

IG-97-014

**AUDIT
REPORT**

**EARTH OBSERVING SYSTEM DATA AND
INFORMATION SYSTEM FACILITY
CONSTRUCTION CONTRACT MANAGEMENT**

GODDARD SPACE FLIGHT CENTER

FEBRUARY 7, 1997



National Aeronautics and
Space Administration

OFFICE OF INSPECTOR GENERAL

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Headquarters

Washington, DC 20546-0001



FEB 7 1997

W

TO: 100/Center Director, GSFC

FROM: W/Acting Assistant Inspector General for Auditing

SUBJECT: Final Report on Earth Observing System Data and Information System Facility
Construction Contract Management
Assignment No. A-GO-96-008
Report No. IG-97-014

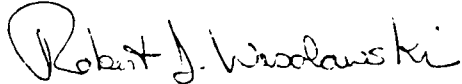
Enclosed is a final report on our review of the Earth Observing System Data and Information System (EOSDIS) Facility Construction Contract Management. We found that the cost control on the project was reasonable. Also, the facility was constructed in time to meet the Earth Observing System mission schedule and meets NASA's functional requirement. However, we identified three areas where management actions could result in better controls on future facility construction projects and the recovery of \$274,000 of EOS R&D funds:

- (1) Prompt change order definitization could have more effectively controlled contract cost.
- (2) Potential recovery for building design errors, omissions and conflicts should be assessed.
- (3) Better use can be made of research and development funds.

We received the Center's official written response on December 19, 1996, which (1) indicated concurrence or partial concurrence to each of the four recommendations, and (2) described actions taken or planned by the Center. As a result of actions taken to date by the Center, we consider recommendations 1, 3 and 4 closed for reporting purposes. With respect to recommendation 2, please notify our office when it is considered closed.

The Center's response is included as Appendix A to this report. We have included management's response to each recommendation as well as our evaluation of the response following each recommendation.

The NASA Office of Inspector General staff members associated with this review express their appreciation to NASA personnel for their courtesy, assistance and cooperation. If you have any questions or desire to discuss the matters contained in this report, please contact Daniel J. Samoviski, Acting Director, Audit Division-A, or me at 202-358-1232.


Robert J. Wesolowski

Enclosure

cc:

JMC/Myles

W/Carson, GSFC

201/J. Clark, GSFC

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EARTH OBSERVING SYSTEM DATA AND INFORMATION SYSTEM FACILITY CONSTRUCTION CONTRACT MANAGEMENT

GODDARD SPACE FLIGHT CENTER

EXECUTIVE SUMMARY

INTRODUCTION

The EOSDIS was the first of two facilities to be constructed at GSFC in support of NASA's Earth Observing System (EOS) science mission. GSFC competitively awarded a fixed-price contract for construction of the EOSDIS facility to Blake Construction Company, Inc. in 1992 for approximately \$30 million. Modifications increased the total contract cost to approximately \$35 million. The EOSDIS facility was accepted by GSFC on June 2, 1995; however, as of May 21, 1996, a punch-list of corrective construction actions remained to be completed. A \$36 million contract for the second building, the Earth System Science Building (ESSB), was awarded to a different contractor September 25, 1995.

OBJECTIVE

Our objective was to determine whether opportunities existed to improve construction contract management controls on this or future contracts.

RESULTS OF AUDIT

Three areas were identified where controls could be improved on future facility construction projects.

1. ***PROMPT CHANGE ORDER DEFINITIZATION COULD HAVE MORE EFFECTIVELY CONTROLLED CONTRACT COST*** - Ninety percent of the change orders issued on the EOSDIS construction contract were not definitized within the NASA FAR Supplement (NFARS) 180 day goal for definitization. The delays in definitization resulted from not conducting negotiations on a timely schedule. The delays weakened the agency's negotiation position and reduced the effectiveness of cost control on the contract changes, resulting in higher costs (Page 9).

2. THE POTENTIAL RECOVERY FOR BUILDING DESIGN ERRORS, OMISSIONS AND CONFLICTS SHOULD BE ASSESSED - An estimated 46 percent of EOSDIS construction contract modifications, which increased costs, were caused by design errors, omissions or conflicts. The contracting officer did not examine potential recovery from the responsible architect-engineering design firm, because no single flaw was considered cost effective to pursue. The flaws likely caused work delay, rework, increased GSFC administrative effort and resulted in higher costs due to noncompetitively negotiated contract modifications for the corrective work (Page 13).

3. BETTER USE CAN BE MADE OF RESEARCH AND DEVELOPMENT FUNDS - More than \$460,000 of Research and Development (R&D) funds were used to complete EOSDIS facility construction although \$274,000 of Construction of Facilities (CoF) funds were available at NASA Headquarters. The R&D funds were used because the CoF funds at GSFC had been exhausted and GSFC was unaware that additional CoF funds were available at NASA Headquarters and did not request additional funds. The use of R&D funds for construction potentially reduces the amount of scientific research GSFC can conduct (Page 17).

RECOMMENDATIONS

Implementing our recommendations will better control construction projects and result in the recovery of over \$240,000 of EOS R&D funds.

1. The Management Operations Procurement Office should take action to ensure that contract change orders on the ESSB contract are definitized within the established NFARS 180 day guideline.
2. The GSFC contracting officer for the architect-engineer services contract, in conjunction with the GSFC's Office of Chief Counsel, should examine the design errors, omissions and conflicts and take action to reduce the contract amount or recover for services not provided and additional costs incurred by NASA.
3. The GSFC Chief, Facilities Management Division, should seek to improve communications with the NASA Headquarters Facilities Engineering Division on EOS program CoF funds availability.

4. The GSFC Chief, Facilities Management Division, should request the \$274,000 CoF funds from the NASA Director, Facilities Engineering Division. Funds received should be applied to the EOSDIS facility construction costs.

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INTRODUCTION

The NASA Office of Inspector General has completed a review of the Earth Observing System Data and Information System (EOSDIS) Facility Construction Contract Management. This review was completed as part of a congressional request to examine the concerns of a constituent.

The EOSDIS facility has been constructed on Goddard Space Flight Center's (GSFC) East Campus, Greenbelt, Maryland. Construction contract management was the responsibility of two offices within the GSFC Management Operations Directorate, (1) the Procurement Operations Division's Management Operations Procurement Branch, and (2) the Facilities Management Division's Construction Management Branch. In addition, the NASA Headquarters Office of Management Systems & Facilities, Facilities Engineering Division, was responsible for agency-wide construction policy, general oversight and overall budgeting for the project.

The EOSDIS was the first of two facilities to be constructed at GSFC in support of NASA's EOS science mission. The EOSDIS facility project consisted of five primary elements (1) site development, (2) electrical switchyard, (3) central utilities plant, (4) three story main building with mechanical equipment penthouse having a gross square footage of approximately 190,000, and (5) underground utilities tunnels and ground level parking lots. A \$36 million contract for the second building, the Earth System Science Building (ESSB), was awarded September 25, 1995.

The EOSDIS facility project was authorized by law at \$45.3 million. However, only \$40.3 million was appropriated. GSFC competitively awarded a fixed-price contract for construction of the EOSDIS, which included primary elements 2 to 5, to Blake Construction Company, Inc., of Washington, D.C., in 1992 for approximately \$30 million. This contract was modified to include additional work for tenant fit-out costing approximately \$3 million, and to include work for government directed changes and design corrections costing approximately \$2 million. Separate contracts were awarded to other companies for site development and for GSFC construction management and inspection services. The facility was designed by HTB, Inc., of Washington, D.C., under a non-project funded architect-engineer services contract.

The EOSDIS facility was accepted by GSFC June 2, 1995; however, as of May 21, 1996, a punch-list of corrective construction actions remained to be completed. GSFC has withheld retainage to ensure completion.

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

The review was performed in response to a congressional request to examine the concerns of a constituent. The concerns related to the adequacy of GSFC management controls over cost, schedule and quality of performance on the EOSDIS facility construction contract. Our objective was to determine whether opportunities existed to improve construction contract management controls on this or future contracts.

SCOPE AND METHODOLOGY

Interviews were conducted with GSFC personnel in the (1) Facilities Management Division, Construction Management Branch, (2) Facilities Management Division, Engineering Branch, and (3) Institutional Management Division, Management Operations Procurement Branch. Discussions were conducted with NASA Facilities Engineering Division and GSFC Safety, Environmental and Security Office, Safety and Environmental Branch, personnel.

Site visits were conducted of the:

- EOSDIS building, including most usable areas, penthouse, roof, shipping and receiving, utility areas and grounds.
- Central utilities plant and grounds.
- Electrical switchyard.
- Underground utilities tunnels and parking lots.

Documents were reviewed including the:

- EOSDIS facility construction contract.
- Construction compliance notices.
- Project funding history and status documentation.
- Facility final design contract.

***MANAGEMENT
CONTROLS
REVIEWED***

The following significant management controls were identified and tested for effectiveness:

- The Federal Acquisition Regulation (FAR).
- NASA's budget submission to the Office of Management and Budget.
- NASA authorization and appropriation acts.

FIELD WORK

Field work was conducted from March 6, 1996, through May 29, 1996. The review was performed in accordance with generally accepted government auditing standards. Audit work had previously been conducted in this area during 1992, as part of a Survey of Earth Observing System Project Planning and Management (Report GO-93-001, dated January 13, 1993). The prior work included a review of the EOSDIS facility preliminary design planning.

OBSERVATIONS AND RECOMMENDATIONS

OVERALL EVALUATION

The cost control on the project was reasonable. Also, the facility was constructed in time to meet the EOS mission schedule and meets NASA's functional requirement. Three areas were identified where management actions could result in better controls on future facility construction projects and the recovery of EOS R&D funds. These areas are discussed in detail in the following paragraphs.

1. PROMPT CHANGE ORDER DEFINITIZATION COULD HAVE MORE EFFECTIVELY CONTROLLED CONTRACT COST

Ninety percent of the change orders issued on the EOSDIS construction contract were not definitized within 180 days. Federal Acquisition Regulation subpart 43.204 requires change orders to be promptly definitized. The NASA FAR Supplement establishes 180 days as NASA's goal for definitization. The delays in definitization resulted from the contracting officer not conducting negotiations on a timely schedule. The delays in timely negotiations (1) weakened the agency's negotiation position and (2) reduced the effectiveness of cost control on the contract changes, resulting in higher costs.

The Federal Acquisition Regulation (FAR) and NASA FAR Supplement (NFARS) contain clear guidelines for timely definitization of unpriced change orders on fixed-price contracts:

- FAR, Subpart 43.204, Administration, requires "(b) Definitization. (1) Contracting officers shall negotiate equitable adjustments resulting from change orders in the shortest practicable time." Further, "(3) Contracting offices . . . shall establish suspense systems adequate to ensure . . . prompt definitization of unpriced change orders."
- The NFARS, part 1843.7005, "Definitization", provides, "The NASA goal is to definitize UCAs" (Undefined Contract Actions) "within 180 days from date of issuance."
- FAR, Subpart 16.2, Fixed-Price Contracts, states "A firm-fixed price contract provides for a price that is not subject to any adjustment. . ." This contract type places upon the contractor maximum risk and full responsibility for all costs and resulting profit or loss. It provides maximum incentive for the contractor to control costs and perform effectively. . ."

Ninety percent of the change orders issued on the EOSDIS construction contract were not definitized within 180 days. Measurement from the date of change order issuance to the date of the definitizing contract modification showed:

<u>DAYS</u>	<u>NUMBER</u>	<u>PERCENT</u>
1 - 90	4	3%
91 - 180	<u>8</u>	<u>7%</u>
Total Within 180 Days	<u>12</u>	<u>10%</u>
181 - 270	10	9%
271 - 365	24	22%
Over 1 Year	<u>65</u>	<u>59%</u>
Total Over 180 Days	<u>99</u>	<u>90%</u>

The average change order took 392 days to definitize; more than twice the 180 day standard prescribed by the NFARS.

Comparison of the EOSDIS contract with similar recent GSFC construction contracts showed that the average definitization period took longer on the EOSDIS contract than on any other recent similar GSFC construction contract:

<u>CONTRACT (CONTRACTOR)</u>	<u>LAST MOD</u>	<u>AVERAGE DAYS</u>
Spacecraft Dev. & Int. Facility (Blake Construction Company)	1989	340
Customer Data Operation Facility (Centennial Contractors, Inc.)	1991	229
QA Detector Dev. Facility (Gassman Corporation)	1993	111
EOSDIS Facility (Blake Construction Company)	1996	392

The delay in definitization of EOSDIS contract change orders resulted primarily from the contracting officer not conducting negotiations on a timely schedule. We were told the contractor was slow in coming to negotiations, despite the contracting officer's efforts to encourage prompt negotiation and a "partnering" agreement between GSFC and the contractor.

Because definitization took so long, in some cases work was well underway or complete prior to negotiating a price. The contractor was effectively reimbursed the costs incurred, plus overhead and profit. This placed the risk and responsibility for costs upon the government and defeated the purpose of the fixed-price contract as stated in the FAR. The contractor had little incentive to control costs or to pursue efficient construction methods. Had the change orders been definitized for a fixed price prior to much of the work being performed or had a maximum price been negotiated in advance, the contractor would have been incentivized to perform the work at lower cost, efficiently and quickly. Change orders not timely negotiated generally showed higher costs. For example:

Request For Proposal (RFP) or Change Order (CO)		Date	Date Definitized	Government Estimate	Government Negotiated
RFP#34	7/8/93	9/16/94	\$ 14,998	\$ 40,046	
CO#30	7/13/93	10/28/94	\$ 23,998	\$119,461	
CO#128	10/7/94	10/18/95	\$ 37,340	\$ 65,057	

In our opinion, the delays in change order definitization (1) weakened the agency's negotiation position and (2) reduced the effectiveness of cost control, resulting in higher costs to NASA.

GSFC recently awarded a \$36 million fixed-price contract for construction of a complementary Earth Systems Science Building (ESSB) for the EOS program. Like the EOSDIS contract, the Management Operations Procurement Office has responsibility for the contract. We believe that action to ensure prompt definitization of changes on the ESSB contract will increase contractor incentive to control costs and to perform effectively.

RECOMMENDATION 1

The Management Operations Procurement Office should take action to ensure that contract change orders on the ESSB contract are definitized within the established NFARS 180 day guideline.

**Management's
Response**

Partially Concur. We agree that change order definitization should be timely, and will continue to focus considerable attention and resources to prompt change order definitization and to meeting NASA's 180-day definitization goal. We are implementing several improved management control mechanisms to help accomplish this

on the ESSB facility contract. The ESSB contract contains an incentive provision whereby the contractor will be evaluated in various categories, among them subcontract management, to encourage timely submission of proposals. In addition, the Contracting Officer (CO) has implemented a formal scheduling and suspense-tracking process to facilitate definitization of change orders within 180 days.

Contrary to the OIG's conclusion, the CO on the EOSDIS construction contract did hold timely weekly negotiation sessions; and despite that, and due to a variety of complex circumstances including contractor delays, many definitizations were still delayed. As you know, unilateral definitizations by the Government are subject to dispute under the Contract Disputes Act. The CO determined it was in the best interest of the Government to continue negotiations until agreement was reached.

We consider the action under this recommendation to be ongoing and closed for reporting purposes.

***Evaluation of
Management's
Response***

Management's action is responsive to the recommendation. This recommendation is closed for reporting purposes.

**2. THE
POTENTIAL
RECOVERY FOR
BUILDING DESIGN
ERRORS,
OMISSIONS AND
CONFLICTS
SHOULD BE
ASSESSED**

An estimated 46 percent of EOSDIS building construction contract modifications, which increased costs, were caused by design errors, omissions or conflicts. The architect-engineering design services contract required the drawings and specifications to be complete in all details and accurate. The contract provides for the Government to reduce the contract price if services do not conform. The contracting officer did not examine potential recovery because no single design flaw identified during construction progress was considered cost effective to pursue. The flaws likely caused work delay, rework, increased GSFC administrative effort and higher costs due to noncompetitively negotiated contract modifications for the corrective work.

The fixed-price architect-engineering service contract required preparation of the EOSDIS building construction final design drawings and specifications. The contract states that the drawings and specifications ". . . shall be complete in all details. . . It is essential that the drawings and specifications be accurate and explicit. . . The database, drawings, cost estimate and specifications for the project contemplate complete and acceptable work in all particulars. . . the A/E shall be responsible for the professional and technical quality of these items and other materials produced under this contract. The A/E shall be responsible for the professional quality and adequacy of the services and material furnished. . ." Further, "If any of the services do not conform with contract requirements, the Government may require the contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may. . . reduce the contract price to reflect the reduced value of the services performed."

Review of modifications number 94 through 130 to the EOSDIS construction contract showed that 17 of the 37 modifications (46 percent) resulted from architect-engineer design errors, omissions and conflicts:

<u>Contract Mod #</u>	<u>Cost</u>	<u>Justification</u>
95	\$ 1,503	Conflict in contract documents
97	7,500	Not shown on drawings (Omission)
98	9,753	Not shown on drawings (Omission)
101	73,847	Omission by the A&E
102	1,538	Conflict in drawings
103	1,068	Contract documents deficient (Omission)
105	2,142	Error on drawing
106	5,427	Not on finish schedule (Omission)
107	2,656	Not provided in contract (Omission)
111	13,785	Elevation plan error
112	945	Drawings not coordinated (Conflict)
115	40,046	Drawings and specifications conflict
116	1,725	Not shown on drawings (Omission)
118	480	Drawing error
120	12,027	Omitted from drawings
122	1,201	Not included in contract (Omission)
123	19,302	Design incorrect (Error)

The GSFC contracting officer did not examine the potential for recovery from the architect-engineering company for the design errors, omissions and conflicts during construction progress, because no single flaw identified was considered cost effective to pursue. The contracting officer's technical representative felt that the number of design flaws was within an acceptable industry standard and therefore GSFC could not successfully pursue recovery. Neither the contracting officer nor the contracting officer's technical representative had consulted GSFC's Office of Chief Counsel on the potential for recovery.

We estimate that some 91 of the total 199 EOSDIS contract modifications (46 percent) were required to correct flaws in the drawings or specifications prepared by the architect-engineer. The design flaws caused or likely caused:

- Work delay and rework.
- GSFC personnel time to be diverted from daily productive activities and consumed in evaluating and approving proposed fixes and evaluating and negotiating cost proposals for the fixes.

- Increased GSFC contract cost due to the higher cost typically negotiated on noncompetitive contract modifications, over competitive procurement actions.

The cost of this added effort, delay and rework was included in the contractor's proposed cost paid by GSFC or was borne directly by GSFC. GSFC paid the architect-engineer more than \$3 million to provide final building design drawings and specifications which were to be accurate, complete, and of professional quality. In our opinion, the volume of errors, omissions and conflicts indicates that the architect-engineer did not meet the contract requirements. GSFC should examine the potential for recovery of the additional costs incurred that resulted from errors, omissions and conflicts in the drawings and specifications.

RECOMMENDATION 2

The GSFC contracting officer for the architect-engineer services contract, in conjunction with the GSFC's Office of Chief Counsel, should examine the design errors, omissions and conflicts and take action to reduce the contract amount or recover for services not provided and additional costs incurred by NASA.

***Management's
Response***

Concur. We will examine changes to the EOSDIS facility contract, to identify those that may have a high potential for possible recovery and, in consultation with the Office of Chief Counsel, make a determination regarding recovery actions that best serve the Government interest. Until we have done the OIG-recommended analysis, we are unable to determine appropriate action regarding reduction in the contract amount. To date, the CO's review of the 17 changes listed in the OIG's draft report identified only six that may have architect-engineer liability, for an estimated total not to exceed \$7,000.

***Evaluation of
Management's
Response***

The actions taken and planned are responsive to the recommendation.

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**3. BETTER USE
CAN BE MADE OF
RESEARCH AND
DEVELOPMENT
FUNDS**

More than \$460,000 of R&D funds were used for completion of the EOSDIS facility construction although \$274,000 of CoF funds were available at NASA Headquarters for this purpose. The R&D funds were appropriated primarily for scientific research with the intent, in our opinion, that they could be used for building construction if CoF funds were inadequate. The CoF funds were authorized and appropriated specifically for the EOSDIS facility construction. R&D funds were used because the CoF funds at GSFC had been exhausted and GSFC Facilities Management Division personnel were unaware that additional CoF funds were available from NASA Headquarters Facilities Engineering Division and did not request additional funds. The use of R&D funds for construction potentially reduces the amount of scientific research the EOS program can conduct.

NASA requested the Congress to provide funding for EOSDIS construction under the CoF appropriation. A total of \$40.3 million of CoF funds were specifically provided for "Construction of Earth Observing System Data Information System Facility, Goddard Space Flight Center" by fiscal year 1991, 1992 and 1993, authorization and appropriation acts. NASA was separately provided funds in the fiscal year 1991, 1992, and 1993 authorization and appropriation acts for the EOS program under the R&D appropriation. The R&D funds were provided primarily for the conduct of scientific research. Although the acts permit the use of R&D funds for facilities construction, the intent of the acts, in our opinion, is that funds specifically requested by NASA and provided for a CoF project, should be used for that project. R&D funds could be used for the project if the CoF funds are inadequate.

More than \$460,000 of EOS program R&D funds were used by GSFC for unforeseen EOSDIS facility construction requirements. Specifically, R&D funds were used for:

• Building standpipe system pump	\$133,000
• Additional support framing below building entry doors	22,300
• Fire-rated glass instead of non-rated	12,700
• Utility control system modification	79,000
• Install screens in water strainers	17,300
• Extension of construction management services	48,800
• Two 104 ton chillers	<u>150,700</u>
Total	<u>\$463,800</u>

The R&D funds were used for the EOSDIS construction because the CoF funds at GSFC had been exhausted and GSFC Facilities Management Division personnel were unaware that \$274,000 of CoF funds, specifically provided to NASA by authorization and appropriation acts for the EOSDIS construction, were available at NASA Headquarters. GSFC personnel had been informed in a discussion with Headquarters Facilities Engineering Division personnel in 1994, that a current request for funds would be filled, but no further funds would be available. As a result, GSFC did not request additional funds when the unforeseen requirements arose. NASA Headquarters did not communicate to GSFC that \$274,000 of EOSDIS CoF funds were held as a project contingency reserve.

The use of the R&D funds for EOSDIS construction potentially reduces the amount of scientific research and development the EOS program can conduct. Also, if the unused CoF funds at NASA Headquarters are not used for EOSDIS construction, but are used for some other NASA construction purpose, NASA may not be fully in compliance with the intent of the specific authorization and appropriation acts. In addition, GSFC recently awarded a contract for the construction of an EOS program Earth Systems Science Building (ESSB). A reoccurrence of ineffective communications on funds availability between GSFC and NASA Headquarters could result in a similar funding condition on this new project.

RECOMMENDATION 3

The GSFC Chief, Facilities Management Division, should seek to improve communications with the NASA Headquarters Facilities Engineering Division on EOS program CoF funds availability.

Management's Response

Concur. The GSFC Facilities Management Division and Headquarters functional office value their good working relationship and will continue to emphasize clear communications. In order to complete all aspects of construction activation requirements, we will make every effort to ensure NASA Headquarters understands Goddard's funding requirements.

GSFC considers action under this recommendation to be ongoing and closed for reporting purposes.

Evaluation of Management's Response

The action taken and planned is responsive to the recommendation. This recommendation is closed for reporting purposes.

RECOMMENDATION 4 The GSFC Chief, Facilities Management Division should request the \$274,000 CoF funds from the NASA Director, Facilities Engineering Division. Funds received should be applied to the EOSDIS facility construction costs.

Management's Response Concur. As a result of the OIG audit, GSFC requested the remaining CoF funding, received the funds, and applied them to the EOSDIS facility construction project. The action under this recommendation is complete.

Evaluation of Management's Response The action taken is responsive to the recommendation. This recommendation is closed.

MAJOR CONTRIBUTORS TO THIS REPORT

***GODDARD SPACE
FLIGHT CENTER***

Daniel J. Samoviski, Program Director, Mission To Planet Earth &
Communications
William A. Garay, Auditor-in-Charge

National Aeronautics and
Space Administration
Goddard Space Flight Center
Greenbelt, MD 20771



DEC 19 1996

Reply to Attn of 201

TO: NASA Headquarters
Attn: W/Assistant Inspector General for Auditing

FROM: 100/Director

SUBJECT: GSFC Response to OIG Draft Report on Earth Observing System Data and Information System (EOSDIS) Facility Construction Contract Management, A-GO-96-008

Enclosed is our response to the subject draft report dated November 18, 1996.

We concur with the draft report and have taken or will take corrective actions as described in the enclosure.

Please call Ms. JoAnn Clark at 301-286-7977 if you have any questions or need further information or followup on this response.

A handwritten signature in black ink, appearing to read "Joseph H. Rothenberg".

Joseph H. Rothenberg

Enclosure

GODDARD SPACE FLIGHT CENTER (GSFC)

RESPONSE TO

OFFICE OF INSPECTOR GENERAL (OIG)

DRAFT REPORT A-GO-96-008

DATED NOVEMBER 18, 1996

ON

EARTH OBSERVING SYSTEM DATA AND INFORMATION SYSTEM (EOSDIS)

FACILITY CONSTRUCTION CONTRACT MANAGEMENT

Date DEC 19 1996

ENCLOSURE

GSFC Response to OIG
11/18/96 Draft Report
A-GO-96-008
Page 2

We are pleased with the OIG's finding that there was reasonable cost control on this project and that the facility construction was accomplished in time to meet NASA's mission schedule and NASA's functional and program requirements.

We concur with the OIG's four recommendations as follows and will continue our efforts to improve construction contract management controls.

OIG RECOMMENDATION 1: (\$0)

The Management Operations Procurement Office should take action to ensure that contract change orders on the Earth Systems Science Building (ESSB) contract are definitized within the established NASA Federal Acquisition Regulation Supplement (NFARS) 180-day guideline.

GSFC RESPONSE TO RECOMMENDATION 1: (\$0) PARTIALLY CONCUR

We agree that change order definitization should be timely, and we will continue to focus considerable attention and resources to prompt change order definitization and to meeting NASA's 180-day definitization goal. We are implementing several improved management control mechanisms to help us accomplish this on the ESSB facility contract. The ESSB contract contains an incentive provision whereby the contractor will be evaluated in various categories, among them subcontract management, to encourage timely submission of proposals. In addition, the Contracting Officer (CO) has implemented a formal scheduling and suspense-tracking process to facilitate definitization of change orders within 180 days.

Contrary to the OIG's conclusion, the CO on the EOSDIS construction contract did hold timely weekly negotiation sessions; and despite that, and due to a variety of complex circumstances including contractor delays, many definitizations were still delayed. As you know, unilateral definitizations by the Government are subject to dispute under the Contract Disputes Act. The CO determined it was in the best interest of the Government to continue negotiations until agreement was reached.

We consider the action under this recommendation to be ongoing and closed for reporting purposes.

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OIG RECOMMENDATION 2: (\$0)

The GSFC Contracting Officer for the architect-engineer services contract, in conjunction with the GSFC Office of Chief Counsel, should examine the design errors, omissions, and conflicts and take action to reduce the contract amount or recover for services not provided and additional costs incurred by NASA.

GSFC RESPONSE TO RECOMMENDATION 2: (\$0) CONCUR

We will examine changes to the EOSDIS facility contract, to identify those that may have a high potential for possible recovery and, in consultation with the Office of Chief Counsel, make a determination regarding recovery actions that best serve the Government interest. Until we have done the OIG-recommended analysis, we are unable to determine appropriate action regarding reduction in the contract amount. To date, the CO's review of the 17 changes listed in the OIG's draft report identified only six that may have architect-engineer liability, for an estimated total not to exceed \$7,000.

ACTION OFFICIAL:	GSFC/212/L. Treece
CLOSURE OFFICIAL:	GSFC/210/R. Keegan
CONCURRING OFFICIAL:	GSFC/140/L. Watson
PROJECTED CLOSURE DATE:	June 30, 1997

OIG RECOMMENDATION 3: (\$0)

The GSFC Chief, Facilities Management Division should seek to improve communications with the NASA Headquarters Facilities Engineering Division on EOS program Construction of Facilities (CoF) funds availability.

GSFC RESPONSE TO RECOMMENDATION 3: (\$0) CONCUR

The GSFC Facilities Management Division and Headquarters functional office value their good working relationship and will continue to emphasize clear communications. In order to complete all aspects of construction activation requirements, we will make every effort to ensure NASA Headquarters understands Goddard's funding requirements.

GSFC considers action under this recommendation to be ongoing and closed for reporting purposes.

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11/18/96 Draft Report
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OIG RECOMMENDATION 4: (\$0)

The GSFC Chief, Facilities Management Division should request the \$274,000 CoF funds from the NASA Director, Facilities Engineering Division. Funds received should be applied to the EOSDIS facility construction costs.

GSFC RESPONSE TO RECOMMENDATION 4: (\$0) CONCUR

As a result of the OIG audit, GSFC requested the remaining CoF funding, received the funds, and applied them to the EOSDIS facility construction project. The action under this recommendation is complete.

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