

PDAAR-879

IN: 41515

AUDIT OF  
APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
USAID/EGYPT PROJECT NO. 263-0016  
Audit Report No. 6-263-85-9  
September 30, 1985

## memorandum

DATE: September 30, 1985  
REPLY TO: *Joseph R. Ferri*  
ATTN OF: Joseph R. Ferri, RIG/A/Cairo  
SUBJECT: Audit Of Applied Science And Technology  
Research - USAID/Egypt Project  
No. 263-0016 - Audit Report No. 6-263-85-9  
TO: Mr. Frank B. Kimball, Director USAID/Egypt

This report presents the results of our audit of the Applied Science and Technology Research Project. The objectives of the audit were to determine whether: (1) the project was achieving its purposes; (2) project activities were in compliance with the grant agreement and AID regulations; and (3) funds were spent economically and effectively.

Evaluations of the project, reports by the Government of Egypt and project consultants, and our review of selected activities indicated that the project was essentially achieving its objectives. The project also appeared to be carried out in general conformance with AID regulations with the exception of the following matters.

An effective system was not in place for controlling Phase I property valued at about \$3.7 million. Accordingly, some items were lost or damaged or not delivered to project sites until several months after arrival in-country. Claims for lost, damaged or defective equipment were not being pursued. Action has now been taken in large measure to correct these problems. An item totaling \$38,908 for chemicals damaged during Customs inspection still needs to be resolved.

Ineligible costs totaling about \$31,000 were reimbursed to four contractors. Again, action was being taken to resolve the questioned costs.

Controls were lacking over subadvances totaling \$92,977. Procedures have now been established which should take care of the problems reported on.

Finally, the technical services agreement with the National Bureau of Standards had run four years and cost \$462,500. Most of the objectives of the agreement remain unfulfilled because of

delays in the arrival of equipment needed for the project. A revised implementation schedule has been established and the training of Egyptian agency staff resumed in the fields of measurement standards and quality control.

We made four recommendations in the report directed to better use of project resources and to the recovery of questioned costs. On the basis of your comments on the draft report, we closed one recommendation and parts of another upon issuance of this report. Your comments were considered in finalizing this report and are attached as Appendix 1 to the report.

Please advise us within 30 days of any actions taken or planned to close the remaining recommendations. We appreciate the cooperation and courtesy extended to our staff during the audit.

## EXECUTIVE SUMMARY

The Office of the Inspector General made an audit of the Applied Science and Technology Research Project (No. 263-0016) to determine whether the project was (1) accomplishing its purpose, and (2) being conducted in accordance with AID regulations. We reviewed project activities from inception in March 1977 through March 1985. The audit was done in Cairo, Egypt and in four sub-project locations in Egypt. We also visited two contractors' places of business in Wisconsin and New York.

The project's purpose was to improve the institutional capability of the Egyptian scientific and technical community to develop and manage research programs, with special emphasis on applied research. The project was two-phased. Phase I laid the infrastructure, and Phase II emphasized the operational aspect. The purpose of the project remained the same during both phases.

USAID/Egypt obligated \$25.5 million for the project. Expenditures, as of March 31, 1985, were \$14.8 million for consulting services, commodities, training and sub-projects. The Government of Egypt, through its implementing agencies, the Academy of Scientific Research and Technology and the National Research Center was responsible for project implementation. Five U.S. consulting firms provided technical assistance to the Academy and the National Research Center. The project was scheduled for completion in October 1986.

Evaluations of the project made in 1980 and in 1983, progress reports issued by GOE and U.S. consultants, and our review of selected project activities indicated that the Academy of Scientific Research and Technology and the National Research Center had succeeded in coordinating the resources of the Egyptian scientific and technical community towards building an effective institutional capability in applied research. The project appeared to be carried out in general conformance with AID regulations with the exception of the matters noted below.

- o USAID/Egypt funded \$5 million for procurement of scientific and technical equipment. The GOE did not establish a system to account for the arrival, distribution and location of all Phase I items totaling \$3.7 million. Some items were not used; many others were not delivered to project sites until several months after arrival in Egypt. Claims for lost, damaged or defective equipment were not pursued.
- o USAID/Egypt reimbursed four contractors for ineligible costs totalling \$13,360 and LE14,597 (\$17,587).

- o The Academy of Scientific Research and Technology had not established procedures to monitor project subadvances totaling \$92,977 resulting in funds being outstanding for longer periods of time than necessary.
- o A four-year technical services agreement with the National Bureau of Standards costing \$462,500 did not produce the intended results of strengthening GOE systems for measurement standards and quality control because of delays in the arrival of equipment needed for the project.

This report contains four recommendations directed to establishing better control over project resources and to the recovery of questioned costs. Mission officials in responding to the draft report outlined various actions taken to address the recommendations. We considered these comments in finalizing the report. We closed Recommendation No. 1 a and c and Recommendation No. 3 upon issuance of the report on the basis of the corrective actions taken. Mission comments, without attachments, are included in the report as Appendix 1.

*Office of the Inspector General*  
Office of the Inspector General

AUDIT OF  
APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
USAID/EGYPT PROJECT NO. 263-0016

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AUDIT OF  
APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
USAID/EGYPT PROJECT NO. 263-0016

PART I - INTRODUCTION

A. Background

On March 29, 1977, USAID/Egypt signed a grant agreement with the Government of Egypt (GOE) to finance the Applied Science and Technology Research Project. The purpose of the project was to improve the institutional capability of the Egyptian scientific and technical community to develop and manage research programs and to solve priority development problems. This was to be accomplished by:

- . Improving the quality of staff in the GOE scientific research institutions.
- . Enhancing research capability and the use and maintenance of scientific equipment.
- . Expanding the data base of the scientific and technical information system.
- . Utilizing results of applied research in the solution of specific developmental problems.

Phase I of the project was from March 1977 through October 1980. It concentrated on designing and implementing three demonstration and four research and development projects. Phase II commenced in October 1980 and was designed to improve GOE institutional capability in policy studies, manage research and development activities, and establish infrastructure support systems. The project assistance completion date was October 1, 1986.

USAID/Egypt initially obligated \$3.9 million and LE760,000 (\$915,663) <sup>1/</sup> for the project. Subsequent amendments in March 1978 and August 1980 increased the obligations to \$24.4 million and LE895,000 (\$1,078,313). As of March 31, 1985, project disbursements totalled \$13.8 million and LE842,900 (\$1,015,542) (Exhibit 1). The GOE contribution was to be the Egyptian Pound equivalent of \$9.1 million which would pay for staff salaries, incentives, and equipment.

Two GOE entities, the Academy of Scientific Research and Technology (ASRT) and the National Research Center (NRC) were responsible for project implementation. Five U.S. consultants (National Academy of Sciences, National Bureau of Standards, National Institute of Health, Georgia Institute of Technology and the University of Wisconsin) performed technical advisory services which were financed by USAID/Egypt.

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<sup>1/</sup> LE.83 = \$1.00 throughout this report.

## B. Audit Objectives And Scope

The audit objectives were to determine whether: (1) the project was achieving its purpose; (2) project activities were in compliance with the grant agreement and AID regulations; and (3) AID funds were spent economically and effectively. The audit covered activities from March 29, 1977 through March 31, 1985.

We examined USAID/Egypt, GOE and the Consultants' financial and project records and interviewed project personnel. We visited four sub-project locations in Egypt and the University of Wisconsin and the Afro-American Purchasing Center, Inc. (AAPC), in the United States. In addition to reviewing procurement activities, we reviewed the application of the certified overhead rates as reflected in the billings submitted to USAID by the University of Wisconsin and the procurement service fees billed by AAPC.

We did not audit other dollar expenditures of the U.S. consultants because supporting documentation was not available in Cairo. Also, we did not try to determine whether the expected GOE contribution of \$9.1 million had been met because of the lack of readily available documentation. No previous audits of this project were made.

The audit work was done from January 16 through April 30, 1985 in accordance with generally accepted government auditing standards. We included such tests of the project activities, records and internal controls as were considered necessary in the circumstances.

AUDIT OF  
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PART II - RESULTS OF AUDIT

A. Findings And Recommendations

1. Controls And Accountability Over Project Equipment Should Be Established

The Academy of Scientific Research and Technology (ASRT) did not establish an inventory management system to coordinate the receiving, delivering and distributing functions for \$3.7 million of project equipment procured during Phase I. Some equipment was not used for several years after arrival in Egypt, claims for damaged or lost equipment were not pursued, and delivery and installation of equipment was delayed by several months. The grant agreement and AID regulations required ASRT to account for AID-financed equipment and to utilize it efficiently and effectively. As a result of these conditions project implementation, therefore, was delayed, and AID funds committed to the project were not used effectively or efficiently.

Recommendation No. 1

We recommend that USAID/Egypt:

- a. require the Academy of Scientific Research and Technology to establish inventory records to account for arrival, distribution and location of all Phase I project equipment;
- b. issue a bill for collection to the Academy of Scientific Research and Technology for lost or damaged equipment; and
- c. coordinate with the Academy of Scientific Research and Technology to expedite the shipment and delivery of equipment to project sites.

Discussion

The grant agreement required ASRT, the recipient, to account for the receipt and utilization of all goods and services provided under the grant. AID regulations (Handbook 15) specify that commodities financed under project agreements should be properly accounted for, expeditiously moved to their destination, and effectively used for the purpose for which the assistance was made available.

## Accountability

As of December 31, 1984, USAID/Egypt had financed \$5 million for procurement of project equipment. Lines of authority and responsibility were not clearly designated and it was difficult to determine who in ASRT was responsible for the overall inventory management function. Accordingly, ASRT had not established an inventory management system to account for the arrival, distribution and location of the Phase I equipment totaling \$3.7 million. Stock records for these items were generally incomplete. The problems were corrected during Phase II, and the University of Wisconsin established inventory records which provided a satisfactory accounting of equipment valued at \$1.3 million.

## Unused Equipment

We made a physical inventory of 105 items totaling \$3,752,800, or about 70 percent of the \$5 million in equipment purchases. The inventory showed that six items totaling \$170,000 were not used. Three of the six items were procured during 1979, one in 1981 and two in 1984. According to GOE officials, the equipment was not used because of a variety of problems including a research laboratory not being finished, unavailability of trained staff, and missing manuals and/or spare parts.

## Claims

ASRT did not pursue claims for lost, damaged or defective equipment in a timely manner. In a memorandum dated August 23, 1981, the project consultant, the University of Wisconsin, provided USAID/Egypt a list of 34 items which were either lost or damaged and defective estimated to cost \$68,600 (Exhibit 5). Only one claim covering one item was pursued, and damages totaling \$2,620 were recovered. According to the Phase I procurement agent, GOE officials did not forward surveyors' reports or other independent assessments of lost and damaged equipment to the insurance carriers. Consequently, the claims became time-barred.

In July 1985, ASRT informed USAID/Egypt that of the list of 34 lost, damaged or defective equipment (Exhibit 5), two items totaling \$12,700 had been repaired and were being used. No satisfactory accounting was received of the 32 remaining items valued at \$55,900.

## Delivery And Installation

Delays occurred between the time of ordering, shipping and delivering of equipment to project sites which hampered implementation. For example, of eighteen purchase orders totaling \$407,000 processed between September 1983 and August 1984, only three orders totaling \$67,400 were actually delivered to project sites as of April 1985. The other 15 orders were either awaiting

shipment or were not yet cleared by Egyptian customs authorities. GOE project officials attributed the delays to time-consuming U.S. and Egyptian Government regulations which were not taken into consideration when planning the procurement schedules.

As a result of delays in the arrival and distribution of project equipment, research laboratories could not be installed on a timely basis, and training programs could not be implemented according to schedule. After eight years of project operation up to March 31, 1985, only 58 percent (\$14.8 million) of the total obligated funds (\$25.5 million) had been disbursed.

#### Conclusions

Phase I project equipment was not properly controlled and accounted for by the grantee. A system was needed to do so. Also, responsibility for lost or damaged equipment needed to be fixed and collection made for those items for which the contractor, or other parties, were responsible.

#### Management Comments

The Mission said ASRT's inventory of Phase I equipment is well underway and will be completed. The active inventory of purchased equipment is the responsibility of individual research and development institutions, and controls are in place at these institutions. With respect to lost and damaged equipment, the Mission said the amounts in the audit report were negligible given the complex procurements made under the project. It pointed out that all but \$38,908 was now either located, expended, or used elsewhere. Regarding claims, it said the insurance became time-barred before the items left Customs because of the time taken to clear Customs. The Mission provided a series of steps to preclude such losses under Phase II. Data also was provided indicating that the project and ASRT were working closely to expedite and distribute equipment to the project sites. It requested that this recommendation be closed.

#### Office of Inspector General Comments

The actions taken are responsive to the issues raised. Sections a and c are closed upon issuance of the report. Section b, however, remains open. The amount of \$38,908 representing chemicals that were damaged during inspection at Customs must be settled. It is inappropriate for AID to absorb this loss. Action should be taken against the party liable for the damage and the monies recouped.

## 2. Questioned Costs Should Be Recovered

Certain costs reimbursed to four project contractors were questioned because they were unallowable under AID regulations or under terms of the contractual agreements; or were not supported by invoices, receipts, or other acceptable documentation. The USAID/Egypt review of the contractors' fiscal reports did not disclose the ineligible costs.

### Recommendation No. 2

We recommend that USAID/Egypt recover questioned costs of: (a) \$5,348 (LE4,439) from the National Academy of Sciences; (b) \$12,239 (LE10,158) from the Georgia Institute of Technology; (c) \$10,560 from the University of Wisconsin; and (d) \$2,800 from Afro-American Purchasing Center, Inc.

### Discussion

#### Local Currency Questioned Costs

The National Academy of Sciences and Georgia Institute of Technology questioned costs concern the lack of documentation authorizing the purchase of office equipment, two technical seminars, and certain housing and utility costs. Local currency questioned costs are presented in Exhibits 2 and 3.

#### U.S. Dollar Questioned Costs

USAID/Egypt overpaid the University of Wisconsin \$10,560 from contract inception (June 14, 1982) through September 30, 1984 because the university inappropriately included equipment and subcontract costs in the base for computing its overhead rate (See Exhibit 4).

AAPC procured scientific and technical equipment for the project between November 1978 and June 1983. Under the terms of their agreement with USAID, AAPC was to be paid a handling fee of \$20 per transaction, which was defined as the vendor invoice plus freight, insurance and shipping documents. However, AAPC billed AID \$20 for each invoice and \$20 for freight, insurance and shipping documents resulting in an overcharge of \$20 per transaction. AAPC's procurement reports indicated an overbilling of \$2,800. USAID/Egypt should recover this amount from AAPC.

In a May 1985 cable, the University of Wisconsin stated that the overhead charges billed to USAID/Egypt were proper. However, based on our review of the University's contract with USAID/Egypt, we continued to believe that the overhead charges were overbilled by \$10,560.

Of the LE4,439 questioned costs billed to AID by the National Academy of Sciences (Exhibit 2), USAID/Egypt took action in May 1985 to offset LE1,570 (\$1,892) from the contractor's billings. The remaining questioned costs of LE2,869 (\$3,457) have yet to be resolved.

## Conclusions

Certain costs were inappropriately reimbursed contractors by the Mission. Action needed to be taken to recover these questioned costs.

## Management Comments

The Mission said that the approval by the Mission Director of the project budget, which included the purchase of equipment, met the contract and grant requirements for the Director's written approval. The costs, therefore, were allowable. Regarding the local currency costs questioned, the Mission said: (a) a legal opinion would be sought on the housing and utilities costs; (b) LE1,570 had been withheld from the contractor's voucher and another LE150 would be withheld for project support costs; and (c) approval of the Mission Director would be sought for supplies and services payments, or absent such approval, the costs would be disallowed. Regarding the dollar costs questioned, the Mission said that it would refer the question of overpayments to University of Wisconsin to the AID/W contracting officer. Also, it would ask SER/COM to issue a Bill of Collection to AAPC for the costs questioned.

## Office of Inspector General Comments

The above actions are generally responsive to our recommendation. We continue to believe, however, that specific approval by the Mission Director of equipment purchases is needed to satisfy the requirements of the arrangements between the parties. The arrangements contemplated that the GOE would provide the needed equipment. If the GOE didn't, AID could authorize such purchases. The project budget did not include any determination that the GOE was unwilling to provide the necessary equipment.

### 3. Procedures To Monitor Subadvances Should Be Established

Subadvances, totalling LE77,171 (\$92,977) made by ASRT from AID funds, were outstanding for periods of up to sixteen months. AID financial management regulations require more timely followup and liquidation of outstanding advances. ASRT did not establish the appropriate accounting controls resulting in idle project funds.

#### Recommendation No. 3

We recommend that USAID/Egypt have the Academy of Scientific Research and Technology establish procedures to ensure timely followup and liquidation of outstanding advances.

#### Discussion

AID Handbook 19 (Financial Management) and U.S. Treasury regulations required timely followup and liquidation of outstanding advances. The general rule was that advances would be liquidated within 30 days. Project grantees were required to submit quarterly expenditure reports and account for the advances received. At the time of our review, ASRT had not established procedures to appropriately control its cash advances with the result that advances remained outstanding for several months.

ASRT conducted several research and demonstration projects which were financed by USAID/Egypt. ASRT made cash advances from AID funds to these project team leaders to defray local currency expenditures. As of February 13, 1985, sixteen advances of LE77,171 (\$92,977) were outstanding. Of these, six advances LE36,884 (\$44,439) or 48 percent of the funds were outstanding from six to sixteen months as shown below:

<u>Period Outstanding</u>	<u>Advances</u>	<u>Amount</u>		<u>Percent</u>
0 - 4 Months	6	LE27,173	\$32,738	35
4 - 6 "	4	13,114	15,800	17
6 - 12 "	4	24,006	28,923	31
12 - 16 "	2	12,878	15,516	17
	16	LE77,171	\$92,977	100
	==	=====	=====	=====

ASRT did not establish procedures to monitor the advances which ranged from LE100 (\$120) to LE20,000 (\$24,096). No time interval was fixed during which expenditure reports were to be submitted. Project personnel sometimes received advances without liquidating the previous advance and often delayed submitting expenditure reports.

Subsequent to completing our field work, USAID/Egypt in coordination with ASRT reduced the outstanding advances by LE49,000 (\$59,036). In order to improve the monitoring of subadvances, ASRT agreed to perform a monthly review of the

outstanding balances, withhold new advances from the principal investigators until the previous ones were liquidated, and plan forthcoming expenditures and advance requests on a timely basis. These actions should satisfy the intent of our recommendation.

#### Conclusions

Procedures for controlling such advances were inadequate. Thus, advances were outstanding for periods longer than necessary. Improved procedures would cut down on the amounts outstanding and ensure expenditure reports were submitted timely.

#### Management Comments

The Mission said a monitoring system for advances was now in place. Also, it would continue to monitor advances and subadvances provided by ASRT to its principal investigators. It requested this recommendation be closed.

#### Office of Inspector General Comments

The actions taken meet the intent of our recommendation. This recommendation is closed upon issuance of the report.

4. The National Bureau Of Standards Technical Services Agreement Did Not Produce The Intended Results

The Participating Agency Service Agreement (PASA) between USAID and the National Bureau of Standards (NBS) did not produce the intended results of strengthening Egyptian measurement standards and quality control systems. Thus, the agreement was extended for another year to complete the work. At the end of the four-year agreement, NBS had completed only one out of six activities included in the scope of their work basically because of delays in arrival of equipment which hindered implementation.

Recommendation No. 4

We recommend that USAID/Egypt coordinate the activities of all participants and resources involved in the agreement with the National Bureau of Standards and establish revised implementation schedules.

Discussion

USAID/Egypt and the National Bureau of Standards (NBS) signed a Participating Agency Service Agreement in July 1981. The NBS was to provide technical assistance and conduct training programs for two GOE agencies that provided national services in the areas of measurements standardization and quality controls over industrial and agricultural production, construction materials, and raw materials.

The PASA listed six principal activities to be performed by NBS. When the agreement terminated on April 30, 1985, only one activity had been completed. In March 1985, USAID/Egypt requested a no-cost extension of the agreement to October 1985. Expenditures to March 31, 1985, were approximately \$462,500 or about 48 percent of the total obligation of \$906,000.

USAID/Egypt and GOE officials explained that delays in the arrival of scientific and technical equipment seriously hindered implementation of the agreement. Various training programs could not be implemented and the arrival of U.S. experts had to be postponed. Consequently, the PASA objectives of training GOE personnel and strengthening the national system for measurement standards and quality control were not achieved.

USAID/Egypt project officials stated that NBS submitted a revised implementation schedule to the GOE in April 1985 which listed the project activities to be completed by October 1985. These officials said that most of the equipment required by NBS had now arrived in Egypt, enabling NBS to resume its technical advisory services. In July 1985, the PASA was extended to June 1, 1986, and the NBS advised USAID/Egypt that several training programs would resume during August and September of 1985. In view of the problems encountered previously, USAID/Egypt will need to coordinate activities under the agreement to ensure completion.

### Conclusions

The PASA did not fulfill the intended purposes basically because of problems in coordinating the arrival of needed equipment. Active involvement of the Mission was needed in coordinating equipment and resources under the PASA to accomplish the remaining tasks more efficiently.

### Management Comments

The Mission said a revised implementation schedule with NBS had been established. Given the resumption of training activities, the arrival of equipment, and the extension of the agreement, it requested this recommendation be closed.

### Office of Inspector General Comments

The recommendation was directed to the ongoing Mission responsibility for coordinating activities under the PASA, which now is due to expire June 1, 1986. The recommendation will be closed when it is clear that all activities have been effectively coordinated to accomplish the PASA objectives within the revised timeframe.

## B. Compliance And Internal Control

### Compliance

Overall, the project operated within the provisions of AID Handbook 3 (Project Assistance) and within agreements between USAID/Egypt, the GOE and the U.S. technical services contractors. However, four project contractors billed USAID with costs totalling \$13,360 and LE14,597 (\$17,587), which were not in compliance with under terms of the contracts (Page 6).

### Internal Control

All obligations and commitments were recorded on USAID/Egypt financial records, and were supported by obligating documents. However, the project grantee, the Academy of Scientific Research and Technology did not exercise control and accountability over AID-financed project equipment totaling approximately \$3.7 million (Page 3).

AUDIT OF  
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PART III - EXHIBITS AND APPENDICES

EXHIBIT 1

APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
PROJECT NO. 263-0016  
FINANCIAL SUMMARY AS OF MARCH 31, 1985

U.S. \$ Obligations And Disbursements

	<u>Commitments</u>	<u>Disbursements</u>
Consulting Services	\$17,599,970	\$10,017,649
Commodities	3,902,610	3,690,138
Training	106,172	106,101
Miscellaneous	<u>9,026</u>	<u>6,533</u>
	\$21,617,778	<u>\$13,820,421</u>
Uncommitted	<u>2,782,222</u>	
Total	<u>\$24,400,000</u>	

Financial Summary As Of March 31, 1985  
Foreign Currency Fund

LE Obligations And Disbursements

	<u>Commitments</u>	<u>Disbursements</u>
Travel		LE 2,227
Training		3,982
Technical Services		501,478
Contract Support - Academy of Scientific Research and Technology		325,000
Miscellaneous		10,207
Total	LE <u>895,000</u>	LE <u>842,894</u> (Note)
U.S. \$ Equivalent	\$ <u>1,078,300</u>	\$ <u>1,015,500</u>
TOTAL	<u>\$25,478,300</u>	<u>\$14,835,921</u>

Note: No disbursements were made out of this fund after June 1980.

APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
 PROJECT NO. 263-0016  
 QUESTIONED COSTS BILLED BY THE  
 NATIONAL ACADEMY OF SCIENCES  
FROM JANUARY 5, 1979 THROUGH JANUARY 31, 1985

	<u>Costs Reported</u>	<u>Costs Questioned</u>
Personnel	LE 70,858	
Equipment and Supplies	11,816	1,210 A/
Housing and Utilities	57,951	1,509 B/
Household Appliances	2,862	
Travel and Transport	374,060	
Per Diem	111,348	
Honoraria	995	
Direct Cost	20,088	
Project Support Cost	88,324	1,720 C/
	<u>LE738,302</u>	<u>LE4,439</u>
	=====	=====
	\$889,520	\$5,348
	=====	=====

Notes:

- A/ Equipment and Supplies - LE1,210 - Represents cost of purchasing one safe and a typewriter. Article VII, Section B of the contract between USAID and National Academy of Sciences states that office equipment will be provided by the Government of Egypt (GOE). If the GOE fails to provide the necessary equipment, the contractor may obtain reimbursement in such manner as agreed to by the Mission Director. The expenditure should be supported by such documentation as the Mission Director shall prescribe. The contractor was unable to provide us with a written approval by the Mission Director to purchase the above equipment.
- B/ Housing and Utilities - LE1,509 - Represents monthly expenditures for cleaning and maintaining of the common areas of an apartment rented by the contractor's resident Program Director and the cost of storing his furniture in Cairo. Article VIII, Section 2 of the contract between USAID and the contractor states that only house rent and utilities are to be reimbursed from AID funds.
- C/ Project Support Cost - LE1,720 - Represents costs associated with two science and technology seminars which were not supported by invoices, receipts or other acceptable documentary evidence.

EXHIBIT 3

APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
PROJECT NO. 263-0016  
QUESTIONED COSTS BILLED BY  
GEORGIA INSTITUTE OF TECHNOLOGY.  
FROM OCTOBER 1, 1982 THROUGH MARCH 31, 1985

	<u>Costs Reported</u>	<u>Costs Questioned</u>
Salaries	LE101,659	
Equipment	13,483	8,398 A/
Supplies and Services	76,744	1,760 B/
Travel Transportation	11,427	
Other Direct Costs	<u>10,741</u>	
	LE214,054	LE10,158
	=====	=====
	\$257,896	\$12,239
	=====	=====

Notes:

A/ Equipment - LE8,398 - Represents cost of purchasing two typewriters and a photocopying machine. Article VIII, Section B of the contract agreement states that office equipment will be provided to the contractor by the cooperating country (GOE). If the cooperating country fails to furnish the necessary equipment, the contractor may obtain reimbursement from USAID for procuring the items with the written approval of the Mission Director. There was no documentation that the contractor obtained the necessary approval.

B/ Supplies and Services - LE1,760 - Represents extra cash payments made by the contractor out of AID funds to GOE employees responsible for telephone, telex, postal services, water supply and elevator operations. Federal Acquisition Regulations prohibit such payments by contractors.

EXHIBIT 4

APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
PROJECT NO. 263-0016  
OVERHEAD CHARGES BILLED BY THE  
UNIVERSITY OF WISCONSIN,  
FROM JUNE 14, 1982 THROUGH SEPTEMBER 30, 1984

Salaries and Wages		\$157,076	
Fringe Benefits		11,894	
Allowances		4,706	
Travel and Transportation		2,528	
Other Direct Costs	\$26,914		
Less: Purchase of Equipment	<u>14,560</u>	12,354	(Note)
Subcontract Costs	\$68,825		
Less: Amount Excluded	<u>\$43,825</u>	25,000	(Note)
Overhead Base	(A)	<u>\$213,558</u>	
Overhead Rate	(B)	<u>43%</u>	(Note)
Overhead (AxB)		<u>\$ 91,830</u>	
Overhead Billed		<u>\$102,390</u>	
Amount Overbilled		<u>\$ 10,560</u>	
		=====	

Note:

The overhead rate of 43 percent was negotiated by the University of Wisconsin with the Department of Health and Human Services, the Cognizant Audit Agency. The rate is applicable against all expense items shown above except purchases of equipment and subcontract costs in excess of \$25,000.

APPLIED SCIENCE AND TECHNOLOGY RESEARCH  
PROJECT NO. 263-0016  
SUMMARY OF LOST, DAMAGED AND DEFECTIVE EQUIPMENT

<u>PO #</u>	<u>Supplier</u>	<u>Description</u>	<u>Qty.</u>	<u>Estimated Cost</u>	
4573	Du Pont	Dewar Insulating Flask For RI Detector	1	\$ 94	)
4561	Pharmacia	K50/60 Column	1	350	) Note 1
4564	Beckman	Model 48-600 Transformer	1	50	) Note 2
4620	Kramer Scientific Corp:	Plastic Dust Cover	1	26	)
		Temperature Reading Instrument	1	2,546	)
		Melting Crucible	1	7	)
		Transformer 12V	1	380	)
		Case For Filters		85	)
4680	Beckman	Scanning Densitometer	1	450	)
		Serum Proteir. Kit	12	925	)
		Conductivity Monitor System	1	530	)
		Conductivity Sensor - 10' Cable	1	168	)
		Conductivity Cell	2	278	)
		Battery 1.5V	12	23	)
		Instr. Manual for probe	2	20	)
		Instr. Manual for system	2	20	)
		Service Manual for system	2	26	) Note 3
		Acquameter	1	4,200	)
		Hamilton Syringe	3	276	)
		Hamilton Syringe	3	276	)
		Jar Cap, Neoprene Rubber	2	54	)
		Silicone Insert	6	168	)
		Stirring Bar	2	36	)
		Reaction Jar - 250 ml	2	5	)
		DUO Platinum Electrode	2	580	)
		Instr. Manual	2	63	)
		Service Manual	2	78	)
		W-3H Resin, Hydrolyzate	8	16,760	)
		W-3P Resin, Physiological	8	16,760	)
		Sodium Citrate Buffer	6	1,412	)
		Lithium Citrate Buffer	6	1,204	) Note 1
		Lithium Hydroxide	2	112	)
		Sodium Citrate Dilution Buffer	2	130	)
		Lithium Citrate Dilution Buffer	2	130	)
		Ready-Nin Ninhydrin Reagent Rit	6	2,400	)

<u>PO #</u>	<u>Supplier</u>	<u>Description</u>	<u>Qty.</u>	<u>Estimated Cost</u>	
4768	Emerson Apparatus Company	Basket, perforated aluminum, 8"diaX9". Set of gram weights, 200 gm	4 1	\$ 200 ) 40 )	Note 3
4776	Custom Scientific Instruments	Model CS-93M Sample Notcher - Step down transfer	1	50 )	Note 2
4781	Diano	X-Ray Powder Diffractometer	1	9,500 )	
4872	Monsanto	Rheometer Model 100	1	3,200 )	Note 4
4932	Harrop Labs	Hot Load Creep Furnace - Model TDA-VI-2	1	5,000 ) \$68,612 ) =====	

Notes:

1. Broken or damaged in transit.
2. Damaged by faulty electrical system at the National Research Center, Cairo.
3. Lost or stolen in transit.
4. Needs reinstallation or factory service to correct defects

Source: Report of University of Wisconsin consultant to USAID/Egypt, dated August 23, 1981.



UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

CAIRO, EGYPT

MEMORANDUM

SEP 19 1977

TO: Joseph Ferri, RIG/A/CAIRO

FROM: Frank B. Kimball, Director USAID/EGYPT *F. Kimball*

SUBJECT: 30 day response; Draft Audit Report Applied  
Science and Technology Research Project  
No.263-0016

Attached is the subject response prepared by the project officer. We request these comments be included in the final report. Based on this response we request the four open recommendations be closed upon issuance of the final report.

## memorandum

DATE: September 12, 1985

REPLY TO  
ATTN OF: S&T: Sarif, H

SUBJECT: Draft Audit Report of the Applied S&amp;T Research Project 263-0016

TO: Thomas Johnstone, Audit Liaison/FM

The following are the Mission's comments on the subject report:

Recommendation No. 1 consists of three parts:

a. USAID will require the Academy of Scientific Research and Technology to complete its records for all Phase I equipment up to and including issuance of equipment to the individual RSD institutions. RIG/A has on file a computerized list of Phase I equipment purchased for the National Research Center and prepared by the University of Wisconsin with the assistance of the Egyptian Scientific Instrumentation Center (SIC). The SIC is now responsible for procurement activities under this project. The computerized list will also include project equipment purchased for the Central Metallurgical Research and Development Institute, the Institute of Oceanography and Fisheries as well as the equipment provided to the Missr Baida Dyers in Kahr El Zayat. Upon completion, the recommended inventory record of ASRT will be in place.

NB The active inventory of purchased equipment is the responsibility of the individual RSD institutions. These are in place.

b. RIG/A based their recommendation on a Contractor's report dated October 1, 1981 for equipment that was delivered prior to that date. In reviewing the report, we note the following:

1. As shown in Attachment 1, the reported defective equipment consists of:
  - a. Four items with a value of \$3,022 which were recently located at the National Research Center.
  - b. Twenty three items with a total value of \$2,892 which are expendable supplies and materials with cost unit prices ranging from \$5-\$150. Most of these items have a limited lifetime and have expired.
  - c. Eight items with a total value of \$38,908 are chemicals that were damaged during inspection at Customs.
  - d. Five items with a total value of \$6,000 are currently being checked by ITC. They may have been displaced or used in other laboratories.

OPTIONAL FORM NO. 10  
MAY 1962 EDITION  
GSA FPMR (41 CFR) 101-11.6  
5010-106

2. The Audit report quotes a figure of \$55,900 for lost and damaged equipment (which has been decreased to \$47,878). This is out of a total of \$3.7 million of varied, complex and multi-item equipment that was delivered to Cairo and Alexandria over a period of three years. This represents less than 0.13% of the total equipment purchased; an almost negligible amount for this level of complex procurement.
3. The equipment insurance became time-barred before the equipment was consigned to the project. This happened because it takes approximately 15-20 days to be notified of equipment arrival and prepare a clearance request. It then takes Customs 30-60 days to clear the equipment. Thus the clearance timeframe is 40-80 days. The issuance becomes time-barred in "15 days (or 30 days if the destination to which the goods are insured is outside the limits of the port) whichever shall first occur."

The situation was further complicated by the absence of insurance surveyors who refused to conduct a survey unless paid to do so by the GOE or the project. This happened in spite of the fact that such service was included in the policy. By the time the surveyors were ordered to conduct a survey by their U.S. home office, 2-3 months had elapsed and the surveyors were unable to determine whether loss or damage occurred in transit, at Customs, during transport to the project site or at the project site. As a result, they refused to issue a survey report.

In any case, the insurance had become time-barred before the equipment left Customs.

4. In Phase II, we have taken the following steps to prevent such loss:
  - a. All equipment and accessories are assembled and checked at the Contractor's warehouse before shipment from the U.S.
  - b. A shipping agent and freight forwarder monitor the equipment during the customs inspection in Egypt.
  - c. The equipment is stored in the freight forwarder's warehouse until the laboratories are ready.
  - d. The equipment is checked and installed by the contractor's engineer (Mr. Fouad Ragheb), who keeps control of all defective equipment.

We therefore request that this section of the recommendation be closed.

c. The audit report requires AID to coordinate with ASRT to expedite shipment and delivery of equipment. AID and ASRT work together on a continuous basis to solve problems related to customs clearance. During the time of the audit there were 12 shipments estimated at \$669,384.91 being held by Customs. As shown in attachment 2, because of ASRT and AID intervention this was decreased to five shipments with a value of \$81,758. USAID was recently informed by the Customs Authority (Attachment 3) that the remaining shipment will be released upon submission by ASRT of the Ministry of Economy's approval for releasing materials and supplies duty free.

USAID has also provided RIG/A copies of letters that we sent to Customs requesting them to expedite delivery of this equipment. Similarly, the University of Wisconsin hired a full time Egyptian engineer (Mr. F. Ragheb) who is responsible for expediting equipment, consignments, overseeing the equipment installation and keeping track of the project's procurement process in Egypt. Eng. Ragheb is assisted by Engineer Mordi from the Scientific Instrumentation Center to insure that the equipment is installed at project sites. We therefore request that this section of the recommendation be closed.

Recommendation No. 2 deals with ineligible costs paid to four U.S. groups under contracts administered by AID/W, namely:

1. The National Academy of Sciences:

- a. Equipment and supplies: Attached is the original grant No.263-79-G-004 between USAID and the Contractor dated January 22, 1979, (attachment 4) for LE 262,400 in which USAID agreed to provide a budget of LE 1,000 for the purchase of office equipment. We believe that such documentation signed by the Mission Director is satisfactory and therefore these costs are allowable.
- b. Housing and utilities: We will request a legal opinion for the definition of utilities and whether or not it includes payments for common areas used by the Contractor.
- c. Project support costs: We have withheld, as of this date, LE 1,570 from the Contractor's voucher and we will withhold the difference of LE 150 from the next voucher.

2. The Georgia Institute of Technology:

- a. Equipment: As explained in our memo of May 28, 1985 (Attachment 5) to RIG/A, we showed that the amount of LE 7,000 is included in the Egyptian pound budget of Article VII of the contract to purchase office equipment required by the contractor as shown in his cost proposal. RIG/A quotes Article VIII of the contract which requires the Mission Director's prior approval for the equipment purchase. In view of the difference of opinions we will request a determination from the AID/W contracting officer and if necessary we will amend the contract retroactively.
- b. Supplies and services: Exhibit 3 of the Audit report refers to gratuities paid to Government of Egypt employees and cites FAR 52-203-3 which refers to:
  1. Offering or giving gratuities/entertainment or gifts to an officer/official or employee of the U.S. government.
  2. Obtaining a contract or favorable treatment under a contract.

The use of FAR-52.203-3 does not apply as the contractor used the services of the GDE employees over and above their normal working hours. There is no reference in FAR that prevents payment of salaries, incentives or other remuneration to GDE employees. However, Mission policy set forth in Mission

Order 3-10 prevents such payments unless authorized by the Mission Director. On the basis of the explanation in our memo of May 28, 1985, we will request the Mission Director to retroactively approve payment in accordance with M.O. 3-10. In case the Director will not approve, we will disallow these expenses from the contractor's voucher.

3. University of Wisconsin: As the report shows, there is a difference of opinion between FIC/A and the contractor as to the overpayment of \$10,500 as overhead. We will refer this difference of opinion to the AID/W contracting officer for resolution.

4. AARC: Since this contract was administered in its entirety by SER/COM, we will ask SER/COM to issue a Bill of Collection in the amount of \$2,900.

Recommendation No. 3: On the basis of the new monitoring system adopted by ASRT and explained in page 11 of the Audit report, we are requesting this recommendation be closed. We will continue to monitor advances and subadvances provided by ASRT to the principal investigators.

Recommendation No. 4: As pointed out in the Audit report, the MBS has completed a revised implementation schedule and all activities will be accomplished within the extension period. On the basis of the resumption of the training activities at MBS, the arrival of the equipment and the no cost extension of the PASA as explained in page 13 of the report, we are requesting this recommendation be closed.

LIST OF RECOMMENDATIONS

	<u>Page</u>
<u>Recommendation No. 1</u>	3
We recommend that USAID/Egypt:	
a. require the Academy of Scientific Research and Technology to establish inventory records to account for arrival, distribution and location of all Phase I project equipment;	
b. issue a bill for collection to the Academy of Scientific Research and Technology for lost or damaged equipment; and	
c. coordinate with the Academy of Scientific Research and Technology to expedite the shipment and delivery of equipment to project sites. (Sections a and c were closed upon issuance of the report.)	
<u>Recommendation No. 2</u>	6
We recommend that USAID/Egypt recover questioned costs of: (a) \$5,348 (LE4,439) from the National Academy of Sciences; (b) \$12,239 (LE10,158) from the Georgia Institute of Technology; (c) \$10,560 from the University of Wisconsin; and (d) \$2,800 from Afro-American Purchasing Center, Inc.	
<u>Recommendation No. 3</u>	8
We recommend that USAID/Egypt have the Academy of Scientific Research and Technology establish procedures to ensure timely followup and liquidation of outstanding advances.	
<u>Recommendation No. 4</u>	10
We recommend that USAID/Egypt coordinate the activities of all participants and resources involved in the agreement with the National Bureau of Standards and establish revised implementation schedules. (This recommendation was closed upon issuance of the report.)	

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APPENDIX 3

REPORT DISTRIBUTION

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