 be financed from the Military Construction appropriation. The GAO identified several instances, however, where the Army and Air Force were using RDT&E funds to plan and design facilities when Military Construction funds should have been used. In addition, the GAO found an Air Force project, located on a Government-owned, Government-operated facility, had been undertaken with RDT&E funds even though total costs exceeded \$200,000. Although noting that the Air Force believed this to be proper since none of the subdivided efforts exceeded the \$200,000 limit, the GAO concluded the efforts are so interrelated they should have been considered one project and funded under the Military Construction Appropriation. The GAO also concluded that the improper use of RDT&E funds was a second indication of needed improvements to the SDIO management control over its construction projects. (pp. 1 and 4-5, letter; and pp. 15-17, Appendix I, GAO Draft Report)

Now on pp 1, 4-5, and 20-22

See comment 9

**DoD POSITION:** Non-concur. The DoD agrees that its policy associated with the construction of a facility is consistent with Public Law 97-217, however, the DoD does not agree that Research, Development, Test and Evaluation (RDT&E) funds were improperly used, or that the Air Force project was improperly subdivided.

DoD Directive 4275.5 does state that when Government-owned, Government-operated real property is to be acquired or constructed, such construction shall normally be programmed, budgeted, and financed as a military construction project. Projects costing less than \$200,000 may be financed from sources other than the Military Construction (MILCON) Appropriation. Project planning cost may also be financed from sources other than MILCON.

See comment 10

The GAO states, however, that all costs associated with the construction of a facility must be financed from the Military Construction (MILCON) Appropriation. In describing the use of RDT&E funds for project planning and design, the GAO reported that DoD policy requires acquisition or construction at Government-owned, Government-operated (GOGO) facilities costing over \$200,000 be financed from the Military Construction Appropriation. This description is not necessarily a correct interpretation of DoD policy.

All funds associated with the construction of a facility are not necessarily required to be provided from the Military Construction Appropriation. Costs associated with planning may be financed from an appropriation other than MILCON, as cited in Section 2807 of 10 USC. For example, site investigations and surveys, subsurface explorations, environmental assessments, engineering analyses and feasibility studies, etc., may be financed from Operation and Maintenance (O&M) funds or their equivalent (e.g., RDT&E), while design and construction requirements are financed from the MILCON appropriation.

See comment 11

The GAO noted several instances where RDT&E funds rather than MILCON were used for project planning and design. Section 2353 of 10 USC and DoD Directive 4275.5 provides the authority by which facility project planning and design, may be financed with Research and Development funds.

See comment 12

The GAO also found that a project had been subdivided and undertaken with RDT&E funds even though total costs exceeded \$200,000. The DoD policy, as interpreted by the GAO, applicable to projects over \$200,000 or less than \$200,000 require further clarification. DoD Directive 4270.24 provides that projects priced from \$200,000 to \$1 million may be accomplished as unspecified minor construction projects with funds made available under the MILCON appropriation. However, when the construction cost of an unspecified minor construction project is \$200,000 or less, the projects may be financed either by OMA, its equivalent, (e.g., RDT&E) or the MILCON appropriation. Furthermore, when construction and maintenance or repair are accomplished simultaneously, as an integrated undertaking, the construction shall be treated as a separate project. For example, the total project cost was \$560,900 (repair \$340,500 and maintenance \$81,900), however, the construction effort was \$138,500 and was treated as a separate project as required. Additional comments concerning requirements for projects where construction cost is less than \$200,000 were provided in DoD comments to Finding B.

See comment 13

Although location (GOGO) is important, additional considerations, such as (a) identification of facility user (in-house or contractor); (b) facility cost; and (c) the provisions of Section 2353 of 10 USC must be examined when determining the appropriate funding source.

See comment 14

Subsequent to the GAO review, SDIO has reviewed the projects identified in the GAO Draft Report and determined in each case that the appropriate funding source was used consistent

with Public Law, DoD policy and applicable regulatory requirements.

- **FINDING D: Some Construction Projects Were Delayed.** The GAO found a few cases where projects were delayed because the SDIO became aware of them too late to program funds and provide advance notification to the Congress. The GAO noted that these delays could adversely affect research and test schedules. The GAO concluded that this situation was another indication of needed improvements to the SDIO control over construction projects. (pp. 1 and 5, Letter; and p. 17, Appendix I, GAO Draft Report)

**DoD POSITION:** Non-concur. The DoD agrees that some construction projects were delayed, however, the DoD does not agree with the cause of these delays as stated by the GAO, or that delays in minor construction efforts will adversely affect program milestones or schedules.

The GAO reported that projects were delayed because the SDIO became aware of them too late to program funds and provide advance notification to the Congress. In fact, however, the projects were delayed as the result of budget reviews and program adjustments by the SDIO, and a subsequent reprioritization of test support facilities requirements. For example, the Intermediate Range Booster Systems (IRBS) launch complex was not delayed because of late identification of facility needs and resultant lack of MILCON funds, as reported by the GAO, but because of technical considerations. The current IRBS facility schedule will support program requirements.

Section 2803 of 10 USC and DoD Directive 4270.24 provide the authority to carry out urgent military construction projects not authorized by law. This authority could have been used by SDIO if required to support emergency construction of test support facilities.

The DoD does not agree with the GAO conclusions that minor construction efforts will adversely affect program goals, time lines or tasks previously described to the Congress, or that SDIO does not exercise adequate control over its construction program. As noted in its FY 1986 report to Congress, the SDIO still plans to provide the basis for informed decisions in the early 1990s on whether or not to develop a defense of the United States and its Allies against ballistic missiles.

Finding deleted

See comment 15

- o **FINDING E: Controls Needed On the Use of SDIO Funds for Operational Support.** The GAO found instances where the executing agencies had used and were planning to continue to use SDIO research funds for operating and maintaining facilities. The GAO reported that SDIO officials were unaware of this situation until the joint SDIO/GAO visits to the research activities in October 1985. Although the SDIO is responsible for establishing the necessary policies and agreements to insure proper coordination and execution of the SDI program, the GAO found that the work package directives are not sufficiently descriptive to delineate support responsibilities of executing agencies. In addition, the GAO also noted that it could find no evidence of the Congress being aware of SDI funds being used for operational support. The GAO concluded that the SDIO needs to establish policies and controls on the use of its funds for operational support. (pp. 1 and 6, Letter; and pp. 18-19, Appendix II, GAO Draft Report).

Now pp 1, 7, and 23-24

**DoD POSITION:** Non-concur. Although the DoD agrees that executing Agencies supporting the SDI used R&D funds for operating and maintaining facilities, which is consistent with the general use of R&D funds as stated in DOD 7110-1M, the DoD does not agree that the SDIO was unaware of this situation as reported by GAO, or that Congress was not informed. Neither does the DoD agree that all work package directives should delineate support responsibility details.

See comment 16

As discussed in the DoD comments to FINDING A, agency funding allocated to ballistic missile defense research predating the SDIO were subsumed into it. Subsequently, operation and maintenance responsibilities funded by the RDT&E appropriation were also incurred. In the relevant appropriation language, expenses of activities and agencies of the DoD necessary for basic and applied scientific RDT&E to include maintenance, rehabilitation, lease and operation of facilities and equipment are charged to that appropriation as authorized by law. Thus, operation and maintenance along with other overhead costs associated with R&D projects in the SDI program have been correctly charged. Since these expenditures are consistent with the general use of R&D funds, Congress should be aware that SDI funds are being used for expenses pertinent to operational support requirements, just as are research funds provided to other agencies.

See comment 17

In its draft report, the GAO noted the potential purchase of transportation assets by SDIO. The SDIO, however, has no planned use of RDT&E funds for the acquisition of transportation assets. If the acquisition of specific equipment is required to support the SDI program at the Kwajalein Missile Range, it may be funded by SDIO under the provisions of DoD Directive 3200.11. Any such acquisition will be reported.

See comment 18

Also, the GAO reported that the Work Package Directives (WPD) are not sufficiently descriptive to delineate support responsibilities of executing agencies. Such detail is not necessary and in fact would be inappropriate to include in every WPD. The WPD is designed to formalize technology efforts and milestones between the SDIO and the executing agencies. It is agreed that test support facilities requirements should be addressed in the WPD. Guidance to that effect has been published. Support responsibilities of executing agencies have been correctly identified, however, in the SDIO Draft Charter and follow-on DoD Directive 5141.5 which are separately provided to executing Agencies.

**RECOMMENDATIONS**

- **RECOMMENDATION 1.** The GAO recommended that the Secretary of Defense require the Director, SDIO to examine all SDIO funded construction projects to determine if RDT&E funds were properly used, and to the extent necessary, deobligate funds improperly charged to the RDT&E accounts. (p.5, Letter, GAO Draft Report)

Recommendation deleted

**DoD POSITION:** Concur. As discussed in the DoD response to FINDING C, appropriate funding sources were identified or used for project planning, design and/or construction. Reviews have been recently conducted by executing agencies and the SDIO to verify that the proper fund source was used, subsequent to the GAO visit.

See comment 19

Reviews are also conducted as part of the project approval process. When projects changed from RDT&E funding to MILCON, the funds for design and/or planned construction were also changed consistent with these determinations. Guidance issued on February 19, 1986, will greatly enhance the facilities planning, programming and budget process between executing agencies and the SDIO.

- **RECOMMENDATION 2:** The GAO recommended that the Secretary of Defense require the Director, SDIO to establish (1) policies

on the use of SDI funds for operational support and (2) agreements with executing agencies delineating responsibilities for funding operational support of SDIO funded facilities. (p. 7, Letter, GAO Draft Report)

**DoD POSITION:** Partially concur. The DoD agrees that the on-going review of the use of constrained resources is prudent and consistent with sound internal management practices. However, DoD policies and procedures are in place concerning the use of R&D funds for operational support as described in the DoD response to Finding E. This is not to say that additional guidance is not required. Where necessary, the SDIO has established supplemental agreements with executing or outside agencies. For example, a draft Memorandum of Agreement currently exists between the DoD and the Department of Energy pertinent to its support to the SDIO.

- o **RECOMMENDATION 3:** The GAO recommended that the Secretary of Defense require the Director, SDIO to describe in budget documents the planned use of RDT&E funds for operational support costs, such as operation and maintenance of facilities and acquisition of transportation assets. (p. 7, GAO Draft Report)

**DoD POSITION:** Partially concur. As stated in the DoD response to FINDING E, the planned use of funds allocated to the SDIO is described in budget documents already provided to Congress. Given the dynamic nature of the SDI program, the continual monitoring of the use of constrained resources is inevitable and will continue.

Now on p 8

See comment 20

Now on p 8

See comment 21



The following is GAO's comments on the Director's, Strategic Defense Initiative Organization, letter dated May 23, 1986.

## GAO Comments

1. No revision to our report is required. DOD recognizes that SDIO encountered a number of problems during its start-up period. However, DOD states that SDIO followed authorized expedite procedures and has complied with funding thresholds established by the Congress. We disagree. As explained on page 3 of the report, under 10 U.S.C. 2805 the Secretary of Defense and the Secretaries of the military departments have the authority to carry out minor military construction projects that have not been previously authorized in the annual Military Construction Authorization Act. If the Secretary concerned decides to exercise such authority with respect to a minor military construction project that cost more than \$500,000, 10 U.S.C. 2805 requires the Secretary to submit a report to the Senate and House Committees on Armed Services and on Appropriations. The project may then be carried out only after 21 days have passed or after each committee has approved the project, whichever comes first. We found that an SDIO project to convert a warehouse into an office complex with a cost over \$500,000 began before SDIO notified the authorization and appropriations committees of the Congress.

2. No revision to our report is required. We agree with DOD's description of the conditions during SDIO's "formative years."

3. No revision to our report is required. DOD states that 12 construction projects were not identified to SDIO because of program adjustments and the potential for service funding. We disagree. As explained on page 15 of the report, the projects were identified during joint GAO and SDIO visits to the locations where SDI research is underway. After SDIO Resource Management officials learned of the projects, some program adjustments occurred and SDIO may have entered into negotiations with executing agencies concerning possible service funding. However, these adjustments and negotiations took place after SDIO undertook a concerted effort to identify projects that executing agencies planned to undertake with SDIO RDT&E funds.

4. No revision to our report is required. DOD states that SDIO did not receive its first funding appropriation until fiscal year 1985 and had to use expeditious, but authorized methods to ensure the continuing progress of critical program components. Moreover, DOD notes that the Congress has realized in the past that some programs of high priority may

require expeditious handling and has established procedures and thresholds, as specified in applicable DOD policy and military services' regulatory guidance.

We agree that SDIO did not receive its first appropriation until fiscal year 1985. We also agree that the Congress has included provisions in law for the expeditious handling of projects, as discussed on pages 3-5 of our report. We also discuss one project where SDIO did not follow a DOD directive and one project where the threshold for notifying the Congress was exceeded and SDIO did not comply with statutory requirements

5. DOD states that it does not agree that RDT&E funds were used improperly or that projects were delayed for the reasons we cited. We discuss these points in 11 and 15.

6. No revision to our report is required. DOD states that there may have been some temporary disruptions in processing project documentation; however, the condition was known by SDIO and positive action was taken. Also, because legal and policy requirements are not immediately repeated by internal implementing directives does not diminish the basic requirement for compliance nor does it lead to the conclusion that the requirements were unknown. We disagree with DOD's assessment of the condition at the start of and during our audit work. We believe, as stated in our conclusions on page 5 of the report, that SDIO needed better controls over its facility construction program and that improvements in those controls occurred during and at the conclusion of our work. We do not conclude in our report that SDIO was unaware of DOD or legal requirements. We state on page 2 of the report that, because SDIO did not have a process to provide the information it needed to adequately identify, plan, and budget for projects planned by executing agencies, it could not exercise appropriate management oversight of those projects.

7. DOD agrees that Public Law 97-214 requires the Secretary of Defense to submit a report or notification to the House and Senate Committees on Armed Services and Appropriations covering construction projects not previously authorized; however, it does not agree the report was required in the cited cases.

We agree that the report was not required by law in the case of the project undertaken with RDT&E funds at Lincoln Laboratory at the contractor owned and operated facility. We have modified our report to reflect this position. However, the notification to the Congress was required by DOD Directive 4275.5, as stated on page 4 of the report.

With regards to the project to convert a warehouse into an office complex, we continue to believe, as stated on page 5 of the report, that the project was so integrated as to preclude the separation of construction from maintenance and repair. Had the project been accomplished entirely as construction, as specified in DOD Directive 4270.24, the total cost of the project would have exceeded the \$500,000 limit on minor military construction; thus DOD would have been required to provide notification to the Congress before construction began.

8. No revision to our report is required. DOD is correct in stating that 10 U.S.C. 2807 states that notification is required prior to award of architectural and engineering contracts for project design of \$300,000 or more. The Congress appropriates funds under 10 U.S.C. 2807 to carry out construction design in connection with military construction projects not otherwise authorized by law. These funds are part of the annual Military Construction appropriation. This provision is not applicable to SDIO projects planned and designed with RDT&E funds and, hence, DOD's comment is not applicable. As stated on page 21 of the report, advance planning could be performed with RDT&E funds, but we found that RDT&E funds were used for specific project planning and design for projects to be constructed with Military Construction funds.

9. No revision to our report is required. DOD does not agree that RDT&E funds were improperly used, or that the Air Force project to convert a warehouse into an office complex was improperly subdivided. We disagree. As explained in 12 and on page 22 of the report, DOD Directive 4270.24 explicitly addresses this situation and states that such projects should be accomplished as construction. Also, as noted by DOD, DOD Directive 4275.5 states that when government-owned and-operated real property is to be acquired or constructed, such construction shall normally be programmed, budgeted, and financed as a military construction project.

We agree that projects costing less than \$200,000 may be financed from sources other than the Military Construction appropriation. (See p. 5.) However, we do not agree that the particular project in question cost less than \$200,000, as discussed further in 12.

10. We have modified our report to show that all costs associated with the construction of a facility do not have to be financed from the Military Construction appropriation. On page 20 of the report, we discuss advance planning costs that can be funded with operation and maintenance or RDT&E funds. However, as also indicated on page 20 of the

report, DOD Directive 7040.2, which is consistent with statutory provisions in 10 U.S.C. 2802 and 2807, states that specific project costs associated with the construction of a facility, including planning, design, and construction overhead are to be financed from the Military Construction appropriation provided for that purpose. The costs in question were project specific costs, as indicated by the examples in the report.

11. No revision to our report is required. DOD states that 10 U.S.C. 2353 and DOD Directive 4275.5 provide the authority by which facility project planning and design may be financed with RDT&E funds. We agree that the statute and directive provide authority by which facility project planning and design may be financed with RDT&E funds. However, they apply to projects constructed with RDT&E funds. Executing agencies used RDT&E funds for project planning and design but the decision by SDIO was to construct the projects with Military Construction funds.

12. No revision to our report is required. DOD states that DOD Directive 4270.24 provides that projects priced from \$200,000 to \$1 million may be accomplished as unspecified minor construction projects with funds made available under the Military Construction appropriation. However, when the construction cost of an unspecified minor construction project is \$200,000 or less, the projects may be financed either by operation and maintenance, its equivalent (e.g. RDT&E), or the Military Construction appropriation. Furthermore, when construction and maintenance or repair are accomplished simultaneously, as an integrated undertaking, the construction shall be treated as a separate project. DOD is correct in its statements. However, as stated on page 22 of the report, DOD Directive 4270.24 states that if all of the work on a project "is so integrated as to preclude practical separation of construction from maintenance or repair costs, the entire project shall be accomplished as construction."

13. DOD states that although location (GOGO, government owned and government operated) is important, additional considerations, such as (a) identification of facility user (in-house or contractor); (b) facility cost; and (c) the provisions of 10 U.S.C. 2353 must be examined when determining the appropriate funding source. We agree and have recognized these additional considerations on pages 3-5 of our report.

14. No revision to our report is required. DOD states that subsequent to our review, SDIO reviewed the projects identified in our draft report and determined in each case that the appropriate funding source was used consistent with Public Law, DOD policy, and applicable regulatory

requirements. We recognize SDIO's review but do not agree with its conclusions. As stated on page 9 of the report, SDIO should take those actions required by the House Appropriations Committee report on the fiscal year 1987 Military Construction Appropriation Bill and report all relevant facts concerning funds improperly charged to the five projects to the extent that accounts cannot be adjusted in the same fiscal year. Moreover, DOD should examine other projects in light of this report's discussion of applicable laws and DOD directives.

15. DOD states that project delays were attributed to the normal budget reviews and program adjustments and subsequent reprioritization of test support facilities requirements. For example, the Intermediate Range Booster System launch complex was not delayed because of late identification of facility needs and resultant lack of Military Construction funds, but because of technical considerations.

At the time of our work, the two projects were regarded as high priority projects by the executing agencies and that were in immediate need of funding. However, we recognize that other factors could have caused the delays in the projects and have deleted this section from our report.

16. DOD states that although it agrees that executing agencies used SDIO RDT&E funds for operating and maintaining facilities, which is consistent with the general use of RDT&E funds as stated in DOD 7110-1M, it does not agree that the SDIO was unaware of this situation as reported by GAO, or that the Congress was not informed. Neither does DOD agree that all work package directives should delineate support responsibility details.

At the time we conducted our work, SDIO officials were surprised at some of the support costs paid for by SDIO funds. However, we have changed our report to reflect DOD's position that SDIO was aware of the fact that executing agencies used SDIO funds for operating and maintaining facilities.

We agree that in the relevant appropriation language, the Congress recognizes that RDT&E funds can be used for maintenance, rehabilitation, lease, and operation of facilities and equipment. We do not question the legality of the expenditures for operation and maintenance items. We believe, as stated on page 24 of the report, that the Congress can better exercise its oversight responsibilities if it is informed of major operation and maintenance expenditures, such as those mentioned in the report. We believe that this is especially relevant for the SDI because of the potential growth in operation and maintenance costs as a result of (1) its

facilities construction and acquisition program and (2) the growth and magnitude of the research program.

We agree that there may not be a need to delineate support responsibility for operation and maintenance in all work package directives. However, we continue to believe that the work package directive, as SDIO's primary document for managing and budgeting funds for research, could be a good mechanism to delineate support responsibilities with some agencies or on some programs. This change is reflected on page 24 of our report.

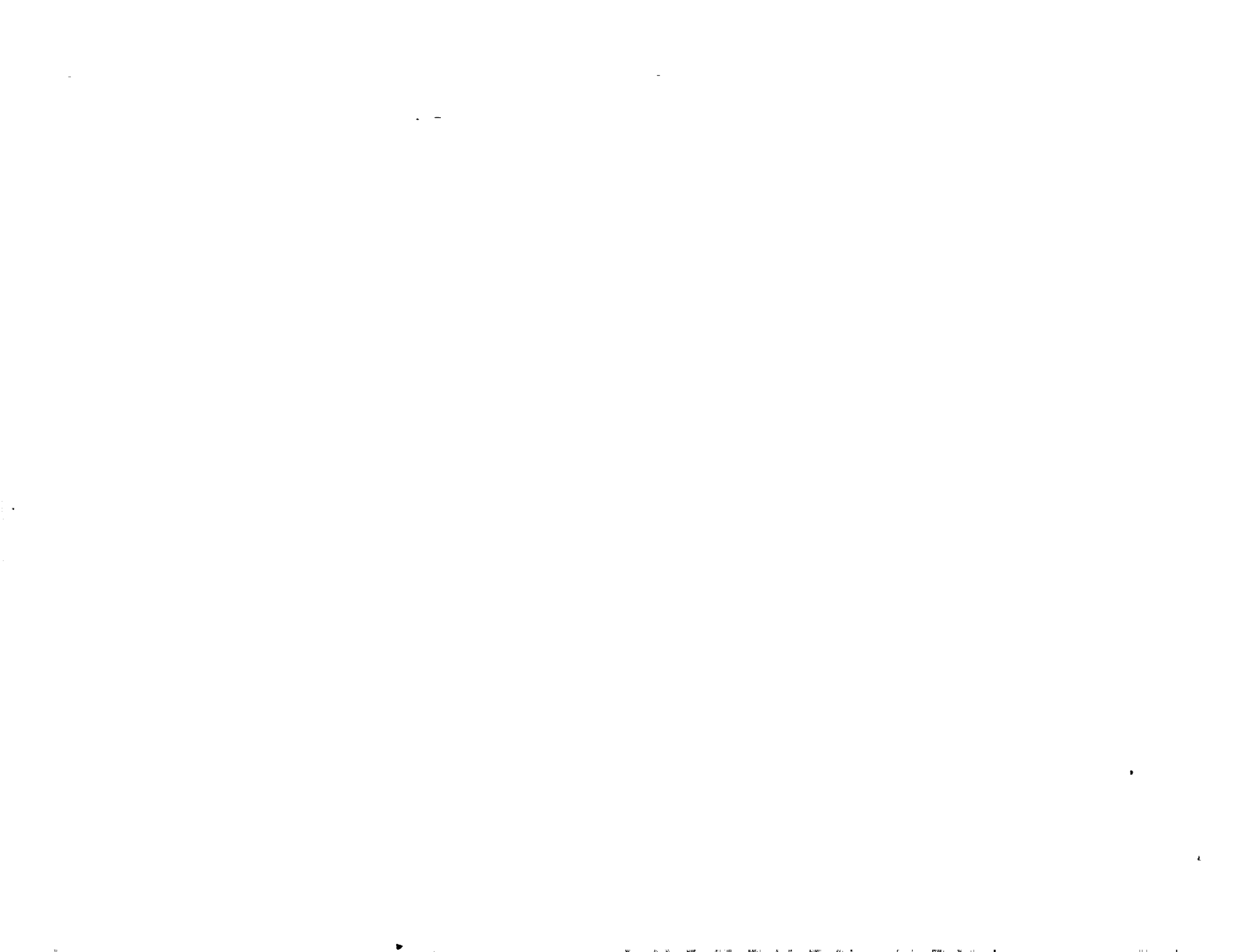
17. DOD states that SDIO has no planned use of RDT&E funds for the acquisition of transportation assets. Moreover, if the acquisition of specific equipment is required to support the SDI program at the Kwajalein Missile Range, it may be funded by SDIO under the provisions of DOD Directive 3200.11 and that such acquisition will be reported. We recognize DOD's position on page 24 of our report.

18. No revision to our report is required. DOD states that support responsibilities of executing agencies have been correctly identified in the SDIO Draft Charter and in follow-on DOD Directive 5141.5, which are separately provided to executing agencies. The SDIO Draft Charter was approved as DOD Directive 5141.5. That directive explains the responsibilities, functions, and authorities of SDIO and its director and the director's relationship with the Secretary of Defense and other DOD organizations. The DOD directive does not delineate responsibilities for support costs. In fact, DOD Directive 5141.5 states that the Director, SDIO will "Negotiate agreements, as necessary, with other U.S. agencies and organizations to insure proper coordination and execution" of the SDI program. The Army, in responding to SDIO's request for comments on our draft report, concurred that policies and agreements delineating responsibility for operational support and funding are still needed.

19. Although DOD concurs, its concurrence is based on SDIO's review of projects identified in our draft report. The review determined in each case that the appropriate funding source was used consistent with Public Law, DOD policy, and applicable regulatory requirements. As stated in 14, we do not agree with the review's conclusions. However, we have deleted the recommendation contained in our draft report because we believe the actions required by the House Appropriations Committee report and 31 U.S.C. 1351 satisfy that recommendation.

20. No revision to our report is required. DOD states that policies and procedures are in place concerning the use of RDT&E funds for operational support and SDIO has established supplemental agreements with executing or outside agencies where necessary. As discussed in 18, we disagree.

21. No revision to our report is required. DOD states that the planned use of funds allocated to SDIO is described in budget documents already provided to the Congress. We agree that the planned use of funds is provided to the Congress in descriptive summaries. However, we find that the summaries are not very descriptive of the operation and maintenance items that SDIO RDT&E funds are being used for. For example, the Army indicated in its reply to our draft report that the cost to maintain the Army's Safeguard Missile site in North Dakota were identified in SDI Congressional Descriptive Summaries as program management. We continue to believe that information on operational support items such as those described in our report should assist the Congress in carrying out its oversight responsibilities.





---

Requests for copies of GAO reports should be sent to:

U.S. General Accounting Office  
Post Office Box 6015  
Gaithersburg, Maryland 20877

Telephone 202-275-6241

The first five copies of each report are free. Additional copies are  
\$2 00 each

There is a 25% discount on orders for 100 or more copies mailed to a  
single address

Orders must be prepaid by cash or by check or money order made out to  
the Superintendent of Documents.

---

United States  
General Accounting Office  
Washington, D.C. 20548

Official Business  
Penalty for Private Use \$300

Address Correction Requested

---

First-Class Mail  
Postage & Fees Paid  
GAO  
Permit No. G100