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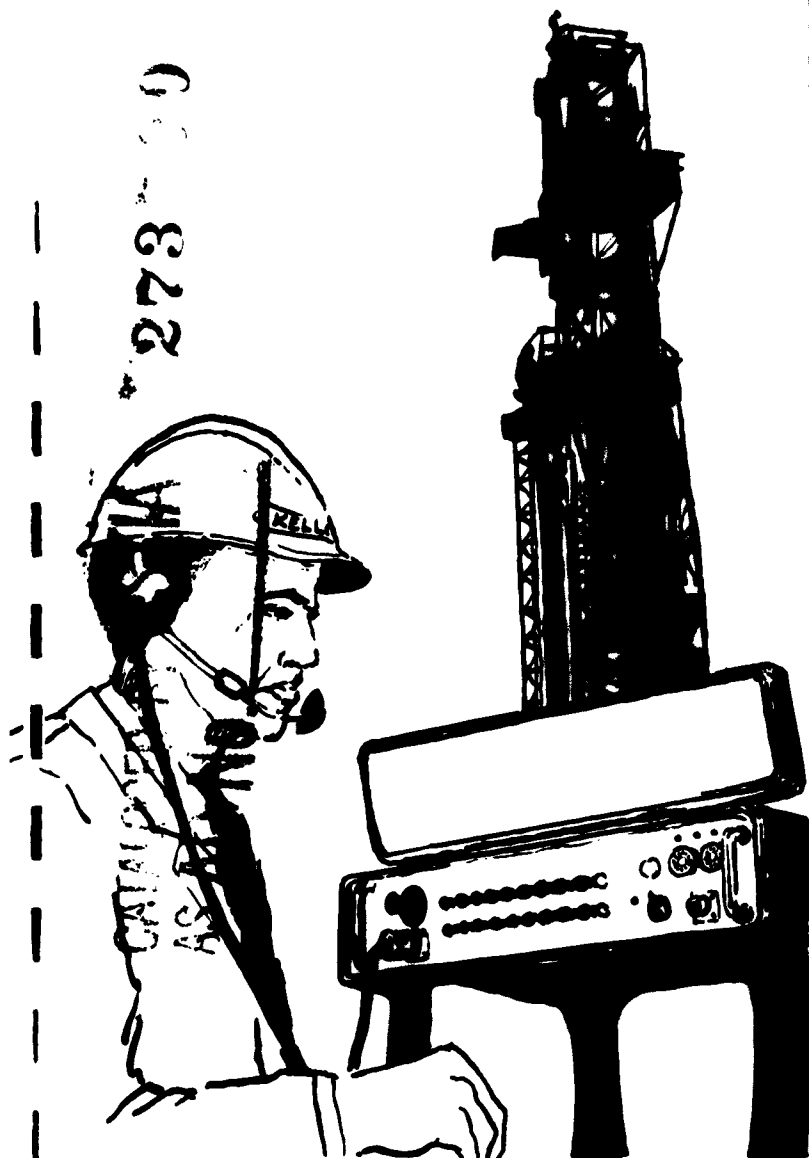
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**Fixed ground
 Communication
 Systems**

**WEAPONS
 SYSTEM 107A-1**

PROGRAM PROGRESS REPORT NUMBER 58



KELLOGG
 COMMUNICATIONS
 SYSTEMS
 DEPARTMENT

500 N. PULASKI ROAD
 CHICAGO 24, ILLINOIS

CONTRACT NUMBERS

AF-04 (647)-312
 AF-04 (647)-461
 AF-04 (647)-462
 AF-04 (647)-486
 AF-04 (647)-495
 AF-04 (647)-502
 AF-04 (647)-503
 AF-04 (647)-609
 AF-04 (647)-738
 AF-04 (647)-739
 AF-04 (647)-740
 AF-04 (647)-741

MONTH OF FEBRUARY, 1962

FIXED GROUND COMMUNICATION SYSTEMS

WEAPONS SYSTEM 107A-1

Prepared by

ITT KELLOGG

A Division of

**International Telephone and Telegraph Corporation
500 North Pulaski Road
Chicago 24, Illinois**

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AFBM Exhibit 58-1

MONTH OF FEBRUARY, 1962

Prepared for

**AIR FORCE BALLISTIC MISSILE DIVISION
AIR RESEARCH AND DEVELOPMENT COMMAND
UNITED STATES AIR FORCE
Inglewood, California**

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ABBREVIATIONS

ACO	-	Administrative Contracting Officer
AFB	-	Air Force Base
AFBM	-	Air Force Ballistic Missile
AFBMD	-	Air Force Ballistic Missile Division
AFBSD	-	Air Force Ballistic Systems Division
AFQC	-	Air Force Quality Control
CAPD	-	Chicago Air Procurement District
CCN	-	Contractual Change Notice
CDF	-	Combined Distributing Frame
CP	-	Command Post
CPE	-	Command Post Equipment
CSD	-	Communications Systems Department
DPL	-	Double Propellant Loading
ECP	-	Engineering Change Proposal
ECR	-	Engineering Change Request
EIUS	-	End Item Uniform Specifications
GDA	-	General Dynamics Astronautics
GDE	-	General Dynamics Electronics
GE	-	General Electric Company
GEEIA	-	Ground Electronic Engineering and Installation Agency
IPB	-	Illustrated Parts Breakdown
ITT K	-	ITT Kellogg
LCC	-	Launch Control Center
LCO	-	Launch Control Officer
LCOSS	-	Launch Control Officer Safety System
LES	-	Launch Enable System
LMCN	-	Launch Maintenance Conference Network
LSB	-	Launch and Service Building
MAB	-	Missile Assembly Building
MAMS	-	Missile and Maintenance Shops

ABBREVIATIONS (cont.)

OSR	-	Operation, Service, and Repair
PABX	-	Private Automatic Branch Exchange
PAS	-	Primary Alerting System
SAC	-	Strategic Air Command
SATAF	-	Site Activation Task Air Force
SDS	-	Systems Design Specification
SM	-	Shop Maintenance
SSB	-	Single Side Band
STN	-	SAC Telephone Network
TAD	-	Technical Acceptance Demonstration
UHF	-	Ultra High Frequency
USAF	-	United States Air Force
WCP	-	Wing Command Post

1-1. **ATLAS COMMUNICATION SYSTEM (Warren AFB).**

1-2. **WARREN I AND II.**

1-3. **ENGINEERING AND DOCUMENTATION.** The engineering effort continues to be one of implementing minor change orders, providing technical assistance to the field, monitoring AFBMD Exhibits 60.36 and 60.36-A, and co-ordinating tasks in progress such as the Launch Maintenance Conference Networks and the Patch and Test Jack Bays. Air Force approval of the submitted ECP's and of those currently being processed will determine future engineering requirements.

1-4. The ECP's now pending Air Force approval concern the Workstand Conference Network in the MAB and the replacement of relay coils in the Remote Alarm Circuits.

1-5. ECP-109 has been submitted to CAPD.

1-6. SDS-10 has been reissued.

1-7. CCN's 46 and 47 have been received from the Air Force.

1-8. **DELIVERY AND INSTALLATION OF EQUIPMENT.** The implementation of the open CCN tasks at the base is proceeding satisfactorily, and except for minor items of Launch Maintenance Conference Network equipment yet to be delivered, the manufacturing and installation schedules for all remaining tasks are compatible.

1-9. The installation of the remaining CCN tasks has been brought to the following percentages of completion:

a. Warren I. LMCN 80%, Microwave Recable 100%, Centralized Circuit Control Console 40%, Coil Replacement Alarm System 100%.

b. Warren II. LMCN 90%; Microwave Recable 100%, Handover and Alternate Routing 100%; Coil Replacement Alarm System 100%.

1-10. The installation of the Warren I and II LES has been completed, and the systems will be demonstrated as soon as GDA has completed the modification of its equipment.

1-11. **QUALITY CONTROL.** The inspection of equipment that has been installed in compliance with CCN's continues.

1-12. WARREN III.

1-13. ENGINEERING AND DOCUMENTATION. The monitoring of project facilities, co-ordinating work on the Alerting System and the Task Analysis Program, and processing ECP's, ECR's and EIUS continue to be the main engineering tasks for Warren III.

1-14. The status of ECP's for the Series E operational squadrons was reviewed in a meeting between the Air Force and associate contractors at GDA San Diego on 16-19 January.

1-15. Work on the following ECP's is in progress: ECP-95, ECP-108 (Emcor Cabinet to secure the PAS), and ECP-110 (reassignment of LES cable pairs).

1-16. The preparation of top drawings for the Order-Wire Extension is nearing completion, and the installation drawings for the Alerting System are scheduled to be released shortly.

1-17. During the next reporting period, a meeting will be held to resolve problem areas affecting the implementation of CCN-10 to Contract AF04(647)495.

1-18. DELIVERY AND INSTALLATION OF EQUIPMENT. The modification material required for the Changing Console Control Circuit and the Release of Communication Circuit was delivered to the base two to four weeks ahead of schedule and will be installed by 15 April.

1-19. The end delivery dates for the Alerting System and Securing of the LES CP Cabinet have been scheduled 23 March and 9 April 1962 respectively.

1-20. The installation of the Order-Wire Extension has been brought to 90% completion and the Headset Rework to 70% completion.

1-21. QUALITY CONTROL. The inspection of equipment that has been installed in compliance with CCN's continues.

2-1. ATLAS COMMUNICATION SYSTEM (Offutt AFB).

2-2. ENGINEERING AND DOCUMENTATION. The present engineering effort is one of providing technical assistance to the field and monitoring and co-ordinating such project tasks as adding a Klaxon Horn in the Power House, Securing the LES CPE Cabinets, and integrating the SSB/UHF and 465-L systems. Air Force approval of submitted ECP's and of possible additional change proposals will determine future engineering requirements.

- 2-3. The engineering for the Handover system and the 5 and 10 Party Meet-Me-Conference is in progress at all complexes.
- 2-4. All field changes covered by ECP's 15040 through 15045 and 15047 through 15049 have been completed and submitted to Engineering.
- 2-5. DELIVERY AND INSTALLATION OF EQUIPMENT. All of the Category I and II drawings and the K-60 portion of the Category III drawings have been delivered to the base.
- 2-6. With the exception of the open tasks covered by the Request for Waiver Document (CCN-19) and subsequent CCN's, the ITT K installation effort under Contract AF04(647)461 has been completed.
- 2-7. Virtually all of the equipment for the open tasks has been delivered. The installation effort for the open tasks presently in progress has been brought to the following percentages of completion: Remote Alarm System (CCN-19) 98%, Handover (CCN-19) 50%, and LMCN (CCN-20) 83%.
- 2-8. The installation of the LMCN has been brought to 100% completion at Complex A and to about 70% completion at Complex B. The installation of the outside plant portion of the LMCN at Complex B by the ITT K subcontractor is in progress.
- 2-9. ITT K recently regained access to the LSB at Complex A following an explosion there on 28 January. A thorough investigation of the area has been completed, revealing that ITT K equipment in the area was not damaged as a result of the explosion.
- 2-10. QUALITY CONTROL. In-process inspection of the equipment installed in compliance with CCN's continues.
- 3-1. ATLAS COMMUNICATION SYSTEM (Fairchild AFB).
- 3-2. The ITT K field office at Fairchild AFB was closed on 31 January 1962.
- 3-3. The engineering effort remains one of monitoring and co-ordinating the various project facilities and AFBMD Exhibits 60.36 and 60.36-A.
- 3-4. The installation drawings for the Alerting System are scheduled to be released shortly.
- 3-5. Cost to complete and milestone schedules are being established to determine the remaining contractual obligations and to phase out the various projects in compliance with Air Force requirements.

3-6. The status of ECP's for the Series E operational squadrons was reviewed in a meeting between the Air Force and associate contractors at GDA San Diego on 16-19 January.

3-7. Work on the following ECP's is in progress: ECP-95, ECP-108 (Emcor Cabinet for securing the PAS), and ECP-110 (reassignment of the LES cable pairs).

3-8. During the next reporting period, a meeting will be held to resolve problem areas affecting the implementation of CCN-10 to Contract AF04(647)495.

3-9. The modification material required for the Changing Console Control Circuit and the Release Communication Circuit was delivered two weeks ahead of schedule and will be installed by 15 April.

3-10. The end delivery dates for the Alerting System and Securing of the LES CP Cabinet have been scheduled 23 March and 9 April respectively.

3-11. An ITT K task team will be sent to the base about 1 April to install equipment for the remaining open tasks. This installation effort is to be completed by 1 June. It is expected that work in compliance with CCN-31 and ECP's 1-CC-76 and 1-CC-81 will be completed by the middle of April, with the remaining time being devoted to the installation of the Alerting System.

4-1. ATLAS COMMUNICATION SYSTEM (Forbes AFB).

4-2. The ITT K field office at Forbes AFB was closed on 28 February 1962.

4-3. The engineering effort remains one of co-ordinating and monitoring project facilities such as the Alerting System, AFBMD Exhibits 60.36 and 60.36-A, and the Task Analysis Program and the processing of ECP's, ECR's, and EIUS.

4-4. The installation drawings for the Alerting System are scheduled to be released shortly.

4-5. The status of ECP's for the Series E operational squadrons was reviewed in a meeting between the Air Force and associate contractors at GDA San Diego on 16-19 January.

4-6. Work on the following ECP's is in progress: ECP-95, ECP-108 (Emcor Cabinet for securing the PAS), and ECP-110 (reassignment of the LES cable pairs)..

4-7. During the next reporting period, a meeting will be held to resolve problem areas affecting the implementation of CCN-10 to Contract AF04(647)495.

4-8. The modification material required for the Changing Console Control Circuit and the Release of Communication Circuit was delivered to the base two weeks ahead of schedule and will be installed by 15 April.

4-9. The end delivery dates for the Alerting System and Securing of the LES CP Cabinet have been scheduled 23 March and 9 April respectively.

4-10. An ITT K task team will be sent to the base about 1 April to install equipment for the remaining open tasks. This installation effort is to be completed by 1 June. It is expected that work in compliance with CCN-31 and ECP's 1-CC-76 and 1-CC-81 will be completed by the middle of April, with the remaining time being devoted to the installation of the Alerting System.

5-1. ATLAS COMMUNICATION SYSTEM (Altus, Dyess, Lincoln, Plattsburg, Schilling and Walker Air Force Bases).

5-2. ENGINEERING AND DOCUMENTATION.

5-3. GENERAL. Since the last reporting period, ITT K has received the following CCN's:

Contract AF04(647)738. CCN's 18, 20, 21, 22, and 23, Altus AFB.
Contract AF04(647)739. CCN's 16, 18, 19, and 20, Dyess AFB.
Contract AF04(647)740. CCN's 15, 17, 18, and 19, Walker AFB.
Contract AF04(647)741. CCN's 17, 18, 19, 20, and 21, Plattsburg AFB.
Contract AF04(647)502. CCN's 26, 27, 28, 29, and 30, Schilling AFB.
Contract AF04(647)503. CCN's 21, 22, 23, 24, and 25, Lincoln AFB.

5-4. The pre-order specifications for the Atlas Series F Alerting System have been released.

5-5. ITT K is still awaiting CCN action by the Air Force on ECP-73 for Dyess, Plattsburg, and Walker Air Force Bases. Contractual coverage for implementing ECP-73 for Altus, Lincoln, and Schilling Air Force Bases has been received.

5-6. ECP-108, providing for the integration of the SSB/UHF system and the PAS at all Series F bases, has been approved by the Air Force.

5-7. The SDS for the Order-Wire Extension at Altus, Dyess, and Walker Air Force Bases has been completed. The SDS for the Order-Wire Extension at Plattsburg AFB is being prepared.

5-8. ITT K has received Air Force direction to update the Communications Room floor plans and the communication manhole duct assignments for all Series F complexes.

5-9. ITT K has been directed by the Air Force to furnish the entrapment area telephones at all Series F complexes.

5-10. During the present reporting period, ITT K completed a study of AFBMD Exhibits 60.36 and 60.36-A for the Series F bases. A list of proposed corrections to Exhibit 60.36 has been prepared and submitted to the Air Force. Work is in progress on the preparation of inputs for AFBMD Exhibit 60.36-A. The first engineering input for AFBMD Exhibit 60.36-A has been completed, and it is expected that Section IV to this exhibit will be completed and submitted to the Air Force during the next reporting period.

5-11. During the next reporting period, all ITT K drawings for the Atlas Series F program will be reviewed preparatory to implementing a format change in compliance with CCN-10 to Contract AF04(647)495.

5-12. During the next reporting period, ITT K Engineering will continue to work on the Order-Wire Systems for Altus and Dyess Air Force Bases and co-ordinate work being performed in compliance with ECP's 75-R1, 84, and 86 for Altus, Dyess, Plattsburg, and Walker Air Force Bases.

5-13. ALTUS AFB. Contractual coverage for relocating interim telephones in the administrative buildings on the launch complexes has been received. The engineering for this task has been completed; all of the required material has been ordered; and the installation of equipment is in progress.

5-14. The engineering for CCN-10 to Contract AF04(647)738 is nearing completion, and the installation of equipment is expected to be started shortly.

5-15. The local GDA has received the accounting information needed to provide ITT K with welders and related skilled labor from the GDA subcontractor pool to assist in the modification of the communications panel mounting brackets. ITT K and GDA are presently establishing and co-ordinating procedures to implement this effort.

5-16. ITT K recently met with the local GE to orient them on the use of I&C communications available to support the GE effort at the complexes.

5-17. ECP-CC-119, proposing the relocation of the LMCN conduit and outlet box, has been submitted to CAPD.

- 5-18. DYESS AFB. The majority of the engineering tasks at the base have been completed.
- 5-19. The engineering for the LES has been brought to about 50% completion.
- 5-20. The wiring and mounting problems concerning the additional communication panels called for by CCN-9 to Contract AF04(647)739 have been solved, and the preparation of as-built drawings has been started.
- 5-21. The running of the outside plant conduit in compliance with CCN-9, a task performed by the ITT K subcontractor, has been completed, and final inspection is being performed.
- 5-22. ECP's CC-106 (installation of conduit), CC-112 (rerouting and extension of cable), and CC-114 (implementation of various communication channels) have been submitted to CAPD.
- 5-23. ECP's proposing the relocation of PA speakers on Levels 5 and 6 of the Silo have been prepared.
- 5-24. LINCOLN AFB. The SDS for the Order-Wire System has been completed.
- 5-25. A new revised drawing system is being prepared that will possibly affect the Category I and II drawings.
- 5-26. At the direction of SATAF, a meeting between the local SATAF, SAC, GEEIA, Lincoln Telephone and Telegraph Company, and ITT K is to be scheduled to resolve the integration responsibilities of ITT K in interfacing the PAS, 465-L system, STN, and CSD within the WCP area.
- 5-27. A portable platform to be used in a mock-up of the MAPCHE and Pneumatic communication panel and in the checkout of communications equipment at the complexes has been completed through the joint effort of ITT K and GDA.
- 5-28. A work order for installing communication panels in the MAPCHE and Pneumatics Trailer is being prepared.
- 5-29. The dial line assignments for the Maintenance Conference Network in the MAMS have been completed by ITT K and the Lincoln Telephone and Telegraph Company.
- 5-30. PLATTSBURG AFB. ITT K has received written approval from the ACO to rent-lease an additional conduit hydraulic bender, an electric welder, and associated equipment. Costs for rent-leasing this equipment are to be charged against the contract under the Base Support Clause.
- 5-31. It is expected that, in the very near future, GDA will provide ITT K with information concerning the latest modification of the LCO Console.

5-32. The engineering for the various tasks at the base had been brought to the following stages of completion:

- a. Direct Line. Engineering and drafting have been completed; drawings are being prepared; work orders have been prepared and will be released with the drawings.
- b. Maintenance Checkout. Engineering and drawings have been completed; work orders have been prepared.
- c. LCOSS. Engineering will be completed as soon as certain information required for compliance with CCN's 8, 12, and 19 has been received.
- d. LES. Preliminary engineering is in progress, and further engineering effort will be started when information required for compliance with CCN-4 has been received.
- e. MSCC (LR1305). Engineering and drafting have virtually been completed.
- f. WCP. Engineering is nearing completion; work orders and drawings have been released preparatory to the installation of equipment.
- g. MAB. Engineering for power and equipment located in the Communications Room and the MAMS area is in progress.

5-33. During the next reporting period, it is expected that locations for the Remote Annunciator Cabinets in the MAMS and WCP buildings will be established.

5-34. SCHILLING AFB. The design for implementing CCN-19 to Contract AF04(647)502 has been completed. During the next reporting period, it is expected that the remaining work on CCN-19 will be completed, and that work on the other CCN's for Schilling AFB will be started.

5-35. Drawings reflecting Air Force changes in the Communications Room floor plans have been prepared, and it is expected that the ITT K effort on the floor plans will be completed in the near future.

5-36. ECP-CC-111, proposing the rearrangement of various conduits and outlets, has been submitted to CAPD.

5-37. WALKER AFB. The implementation of MCSS tasks has virtually been completed at five complexes.

5-38. Cross-connect sheets for the Maintenance Checkout Systems at the typical sites and the MAMS have been prepared and are being reproduced.

5-39. Work orders for CCN-3 have been prepared and released.

5-40. Work orders are being prepared for the direct-line at the WCP and for the LES at all complexes and the WCP.

5-41. DELIVERY AND INSTALLATION OF EQUIPMENT.

5-42. ALTUS AFB. Ninety-four percent of the operational equipment (excluding spare parts) has been delivered to the base.

5-43. The installation of interim equipment has been completed at the MAB and has virtually been completed at the complexes. The installation of operational equipment ranges from 2% completed at Complex 12 to 92% completed at Complex 2.

5-44. DYESS AFB. The delivery of interim equipment has been completed, and about 90% of the operational equipment has been delivered to the base.

5-45. The installation of interim equipment has been completed at the MAB and has virtually been completed at the complexes. The installation of operational equipment ranges from 2% completed at Complexes 10 through 12 to 86% completed at Complex 1.

5-46. LINCOLN AFB. The delivery of operational equipment has been completed.

5-47. The installation of interim equipment has been completed at Complexes 1 through 9 and at the MAB and has virtually been completed at Complexes 10 through 12. The installation of operational equipment ranges from 42% completed at Complex 11 to 100% completed at the MAB.

5-48. A preliminary sub-systems demonstration was held at Complex 9 on 19 February; final testing has been started at the MAMS and the WCP.

5-49. PLATTSBURG AFB. Ninety-five percent of the interim equipment and 50% of the operational equipment has been delivered to the base.

5-50. The installation of interim equipment has been completed at the MAB and Complex 7 and, except for Complex 12, has been brought to more than 90% completion at the other complexes.

5-51. The interim communication system at Complex 7 was completed ahead of schedule and was turned over to GDA on 22 February. It is expected that the installation of interim equipment for Complex 6 will also be completed ahead of schedule.

5-52. The installation of operational equipment has been started at Complexes 1, 2, 8, 10, and 11 and at the WCP.

5-53. At Complex 2, cabling is in progress. It is expected that all station relocation and the addition of conduit and terminal cabinets in the Silo will be completed shortly.

5-54. SCHILLING AFB. With the exception of spare parts, the delivery of operational equipment has been completed.

5-55. The installation of operational equipment at Complexes 1 through 9 and at the MAB and WCP has been completed and at Complexes 10 through 12 is nearing completion.

5-56. Work on the termination of CDF communication panels and the installation of dial telephones are in progress at Complexes 10 through 12.

5-57. WALKER AFB. Virtually all of the interim equipment and 76% of the operational equipment has been delivered to the base.

5-58. The installation of interim equipment has been brought to 100% completion at the MAB and is nearing completion at the complexes. The installation of operational equipment is underway at all complexes and at the MAB and the WCP.

5-59. QUALITY CONTROL.

5-60. ALTUS AFB. The inspection of operational equipment ranges from 1% completed in the MAB to 53% completed at Complex 2.

5-61. DYESS AFB. The inspection of operational equipment ranges from 14% completed at Complex 8 to 60% completed at Complex 2.

5-62. LINCOLN AFB. Unit testing is in progress at Complexes 1, 3 and 9, and sub-systems testing is in progress at Complex 3.

5-63. PLATTSBURG AFB. The inspection of interim equipment ranges from 25% completed at Complex 5 to 100% completed at the MAB.

5-64. SCHILLING AFB. The inspection of operational equipment is in progress at all complexes, ranging to 60% completed at Complex 7. At Complex 8, inventory was completed on 8 February, and the documentation for the inventory and the TAD is in progress.

5-65. WALKER AFB. The interim equipment at the MAMS has been accepted by AFQC. The functional testing of interim equipment ranges from 75% completed at Complex 12 to 95% completed at Complex 1.

5-66. PROBLEMS.

5-67. GENERAL. The major problem areas affecting ITT K installation of Series F equipment are as follows:

- a. Late access to launch and work platforms.
- b. Failure of associate contractors to maintain their interface equipment installation changes.
- c. Lost time resulting from a lack of notification concerning schedule interruptions caused by power shutdowns and civil dedication ceremonies.

5-68. LINCOLN AFB. The late construction of launch platforms and work on the gaseous oxygen vent facilities continue to hamper ITT K effort on the installation of equipment and the relocation of conduit. Although substantial progress on the relocation of conduit has been made in recent weeks, work has been completed at only five complexes.

5-69. PLATTSBURG AFB. ITT K has notified the Air Force that several ITT K jack boxes were recently removed from their location in the MAB and left lying on the floor. This matter is being investigated by AFQC.

5-70. ITT K is to provide GDA with communications from the LCC to the road block in the fall-back area during forthcoming DPL tests. SATAF is to investigate this matter and direct ITT K on the action needed to implement the additional communications.

5-71. For sometime, ITT K has been awaiting word from GDA on when to begin instructing GDA personnel in the operation of patch panels at the complexes. To date, however, GDA has not requested this instruction.

5-72. ITT K has notified the Air Force of the need for minor corrective action concerning the hold-circuit for the Logic Unit in the direct-line system.

6-1. LAUNCH ENABLE SYSTEMS.

6-2. ENGINEERING AND DOCUMENTATION. The alignment procedures for installing the 1 x 12 LES at Altus and Lincoln Air Force Bases have been completed and distributed.

6-3. The detailed EIUS for the 1 x 12 LES have been completed and will be submitted to the Review Board for approval shortly.

6-4. The design engineering for the security kit required in securing the 1 x 9 LES CPE Cabinets (ECP-50-1) is nearing completion.

6-5. DELIVERY AND INSTALLATION OF EQUIPMENT. With the exception of spare parts, the delivery of 1 x 12 LES equipment for Altus and Dyess Air

Force Bases has been completed, and the shipment of major 1 x 12 LES equipment items to Plattsburg and Walker Air Force Bases has been started.

6-6. The installation of 1 x 12 LES equipment is proceeding on schedule at all sites where installation is in progress.

7-1. INTEGRATION PROJECTS.

7-2. GENERAL. The ITT K design proposal for the LCOCC Console has been approved by AFBSD, and the preparation of the manufacturing drawings is nearing completion.

7-3. SSB/UHF INTEGRATION. In compliance with an Air Force request, ITT K has made a critical review of GDE drawings, previously submitted to AFBSD for approval. A letter commenting on the drawings and proposing several drawing changes was submitted to the Air Force on 9 February.

7-4. 465-L INTEGRATION. ITT K recently completed an on-site investigation of 465-L facilities at Fairchild, Forbes, Schilling, and Warren (Site III) Air Force Bases. Drawings reflecting the results of the investigation are being prepared for submission to AFBSD.

7-5. As a result of a 465-L Integration Meeting that was held 9-10 January at Norton AFB to implement methods for solving interface problems, AFBSD is to provide ITT K with contractual direction to revise the 465-L integration specification covered by CCN-1 to Contract AF04(647)495. This revision will be made on the basis of data issued during the meeting and data to be furnished ITT K in writing by the Air Force and associate contractors. The revised specifications are to be prepared, ready for distribution, within 60 days from the time ITT K has received the necessary contractual coverage.

7-6. With the exception of one specification requirement for integrating the 465-L system at Offutt AFB, the integration documentation required in compliance with the AFBSD work statement has been completed.

7-7. CCN-17 to Contract AF04(647)495, covering the updating of integration specifications and drawings for the 465-L system, has been received.

8-1. MICROFILM.

8-2. A CCN to Contract AF04(647)495 has been received from the Air Force directing ITT K to implement the microfilm requirements of MCP 71-77. A

master authorization reflecting these requirements has been prepared and released.

8-3. MCP 71-77, which defines the Engineering data requirements for Material and Services (USAF), requires the contractor to furnish the concerned military agency with a 35 mm microfilm slide of each engineering drawing prepared and submitted under contract. In addition, MCP 71-77 requires that each drawing be prepared in compliance with the military data preparation specification, MIL-D-70327.

8-4. MIL-D-70327 establishes specification standards for Government and contractor designed activities. It defines, controls, directs, and limits the minimum amount of detail on drawings and authorizes the interchange of drawings, engineering data, and associated lists between the branches of the armed services.

8-5. The ITT K interpretation of MCP 71-77 and MIL-D-70327, as set forth in the master authorization, is based solely on the minutes of a 4 January 1962 meeting at Norton AFB between the Air Force and ITT K. The minutes of this meeting, however, do not reflect certain conditions agreed upon by the Air Force and ITT K in earlier discussions of MCP 71-77. Consequently, the 4 January minutes are being amended by ITT K to reflect the conditions of the earlier discussions and will be submitted to the Air Force for approval as soon as possible. When the Air Force has approved these changes, ITT K will release a new master authorization on the microfilm requirements.

8-6. A film and a discussion explaining the requirements of MIL-D-70327 were presented to representatives of ITT K at an MCP 71-77 meeting chaired by CAPD on 8 February.

9-1. PUBLICATIONS.

9-2. TECHNICAL MANUALS. ITT K recently received from the Air Force a printing contract that enables ITT K to proceed with the work remaining on the technical manuals that have been held back by the lack of contractual coverage. Every effort is being made to expedite the printing of the manuals for shipment as soon as possible.

9-3. The following manuals have been completed and shipped to the Air Force bases:

31X1-8-5-2	Telephone Conference Group SM.
31X1-8-5-4	Telephone Conference Group IPB.
31X1-2-13-2	Communication Panels SM.
31X1-2-13-4	Communication Panels IPB.

31X1-2-1-122	Launch Enable System SM (Atlas) (reprint).
31X1-2-1-122	Launch Enable System SM (Atlas) (change).
31X1-9-3-4	Direct Line IPB.

9-4. Work is progressing on the preparation of manuals for the Samos and Complex 75-1 retrofit programs; a work authorization has been received for manuals on the Minuteman Site at Vandenberg AFB.

9-5. The ITT K Publications Department is currently preparing, changing, or revising the following manuals:

31X1-2-1-124	Launch Enable System IPB (Atlas).
31X1-2-1-152	Launch Enable System SM (Titan).
31X1-2-1-154	Launch Enable System IPB (Titan).
31X1-2-23-2	Dial Telephone Local Test Board SM.
31X1-2-23-4	Dial Telephone Local Test Board IPB.
31X1-6-2-4	Type K-60 PABX IPB (change).
31X1-8-3-22	Type K-554 Manual Telephone Sets OSR and IPB.
31X1-8-4-1	Types K-554, K-564, and K-565 Dial Telephone Sets OSR (rev.).
31X1-8-4-4	Types K-554, K-564, and K-565 Dial Telephone Sets IPB (rev.).
31X1-8-7-1	Type K-510 Dial and Manual Telephone Sets OSR and IPB.
31X1-8-8-1	Weatherproof Manual Telephone Sets OSR and IPB.
31X1-8-9-1	Wall-type Manual Telephone Sets OSR and IPB.
31X1-8-10-1	Desk-type Manual Telephone Sets OSR and IPB.
31X1-9-3-2	Direct Line Shop Maintenance (rev.).
31X1-11-3-2	Power and Alarm Equipment SM (change).
31X1-11-3-4	Power and Alarm Equipment IPB (rev.).
31X1-12-3-1	Headset-Microphones OSR and IPB.

9-6. **PROVISIONING.** The preparation of the provisioning documentation for Complexes 576-D and 576-E and for the 1 x 12 LES sites is progressing satisfactorily, and item description sheets for all missile sites are being prepared.

9-7. Input data for the Unit Code Manual PO 21-SM65F-06 and calibration data for the Series D, E, and F missile bases have been prepared and submitted to GDA.

9-8. Work has been started on the updating of the MGE list for all Atlas sites, and it is expected that a final conference for the MGE list will be held in the near future.