

ISH 93231
PB-ABK-070



CONSTRUCTION MANAGEMENT CONSULTING CONTRACT

In Support of Telecommunications IV

USAID Contract Number
263-0177-C-00-2216-00

Quarterly Report No. 4

3rd Quarter, 1993

Overseas Bechtel, Incorporated - Job 22083
and its subcontractor Teleconsult, Inc.
World Trade Center, 18th Floor
Cairo, Baulac, Egypt



22083-S112-USAID-118

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November 7, 1993

Dear Eng. Gohar,

CONSTRUCTION MANAGEMENT CONSULTING CONTRACT

USAID Contract No. 263-0177-C-00-2216-00

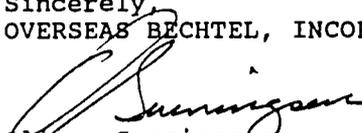
Quarterly Report No. 4

This Quarterly Report summarizes progress for CMC Services and for Digital Switching Systems (DSS) and Outside Plant (OSP) host country contracts. The project is on schedule at 56% complete.

Cost and Commitment Reports, Quarterly Cash Flow Reports, and Change Order Summaries are included with Section III, Progress Statistics.

Additional information is contained in Monthly Progress Reports for July, August and September.

Sincerely,
OVERSEAS BECHTEL, INCORPORATED



Oliver Sweningsen
Project Manager

OS/ar

Distribution:

USAID Contracting Officer - 1 copy
Eng. Fatein Mahmoud, USAID - 1 copy
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I EXECUTIVE SUMMARY

Summary Description of Project

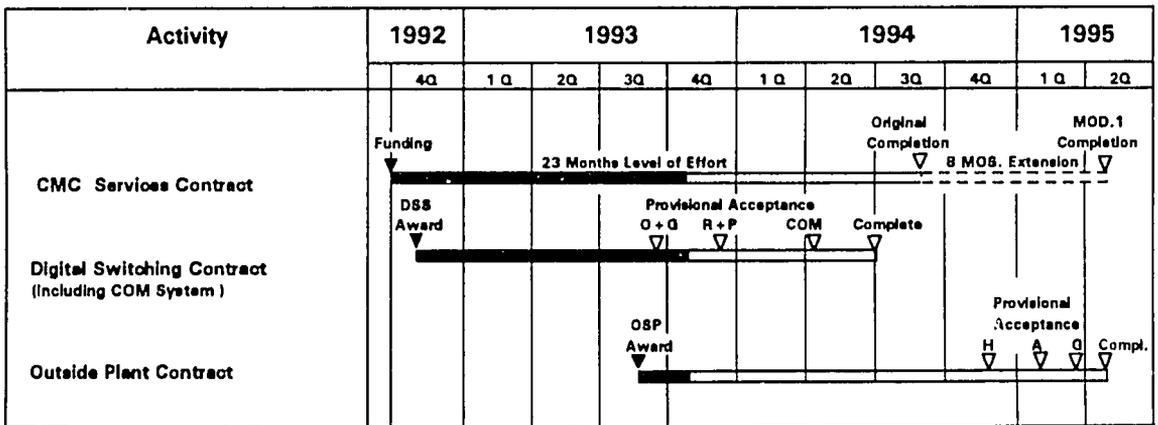
The United States Agency for International Development (USAID) is assisting the Government of Egypt with the expansion of the Cairo telecommunications network under USAID Project No. 263-0177, Telecommunications IV.

Overseas Bechtel, Incorporated (OBI or Bechtel) is contracted with USAID-Egypt to provide construction management and consulting services to the Arab Republic of Egypt National Telecommunications Organization (ARENTO). Bechtel and its subcontractor, Teleconsult, will provide technical advice, support and assistance to ARENTO in the administration of two turnkey contracts that replace and expand central office switching equipment with Digital Switching Systems (DSS), add a Centralized Operations and Management (COM) system and expand the Outside Plant (OSP).

This phase of Telecommunications IV includes:

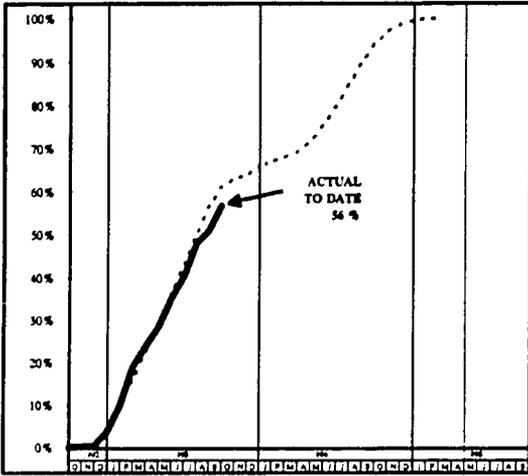
- Four new 20,000 line AT&T #5ESS digital switching systems to be located in existing ARENTO central office facilities at the Ramsis, Opera, Pyramids and Giza exchanges.
- A centralized operations and maintenance system to monitor and control the network switching nodes.
- Outside plant upgrades at the Heliopolis, Giza and Auto exchange areas.

Executive Summary Schedule

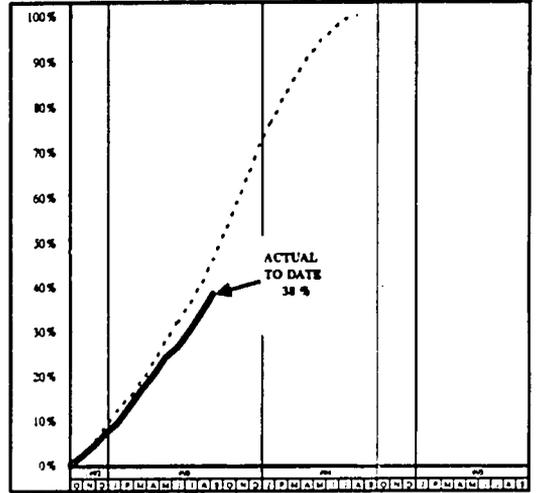


II EXECUTIVE SUMMARY

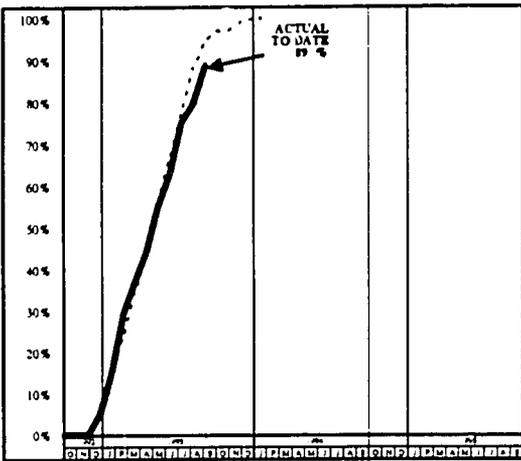
Summary Curves



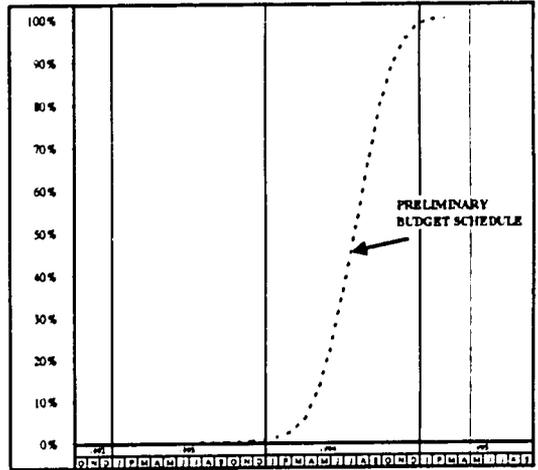
Total Project



Consulting Services



Digital Switching



Outside Plant

2

I EXECUTIVE SUMMARY

Progress Highlights

CONSULTING SERVICES

- The level of effort for CMC services was estimated to be 38% complete through September. The Project is on schedule and services are running slightly under budget. Staffing is being adjusted to reflect the scheduled completion date for outside plant work.
- The OSP Contract became effective on July 21, 1993. The OSP Post-Award Contract Meeting was held on September 1st, to review contract terms and conditions, ATTI's OSP Implementation Plan, and the Contractor's Manual.
- OSP field offices in ARENTO buildings have been identified. Site operations are being established in Heliopolis, Auto and Giza.

DSS CONTRACT

- The DSS Contract is estimated to be 89% complete; and all Digital Switching Systems should be essentially complete by December 1, 1993.
- Provisional Acceptance testing was completed for Opera and Giza Exchanges. The Giza RSM was relocated to the host switch; pre-cutover testing was completed in September.
- Ramsis Exchange is 91% complete and scheduled for 24 hour tests on October 11, 1993. Cutover is forecasted by November 11, 1993, and Provisional Acceptance in December.
- Pyramid Exchange is 70% complete. All critical schedule elements have been completed. Cutover is forecasted by November 25, 1993 and Provisional Acceptance in December.

COM SYSTEM

- The COM System Implementation Plan was submitted in August and revised in September to reflect training activities. At the end of September, the COM System was 77% percent complete and one switch was connected to MFOS.
- Close cooperation of the Project and O&M Departments has accelerated the completion of the COM System installation work.
- ARENTO is reviewing introductory level O&M goals and objectives to be used to establish the COM System organization and report specification criteria.
- ATTI will begin basic UNIX training in October.

Progress Highlights

OSP CONTRACT

- The OSP Contract became effective on July 21, 1993. ATTI mobilized an engineering team to produce System Plans and conduct site surveys.
- The OSP Post-Award Meeting included a review of ATTI Implementation Plans. OSP Site Mobilization Schedules were developed to monitor the key events required to begin construction.
- The Amended System Plan Drawing for Heliopolis was signed by ARENTO on September 15, 1993. This site survey revealed that ducts were not available and approximately 2000 meters of new ductbank may be required.
- The OSP Implementation Plans, Documentation Plan and Test Plan have been submitted for Project review.
- The OSP training curriculum and schedule were accepted by the ARENTO Training Institute. Training will begin in October.

II WORK STATUS

Consulting Services

GENERAL

Bechtel and its subcontractor Teleconsult began work on the Construction Management Consulting Contract (CMC) on October 1, 1992. Under its contract with USAID, Bechtel works with ARENTO, as their agent, to administer two host country construction contracts prepared and awarded by ARENTO for the digital switching systems and the outside plant networks funded under the USAID Telecommunications IV Project (263-0177) grant. The tasks performed under this contract were originally scheduled to be completed within 23 months, with a level of effort staffing. A schedule extension was processed to cover the OSP Contract period.

WORK STATUS

Consulting Services were estimated to be 38.4% complete after the first twelve months. Bechtel and Teleconsult had a total equivalent staff of five expatriates and eight nationals.

Major Accomplishments:

- Assisted with Opera cutover on July 22nd, 1993 and Giza cutover on August 5th, 1993 eighteen and five days before the Contract dates.
- Completed post cutover analysis and formal reports recording working lines, working trunks, and available OSP facilities.
- Helped ARENTO apply lessons learned on line transfers at Opera and Giza to Ramsis cutover.
- Developed a sampling technique to furnish weekly MDF results to ARENTO. This technique gives ARENTO an accounting system to monitor the transfer of lines.
- Found alternative to new fiber optic transmission link from Giza to Pyramid, allowing the Pyramid cutover to take place in November.
- Completed installation and functional testing of COM System at Cairo and Alexandria. MFOS and DATAKIT equipment is now operational.
- Reviewed Fault Clearance Center capabilities and prepared recommendations for changes within Cairo COM System to take advantage of FCC capabilities.

II WORK STATUS

- The Preliminary OSP Contractor's Manual was issued for Project use.
- Conducted Coordination Meetings to organize for Outside Plant Contract mobilization and the preparation of quality, cost and schedule control programs.

Activities Next Quarter

- Complete DSS provisional acceptance at Ramsis and Pyramid.
- Monitor COM System training and support ARENTO on-the-job training, as appropriate. Develop an O&M transition plan.
- Review and approve System Plan Drawings for OSP work at Heliopolis, Auto and Giza Exchanges.
- Carefully monitor key events to mobilize OSP field offices for construction. Current plans are to begin work in Heliopolis in early January, Auto in February, and Giza in late March. Refer to Exhibit A, "OSP Site Mobilization Schedule".

II WORK STATUS

DSS Contract

GENERAL

Contract No. 10/92/21 between ARENTO and AT&T International, Inc. (ATTI) was signed on October 15, 1992 and became effective on November 3, 1992. The contract requires ATTI to design, furnish, install and maintain AT&T #5ESS digital electronic central office switches on a turnkey basis. The Centralized Operations and Maintenance (COM) System effective date was May 24, 1993.

FINANCIAL:

- Amendment No. 1 for miscellaneous contract adjustments and Amendment No. 2 for the COM System with costs of \$3,925,014 and LE 419,598 were processed. The revised budget for the DSS Contract scope managed by Bechtel is \$24,683,250 and LE 1,942,083. See Exhibit 3.1, DSS Cost and Commitment Report.
- Quarterly Cash Flows (Exhibit 4.1) are lower than planned primarily due to slower than expected invoicing by ATTI. This period, \$146,520 and LE 62,038 were expended; to date totals are \$14,598,101 and LE 631,569.

SCHEDULE:

- The DSS Contract is estimated to be 88.8% complete and slightly behind schedule. Opera and Giza cutovers were established on July 22nd and August 5th respectively.
- Provisional Acceptance Certificates were issued for Opera and Giza.
- Ramsis Exchange is 91.2% complete; and slightly behind schedule. Cutover is scheduled for November 11, 1993.
- Pyramid Exchange is 70.2%; complete. Alternatives have been found for the fiber optic transmission link from Giza to Pyramid, and the cutover is scheduled for November 25, 1993.
- DSS training continued throughout the period. Advanced training is scheduled for first quarter, 1994.
- The installation of COM System equipment was essentially completed in Cairo and Alexandria. Functional testing will be completed in early October to allow training to begin.

II WORK STATUS

DSS Contract (Cont'd)

MILESTONE ANALYSIS:

<u>Opera Schedule Milestones (1)</u>	<u>BASELINE SCHEDULE</u>	<u>CPM SCHEDULE (2)</u>
Effective Date of Contract:	Nov 3, 1992	Nov 3, 1992A
Equipment Shipped:	Nov 4, 1992	Nov 4, 1992A
Installation Start:	Dec 17, 1992	Dec 17, 1992A
All Equipment On-Site:	Dec 24, 1992	Jan 10, 1993A
Trans. Facility Ready: (3)	Jul 5, 1993	Jul 29, 1993A
Function Test Complete:	Jun 27, 1993	May 31, 1993A
Training Complete:	Oct 1, 1993	Mar 1, 1994
OSP Ready - Initial: (3)	Jul 5, 1993	Jul 29, 1993A
Load Test Complete:	Jul 31, 1993	Jun 20, 1993A
Pre-cutover Tests Complete:	Jul 28, 1993	Jul 22, 1993A
Cutover Complete:	Aug 10, 1993	Jul 22, 1993A
OSP Ready - Final: (3)	Sep 12, 1994	Aug 29, 1993A
Provisional Acceptance:	Sep 18, 1993	Aug 29, 1993A
Final acceptance :	Sep 21, 1994	Aug 27, 1994

Cutover was established on July 22nd, 1993, and provisional acceptance is complete.

<u>Giza Schedule Milestones (1)</u>	<u>BASELINE SCHEDULE</u>	<u>CPM SCHEDULE (2)</u>
Effective Date of Contract:	Nov 3, 1992	Nov 3, 1992A
Equipment Shipped:	Nov 4, 1992	Nov 4, 1992A
Installation Start:	Dec 18, 1992	Dec 18, 1992A
All equipment on-site:	Dec 23, 1992	Dec 23, 1992A
Trans. Facility Ready: (3)	Aug 1, 1993	Sep 11, 1993A
Function Test Complete:	Jun 27, 1993	Jun 30, 1993A
Training Complete:	Oct 1, 1993	Mar 1, 1994
OSP Ready - Initial: (3)	Aug 1, 1993	Sep 30, 1993
Load Test Complete:	Jul 31, 1993	Jul 25, 1993A
Pre-cutover Test Complete:	Jul 26, 1993	Aug 5, 1993A
Cutover Complete:	Aug 10, 1993	Aug 6, 1993A
OSP Ready - Final: (3)	Sep 12, 1994	Oct 9, 1993
Provisional Acceptance:	Sep 19, 1993	Oct 9, 1993
Final Acceptance :	Sep 19, 1994	Oct 11, 1994
Cutover 4K ADD :	Oct 19, 1993	Oct 3, 1993

Giza was estimated to be 99.8% complete versus a plan of 96.1%. Cutover was on August 6th, 1993.

Notes:

- (1) Milestone analysis based on ATTI revised Implementation Plan schedule, dated February 15, 1993.
- (2) CPM schedule forecast dates are determined by the network calculations.
- (3) ARENTO coordinating milestones added in February.

II WORK STATUS

DSS Contract (Cont'd)

<u>Ramsis Schedule Milestones (1)</u>	<u>BASELINE SCHEDULE</u>	<u>CPM SCHEDULES (2)</u>
Effective Date of Contract:	Nov 3, 1992	Nov 3, 1992A
Equipment Shipped:	Nov 4, 1992	Nov 4, 1992A
Installation Start:	Apr 26, 1993	Mar 27, 1993A
All Equipment on Site:	May 2, 1993	May 19, 1993A
Trans. Facility Ready: (3)	Oct 24, 1993	Nov 3, 1993
Function Test Complete:	Sep 19, 1993	Sep 30, 1993A
Training Complete:	Oct 1, 1993	Mar 1, 1994
OSP Ready - Initial (3)	Sep 20, 1993	Oct 4, 1993
Load Test Complete:	Oct 31, 1993	Dec 14, 1993
Pre-cutover Test Complete:	Oct 31, 1993	Dec 9, 1993
Cutover Complete:	Nov 2, 1993	Nov 07, 1993
OSP Ready - Final (3)	Sep 12, 1994	Nov 07, 1994
Provisional Acceptance:	Dec 9, 1993	Dec 12, 1993
Final Acceptance:	Dec 12, 1994	Dec 12, 1994

Ramsis was estimated to be 91.2% complete versus a plan of 96.9%. The forecast cutover date is now November 11, 1993.

<u>Pyramid Schedule Milestones (1)</u>	<u>BASELINE SCHEDULE</u>	<u>CPM SCHEDULE (2)</u>
Effective Date of Contract:	Nov 3, 1992	Nov 3, 1992A
Equipment Shipped:	Mar 7, 1993	Apr 11, 1993A
Installation Start:	Apr 26, 1993	May 11, 1993A
All Equipment on-site	Apr 24, 1993	May 25, 1993A
Trans. Facility Ready (3)	Oct 24, 1993	Oct 24, 1993
Function Test Complete:	Sep 19, 1993	Nov 11, 1993
Training Complete:	Oct 1, 1993	Mar 1, 1994
OSP Ready - Initial: (3)	Oct 1, 1993	Oct 25, 1993
Load Test Complete:	Oct 31, 1993	Nov 30, 1993
Pre-cutover Test Complete:	Oct 31, 1993	Nov 30, 1993
Cutover Complete:	Nov 2, 1993	Dec 3, 1993*
OSP Ready - Final: (3)	Dec 2, 1994	Dec 3, 1994
Provisional Acceptance:	Dec 12, 1993	Jan 16, 1994
Final Acceptance:	Dec 14, 1994	Jan 16, 1995
Cutover 4K ADD :	Jan 25, 1994	Feb 27, 1994

Pyramid was estimated to be 70.2% versus a plan of 86.3%. There are currently 30 days of negative float.

* ATTI has accelerated testing and expects to improve on the schedule. The target cutover is November 25, 1993.

Notes:

- (1) Milestone analysis based on ATTI revised Implementation Plan schedule, dated February 15, 1993.
- (2) CPM schedule forecast dates are determined by the network calculations.
- (3) ARENTO coordinating milestones added in February.

II WORK STATUS

DSS Contract (Cont'd)

COM System

<u>COM System Schedule Milestones</u>	<u>BASELINE SCHEDULE</u>	<u>CPM SCHEDULE</u>
Effective Date Amend. No. 2	May 24, 1993	May 24, 1993A
Start Installation	Jul 24, 1993	Aug 1, 1993A
All Equipment on Site	Jul 22, 1993	Sep 15, 1993A
Cutover	Feb 28, 1994	Nov 22, 1993*
Complete Provisional Acceptance	Apr 28, 1994	Mar 31, 1994
Complete Training	Apr 14, 1994	Mar 15, 1994
Start Maintenance	Apr 28, 1994	Apr 28, 1994
Final Acceptance	Apr 28, 1995	Apr 28, 1995

Notes:

- (1) The effective date (Amendment No. 2) is May 24, 1993.
- (2) The Contract schedule is 40 weeks to cutover.
- (3) COM System was estimated to be 77.2% complete versus a plan of 83.5%.
- * Installation is proceeding ahead of schedule; the system will be operated in October, when training is schedule to begin.

II WORK STATUS

OSP Contract

GENERAL

Contract No. 7/92/30 between ARENTO and AT&T International, Inc. was signed on July 15, 1993 and became effective on July 21, 1993. The schedule duration is 600 days.

The Outside Plant Contract is for 23,700 lines in Heliopolis, 18,600 lines in Auto, and 21,400 lines in Giza.

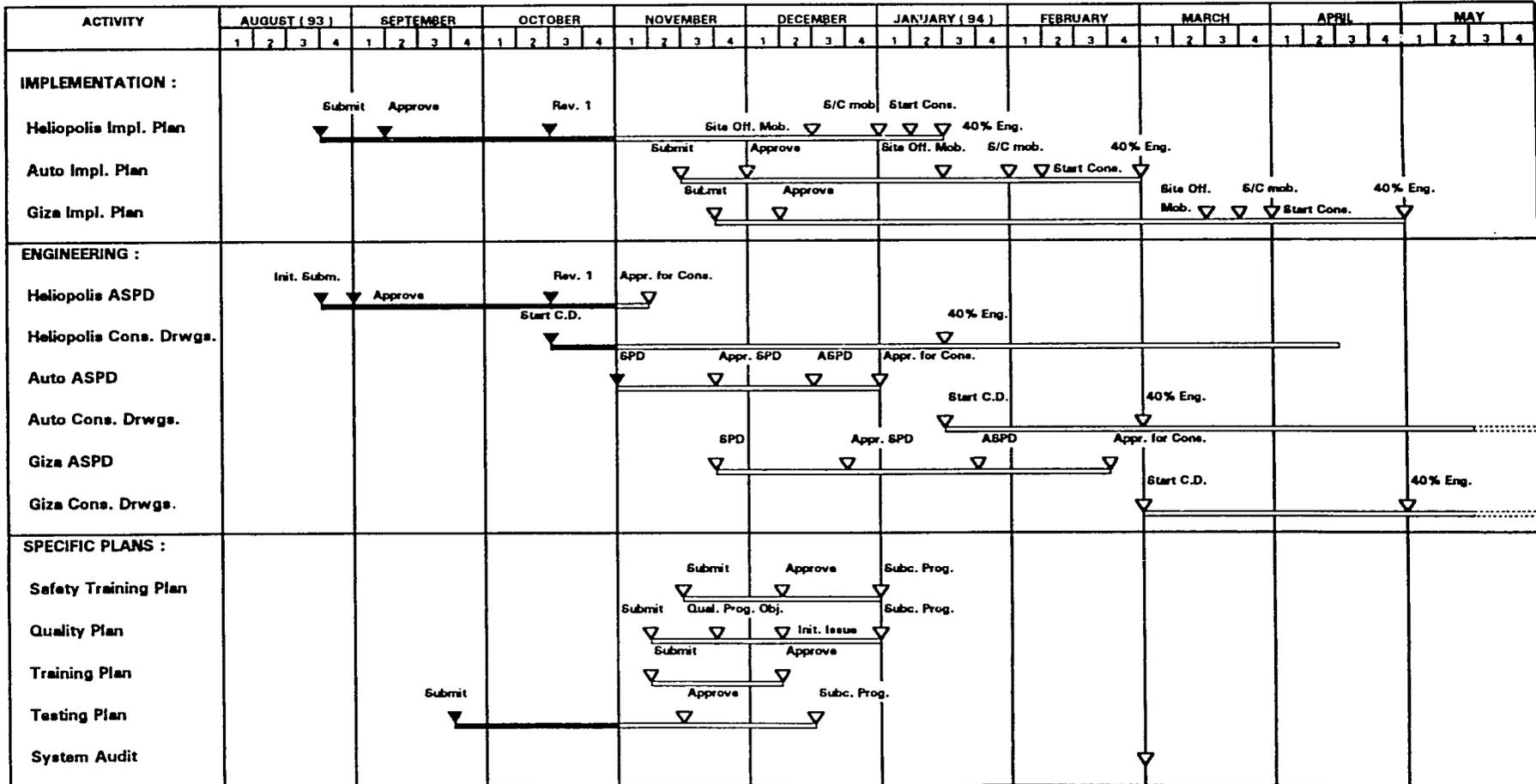
FINANCIAL:

- The total contract value is \$10,000,000 financed by USAID and LE 10,528,854 financed by ARENTO. See Exhibit 3.2, OSP Cost and Commitment Report.
- No expenditures were made during the quarter. The OSP Cash Flow is being prepared for inclusion in the next report.

SCHEDULE:

- The OSP Contract is estimated to be 1% complete. Engineering and planning activities began during second quarter.
- ATTI attended the Post-Award Meeting on September 1, 1993 to reach a clear understanding on contract requirements and administrative procedures. Meeting minutes recorded action items for ATTI, ARENTO and the Consultant.
- The Heliopolis Amended System Plan was submitted and approved in September.
- Held weekly meetings to coordinate mobilization schedule review, development of project control systems, and coordinate engineering at the three exchanges. Refer to Exhibit A, OSP Site Mobilization Schedule.
- Began discussions to develop a coordinated Quality Control Plan and Field Engineer's Manual for ARENTO.

CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
OSP SITE MOBILIZATION SCHEDULE (Exhibit A)
 October, 1993



▽ Schedule
 ▼ Actual

II WORK STATUS

OSP Contract (Cont'd)

MILESTONE ANALYSIS:

Heliopolis Schedule Milestones

	<u>BASELINE SCHEDULE</u>	<u>CPM SCHEDULE</u>
Effective Date of Contract:	Jul 21, 1993	Jul 21, 1993A
Submit ASPDS:	Aug 20, 1993	Aug 20, 1993A
ASPD/BOQ Approved:	Sep 20, 1993	TBD
Complete Engineering:	Jun 15, 1994	
Complete Test Digs:	Sep 20, 1993	
All Materials in Site:	Jan 20, 1994	
Complete Installation:	Oct 16, 1994	
Complete Testing:	Dec 1, 1994	
Submit ASBDS:	Feb 20, 1995	
Start Provisional Acceptance:	Dec 31, 1994	
Final Acceptance:	Mar 20, 1996	

Auto Schedule Milestones

Effective Date of Contract:	Jul 21, 1993	Jul 21, 1993A
Submit SPDS:	Sep 15, 1993	TBD
SPD/BOQ Approved:	Oct 15, 1993	
Submit ASPDS:	Nov 15, 1993	
ASPD/BOQ Approved:	Dec 15, 1993	
Complete Engineering:	Sep 20, 1994	
Complete Test Digs:	Jan 20, 1994	
All Materials In Site:	Feb 20, 1994	
Complete Installation:	Nov 21, 1994	
Complete Testing:	Jan 1, 1995	
Submit ASBDS:	Feb 20, 1995	
Start Provisional Acceptance:	Feb 20, 1995	
Final Acceptance:	Mar 20, 1996	

GIZA Schedule Milestones

Effective Date of Contract:	Jul 21, 1993	Jul 21, 1993A
Submit SPDS:	Oct 14, 1993	TBD
SPD/BOQ Approved:	Dec 15, 1993	
Submit ASPDS:	Jan 15, 1994	
ASPD/BOQ Approved:	Feb 14, 1994	
Complete Engineering:	Oct 31, 1994	
Complete Test Digs:	Feb 20, 1994	
All Materials In Site:	May 10, 1994	
Complete Installation:	Jan 16, 1995	
Complete Testing:	Jan 31, 1995	
Submit ASBDS:	Feb 28, 1995	
Start Provisional Acceptance:	Feb 20, 1995	
Final Acceptance:	Mar 20, 1996	

III PROGRESS STATISTICS

Exhibit 1.1, DSS Progress Curve
Exhibit 1.2, OSP Progress Curve (Preliminary)

Exhibit 2.1, DSS Contract Manpower Histogram
Exhibit 2.2, OSP Contract Manpower Histogram (future)

Exhibit 3.1, DSS Cost & Commitment Report
Exhibit 3.2, OSP Cost & Commitment Report

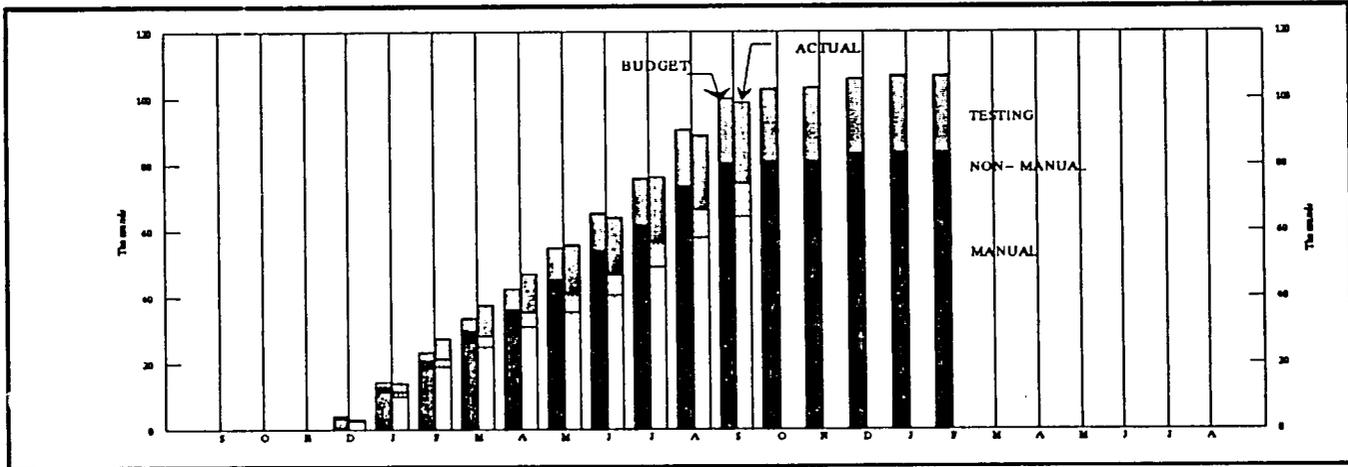
Exhibit 4.1, DSS Quarterly Cash Flow
Exhibit 4.2, OSP Quarterly Cash Flow (future)

Exhibit 5.1, DSS Change Order Summary
Exhibit 5.2, OSP Change Order Summary

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
DSS MANPOWER HISTOGRAM (Exhibit 2.1)
DSS CONTRACT
September, 1993**

**III
PROGRESS STATISTICS**



III-3

Description	1992				1993												1994												Total ToDate
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A					
Budget Manual	Man & by				3458	8184	7053	8098	5072	7608	7716	6652	10114	6270	457	32	1864	169											
	Cumulative	0	0	0	3,458	11,672	18,725	26,773	31,845	39,753	47,467	54,119	64,733	70,455	70,910	70,947	72,811	72,975	72,975	72,975	72,975	72,975	72,975	72,975	72,975	72,975			
Non-Manual	Man & by				433	1024	884	1040	885	1199	1060	1021	1475	958	286	7	253	72											
	Cumulative	0	0	0	433	1,457	2,341	3,381	4,266	5,465	6,525	7,544	9,021	9,979	10,265	10,272	10,525	10,597	10,597	10,597	10,597	10,597	10,597	10,597	10,597				
Testing	Man & by				452	1065	920	1282	2915	2682	1932	2635	3215	2413	2141	225	523	685	152										
	Cumulative	0	0	0	452	1,517	2,437	3,719	6,634	9,316	11,448	14,083	17,298	19,713	21,852	22,077	22,600	23,285	23,437	23,437	23,437	23,437	23,437	23,437	23,437				
Actual Manual	Man & by				2,742	7,209	9,076	6,124	6,240	4,129	3,046	8,464	8,740	6,419															
	Cumulative	0	0	0	2,742	10,011	19,087	25,211	31,451	35,580	40,676	49,040	57,830	64,249	64,249	64,249	64,249	64,249	64,249	64,249	64,249	64,249	64,249	64,249	64,249				
Actual Non-Manual	Man & by				276	1024	884	1,075	885	1,199	1,060	1,021	1,483	1,021															
	Cumulative	0	0	0	276	1,250	2,134	3,209	4,094	5,293	6,353	7,374	8,857	9,878	9,878	9,878	9,878	9,878	9,878	9,878	9,878	9,878	9,878	9,878	9,878				
Actual Testing	Man & by				283	2,825	3,354	2,795	2,202	3,250	2,718	2,497	2,355	2,626															
	Cumulative	0	0	0	283	3,108	6,462	9,457	11,659	14,909	17,127	19,624	21,979	24,605	24,605	24,605	24,605	24,605	24,605	24,605	24,605	24,605	24,605	24,605	24,605				

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
COST AND COMMITMENT REPORT (Exhibit 3.1)
D.S.S. CONTRACT
September, 1993**

**III
PROGRESS STATISTICS**

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total FID	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
1.	GIZA EXCHANGE						
1.1	Switching Equipment - 24,000 Lines	\$3,485,462	74,000	\$0	0	\$2,718,936	14,800
1.2	MDF	\$237,048	0	\$0	0	\$48,129	0
1.3	Power System	\$111,791	0	\$0	0	\$85,121	0
1.4	Standby Power System	\$289,639	24,900	\$0	0	\$231,711	4,980
1.5	HVAC System	\$78,930	0	\$0	0	\$58,381	0
1.6	Fire Detection System	\$0	22,304	\$0	0	\$0	4,461
1.7	Security System	\$28,550	0	\$0	0	\$22,840	0
1.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
1.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$1,398	600
1.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
1.11	Installation and Testing for Cutover and Provisional Acceptance	\$472,446	280,961	\$28,347	16,858	\$292,916	174,196
1.12	Spare Parts and Consumables - CIF	\$338,627	0	\$0	0	\$266,105	0
1.13	Tools and Equipment - CIF	\$10,995	0	\$0	0	\$9,072	0
1.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
1.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
1.16	Testing	\$6,689	0	\$0	0	\$0	0
1.	GIZA EXCHANGE Total	\$5,067,167	405,165	\$28,347	16,858	\$3,734,609	199,037
2.	RAMSIS EXCHANGE						
2.1	Switching Equipment - 20,000 Lines	\$3,428,956	78,000	\$0	0	\$2,725,467	15,600
2.2	MDF	\$54,628	0	\$0	0	\$40,926	0
2.3	Power System	\$102,620	0	\$0	0	\$82,096	0
2.4	Standby Power System	\$334,500	26,700	\$0	0	\$267,600	5,340
2.5	HVAC System	\$53,218	0	\$0	0	\$39,040	0
2.6	Fire Detection System	\$0	22,304	\$0	0	\$0	4,461
2.7	Security System	\$28,550	0	\$0	0	\$21,875	0
2.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
2.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$1,398	600
2.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
2.11	Installation and Testing for Cutover and Provisional Acceptance	\$440,533	122,268	\$37,760	10,480	\$239,147	66,376
2.12	Spare Parts and Consumables - CIF	\$343,023	0	\$0	0	\$277,630	0
2.13	Tools and Equipment - CIF	\$10,995	0	\$0	0	\$9,072	0
2.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
2.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
2.16	Testing	\$6,689	0	\$0	0	\$0	0
2.	RAMSIS EXCHANGE Total	\$4,810,702	252,272	\$37,760	10,480	\$3,704,251	92,375

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CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
COST AND COMMITMENT REPORT (Exhibit 3.1 cont'd)
D.S.S. CONTRACT
 September, 1993

**III
PROGRESS STATISTICS**

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total ITD	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
3.	OPERA EXCHANGE						
3.1	Switching Equipment - 20,000 Lines	\$3,428,956	78,000	\$0	0	\$2,739,496	15,600
3.2	MDF	\$54,628	0	\$0	0	\$10,926	0
3.3	Power System	\$101,721	0	\$0	0	\$81,377	0
3.4	Standby Power System	\$456,100	31,000	\$0	0	\$364,880	6,200
3.5	HVAC System	\$53,218	0	\$0	0	\$41,632	0
3.6	Fire Detection System	\$0	22,304	\$0	0	\$0	4,461
3.7	Security System	\$28,550	0	\$0	0	\$22,840	0
3.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
3.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$1,398	600
3.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
3.11	Installation and Testing for Cutover and Provisional Acceptance	\$457,078	122,268	\$39,178	10,480	\$365,662	97,814
3.12	Spare Parts and Consumables - CIF	\$344,510	0	\$0	0	\$270,372	0
3.13	Tools and Equipment - CIF	\$10,995	0	\$0	0	\$9,072	0
3.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
3.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
3.16	Testing	\$6,689	0	\$0	0	\$0	0
3.	OPERA EXCHANGE Total	\$4,949,435	256,572	\$39,178	10,480	\$3,907,654	124,675
4.	PYRAMID EXCHANGE						
4.1	Switching Equipment - 24,000 Lines plus RSM Host Equipment	\$3,888,228	78,400	\$0	0	\$2,592,308	15,680
4.2	MDF	\$279,700	0	\$0	0	\$55,940	0
4.3	Power System	\$134,927	0	\$0	0	\$26,985	0
4.4	Standby Power System	\$289,639	24,900	\$0	0	\$57,928	3,090
4.5	HVAC System	\$53,218	0	\$0	0	\$10,644	0
4.6	Fire Detection System	\$0	22,304	\$0	0	\$0	4,461
4.7	Security System	\$28,550	0	\$0	0	\$5,710	0
4.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
4.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$1,398	600
4.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
4.11	Installation and Testing for Cutover and Provisional Acceptance	\$515,976	323,466	\$30,959	19,408	\$227,029	142,325
4.12	Spare Parts and Consumables - CIF	\$382,167	0	\$0	0	\$166,135	0
4.13	Tools and Equipment - CIF	\$10,846	0	\$0	0	\$2,169	0
4.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
4.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
4.16	Testing	\$6,689	0	\$0	0	\$0	0
4.	PYRAMID EXCHANGE Total	\$5,596,930	452,070	\$30,959	19,408	\$3,146,247	166,156

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
COST AND COMMITMENT REPORT (Exhibit 3.1 cont'd)
D.S.S. CONTRACT
September, 1993**

**III
PROGRESS STATISTICS**

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total ITD	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
5. COM SYSTEM							
5.1	Software Right-to-use Licenses	\$1,945,126	0	\$0	0	\$0	0
5.2	MFOS, TFS and SDAD Equipment	\$797,527	0	\$0	0	\$0	0
5.3	DATAKIT Equipment	\$442,640	0	\$0	0	\$0	0
5.4	Modems for basic MFOS	\$89,917	0	\$0	0	\$0	0
5.5	USP	\$211,146	0	\$0	0	\$0	0
5.6	Standby Power System	\$0	0	\$0	0	\$0	0
5.7	HVAC Equipment	\$53,377	0	\$0	0	\$0	0
5.8	Fire Detection System	\$0	3,000	\$0	0	\$0	0
5.9	Security System	\$0	0	\$0	0	\$0	0
5.10	Raised Floor, Ceiling, Lighting And partitions	\$12,558	14,477	\$0	0	\$0	0
5.11	Documentation (2 sets)	included	included	\$0	0	\$0	0
5.12	Insurance and Transportation to Site	included	included	\$0	0	\$0	0
5.13	Engineering Installation and Testing for Cutover and Provisional Acceptance	\$93,304	80,300	\$0	0	\$0	0
5.14	Spare Parts (3 years) CIF	\$234,939	0	\$0	0	\$0	0
5.15	Tools and Test Equipment - CIF	\$0	0	\$0	0	\$0	0
5.16	Insurance and Transportation	included	included	\$0	0	\$0	0
5.17	Maintenance Personnel- For One (1) Year after Provisional acceptance	Free of Charge	Free of Charge	\$0	0	\$0	0
5.18	Software Maintenance - Until Final Acceptance	Free of Charge	Free of Charge	\$0	0	\$0	0
5.19	Testing	included	included	\$0	0	\$0	0
5.20	Training Unix System V	\$64,614	0	\$0	0	\$0	0
5.21	Training SMS (2 classes)	\$71,916	0	\$0	0	\$0	0
5.22	Training TFS	\$27,529	0	\$0	0	\$0	0
5.23	Training SDAS	\$27,918	0	\$0	0	\$0	0
5.24	Training DATAKIT	\$45,390	0	\$0	0	\$0	0
5.25	Training 3B2 Maintenance	\$38,756	0	\$0	0	\$0	0
5.26	Price Adjustment for Training (Item 5.20 to 5.25)	(\$96,643)	321,821	\$0	0	\$0	0
5.27	Contract Price Reduction For Training (Item 5.20 to 5.25)	(\$35,000)	0	\$0	0	\$0	0
	TOTAL FOR COM SYSTEM	\$4,025,014	419,598	\$0	0	\$0	0
	One Time Price discount for the COM System	(\$100,000)	0	\$0	0	\$0	0
5.	COM CENTER Total	\$3,925,014	419,598	\$0	0	\$0	0
6.	PROGRAM MANAGEMENT	\$334,002	156,406	\$10,277	4,812	\$105,339	49,326
7.	TRAINING PROGRAM		To be determined	\$0	0	\$0	0
TOTAL		\$24,683,250	1,942,083	\$146,520	52,038	\$14,598,101	631,569

Note: Prices are as per Amendment #2 (COM center included)

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CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
COST AND COMMITMENT REPORT (Exhibit 3.2)
O.S.P. CONTRACT
 September, 1993

III
PROGRESS STATISTICS

Item	Description	Budget (Contractual Obligation)		Cost			
				This Period		Total ITD	
		U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
HELIOPOLIS EXCHANGE							
1.	Manholes, Handholes, and Vaults	556	6,840	0	0	0	0
2.	Conduit Systems	0	38,539	0	0	0	0
3.	Feeder Cable and Associated Equipment	1,338,358	209,076	0	0	0	0
4.	Distribution Segment	726,109	1,334,047	0	0	0	0
5.	Existing Plant	0	36,793	0	0	0	0
7.	Preliminary Engineering	0	0	0	0	0	0
9.	Documentation	5,500	24,153	0	0	0	0
10.	Maintenance	0	144,923	0	0	0	0
11.	Rock	0	0	0	0	0	0
12.	Extra Depth	0	0	0	0	0	0
13.	False Digging	0	0	0	0	0	0
14.	Extra Concrete	0	0	0	0	0	0
15.	Extra Reinforced Concrete	0	0	0	0	0	0
16.	Locking Manhole Cover	0	0	0	0	0	0
HELIOPOLIS EXCHANGE TOTAL		\$2,070,522	LE 1,794,370	0	0	0	0
AUTO EXCHANGE							
1.	Manholes, Handholes, and Vaults	5,105	77,635	0	0	0	0
2.	Conduit Systems	8,613	990,282	0	0	0	0
3.	Feeder Cable and Associated Equipment	935,599	191,151	0	0	0	0
4.	Distribution Segment	854,190	1,833,613	0	0	0	0
5.	Existing Plant	245,971	681,590	0	0	0	0
7.	Preliminary Engineering	0	243,443	0	0	0	0
9.	Documentation	5,500	24,153	0	0	0	0
10.	Maintenance	0	144,923	0	0	0	0
11.	Rock	0	0	0	0	0	0
12.	Extra Depth	0	0	0	0	0	0
13.	False Digging	0	0	0	0	0	0
14.	Extra Concrete	0	0	0	0	0	0
15.	Extra Reinforced Concrete	0	0	0	0	0	0
16.	Locking Manhole Cover	0	0	0	0	0	0
AUTO EXCHANGE TOTAL		\$2,054,977	LE 4,186,789	0	0	0	0

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CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
COST AND COMMITMENT REPORT (Exhibit 3.2 cont'd)
O.S.P. CONTRACT
 September, 1993

III
PROGRESS STATISTICS

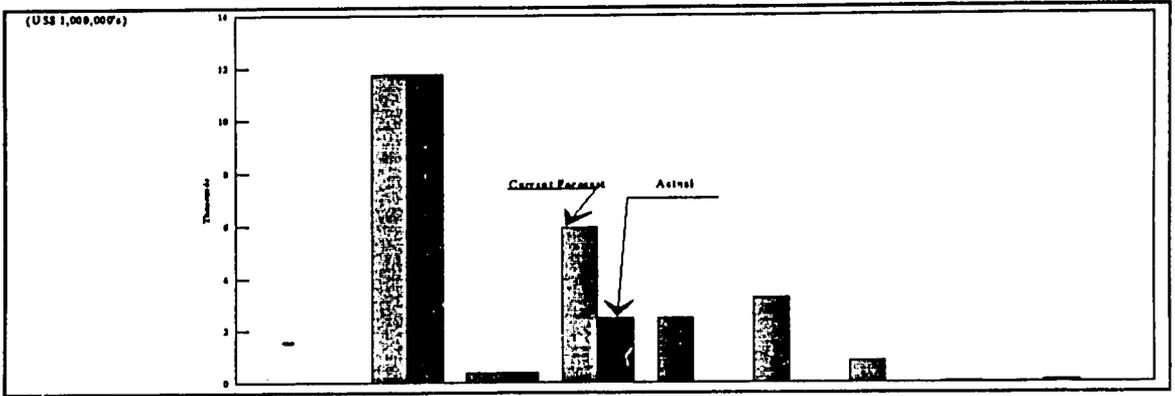
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Item	Description	Budget (Contractual Obligation)		Cost			
				This Period		Total ITD	
		U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
GIZA EXCHANGE							
1.	Manholes, Handholes, and Vaults	20,009	246,240	0	0	0	0
2.	Conduit Systems	0	788,647	0	0	0	0
3.	Feeder Cable and Associated Equipment	1,382,521	344,844	0	0	0	0
4.	Distribution Segment	1,120,583	2,251,199	0	0	0	0
5.	Existing Plant	0	85,680	0	0	0	0
7.	Preliminary Engineering	0	304,304	0	0	0	0
9.	Documentation	5,500	24,153	0	0	0	0
10.	Maintenance	0	144,923	0	0	0	0
11.	Rock	0	0	0	0	0	0
12.	Extra Depth	0	0	0	0	0	0
13.	False Digging	0	0	0	0	0	0
14.	Extra Concrete	0	225	0	0	0	0
15.	Extra Reinforced Concrete	0	552	0	0	0	0
16.	Locking Manhole Cover	0	0	0	0	0	0
GIZA EXCHANGE TOTAL		\$2,528,612	LE 4,190,766	0	0	0	0
COMMON ITEMS							
6.	Warehouse Inventory	0	0	0	0	0	0
8.	Training	491,387	0	0	0	0	0
9.4	Documentation Center (Ramsis)	11,000	24,153	0	0	0	0
17.	Program Management	2,617,636	1,332,777	0	0	0	0
18.	Price Discount	0	(1,000,000)	0	0	0	0
COMMON ITEMS TOTAL		\$3,120,022	LE 356,929	0	0	0	0
SUB-TOTAL OSP CONTRACT		\$9,774,134	LE 10,528,854	0	0	0	0
CONTINGENCIES		\$225,866	LE 0				
TOTAL OSP CONTRACT		\$10,000,000	LE 10,528,854	0	0	0	0

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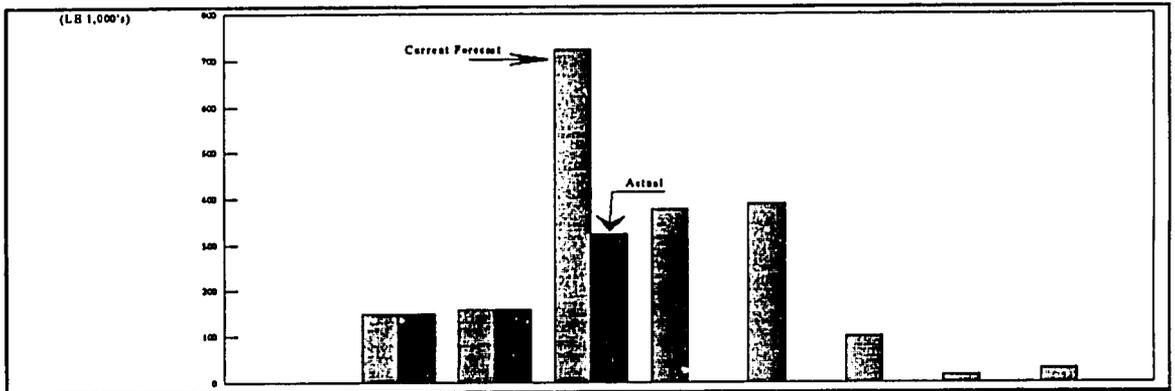
III PROGRESS STATISTICS

CONSTRUCTION MANAGEMENT CONSULTING CONTRACT QUARTERLY CASH FLOW REPORT (Exhibit 4.1) DSS CONTRACT September, 1993



Description	1992				1993				1994				Total To Date	
	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter		4th. Quarter
Budget	Quarterly	\$0	\$11,746	\$373	\$5,918	\$7,468	\$7,233	\$818	\$46					\$24,683
	Cumulative	\$0	\$11,746	\$12,119	\$18,037	\$25,505	\$32,740	\$24,559	\$24,604					\$14,598
Actual	Quarterly	\$0	\$11,746	\$373	\$2,479									\$14,598
	Cumulative	\$0	\$11,746	\$12,119	\$14,598									

US Dollars Financed by USAID



Description	1992				1993				1994				Total To Date	
	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter		4th. Quarter
Budget	Quarterly	0	150	159	723	377	388	100	13	30				1,942
	Cumulative	0	150	309	1,032	1,408	1,796	1,896	1,912	1,942				632
Actual	Quarterly	0	150	159	323									632
	Cumulative	0	150	309	432									

NOTES:

The COM center is incorporated

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CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
QUARTERLY CASH FLOW REPORT (Exhibit 4.1 cont'd)
DSS CONTRACT
 As of September 30, 1992

Description / Duration		4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter
		11/92 - 12/92	01/93-03/93	04/93-06/93	07/93-09/93	10/93-12/93	01/94-03/94	04/94-06/94	07/94-09/94	10/94-12/94
US Dollars Financed By	F	\$0	\$11,746,185	\$372,607	\$5,918,210	\$2,468,325	\$3,235,158	\$818,216	\$45,668	\$78,881
USAID	A	\$0	\$11,746,185	\$372,607	\$2,479,309					
Egyptian Pounds Financed By	F	0	150,115	158,731	722,729	376,907	387,869	100,058	15,225	30,450
ARENTO	A	0	150,115	158,731	322,723					

Description / Duration		Disbursement To Date	Balance To Go	Total Cost
US Dollars Financed By	F	\$18,037,002	\$6,646,248	\$24,683,250
USAID	A	\$14,598,101	\$0	\$14,598,101
Egyptian Pounds Financed By	F	1,031,575	910,509	1,942,084
ARENTO	A	631,569	0	631,569

NOTES:

- (1) The COM center is incorporated in the current forecast
- (2) F = Current Forecast For Disbursement
A = Actual Disbursement
- (3) The difference in the amount disbursed between the Forecast (F) and the Actual (A) is caused by not presenting the invoices of the following :
 1. The balance of the remaining 60% materials and spare parts for the switches delivered and erected.
 2. The 10% advance payments and 60% materials for the COM System.

RE

**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
AMENDMENT AND IMMEDIATE ACTION CHANGE ORDER (IACO) SUMMARY (Exhibit 5.1)
DSS CONTRACT
September, 1993**

III PROGRESS STATISTICS

III-11

AMENDMENT NO.	IACO NO.	C.A NO.	DATE EXECUTED BY ARENTO/OBI	Note (2)	
				USD	L.E.
ORIGINAL CONTRACT	-	-	03-Nov-92	\$26,262,479	1,953,923
APPROVED CHANGES :					
AMENDMENT NO. 1	N/A	1	09-Feb-93	(\$153,826)	21,336
AMENDMENT NO. 2	N/A	2	24-May-93	\$3,925,014	419,598
SUB-TOTAL APPROVED CHANGES				\$3,771,188	440,934
TOTAL CONTRACT				\$30,033,667	2,394,857

USAID GRANT NO. 263-0177 (TELECOM IV)		USAID GRANT NO. 263-K-620 (CIP)		ARENTO FINANCED NOTE (1)	
USD	L.E.	USD	L.E.	USD	L.E.
\$20,068,108	0	\$4,707,743	0	\$666,628	1,953,923
(\$109,872)	0	\$0	0	(\$43,954)	21,336
\$2,500,000	0	\$0	0	\$1,425,014	419,598
\$2,390,128	0	\$0	0	\$1,381,060	440,934
\$23,258,236	0	\$4,707,743	0	\$2,067,688	2,394,857

PENDING CHANGES :					
N/A	N/A	N/A	N/A	\$0	0
SUB-TOTAL PENDING CHANGES				\$0	0

\$0	0	\$0	0	\$0	0
\$0	0	\$0	0	\$0	0

NOTES:

- (1) ARENTO financed local currency includes L.E. 452,775 for Auto exchange, plus L.E. 1,522,485 for Giza, Ramsis, Opera & Pyramids exchanges.
- (2) The total contract value of U.S.D.\$ 30,033,667 includes U.S.D.\$ 4,707,743 financed under USAID grant No.236-K-620 and U.S.D.\$ 2,067,688 financed by ARENTO for Auto exchange & COM System.

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT
 AMENDMENT AND IMMEDIATE ACTION CHANGE ORDER (IACO) SUMMARY (Exhibit 5.2)
 OSP CONTRACT
 September, 1993**

III PROGRESS STATISTICS

III-12

AMENDMENT NO.	IACO NO.	C.A NO.	DATE EXECUTED BY ARENTO/OBI	Note (1)		AMOUNT FINANCED BY USAID		AMOUNT FINANCED BY ARENTO			
				USD	LE	USD	LE	USD	LE		
ORIGINAL CONTRACT	-	-	22-Jul-93	\$9,774,134	10,528,854	\$10,000,000	0	\$0	10,528,854		
APPROVED CHANGES :											
SUB-TOTAL APPROVED CHANGES						\$0	0	\$0	0		
TOTAL CONTRACT						\$9,774,134	10,528,854	\$10,000,000	0	\$0	10,528,854
PENDING CHANGES :											
SUB-TOTAL PENDING CHANGES						\$0	0	\$0	0		

NOTES:

(1) Amount available for Warehouse Inventory and Contingencies is \$ 225,866

AL