

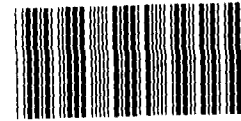
GAO

Report to the Chairman, Legislation and
National Security Subcommittee,
Committee on Government Operations,
House of Representatives

October 1987

OVERSEAS CONSTRUCTION

State Initiates Corrective Actions, but Improvements Still Needed



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**National Security and
International Affairs Division**

B-226595

October 30, 1987

The Honorable Jack Brooks
Chairman, Legislation and National
Security Subcommittee
Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

In response to your February 26, 1986, letter, we reviewed the Department of State's efforts to correct long-standing construction management problems in its Office of Foreign Buildings Operations (FBO). As requested, this report provides information on deficiencies identified in past GAO and Department of State Inspector General reports, actions taken or planned to correct these problems, and our assessment of the adequacy of corrective measures. On other reviews, we evaluated individual construction projects, but on this assignment we focused on programmatic measures initiated by FBO to address underlying and contributing causes of construction management problems. As agreed with your office, we also reviewed how the Department of State estimated the cost of projects included in its diplomatic security construction and renovation program.¹

For more than 2 decades GAO and Inspector General reports have documented numerous problems in FBO's construction activities. The Department of State has acknowledged FBO's past problems and believes that recent actions, such as hiring a private sector program manager and reorganizing and improving FBO, will result in effective implementation of the Department's worldwide security construction program. Although it is too early to determine the full impact of these actions, programmatic and procedural deficiencies still remain in FBO ongoing operations. Specifically,

- many authorized staff positions to carry out program management responsibilities on FBO-managed projects remain vacant;
- some FBO policies and procedures do not meet government-wide regulations; others have not yet been developed; and

¹In fiscal year 1986, the Department of State requested about \$2.9 billion for its overseas security construction program; to date, the Congress has authorized about \$2.1 billion.

- cost estimating procedures have not been formalized and documentation to assess the reasonableness of construction project estimates is unavailable or incomplete.

Past Problems Not Fully Corrected

Our review of past deficiencies in FBO's overseas construction activities showed a continuing pattern of problems. Since the early 1960s, we and the Department's Inspector General have issued 21 reports² containing about 180 recommendations for remedying deficiencies related to FBO construction. Although FBO generally agreed with most of the recommendations, the reports noted many recurring problems in such areas as architectural and engineering (A&E) services, contract administration, and design and construction management. Because these problems span a considerable number of years, we did not attempt to determine the extent of FBO compliance with all recommended corrective actions. However, we did assess FBO actions in response to the latest GAO and Inspector General recommendations in reports issued in April 1986 and August 1985, respectively. We found that FBO had implemented the three GAO recommendations; however, 10 of the 20 recommendations for correcting deficiencies noted in the August 1985 Inspector General report were only partially implemented or were still in process.

Private Contractor to Help Manage FBO Projects

Reliance on the expertise and resources of a professional, private sector program manager is the cornerstone of FBO's current plan to ensure effective management and implementation of the Department's expanded security construction program. In October 1986, a 3- to 5-year contract was signed with the Sverdrup Corporation to provide various management support services on specifically designated projects including, among others, assistance in developing project requirements and design criteria, conducting site feasibility studies, selecting A&E and construction firms, and managing actual construction. The approach was selected to (1) reduce FBO personnel requirements, (2) acquire the sophisticated management and project support services used in commercial construction, and (3) accelerate the transfer of commercial technologies into FBO. The Program Manager Contractor (PMC) is involved in a mix of 22 specific projects at various stages of development. Only one of them (Sanaa, Yemen) is now in the actual construction phase—an area where FBO has experienced a number of problems in the past.

²A list of 10 GAO and 11 Department of State Inspector General reports is provided in appendix IV.

FBO Internal Changes to Implement Construction Program

Although the private program manager is a key element in FBO's security construction program, PMC services do not extend to all construction projects. FBO personnel are responsible for managing about two-thirds of ongoing security construction projects. To handle the responsibilities of the expanded building program, FBO initiated a number of organizational and operational changes, including a reorganization of the agency and various revisions to internal policies and procedures.

In December 1986, the Department approved a major reorganization of FBO designed to improve overall FBO operations, enhance in-house program management capabilities, and increase critical organizational resources. At the conclusion of our audit work in July 1987, the new in-house program management system had not yet been implemented and standard operating procedures had not been developed. At that time, 75 of the 133 FBO positions approved in the Department's Fiscal Year 1986 Security Supplemental remained vacant. FBO estimated that most of the new staff positions would be filled by December 1987. As an interim measure, FBO had filled some positions with contract employees and planned to fill some other positions by using personnel from the U.S. Army Corps of Engineers. However, as of July 1987, none of the temporary Corps transfers had yet taken place.

FBO has also implemented a number of policy and procedural changes designed to improve its overall operation. Among others, FBO has revised its procedures for selecting A&E firms, assessing contractor's capabilities, and handling contractor claims and contract change orders. We found, however, that in some cases further changes were still needed. For example, although called for by the Federal Acquisition Regulation, (1) descriptions of the discussions and evaluations to choose A&E candidates were not being properly documented, (2) performance evaluations of A&E contract services were not being prepared, and (3) the majority of the project files we reviewed were not adequately documented.

Reasonableness of FBO Cost Estimates Could Not Be Determined

Deficiencies in FBO's cost-estimating procedures prevented a complete assessment of the reasonableness of costs associated with the Department's \$2.9 billion security construction and renovation program. In particular, we found that FBO had no formalized cost-estimating system and could not provide documentation to support the original program costs presented to the Congress in the Department's Fiscal Year 1986 Security Supplemental request.

Additional funds may be needed if the overall program is to be completed as originally planned. However, uncertainties, such as the cost of new security requirements, program revisions, and project scheduling and construction changes, prevented us from quantifying the extent of possible cost growth.

Conclusions and Recommendations

Problems in Department of State overseas construction have continued over a prolonged period. To overcome such problems, FBO has undertaken some positive initiatives, including the hiring of a professional program manager and reorganizing to better manage the expanded overseas construction program. Although it is too early to determine how well FBO will implement these initiatives, its policy and procedural changes, in some instances, do not go far enough to ensure problems of the past are not repeated. FBO needs a comprehensive set of policies and procedures to provide a firm basis for implementing and evaluating its activities and ensuring that such activities comply with applicable government regulations. Although the development of new policies and procedures does not guarantee that problems of the past will be eliminated, such guidance would contribute to the effective and efficient operation of the organization.

Realistic cost estimates are needed by the Congress and agency management to evaluate new projects and control overall costs. The cost-estimating deficiencies we observed stemmed to a large extent from the absence of formal guidance. Given the magnitude of the security construction program and the competing demands for funds, FBO needs to develop a cost estimating system for overseas construction based on written procedures explaining how estimates are to be prepared and what documentation is required to support them.

We recommend that the Secretary of State direct FBO to develop and implement

- detailed written operating procedures to provide the necessary managerial framework for planning, awarding, administering, managing, and monitoring the design and construction of FBO construction projects and
- a systematic cost-estimating process setting forth the specific criteria to be used in developing estimates, the need for regular updating of cost factors, and the requirement for documenting program cost estimates and any changes to them.

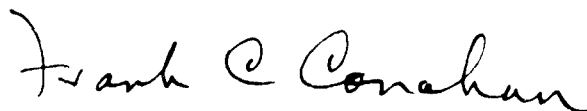
Objectives, Scope, and Methodology

Our objectives were to identify FBO construction management problems identified in past GAO and Department of State Inspector General reports and evaluate actions taken or planned to overcome such problems in FBO's current construction program. Our work was conducted in Washington, D.C., primarily at FBO headquarters, during March 1986 through July 1987. We interviewed FBO and other State Department officials and reviewed FBO policies, procedures, records, and files. We also talked with personnel at the U.S. Army Corps of Engineers and the Veterans Administration involved in government construction. Information on past FBO construction problems were compiled from prior GAO and Department of State Inspector General reports. (Details of our review are provided in appendixes I, II, III, and IV.)

We did not ask the Department of State to provide official comments on a draft of this report. Except as noted above, our review was conducted in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of issue. At that time, we will send copies to other interested congressional committees, the Department of State, and other executive agencies. We will make copies available to others on request.

Sincerely yours,



Frank C. Conahan
Assistant Comptroller General

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Abbreviations

A&E	Architectural and engineering
FAR	Federal Acquisition Regulation
FBO	Office of Foreign Buildings Operations
GAO	U.S. General Accounting Office
PMC	Program Management Contractor

FBO's Long-Standing Construction Problems and Efforts to Correct Deficiencies

In recent years, Department of State requirements for overseas construction have increased significantly to meet the growing threat of terrorist attacks. Department responsibility for overseas construction is derived from the Foreign Service Building Act of 1926 (22 U.S.C. 292-302), which authorizes the Secretary of State to acquire, construct, sell, maintain, and operate diplomatic and consular facilities abroad. The Secretary has delegated this authority to the Director of FBO.

The impetus behind the significant increase in the Department's overseas construction was a June 1985 report by the Secretary of State's Advisory Panel on Overseas Security. The Panel recommended a substantial building program be undertaken to correct security deficiencies in Department of State facilities and those of other foreign affairs agencies overseas. Accordingly, the Department, in its Fiscal Year 1986 Security Supplemental request, proposed a 5-year (1986-90) \$2.9 billion program to construct and renovate approximately 250 U.S. diplomatic and consular facilities at about 75 posts worldwide. In August 1986, approximately \$2.1 billion of the total was authorized for security construction through fiscal year 1990 as part of the Omnibus Diplomatic Security and Antiterrorism Act of 1986 (Public Law 99-399).

Since fiscal year 1985, FBO has received almost \$1 billion to fund capital projects overseas. The Department is requesting an additional \$515 million in fiscal years 1987 (Supplemental) and 1988 for overseas construction. As of July 31, 1987, FBO's capital program included 64 projects—15 in construction, 21 in design, 24 in site acquisition, and 4 in a special category.

The unprecedented scope of this Department of State construction effort and FBO's history of construction management problems has caused some members of Congress to question FBO's ability to successfully carry out this new security construction program.

Past Construction-Related Problems

GAO and Department of State Inspector General reports have documented numerous deficiencies in FBO's overseas construction activities. Our review of 10 GAO and 11 Inspector General reports issued between 1963 and 1987 identified about 180 specific recommendations relating to foreign construction operations. We categorized these recommendations into nine separate problem areas—A&E services, contract administration, cost estimating, design and construction management, organizational issues, financial management, priorities and planning, project coordination, and reporting and monitoring. A review of the

available agency responses showed that FBO generally concurred with about 80 percent of the recommendations and agreed to implement appropriate changes. We identified instances of recurring problems despite the promised corrective actions. For example:

- Between 1977-85, in the area of contract administration, nine recommendations indicated that FBO was inadequately documenting the files; nine recommendations related to poor handling of contract change orders.
- During 1977-82, eight recommendations called for FBO to better document its process for selecting architectural and engineering firms.
- Between 1982-85, in the area of design and construction management, seven recommendations proposed improvements in inspection and monitoring of construction projects.

Although many of FBO's past construction problems span a considerable number of years, the GAO and Inspector General reports issued in April 1986 and August 1985, respectively, documented the continuing and serious nature of FBO construction-related problems. The reports identified problems such as deficient designs, poor workmanship, inadequate on-site and headquarters monitoring, and cost overruns at projects in Cairo, Egypt; New Delhi, India; Hong Kong, Hong Kong; and Khartoum, Sudan. FBO addressed all 3 GAO recommendations relating to the construction of an ambassador's residence and a chancery in Cairo. However, of the 20 Inspector General recommendations, FBO had fully implemented only 10, had partially implemented 5, and was in the process of implementing 5. Appendix III contains details on the recommendations partially implemented or in process, and FBO actions.

Professional Program Manager Considered Key to Improved Performance

The principal thrust of FBO's current plan to upgrade its operations and to implement the security construction program is reliance on the expertise of a private sector program manager. Although the use of a professional program manager contractor appears to be a reasonable approach, it is too early to assess the ultimate effectiveness of this arrangement.

Since 1985, FBO has been moving from primarily an operational-type organization undertaking only several new capital projects each year to a more management-oriented agency. Lacking sufficient in-house resources to manage the Department of State's significantly expanded security construction program, in 1986 FBO turned to the private sector for the necessary technical and management expertise and personnel

resources to help implement the Department's 5-year construction program.

Following a comprehensive competitive bidding process, the Sverdrup Corporation was selected as the Program Manager Contractor (PMC). On October 2, 1986, the Department of State awarded a contract to Sverdrup for support services to FBO in the areas of (1) program management, (2) design and engineering management, (3) construction management, (4) operations management, (5) security management, and (6) special technical services. The PMC is required to provide personnel, facilities, equipment, travel, and supplies necessary to these support services. The contract is for 3 years with the possibility of 2 separate option years at a total cost of \$57.2 million—\$33.8 million for the first 3 years, \$11.6 million for option year one, and \$11.8 million for option year two. This does not include the costs to support PMC personnel who will be assigned to FBO overseas construction projects.

An FBO management team controls the work of the PMC by assigning numbered tasks which detail specific services the PMC is to provide to FBO. Such tasks may be in one or more of the various phases of a project including planning and programming, A&E selection and design, contractor selection, construction, and operations and maintenance. In response to a specific assignment request, the PMC prepares a formal task plan in accordance with detailed procedures developed by the PMC and approved by FBO. The approved plan establishes the cost, other resources required to perform the task, milestone dates, and products such as reports, charts, drawings, presentations, etc. FBO is to evaluate the PMC's performance on the basis of cost, scheduling, and quality of products.

After the contract was awarded, the PMC was assigned a 90-day mobilization task, which required it to (1) acquire and staff a PMC office in the Washington, D.C., area to carry out assigned tasks, (2) develop and implement a program management operating plan, and (3) prepare a comprehensive set of procedural manuals to be used by the PMC in providing assistance to FBO. The mobilization task was completed on January 26, 1987. Overall, FBO has assigned 25 tasks to the PMC, 22 of them relating to specific construction projects, as shown in table I.1. According to FBO officials, the tasks were assigned to provide a mix of projects at various stages of completion. This enables FBO to readily assess PMC services at different phases of the projects and to accelerate the transfer of PMC technologies and procedures into the FBO organization. The list of

projects assigned to the PMC may be modified by FBO as a result of changes in priorities or funding.

At the conclusion of our audit work in July 1987, PMC assistance, in terms of completed tasks, was in the early stages. Under the initial task, the PMC had mobilized a staff of approximately 70, including architects, engineers, security and safety specialists, and program and project managers, and had developed detailed operating procedures for use in carrying out assigned tasks. Two other tasks were also fully completed: (1) identifying furniture and furnishing requirements in newly constructed facilities and (2) determining the size of the PMC's core staff. The 22 project tasks, which were at various stages of implementation, call for a variety of PMC services and products throughout the life of the individual construction projects. As of July 1987, PMC personnel were on-site at the only assigned project in the construction phase—Sanaa, Yemen. By October 1987, 12 additional PMC staff are expected to be on-site, assisting FBO personnel at about 5 other overseas projects.

Appendix I
FBO's Long-Standing Construction Problems
and Efforts to Correct Deficiencies

Table I.1 PMC Project-Specific Tasks

Project	Description	Initial Stage of PMC Involvement
Amman, Jordan	Embassy compound	Design
Sanaa, Arab Republic of Yemen	Embassy compound	Construction
San Salvador, El Salvador	Embassy compound	Site acquisition
Nicosia, Cyprus	Embassy compound	Design
Bangkok, Thailand	Office building	Site acquisition
Pretoria, South Africa	Office building	Design
Caracas, Venezuela	Office building	Site acquisition
Santiago, Chile	Office building	Design
Geneva, Switzerland	Office building annex	Design
Khartoum, Sudan	Embassy compound	Site acquisition
Kampala, Uganda	Office building	Site acquisition
La Paz, Bolivia	Office building	Design
Cairo, Egypt	Office building	Design
Bogota, Colombia	Office building	Site acquisition
Lima, Peru	Office building	Site acquisition
Tunis, Tunisia	Office building	Site acquisition
Algiers, Algeria	Embassy compound	Design
Rabat, Morocco	Embassy compound	Site acquisition
Abidjan, Ivory Coast	Office building	Site acquisition
Ottawa, Canada	Office building	Site acquisition
Budapest, Hungary	Office building	Site acquisition
Brussels, Belgium	Office building	Planning/ programming

FBO Upgrading Organization and Policies to Better Manage Construction Program

While FBO expects to rely on the services of the PMC for some projects, it will retain responsibility for a major part of the construction program. As of July 31, 1987, FBO staff were responsible for about two-thirds of the 64 major ongoing projects. To upgrade the in-house program, FBO has acted to restructure its organization, increase in-house personnel, and strengthen internal policies and procedures. Although a new organizational framework has been approved, many of the positions in the new organization have still not been filled and some FBO policies and procedures are not consistent with government-wide regulations or have not been developed.

Reorganization

Traditionally, FBO construction operations were marked by a decentralized-style of management. Decisions regarding the different phases of construction, such as site acquisition, design, and construction were the

responsibility of separate functional divisions. However, in December 1986, the Department approved the reorganization of FBO to better manage FBO operations, enhance the in-house program management capability, and increase resources in critical program areas. In addition, the reorganization was intended to provide an FBO structure which would facilitate the integration of new management processes and systems of the PMC. However, key elements of the plan have not yet been completed, particularly (1) the establishment of a Program Management Division to ensure the success of projects from inception to completion and (2) the recruitment of staff to fill new positions within the organization.

As proposed under the FBO reorganization plan, program management responsibilities are to be assigned to a separate Program Management Division which is to be comprised of a program management office for projects managed in-house and another office to coordinate and monitor the work of the PMC. As planned, the office for in-house projects will mirror the organization and functions of the private sector program manager, integrating and coordinating the activities of the various FBO offices during the life of a project. Individual program managers will be assigned as focal points, responsible and accountable for planning, scheduling, assigning design and construction responsibilities, controlling design and construction activities, and monitoring the progress of projects.

An increase in staff resources is an integral part of FBO's plan to effectively implement the security construction program. However, we found a number of staff vacancies for architects, engineers, contract and procurement specialists, and administrative staff. FBO's authorized staffing in April 1987 was 298 positions, 133 of which were authorized as part of the Department's Fiscal Year 1986 Security Supplemental approved in July 1986, as shown in table I.2.

Table I.2 FBO Staff Levels as of April 1987

Positions	Authorized	Filled		Vacant
		Direct Hire	Contract	
Regular	165	73	57	35
Security-Related	133	7	32	94
Total	298	80	89	129

FBO officials advised us that as of July 1987, 58 of the 133 security-related positions had been filled—46 contract employees and 12 direct-hire personnel.

According to FBO officials, the delay in acquiring new staff was due to the lengthy government hiring process, involving preparing position descriptions, classifying jobs, screening and interviewing candidates, and conducting security investigations of individuals selected. New permanent hires generally were not expected to be on board until at least the end of 1987. As an interim measure, FBO was using some contract employees and planned to use specialists from the U.S. Army Corps of Engineers. As of July 1987, the Corps had agreed to an FBO request for 19 employees to serve on 4- to 6-month details; however, none of the temporary transfers had yet taken place. In the longer term, possibly in 1989, FBO is also considering using Corps expertise for selected projects at overseas locations where the Corps has available resources. Details of the arrangement have not been worked out between FBO and the Corps.

Until the Program Management Division is staffed and fully operational, FBO will continue to operate its non-PMC projects under an interim program management approach. Under this arrangement, an individual from either FBO's building design or construction division is designated as a program manager and is responsible for providing information on the status of a particular project through its completion. However, actual control of project activities such as design, acquisition, and construction would remain dispersed among the individual FBO functional divisions.

We found a number of deficiencies in the interim program management system. In particular, there were no formal procedures defining the duties and responsibilities of the program managers. Designated program managers were not well-versed in all phases of specific projects and, consequently, were not able to provide complete details on the progress of work or on problems which may have been experienced. In addition, program managers did not maintain centralized project records or information; such information was dispersed within each of the FBO functional divisions.

New Policies and Procedures

Since the end of 1985, FBO made a number of policy and procedural changes to upgrade its internal operations. In particular, FBO (1) revised A&E selection procedures to obtain higher quality firms, (2) upgraded procedures to assess a contractor's technical and financial capabilities,

(3) revised policies for processing contractor claims and handling contract change orders, (4) established regulations governing the amounts of performance and payment bonds, and (5) increased monitoring of construction projects. In general, these initiatives have been positive; however, as shown in the following examples, further changes are required.

- Although required by the Federal Acquisition Regulation (FAR),¹ FBO officials normally have not included a description of the discussions and evaluations conducted by the Architectural Advisory Board² in reports to the Department's selection committee. Furthermore, FBO acquisition personnel generally have not attended these meetings to ensure that panel members are appropriately fulfilling their assigned responsibilities. In June 1987, FBO revised its procedures for selecting A&E firms for new construction projects valued over \$5 million, but these procedures do not specify the need to document the description of the discussions and evaluations used to arrive at potential A&E candidates and to include them in reports to the Department's selection committee.
- The FAR requires that end-of-contract performance evaluations be made for A&E contractors to evaluate the firms for possible future contracts; FBO has not been meeting this requirement. Agency officials could not explain why these evaluations were not being prepared but said they would be in the future.
- Improper documentation of project files has continued to be a problem. The FAR requires that contract documentation be sufficient to constitute a complete history of the transaction. However, information on individual projects as maintained by the FBO functional divisions in many cases was incomplete or could not be readily provided by agency officials. FBO had no formal procedures assigning responsibilities for maintaining project records or identifying the types of information that should be compiled.
- FBO revised its policies for assessing contractor technical and financial capabilities and processing contractor claims, but issued no formal procedures to ensure that the policies would be implemented.
- Revised FBO A&E policies and procedures cause uncertainty as to which provisions are in force. FBO published A&E policies and procedures in

¹Except in unusual circumstances, it is FBO policy to carry out overseas construction operations in accordance with the FAR; any deviations should be approved in advance by the FBO Director.

²Board membership is composed of three prominent American architects and engineers appointed for a term of 3 years by the Department's Assistant Secretary for Administration. The board members, who are volunteers, recommend potential A&E candidates for new construction projects valued over \$5 million.

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1982. In June 1986 and again in June 1987, FBO revised its A&E requirements; however, we could not determine from a review of the changes which provisions of the 1982 and 1986 documents are in effect and which have been superceded.

FBO Cost Estimating Procedures Need Improvement

As part of its Fiscal Year 1986 Security Supplemental request, the Department of State proposed a 5-year plan to construct and renovate diplomatic facilities at about 75 posts with an estimated cost of \$2.9 billion. FBO could provide no documentation to support how these project estimates were developed. In addition, FBO had no formal procedures stipulating the essential requirements of a comprehensive cost estimating system including the need for proper documentation of project estimates. Department regulations require organizational units to maintain adequate, reliable, and accurate information to support budget requests.

In general, FBO officials explained that their budget estimates are based on size, location, and complexity of projects. After a decision is made concerning the number of people that will be accommodated in a new facility, a formula is applied (550 square feet times the number of people) to arrive at the necessary square footage of the building. Based on the size, an FBO cost estimator develops the basic building cost, which is then adjusted to consider construction costs in the country where the facility is to be built. A factor for anticipated inflation is then applied to the project cost. Finally, as necessary, special costs for security, communications, and other projected expenses are added to the basic building estimate to arrive at the total project estimate.

The lack of supporting documentation prevented us from determining the reasonableness of the original estimates included in the Department's Fiscal Year 1986 Security Supplemental request. FBO officials informally described how the cost estimates were developed but we noted a number of problems with their explanation which raise questions about the validity of such estimates.

- Square footage requirements for many of the requested projects were not consistent with FBO's formula of 550 square feet per person.
- FBO officials advised us that they added a standard 15 percent contingency amount to each project to cover uncertain additional costs; however, FBO could not reconcile its computations with the contingency amounts included in the project estimates.
- FBO could provide no sound basis for the 15-percent contingency factor used in developing initial project estimates. In the past, the Inspector General recommended that this percentage be based on analyses of cost overruns in completed FBO projects. The Army Corps of Engineers normally uses a variable percentage depending on the stage of project development.
- Cost factors used in computing FBO project estimates were based on the judgments of FBO staff members and informal contacts with private

enterprises and other government agencies involved in overseas construction. There was no requirement for documenting these factors or periodically updating them.

Program Cost May Exceed Original Estimate

We identified the following additional construction-related costs, resulting from new legislative requirements, and other costs which are in addition to the \$2.9 billion estimate.

- New security requirements in the Omnibus Diplomatic Security and Antiterrorism Act of 1986 will increase the cost of the program. FBO officials estimated the additional cost would range between 8 and 12 percent per project but could provide no data to support these amounts. A Department Diplomatic Security official estimated the new security requirements would add between \$2 million and \$3 million to each project. This would total about \$150 million to \$225 million for the approximately 75 new Department construction projects identified in the Fiscal Year 1986 Security Supplemental request.
- The estimated \$57 million PMC cost, which requires annual congressional funding approval, was determined subsequent to the original program estimate. Based on the tasks assigned, FBO estimated that PMC costs in fiscal year 1988 will be about \$14 million.
- As budgeted in fiscal year 1988, new and previously identified future costs for project supervision and furniture and furnishings for new construction would increase overall costs by approximately \$22 million.
- FBO only included a factor for inflation to the half-way point of construction; consequently, any additional inflation costs for the remaining life of the project would still have to be funded. FBO plans to adjust inflation costs for those projects submitted for funding in fiscal year 1989.

Other Factors That May Affect Costs

In some cases, the calculation of building size in the original program estimate excluded provisions for a number of employees from other agencies, primarily the Agency for International Development and the United States Information Agency. In the event of increased terrorist activity at a particular location, the Department could require these employees be housed within the chancery compound. This would necessitate a larger facility and increase the project cost.

Closing some overseas posts and reducing requirements and cutting back on U.S. personnel at certain posts could reduce the cost of the security construction program. For example, at the time our audit work was completed, the Department was planning to close the consulate at Izmir,

Turkey, and had indefinitely postponed planned construction of a chancery in Doha, Qatar. About \$19 million was requested for these two projects in the original program request.

In recent years FBO has also experienced substantial cost growth in construction projects in Moscow, the Soviet Union and Cairo, Egypt. The cost of 13 security construction projects set forth in the Department's Fiscal Year 1985 Security Supplemental has increased by \$116 million (about 67 percent) over the original estimate. Similarly, the Department's fiscal year 1988 budget request showed cost increases totaling \$39 million over the original estimates prepared in fiscal year 1986.

The FBO Director told us he was committed to completing the original 5-year program within the approved budget. He pointed out, however, that only \$2.1 billion of the total request of \$2.9 billion was approved; therefore, the original plan would have to be scaled down to compensate for the reduction and it was likely that only about 55 of the approximately 75 original projects could be accommodated within the authorized budget. The Director also indicated that project costs probably would increase, primarily because of new Omnibus Security Act requirements; however, such an increase would not be significant and could be partially offset by better programming and management of projects.

New System to Track Changes in Cost Estimates

Although FBO lacked supporting data on the original cost estimates, it initiated work in March 1987 on a new system to track changes in approved project authorization amounts. Under the system, after Congress has approved funding for a particular project, any change which affects project scope, cost, or schedule would require a formal justification and the approval of the FBO Director.

At the conclusion of our review, the new tracking system was in the very early stages of implementation. Operating procedures were issued in July 1987, at which time the new requirements had been applied to only four capital projects. Our evaluation of the approved change requests for these four projects showed that, in some cases, the narrative justifications did not completely explain the basis for the changes. In addition, deficiencies noted in the original estimates were also found in the new change documents, particularly for the square footage and contingency factor computations. FBO officials were unable to completely reconcile these discrepancies.

Recommendations in August 1985 Inspector General Report Which Have Not Been Fully Implemented and FBO Actions

The August 1985 audit report by the Department of State's Inspector General contained 20 detailed recommendations calling for corrective actions in FBO's overseas construction operations. As of June 1987, FBO had fully implemented 10 of them. The 5 which were only partially implemented and the 5 on which work was still in process are listed below, together with a brief description of FBO's actions.

Recommendations Partially Implemented

1. FBO construction contracts should not allow for advance payments unless it can be determined that this is the only way that qualified contractors will be interested in the project. In cases where advance payments are made, the contract file should include a statement justifying the reasons for the payment. If, in certain instances, it is then in the U.S. government's interest to assist a contractor in financing the contractor's early operations, such payments could be made but only when they can be directly tied to this contractor's mobilization expense.

FBO Action

FBO agrees that advance payments should be used only on an exception basis and the reasons should be documented in the contract file. However, FBO did not prepare a written policy statement or implementing procedures.

2. FBO should issue a policy statement together with FBO regulations which includes detailed procedures for negotiating, pricing, and issuing change orders. These regulations should include the following requirements: (a) an independent U.S. government estimate should be made for each change expected to exceed \$25,000, prior to reviewing the contractor's proposal for the changed work; (b) formal memorandums of negotiations should be prepared and maintained on file detailing how the agreed-to price was arrived at; and (c) contract audits should be requested for all change orders expected to exceed \$500,000, except where there is sufficient information to determine that an audit is unnecessary and the files document the basis of this determination.

FBO Action

FBO issued a general policy statement but no detailed implementing procedures or regulations.

3. FBO should revise its methods for processing contractors' claims. A policy statement and applicable FBO regulations should be issued prescribing a detailed procedure for handling claims. This procedure should include at a minimum: (a) the types of records that must be kept at the construction site (e.g., daily logs); (b) a system to provide for timely investigation and decision-making by those individuals representing the U.S. government; (c) a procedure for requesting audit services where the claim exceeds \$500,000; and (d) preparation of formal memorandums of negotiations detailing the resolution of the claims, i.e., settlement, denial, or withdrawal by the contractor.

FBO Action

FBO issued a general policy statement addressing contractor claims but did not develop implementing procedures and regulations. The PMC had prepared procedures for handling claims involving PMC-managed projects and was meeting the requirements stipulated in the recommendation.

4. FBO should issue an internal regulation detailing the procedures to be used for all negotiated contracts. These procedures should include the following requirements: (a) descriptions of the training needs and composition of the members of the negotiating teams, (b) detailed U.S. government estimates for contracts expected to exceed \$25,000, (c) audits of proposals in excess of \$500,000 to be requested or the files documented that an audit was determined to be unnecessary, (d) formal memorandums of negotiations detailing how prices were established, and (e) solicitation for proposals from several sources or documentation in the contract file as to why this was not done.

FBO Action

FBO issued a general policy statement but did not publish regulations or detailed implementing procedures.

5. FBO should establish a dollar limitation for amendments to miscellaneous A&E contracts and a 1-year time limit. FBO should also require that when these contracts exist for more than 1 year or reach the established dollar limit, the Department selection committee be notified of the reasons. A procedure should also be established requiring a well defined specification and scope of work for every project prior to advertisement.

FBO Action

FBO developed new requirements for miscellaneous A&E contracts but the procedures do not specify that, when the 1-year or dollar limit is reached, the selection committee must be notified of the reasons.

Work to Implement Recommendations Still in Process

1. FBO should establish a staff adequate in size to inspect all ongoing construction projects on a systematic basis, particularly during critical stages of construction. This staff of individuals knowledgeable in architectural, structural, mechanical, and electrical phases of construction as well as in construction techniques would inspect projects to ensure a quality building.

FBO Action

On selected overseas projects, PMC personnel will be assisting FBO staff in monitoring, inspecting, and managing the security construction program. To monitor other projects, FBO is increasing its in-house staff of architects and engineers. However, most of the new personnel are not expected to be on board until the end of 1987.

2. FBO should supplement its staff with additional structural, mechanical, and electrical engineers to assist in performing design analysis for constructibility and to oversee construction projects. This staff, rather than being assigned to a particular project, could be available to assist in overseeing construction as needed for various projects throughout the world.

FBO Action

PMC specialists were on board to perform constructibility reviews for PMC managed projects. For FBO-managed projects, the necessary expertise is being provided on an interim basis, through personal service contracts for civil, electrical, and mechanical engineers. FBO is in the process of hiring additional in-house personnel to assist in the constructibility reviews.

3. FBO should develop and issue procedural manuals which would include internal regulations covering the awarding and administering of design and construction contracts and managing construction projects. These manuals should clearly identify specific procedures that must be followed by individuals involved in the various aspects of construction

and should clearly differentiate between guidelines and mandatory requirements.

FBO Action

The PMC has developed detailed manuals outlining procedures to be followed in providing support to PMC assigned projects. FBO officials said they planned to use these manuals as a basis for manuals covering all FBO projects, but manuals for FBO-managed projects have not been developed.

4. FBO should initiate a program of value engineering. Completed designs, wherever time restraints do not preclude this, should be studied by in-house architects or contracted to specialists to determine where changes can be made that will not affect quality but will reduce construction costs.

FBO Action

FBO has carried out this action for PMC-managed projects. However, value engineering for in-house managed projects will continue to rely upon assistance from outside contractors until in-house specialists are hired.

5. FBO should establish procedures to evaluate design errors or omissions, and seek remuneration from A&E firms when such errors or omissions result in significant construction contract change orders. These procedures should require that all construction contract change orders be analyzed for design deficiencies. FBO should also annotate its files with information regarding design deficiencies for use in future evaluations of A&E firms for FBO contracts.

FBO Action

According to FBO, the PMC prepared and recommended some standard contract clauses to assess design deficiencies of A&E firms. The FBO Director, agency lawyers, and other FBO staff were reviewing these clauses for inclusion in all subsequent A&E contracts.

GAO and Department of State Inspector General Reports on FBO (1963-87)

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2. Problems In Constructing Embassy Facilities in Cairo, Egypt (GAO/NSIAD-86-101, Apr. 18, 1986).
3. Much More Can Be Done by The State Department To Improve Overseas Real Estate Management (GAO/ID-81-15, Feb. 9, 1981).
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5. Some Progress In Improving Management of Government Owned and Leased Real Property Overseas (GAO/B-146782, Mar. 28, 1974).
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7. Reduction in Dollar Outflow Possible Through More Extensive Use of American Made Building Materials In Embassy and Related Construction Projects (GAO/B-258662, Apr. 29, 1966).
8. Review of Construction of Consulate General Office Building and Official Residence, Tangier, Morocco, Office of Foreign Buildings, Department of State (GAO/B-146798, May 7, 1964).
9. Review of Funding Practices in the Acquisition and Management of Real and Related Personal Property Overseas by the Department of State (GAO/B-146782, Sept. 30, 1963).
10. Construction of Embassy Office Building and Ambassador's Residence, Rabat, Morocco, Office of Foreign Buildings, Department of State (GAO/B-146798, Jul. 7, 1963).

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1. New Construction of Foreign Buildings Operations (A-85-3, Aug. 1985).
2. Report of the Special Inquiry into the Construction of the Embassy Residence at Giza, Cairo, Egypt (Oct. 1984).

3. Procurement Activities in Office of Supply, Transportation, and Procurement, Office of Foreign Buildings and Bureau for Refugee Programs (Jul. 1983).
4. Project Management and Contract Administration of the New Embassy Complex - Moscow (Feb. 1983).
5. Management Audit of Management Information Systems, FBO (Sept. 1982).
6. Audit of Renovation of New Office Building/Chancery Khartoum, Sudan (Nov. 1981).
7. Audit of FBO Contract Administration in New Delhi (Oct. 15, 1981).
8. FBO Activities - China (Oct. 1981).
9. Audit of Procurement Program (Jan. 30, 1981).
10. Inspection Report: Office of Foreign Buildings (May 1977).
11. Determining Requirements, Priorities and Funding for Property Needs Abroad (Feb. 1975).

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