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MODEL NO. WS-133A (15) CONTRACT ~~NO.~~ AF04(647)-757

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25-29 1998

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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
A	Complete Revision Including Renumbered Pages Added Pages 44 through 111	5-10-63	[illegible] 5/15/6[illegible]

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REV SYM A

D2-13302 (Wing II) AFBSD APPROVAL STATUS

STATUS: See Approval Chart (Page 5) No Approval received.

REMARKS: The original release of D2-13302-2 was submitted to BSD for approval by Boeing Letter 2-5647-20-37, dated March 19, 1963. BSD Letter BSQAP-4-23-113/ C. Humphrey/8821, dated 23 April 1963 disapproved the original release and requested a revision in accordance with the comments contained in the letter and the requirements of BSD Message BSQA 16-4-51, dated 16 April 1963. These comments were incorporated into the document by a complete revision (Revision A) dated 10 May 1963 and submitted to BSD for approval with Letter of Transmittal No. 2-5647-10-125.

See Remarks: Page 4

D2-13302-2 (Wing II) AFBSD APPROVAL STATUS CHART

REVISION - DATE	BOEING SUBMITTAL LETTER NUMBER	ACTION REQUESTED BY BOEING	BSD APPROVAL STATUS	BSD APPROVAL LETTER NUMBER
Original Release 2-19-63	2-5647-20-37, dated March 19, 1963	Approval	Disapproved	BSQAP-4-23-113/C.Humphrey/ 8821, dated 23 April 1963
Complete Revision "A", dated 5-10-63	2-5647-10-125, dated	Approval		

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of this document is to define the tasks, data, and procedures required to accomplish the modification, checkout, Acceptance, and Delivery/Turnover activities for the Minuteman WS-133A Wing II Weapon System Facilities at Vandenberg Air Force Base (VAFB).

1.2 GENERAL DESCRIPTION

The information and requirements presented ~~herein~~ as they apply to the Assembly and Checkout Contractor (Boeing) meet the objectives for Technical Approval, Inventory, Acceptance, and Delivery/Turnover of the Minuteman Wing II WS-133A Weapon System Facilities at VAFB. ~~This document describes~~ the methods to be used by Boeing to modify and demonstrate the weapon system using supporting Technical Manuals and implement the Acceptance and Delivery/Turnover of the weapon system to the procuring authority. It should be noted ~~that this program plan actually covers~~ the Modification and Checkout (M&C/O) of only the Wing II LF(s). The remaining facilities under SAC control requiring modification (e.g. SMSA) will be modified by the use of a separately negotiated Time Compliance Technical Order ~~(TCTO)~~ and will not be included ~~herein~~. The Delivery/Turnover activities described ~~herein~~ also pertain to only the Wing II LF(s) since the Wing II Supporting Facilities which ~~are~~ not yet in SAC's custody will remain in the custody of Boeing at the end of the Wing II Program in order to support the Wing III Program.

1.3 DEFINITIONS

This section contains a list of definitions which are applicable to the understanding of this document.

1) Acceptance - Acceptance is the acknowledgement and approval by the Air Force of the Contractor's Assembly and Checkout (A&C/O) and/or Modification and Checkout (M&C/O) effort conducted on a weapon system facility.

2) Delivery/Turnover - Delivery/Turnover, as used herein, is defined as the final transfer of custodial responsibility of a facility from Boeing to SAC through AFSC upon completion of the Wing II Test Program.

3) Modification and Checkout - Modification and Checkout (M&C/O) is the modification, by TCTO incorporation, of the existing Wing I equipment or facilities to a Wing II configuration and the checkout of the equipment or facilities to insure operation of the new configuration.

4) Technical Approval Team (TAT) - The TAT is an Air Force Team chaired by the 6595th Aerospace Test Wing Commander responsible for witnessing the Contractor's effort in performing the job of providing a complete Wing II Weapon System.

5) Technical Approval Team (TAT) Discrepancies - TAT Discrepancies are those discrepancies issued by the TAT which indicate that the Contractor or the weapon system failed to meet applicable weapon system specification requirements.

6) Technical Approval Demonstrations - Technical Approval Demonstrations are demonstrations conducted by the appropriate contractor for the TAT. These demonstrations have been categorized into three classes as follows:

   a) Class I - Formal demonstration of maintenance equipment utilizing validated, verified technical data and conducted once on selected items of MGE prior to the Turnover of the facility. The purpose of these demonstrations will be to establish the adequacy of delivered test and handling equipment and technical data.

1.3 (Cont'd)

b) Class II - Formal demonstrations conducted just prior to Turnover of each deliverable facility of the weapon system, using validated and verified technical data. The purpose of these demonstrations will be to establish, in conjunction with the Class III demonstrations, the operational condition of the element being delivered.

c) Class III - Semi-formal demonstrations conducted during the A&C/O or test of the facilities. The tests witnessed during these demonstrations are those conducted by the A&C/O or Test Contractor as part of his normal task. Member(s) of the TAT will be provided an opportunity to witness such tests on each facility which are not feasible to duplicate after complete tie-in of the facility. The TAT will be notified no later than one working day prior to the demonstration to be witnessed. No contractor effort will be delayed or repeated due to the absence of witnessing TAT personnel once proper notification has been accomplished.

7) Technical Surveillance - Technical Surveillance is the witnessing by the TAT of the Modification and Checkout (M&C/O) tasks to prove Model Specification compliance.

1.4 REFERENCES

This section contains a list of references which contain information applicable to this document:

1) AFBSD Exhibit 60-60, "Minuteman Operational Weapon System Configuration Index."

2) AFBSD Exhibit 61-32, "Requirements for Demonstration and Technical Approval, Inventory, Acceptance and Turnover of WS-133A Operational Sites (Hardened and Dispersed) dated 8 February 1963 (a Vandenberg Addendum to be added)

3) S-133-110-0-1- , "Model Specification, Launch Operational System, Wing II Ellsworth Air Force Base," and Addendum No. 1 thereto (VAFB).

4) S-133-111-0-1 , "Model Specification, Launch Facility, Wing II Ellsworth Air Force Base," and Addendum No. 1 thereto (VAFB).

5) Boeing Document D2-7871 Supplement A, "Assembly and Checkout Requirements Wing II - VAFB." (This document is to be used in conjunction with D2-7871.)

6) Boeing Document D2-14652-1 thru-6, "Site Acceptance Test Procedures Wing II - VAFB."

7) Boeing Document D2-01-5, "Integrated Records System, BPTC."

8) Boeing Document D2-14123, "WS-133 Vandenberg Master Program Plan."

9) Boeing Document D2-13001, "Non-Conformance Record: Base Assembly and Checkout."

10) Boeing Document D2-13373, "Request for Waiver - VAFB A&C/O Acceptance - WS-133A."

1.5 CONTRACTUAL REQUIREMENTS

This document is being prepared under the authority of Amendment No. 16 to the Letter Contract AF04(647)-757.

It is understood that the contractual status of the Government specifications and exhibits called out herein is established elsewhere in the applicable contract, and the mention of such specifications and exhibits is for reference purposes only.

2.0 ACCEPTANCE AND DELIVERY/TURNOVER PROCEDURES

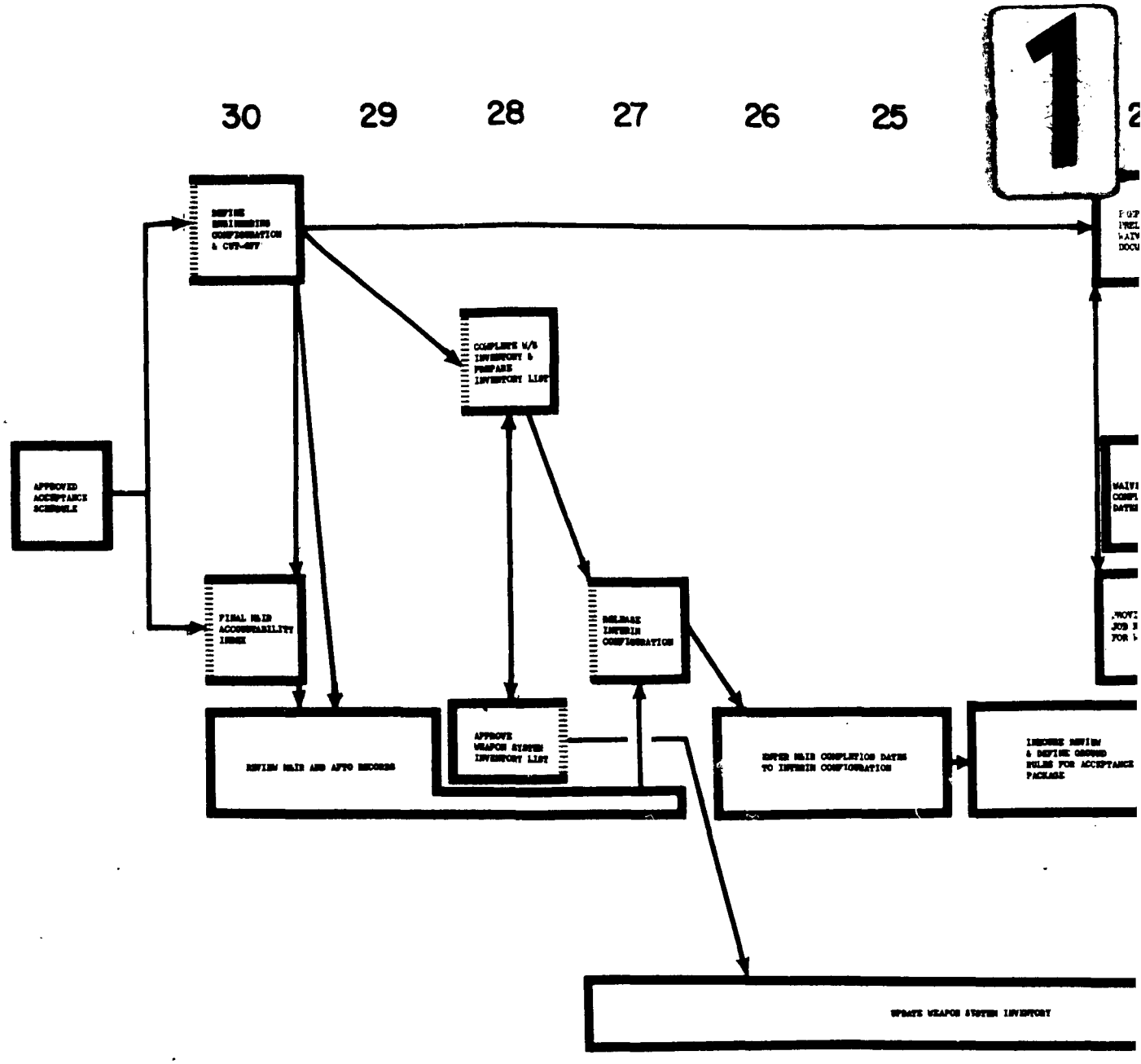
This section provides a description of the methods, procedures, coordination activities, and documentation which will be utilized and/or provided by Boeing to accomplish Acceptance and Delivery/Turnover. Figures II-1 and II-2 contain flow charts showing the activities necessary for the accomplishment of the Acceptance and Delivery/Turnover. During the Wing II Program, the facilities will normally be Accepted by AFSC prior to Delivery/Turnover to SAC; however, it should be noted that Acceptance of the M&C/O effort may be accomplished concurrent with the Delivery/Turnover, in which case the DD-250 is signed and Acceptance is accomplished 15 days after the actual Delivery/Turnover as shown in the Delivery/Turnover Chart (Figure II-2). When Acceptance is accomplished prior to Delivery/Turnover, an "updated" Acceptance package is prepared concurrently with Delivery/Turnover in order to evidence the additional M&C/O effort, in which case the DD-250 is signed and updated Acceptance is accomplished 15 days after the actual Delivery/Turnover as shown in the Delivery/Turnover Chart (Figure II-2). Figure II-1 represents the procedures necessary to accomplish Acceptance only.

The Boeing Acceptance and Delivery/Turnover organizational structure and method of operation is presented in Section 2.1.2. This one basic Boeing-USAF organizational interface will be employed for the Acceptance and Delivery/Turnover of all facilities. The detailed requirements and demonstrations to be accomplished for the Acceptance and Delivery/Turnover of these facilities are presented in Section 5.0.

2.1 GENERAL PROCEDURES

2.1.1 Acceptance and Delivery/Turnover Description

The Minuteman WS-133A Wing II Program at Vandenberg Air Force Base (VAFB) requires the modification of certain Weapon System facilities in order to support and demonstrate the Minuteman WS-133A Weapon System concept through the integrated Category I/Category II Test Programs (Wing II Test Program). No new weapon system facilities will be constructed for the Wing II Program; however, in addition to the facilities modified to a Wing II configuration, certain facilities not requiring modification will be utilized to support the Wing II Program. These facilities will be known as the Wing II Supporting Facilities, and consist of the Hard Launch Control Facility No. 1 (HLCF #1), Soft Launch Control Facility No. 2 (SLCF #2), Destruct Package Installation Facility No. 1 (DPIF #1), and Missile Storage Buildings Nos. 1 and 2 (MSB's 1 and 2).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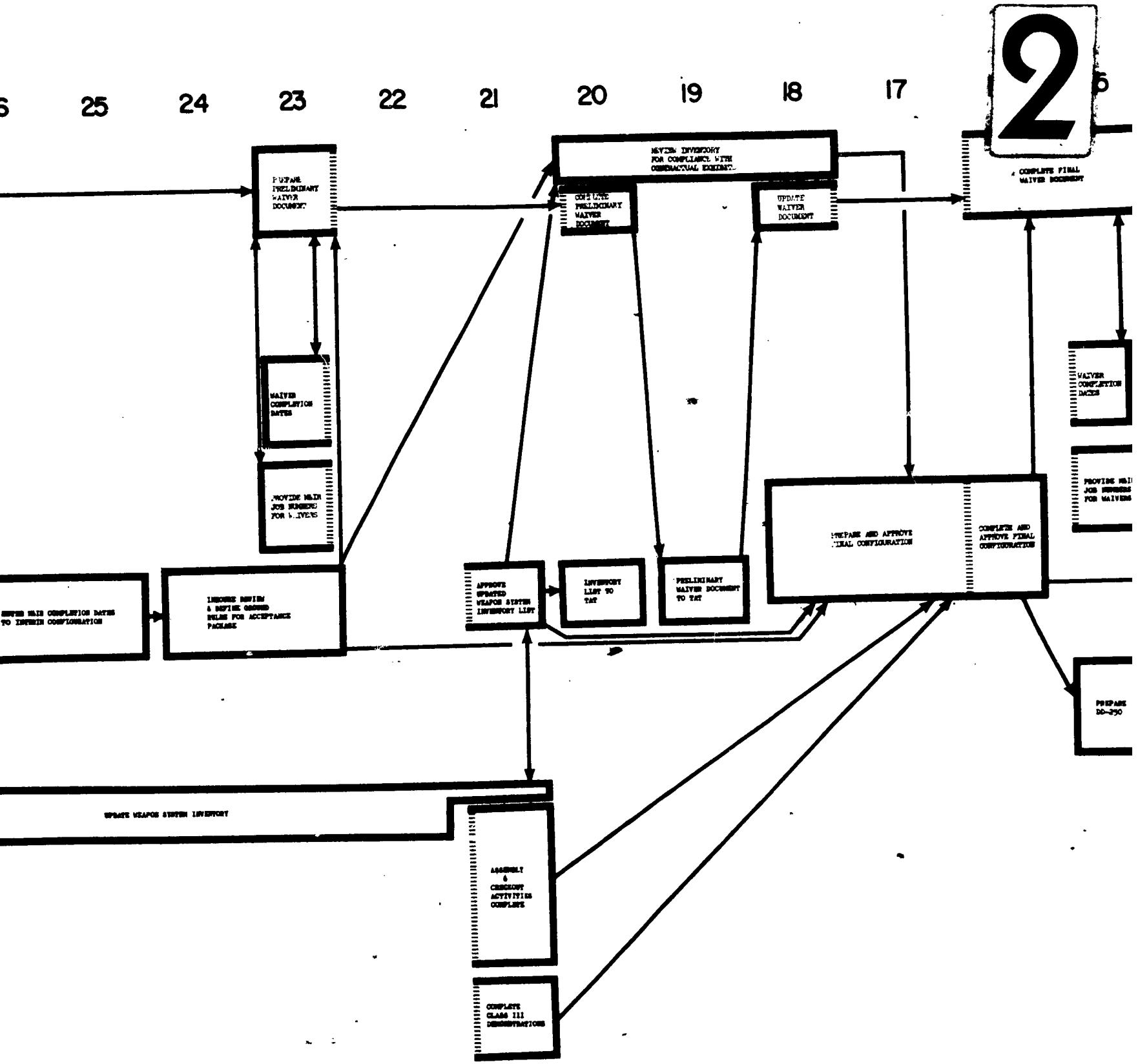
APPROVED ACCEPTANCE SCHEDULE
FINAL MAIN ACCOUNTABILITY INDEX
COMPLETE W/O INVENTORY & PREPARE INVENTORY LIST
APPROVE WEAPON SYSTEM INVENTORY LIST
REVIEW MAIN AND AFTO RECORDS
ENTER MAIN COMPLETION DATES TO INTERIM CONFIGURATION
UPDATE WEAPON SYSTEM INVENTORY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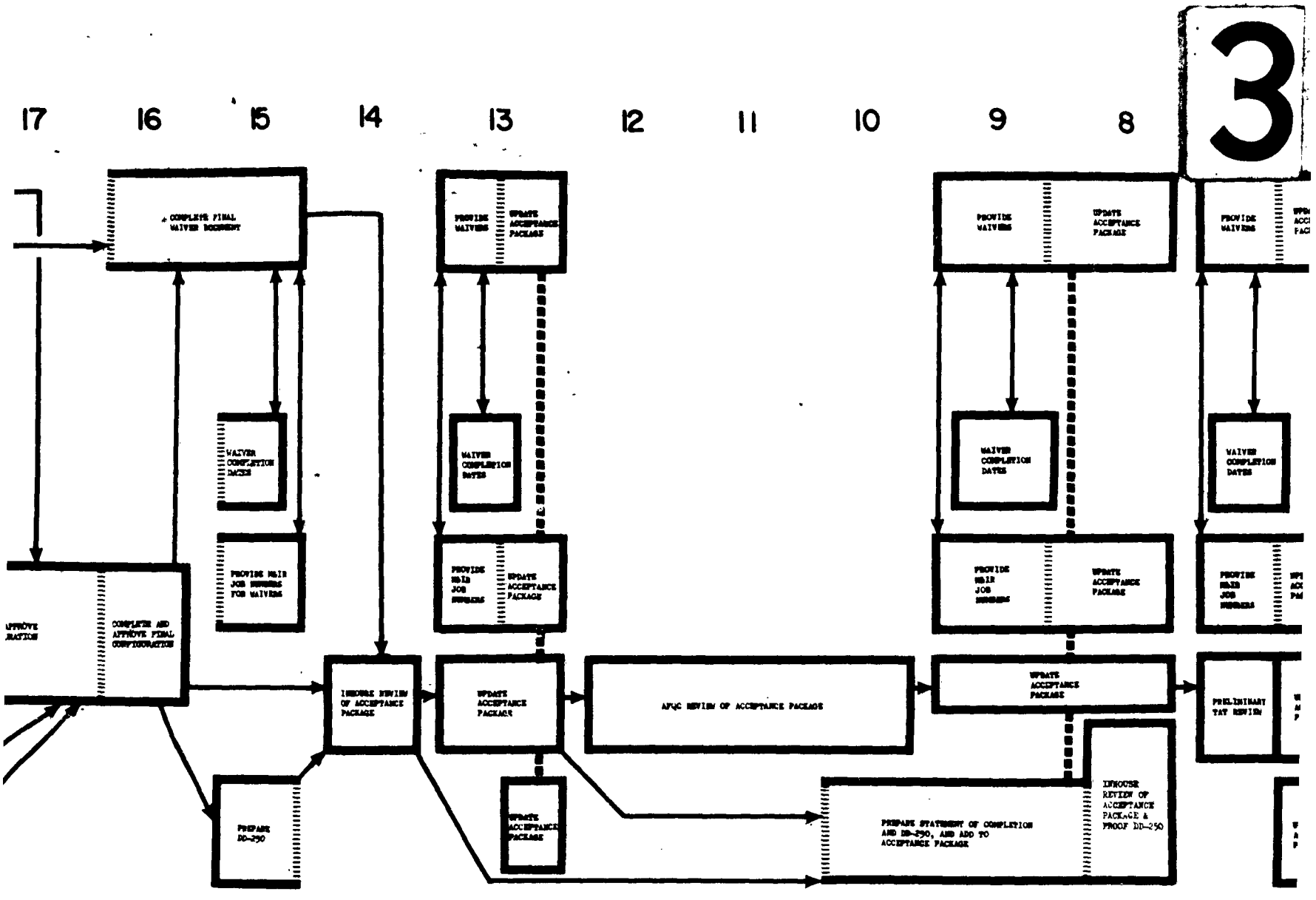
PREPARE PRELIMINARY WAIVER DOCUMENT
WAIVER COMPLETION DATES
PROVIDE MAIN JOB NUMBERS FOR WAIVERS
REVIEW INVENTORY FOR COMPLIANCE WITH CONTRACTUAL REQUIREMENTS
CONTINUE PRELIMINARY WAIVER DOCUMENT
UPDATE WAIVER DOCUMENT
COMPLETE FINAL WAIVER DOCUMENT
WAIVER COMPLETION DATES
PROVIDE MAIN JOB NUMBERS FOR WAIVERS
ENTER MAIN COMPLETION DATES TO INTERIM CONFIGURATION
INSURE REVIEW & REVISE GOODS RULES FOR ACCEPTANCE PACKAGE
APPROVE UPDATED WEAPON SYSTEM INVENTORY LIST
INVENTORY LIST TO TAT
PRELIMINARY WAIVER DOCUMENT TO TAT
PREPARE AND APPROVE FINAL CONFIGURATION
COMPLETE AND APPROVE FINAL CONFIGURATION
PREPARE DD-250
UPDATE WEAPON SYSTEM INVENTORY
ASSEMBLY & CHECKOUT ACTIVITIES COMPLETE
COMPLETE CLASS III DEMONSTRATIONS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COMPLETE FINAL WAIVER DOCUMENT
PROVIDE WAIVERS
UPDATE ACCEPTANCE PACKAGE
WAIVER COMPLETION DATES
PROVIDE MAIN JOB NUMBERS FOR WAIVERS
COMPLETE AND APPROVE FINAL CONFIGURATION
INHOUSE REVIEW OF ACCEPTANCE PACKAGE
AFQC REVIEW OF ACCEPTANCE PACKAGE
PRELIMINARY TAT REVIEW
PREPARE DD-250
PREPARE STATEMENT OF COMPLETION AND DD-250, AND ADD TO ACCEPTANCE PACKAGE
INHOUSE REVIEW OF ACCEPTANCE PACKAGE & PROOF DD-250

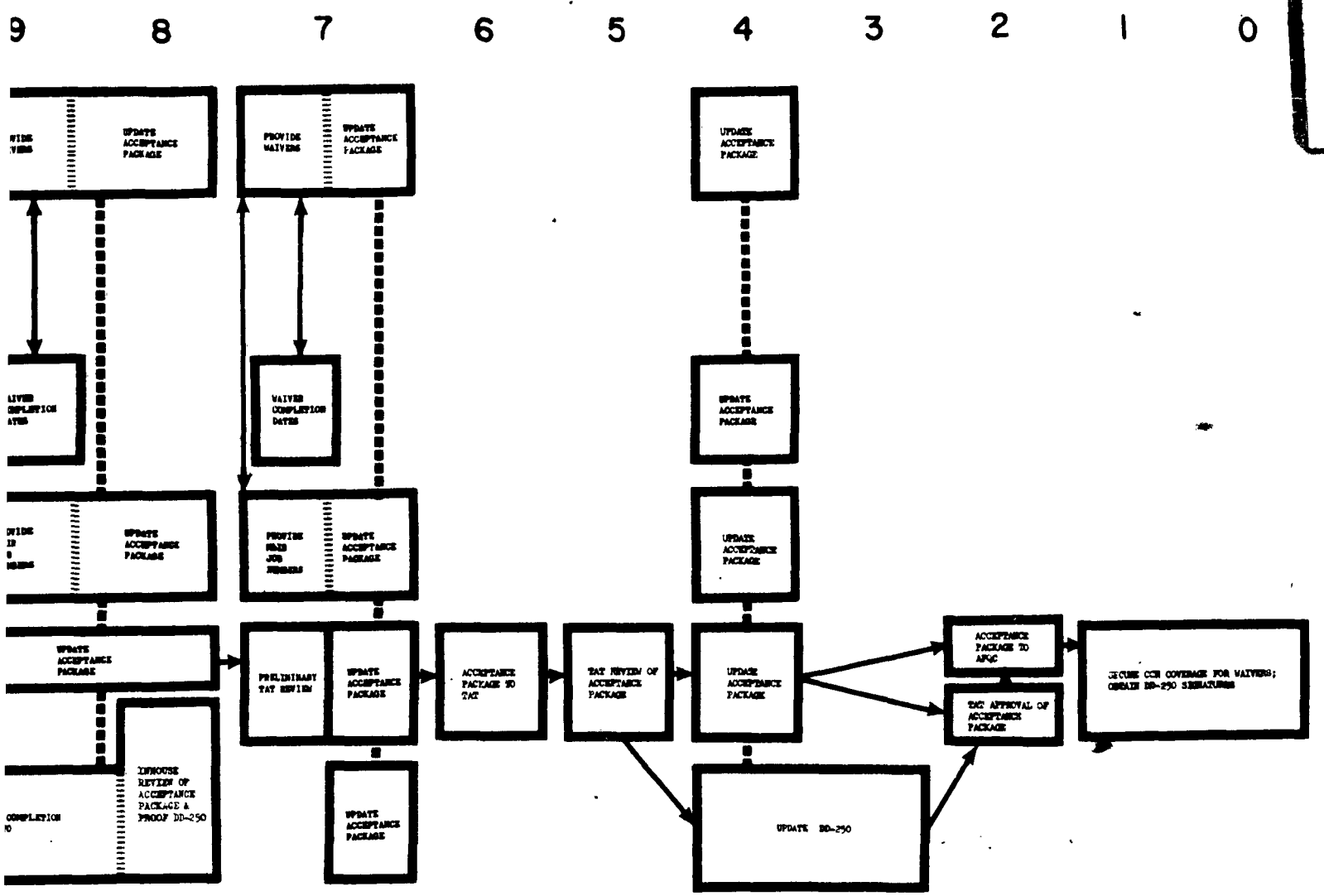
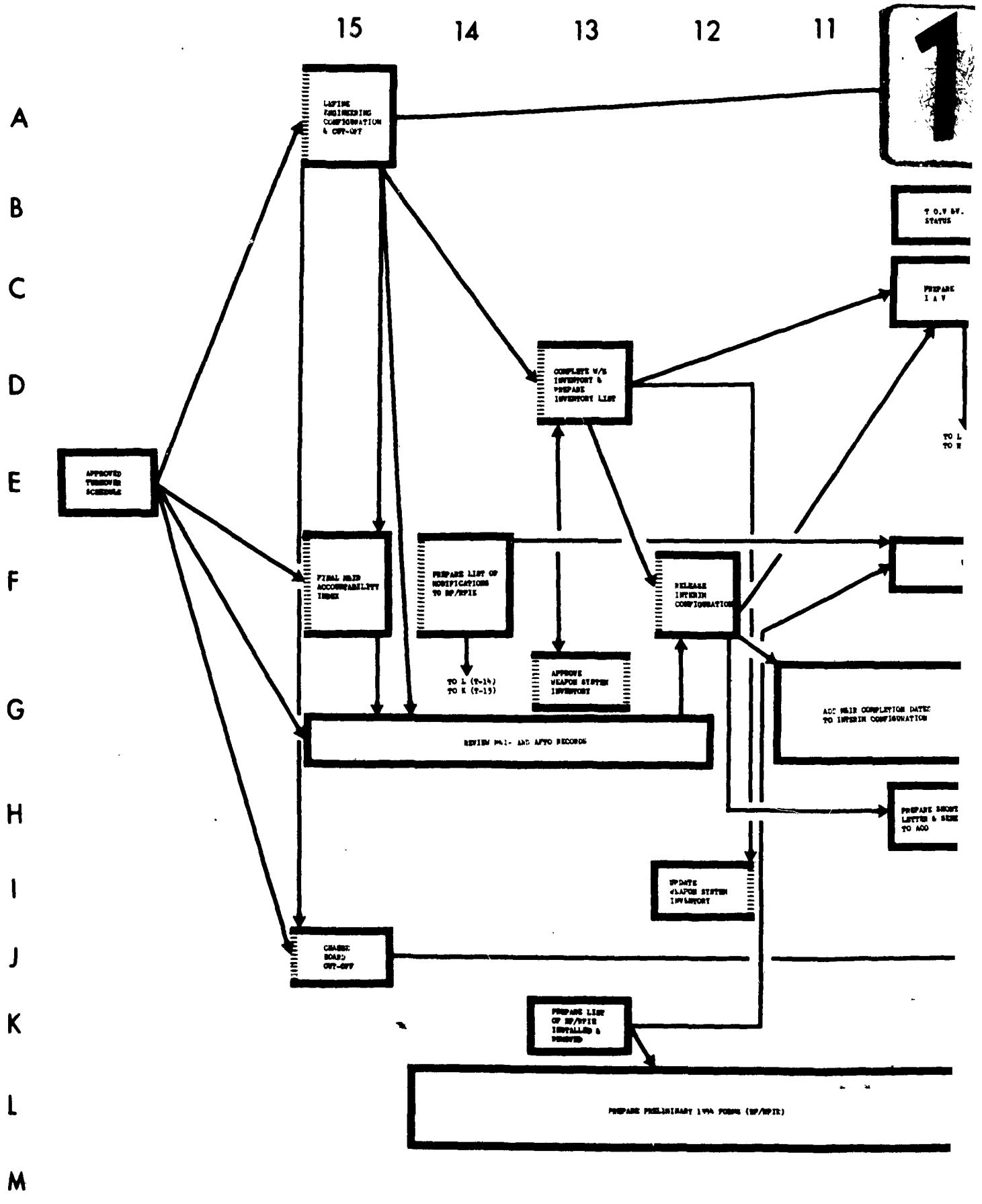


FIGURE II-1

REV. SYM. A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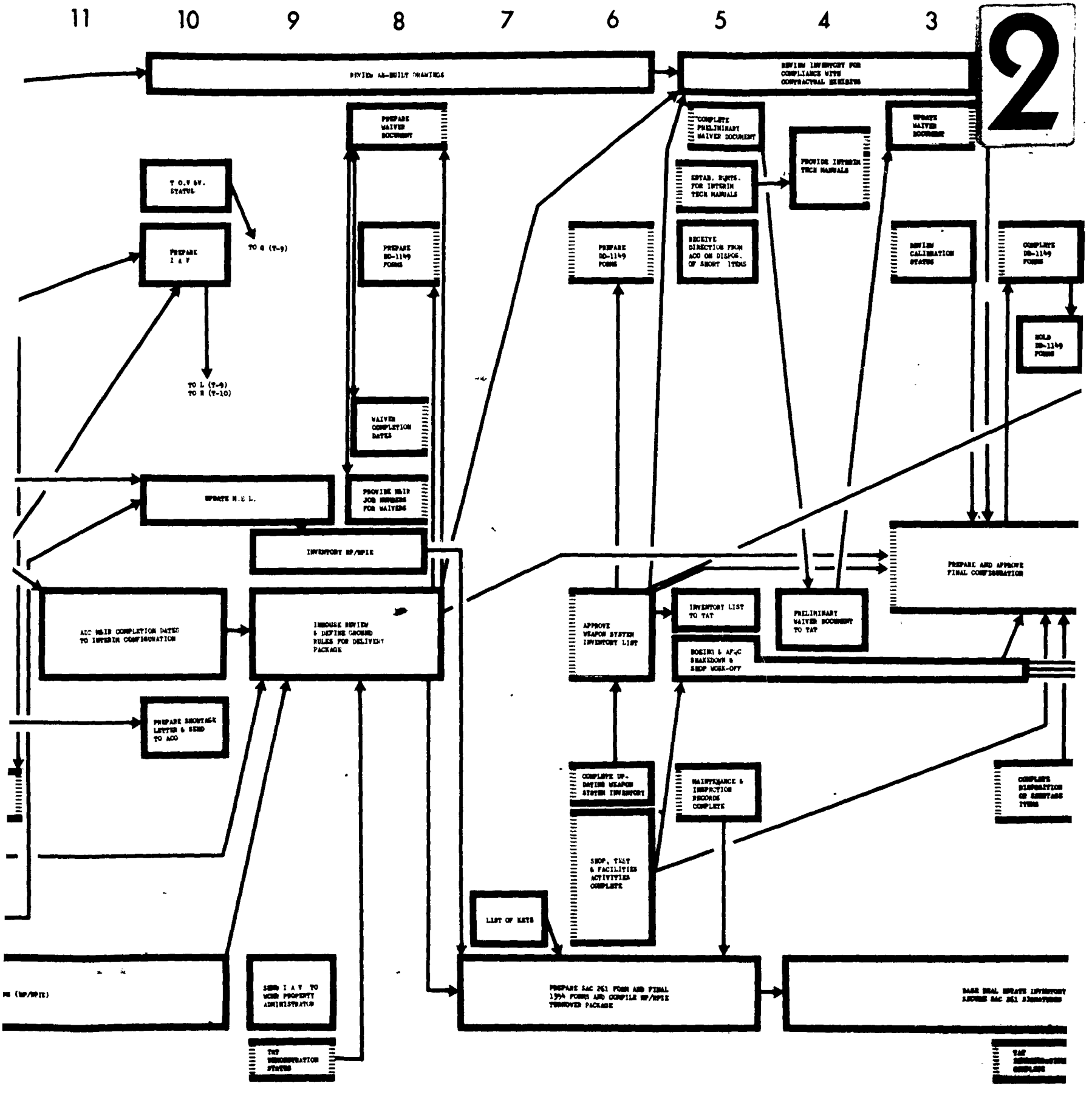
APPROVED TURNOVER SCHEDULE
LIFTIME ENGINEERING CONFIGURATION & CUT-OFF
FINAL MAIN ACCOUNTABILITY INDEX
PREPARE LIST OF MODIFICATIONS TO MP/MPIR
TO L (T-14)
TO K (T-13)
COMPLETE W/S INVENTORY & PREPARE INVENTORY LIST
APPROVE WEAPON SYSTEM INVENTORY
RELEASE INTERIM CONFIGURATION
REVIEW MAI- AND AFTO RECORDS
CHANGE BOARD CUT-OFF
PREPARE LIST OF MP/MPIR INSTALLED & REMOVED
PREPARE PRELIMINARY 199A FORMS (MP/MPIR)
PREPARE I A V
ADC MAIR COMPLETION DATES TO INTERIM CONFIGURATION
PREPARE SHORT LETTER & SEND TO ACO
UPDATE WEAPON SYSTEM INVENTORY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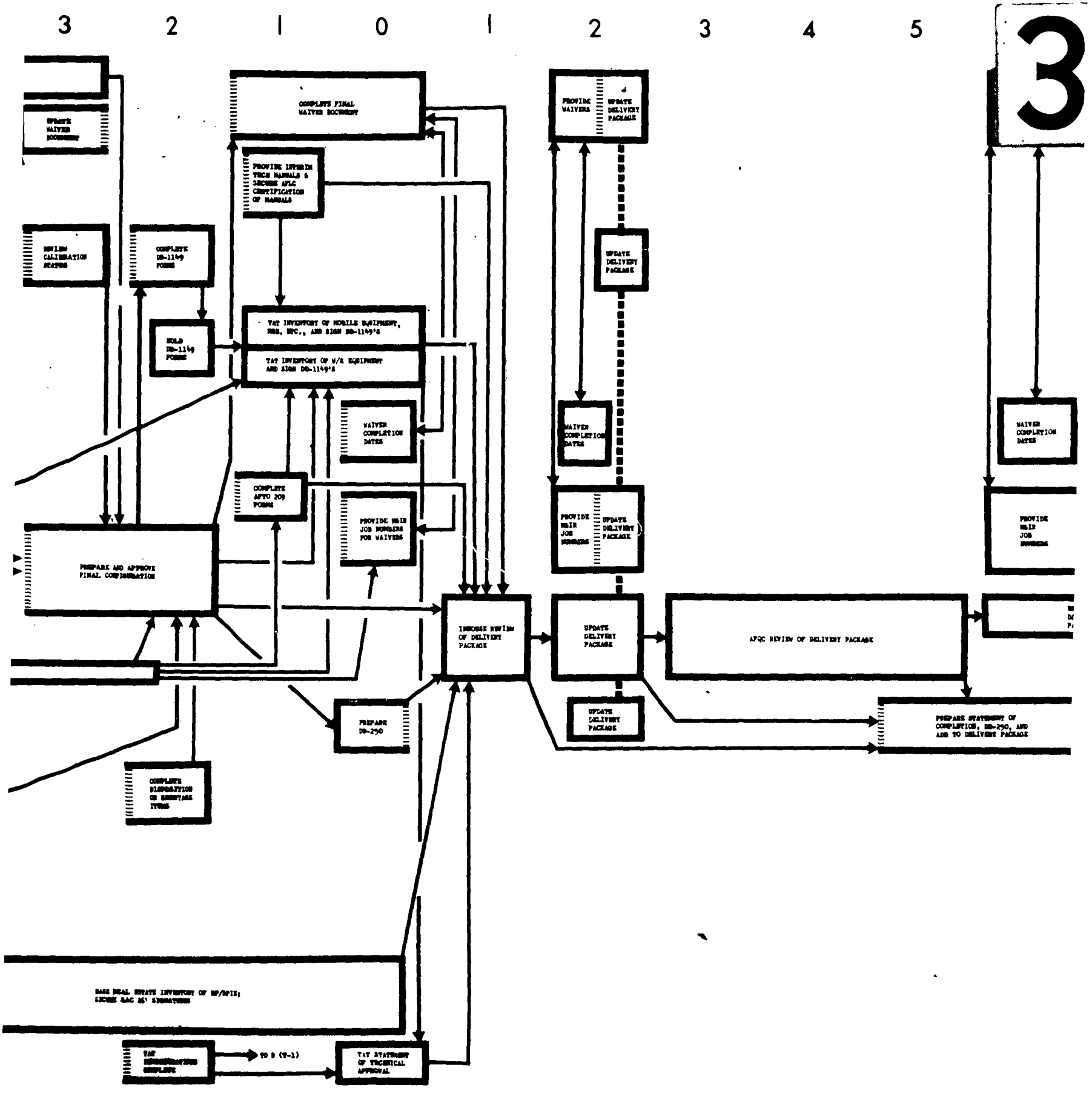
REVIEW AS-BUILT DRAWINGS
REVIEW INVENTORY FOR COMPLIANCE WITH CONTRACTUAL REQUIRE
PREPARE WAIVER DOCUMENT
COMPLETE PRELIMINARY WAIVER DOCUMENT
UPDATE WAIVER DOCUMENT
T O.V SV. STATUS
ESTAB. RQMTS. FOR INTERIM TECH MANUALS
PROVIDE INTERIM TECH MANUALS
PREPARE I A V
TO G (T-9)
PREPARE DD-1149 FORMS
PREPARE DD-1149 FORMS
RECEIVE DIRECTION FROM ACO ON DISPOS. OF SHORT ITEMS
REVIEW CALIBRATION STATUS
COMPLETE DD-1149 FORMS
SCLS DD-1149 FORMS
TO L (T-9)
TO R (T-10)
WAIVER COMPLETION DATES
UPDATE M.E.L.
PROVIDE MAIN JOB NUMBERS FOR WAIVERS
INVENTORY HP/MPIE
PREPARE AND APPROVE FINAL CONFIGURATION
ADD MAIN COMPLETION DATES TO INTERIM CONFIGURATION
INHOUSE REVIEW & DEFINE GROUND RULES FOR DELIVERY PACKAGE
APPROVE WEAPON SYSTEM INVENTORY LIST
INVENTORY LIST TO TAT
PRELIMINARY WAIVER DOCUMENT TO TAT
BOEING & AF-C SHAKEDOWN & SHOP WORK-OFF
PREPARE SHORTAGE LETTER & SEND TO ACO
COMPLETE UP-DATING WEAPON SYSTEM INVENTORY
MAINTENANCE & INSPECTION RECORDS COMPLETE
COMPLETE DISPOSITION OF SHORTAGE ITEMS
SHOP, TEST & FACILITIES ACTIVITIES COMPLETE
LIST OF KEYS
(HP/MPIE)
SEND I A V TO WCMR PROPERTY ADMINISTRATOR
PREPARE SAC 261 FORM AND FINAL 1354 FORMS AND COMPILE HP/MPIE TURNOVER PACKAGE
TAT DESIGNATION STATUS
TAT DESIGNATION COMPLETE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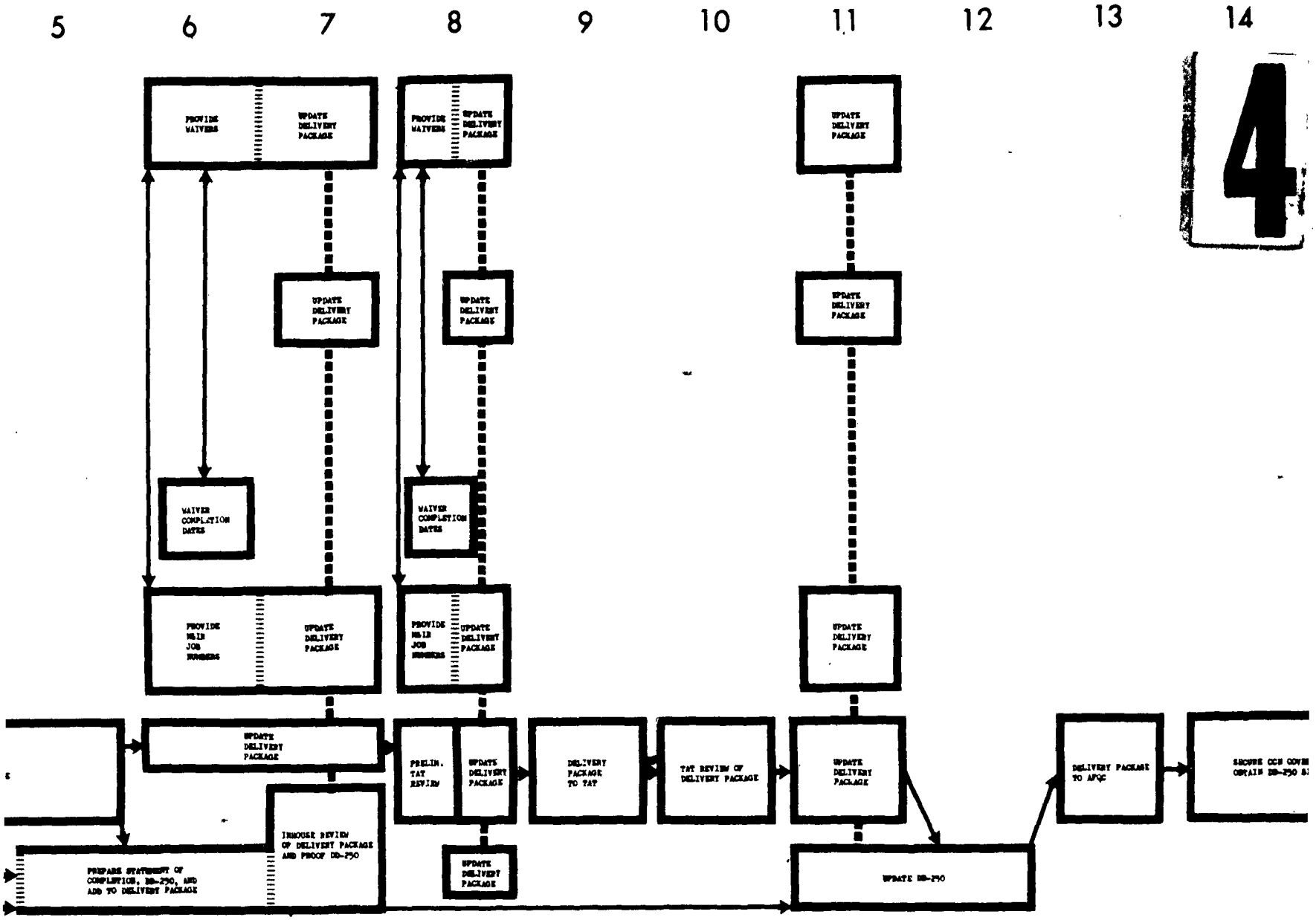
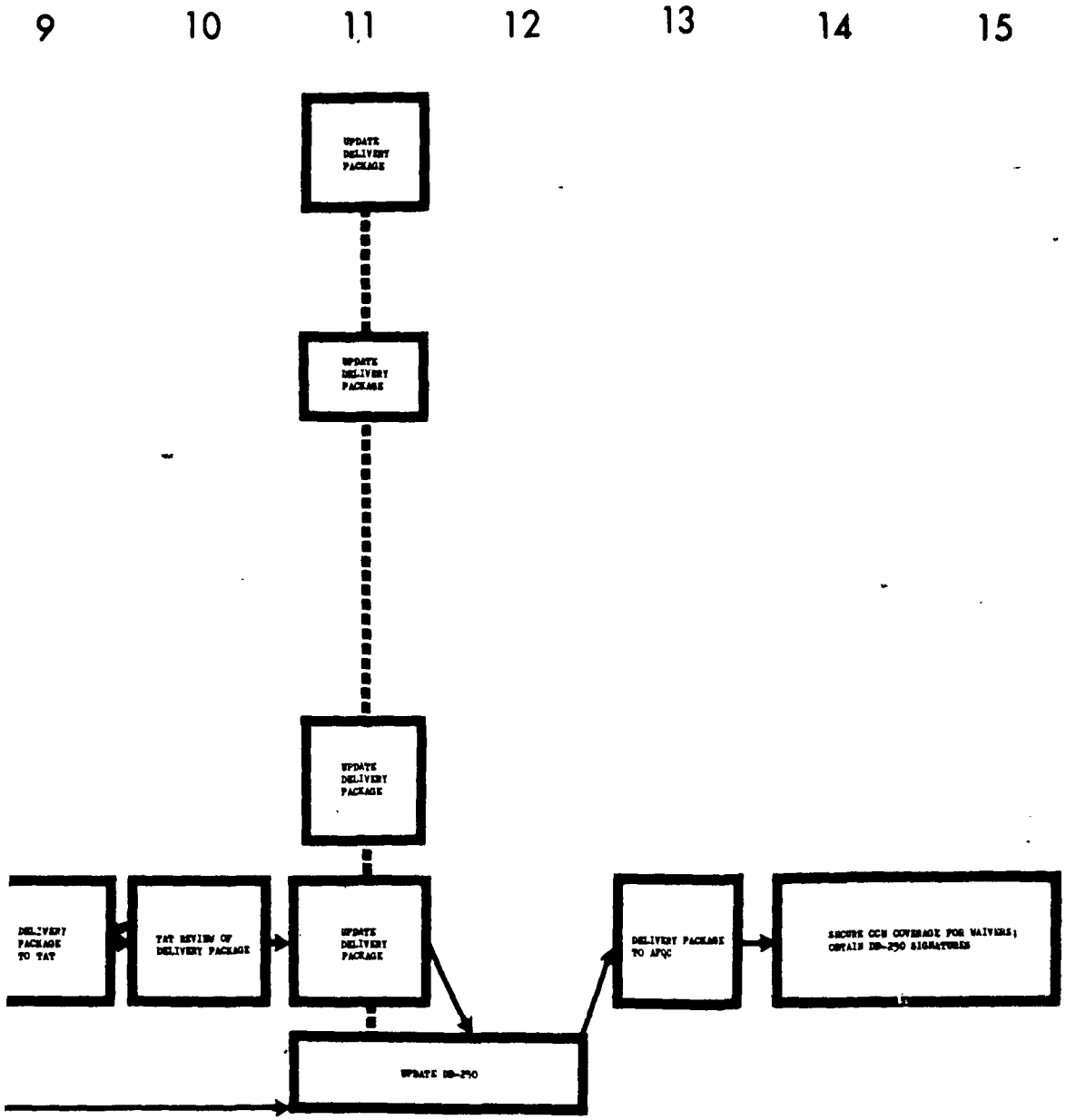
UPDATE WAIVER DOCUMENT
COMPLETE FINAL WAIVER DOCUMENT
PROVIDE WAIVERS
UPDATE DELIVERY PACKAGE
PROVIDE INTERIM TECH MANUALS & SECURE AFLC CERTIFICATION OF MANUALS
REVIEW CALIBRATION STATUS
COMPLETE DD-1149 FORMS
UPDATE DELIVERY PACKAGE
HOLD DD-1149 FORMS
TAT INVENTORY OF MOBILE EQUIPMENT, MSE, ETC., AND SIGN DD-1149'S
TAT INVENTORY OF W/E EQUIPMENT AND SIGN DD-1149'S
WAIVER COMPLETION DATES
WAIVER COMPLETION DATES
WAIVER COMPLETION DATES
COMPLETE AFTO 209 FORMS
PROVIDE M&IR JOB NUMBERS FOR WAIVERS
PROVIDE M&IR JOB NUMBERS
UPDATE DELIVERY PACKAGE
PROVIDE M&IR JOB NUMBERS
PREPARE AND APPROVE FINAL CONFIGURATION
INHOUSE REVIEW OF DELIVERY PACKAGE
UPDATE DELIVERY PACKAGE
AFQC REVIEW OF DELIVERY PACKAGE
PREPARE DD-250
UPDATE DELIVERY PACKAGE
PREPARE STATEMENT OF COMPLETION, DD-250, AND ADD TO DELIVERY PACKAGE
COMPLETE DISPOSITION OR SEGETAGE ITEMS
BASE REAL ESTATE INVENTORY OF RP/RPIE; SECURE SAC 26' SIGNATURES
TAT DEMONSTRATIONS COMPLETE
TO D (T-1)
TAT STATEMENT OF TECHNICAL APPROVAL



FIGURE

REV. SYM. A



DELIVERY/TURNOVER - BPTC

FIGURE II-2

2.1.1 (Cont'd)

At the start of the Wing II Program, all of the Wing II Supporting Facilities and the LF (s) requiring modification will be in the custody of Boeing except for SLCF #2. The use of SLCF #2 in order to support the Wing II Program will be through a joint usage agreement with SAC.

Boeing will conduct the Modification and Checkout (M&C/O) Phase of the Wing II Program on the Wing II LF (s) in accordance with the M&C/O Record Time Compliance Technical Order (TCTO) prepared and delivered by Boeing (Reference Section 2.2.2.1). During the M&C/O Phase, Air Force Quality Control (AFQC) will verify the compliance with all necessary requirements, specifications, etc., and Technical Surveillance shall be accomplished by the Technical Approval Team (TAT). Air Force Acceptance of the M&C/O effort defined by the M&C/O Record TCTO (including the incorporation of equipment level record TCTO's, Kits, and new equipment) shall be evidenced by completion of a Department of Defense Form -250 (DD-250) - (Reference Section 2.2.3,4).

Upon completion of the M&C/O Phase, the Wing II LF (s) will be used in conjuction with the other Wing II Facilities in order to conduct the integrated Category I/Category II Test Program (Wing II Test Program). The purpose of the Wing II Test Program is to test and evaluate the capability of the Wing II Weapon System to meet the objectives set forth in BSD TR 63-29, "WS-133A Vandenberg Wing II Test Program Plan".

Upon completion of the Wing II Test Program, and the necessary requirements (Reference Section 2.2), the Real Property (RP) and Real Property Installed Equipment (RPIE) of the Wing II LF(s) will be transferred back to the Base Real Property Accountable Officer. The Aero-Space Ground Equipment (AGE) portions of these facilities will be transferred to SAC (Delivery/Turnover) through AFSC.

2.1.2 Boeing Acceptance and Delivery/Turnover Organization

The Boeing Acceptance and Delivery/Turnover organization will serve as a single contact point between Boeing and USAF on all matters relating to Acceptance and Delivery/Turnover. The basic relationship between USAF and Boeing is shown in Figure II-3.

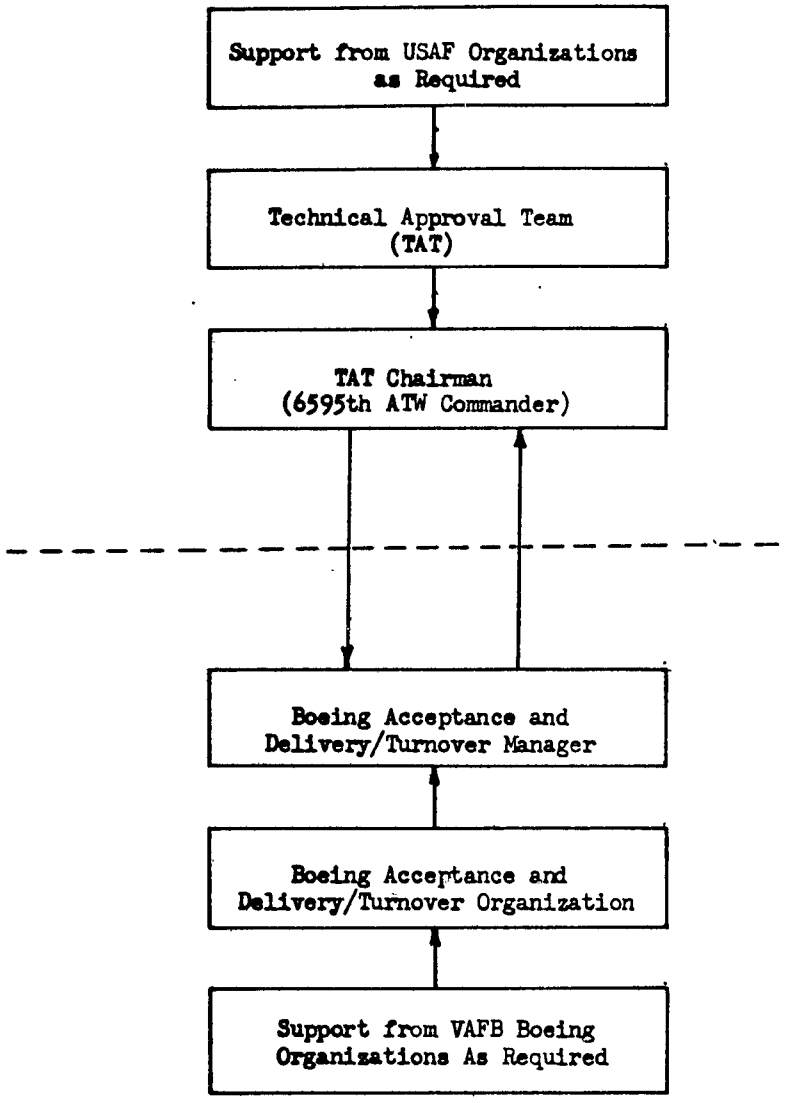

Support from USAF Organizations as Required
Technical Approval Team (TAT)
TAT Chairman (6595th ATW Commander)
Boeing Acceptance and Delivery/Turnover Manager
Boeing Acceptance and Delivery/Turnover Organization
Support from VAFB Boeing Organizations As Required

FIGURE II-3

2.1.2 (Cont'd)

VAFB operating procedures will be prepared by Boeing to describe the specific operating procedures and organizational responsibilities which will be employed by Boeing to implement and support Acceptance and Delivery/Turnover.

The Acceptance and Delivery/Turnover Manager will (1) ascertain when conferences of briefings between USAF and Boeing are required or scheduled, (2) ensure notification is made to required Boeing individuals and USAF representatives, (3) ensure that correct support and data is available for the conferences or briefings, (4) conduct conferences or briefings, and (5) ensure correct and complete distribution of results.

The actual demonstrations, reviews, and checkout activities will be conducted and documented as described in Section 2.2 (M&C/O Acceptance), 2.3 (Delivery/Turnover), 3.0 (Inventory Requirements), 4.0 (Data Requirements), and 5.0 (Demonstration Requirements).

2.2 MODIFICATION AND CHECKOUT ACCEPTANCE

This section presents a description of the Modification and Checkout (M&C/O) Acceptance requirements, procedures, coordination activities, and documentation utilized and/or provided by Boeing to accomplish Acceptance of the Wing II LF(s) by AFSC (Reference Figure II-1).

2.2.1 Modification and Checkout Requirements - Wing II

Acceptance of the Modification and Checkout (M&C/O) effort for the Wing II LF(s) is based upon (1) compliance with the requirements of the Model Specifications listed below, and (2) configuration as defined by the VAFB Base Assembly Drawings called out in these Model Specifications.

1) S-133-110-0-1, "Model Specification, Launch Operational System, Wing II Ellsworth AFB," and Addendum No. 1 thereto (VAFB).

2) S-133-111-0-1, "Model Specification, Launch Facility, Wing II Ellsworth AFB," and Addendum No. 1 thereto (VAFB).

The requirements of the above mentioned Wing II Model Specifications are defined in Boeing Document D2-7871, "Assembly and Checkout System Requirements - VAFB", and Supplement A thereto, "Assembly and Checkout Requirements Wing II - VAFB".

In addition to satisfying specification compliance requirements, certain M&C/O activities are to be witnessed by the TAT in fulfillment of the Class III Technical Approval Demonstration requirements for the Wing II Program (Reference Section 5.0). Tier III Vandenberg Wing II Schedules will be made available to the TAT to inform them of the scheduled performance of these tasks. The M&C/O activities requiring TAT witnessing (Class III Demonstrations) are described in detail in Section 5.0, and the general operating procedures which will be utilized in the accomplishment of these, as well as the other M&C/O activities, are described below in Section 2.2.2.

2.2.2 Operating Procedures

2.2.2.1 Modification and Checkout (M&C/O)

The Contractor (Boeing) will install, modify, and checkout the Wing II equipment in the Wing II LF(s) in accordance with the Modification and Checkout (M&C/O) Record TCTO (21-SM80A-776) prepared by Boeing in accordance with MIL-T-9885. The M&C/O Record TCTO shall identify the following information:

1) The equipment level record TCTO's to modify existing Wing I end items of equipment.

2) The list of modification kits applicable to 1) above.

3) The list of new Wing II items of equipment to be installed and checked out.

4) Base Assembly Drawings as referenced in the model specifications which shall establish the new Wing II configuration of the facilities and equipment.

5) Site Acceptance Test Procedures (D2-14652-1 thru -6) which shall define the acceptance tests to be conducted to evidence compliance with the requirements of model specifications.

The M&C/O phase will utilize the Integrated Record System (IRS) as the means for initiating and controlling all operations. Manufacturing and Inspection Records (M&IR's) will be prepared to direct and record the satisfactory completion of all M&C/O activities.

Any changes to VAFB Weapon System Facilities (modification of brick and mortar) shall be negotiated separately per applicable CCP Instructions (FCR/MCL procedure). The installation, modification and checkout of equipment under SAC control (e.g., SMSA) shall be accomplished in accordance with separately negotiated TCTO's, and are not within the scope of this document.

2.2.2.2 Technical Surveillance

Witnessing of certain M&C/O activities (Class III Demonstrations) is required by the TAT as described in Section 2.2.1 (Reference Section 5.0). The IRS will be used to effectively implement this witnessing and to record completion of associated activities. A demonstration M&IR will be prepared for each M&C/O activity which is subject to TAT witnessing. These M&IR's will be prepared and released in the same manner as M&C/O M&IR's.

The Demonstration M&IR will provide a means of accountability for each activity to be witnessed. The M&IR will direct that the TAT Chairman be notified of the activity a minimum of one working day prior to start of the activity. This notification will contain the following:

1) A description of what the activity is.

2) Where it will take place.

3) When it will take place.

4) Name of the individual to be contacted for last minute changes, access to facilities, and any other coordination relative to this particular activity.

5) Limitations as to the number of the TAT members allowed in the facilities.

The accomplishment of the activity will not be delayed or repeated due to the absence of TAT personnel once proper notification has been accomplished.

The TAT will contact the Boeing Acceptance and Delivery/ Turnover Manager or his delegated representative three working hours prior to the start of the activity and will verbally indicate whether or not the TAT wants to witness the activity. If the TAT does want to witness the activity, the number of TAT members and their names will be made known at this time.

During the accomplishment of an activity, the TAT is in the position of observing only, and as such, they have no direct control or influence on the activity in progress. The Boeing individual named in the TAT notice will be the single point of contact between the TAT and the persons actually conducting the activity.

2.2.2.2 (Cont'd)

The physical phases of the activity to be witnessed will be directed by the M&C/O M&IR. The Demonstration M&IR will cross-reference this M&C/O M&IR and provide for the in-process acceptance of each operation comprising the activity being witnessed strictly from the standpoint of technical approval. TAT Discrepancies arising during the witnessing of an activity will be recorded against the Event Record of the Demonstration M&IR by Boeing. This type of discrepancy will not be grounds for refusing acceptance of the M&C/O activity on the M&C/O M&IR, and need not be recorded on the Event Record of the M&C/O M&IR. The method of handling TAT Discrepancies is described in Section 2.2.2.3. Air Force Quality Control (AFQC) Discrepancies which arise during the accomplishment of the activity will be recorded in the M&C/O M&IR Event Record or other applicable forms, and will be handled as described in Section 2.2.2.4.

At the completion of the activity, the TAT will provide written notice to The Boeing Acceptance and Delivery/Turnover Manager within 48 hours stating that (1) they have witnessed the activity and it was either satisfactorily completed or there were certain TAT Discrepancies, or (2) they didn't witness the activity. If there were TAT Discrepancies involved with the witnessing of the activity, this written notice will contain the details of the discrepancies.

The Boeing Test Operator will record on the Demonstration M&IR that (1) the TAT did witness the activity, or (2) they did not witness the activity. If the TAT did witness the activity, the Demonstration M&IR will require the Boeing Test Operator to verify the TAT acknowledgement of satisfactory completion prior to final acceptance of the M&IR. Disposition of any TAT Discrepancies must be made and noted on the Event Record (i.e., corrective action, request for waiver, etc.).

2.2.2.3 Technical Approval Team (TAT) Discrepancies

The TAT may initiate discrepancies against procedures, equipment, or operations that are observed as deficient with respect to specification compliance or witnessing requirements during the M&C/O activities. The TAT shall describe each discrepancy in writing and shall identify the equipment, procedure, or operation involved. Wherever possible, corrective action shall also be indicated.

2.2.2.3 (Cont'd)

The TAT Chairman or his designee will review the discrepancies with Boeing within 48 hours of discovery. The purpose of this review will be to establish and schedule the action required to correct the discrepancy. As a part of this review, the Acceptance and Delivery/Turnover Manager shall initiate, in writing, direction to all applicable Units to ensure timely correction of the discrepancy. Where appropriate, the IRS will be used to implement corrective action.

Upon correction of the discrepancy to the satisfaction of Boeing Engineering, Boeing shall present complete written documentation of the discrepancy and corrective action to the TAT. Upon TAT approval of the corrective action, the discrepancy will be considered closed. Where the TAT Discrepancy is against a witnessed M&C/O activity, Event Records will be written against the Demonstration M&IR to record the disposition of the discrepancy. The complete documentation of the discrepancy shall become a part of the completed records of the equipment or facility to be retained by Boeing.

2.2.2.4 Air Force Quality Control (AFQC) Discrepancies

Deficiencies noted by the AFQC representatives shall be reported in writing, as they occur, to the Contractor's QC Unit. The Contractor's QC Unit shall review AFQC Discrepancies and establish corrective action within 48 hours of receipt of the discrepancy. Where correction cannot be effected by the Contractor, the discrepancy will be reviewed with the AFQC representative to determine the required course of action.

Twelve days prior to Acceptance of the Wing II LF(s), Boeing QC shall compile and make available for AFQC review, a summary status report of all open AFQC Discrepancies. The report shall indicate the discrepancy and the status of the corrective action.

2.2.3 Acceptance Documentation

The specific contractual Acceptance documentation which will be transferred between Boeing and USAF at the time of Acceptance of the M&C/O effort is presented in this section. The sequence and methods of development of these documentations and records is presented here; however, this documentation is actually the recording of, or certification of, the results of the M&C/O activities and Class III Demonstration Requirements (Section 5.0) Inventory Requirements (Section 3.0), and Data Requirements (Section 4.0). Reference is made to the above sections for the development of these results.

2.2.3.1 Request for Waiver and Non-Conformance Documentation

2.2.3.1.1 Preliminary Request for Waiver Document -- The purpose of the Request for Waiver Document is to identify all work which has not been accomplished at the time of Acceptance by the Government. Preparation of the Request for Waiver Document will be the responsibility of the Acceptance and Delivery/Turnover Organization.

The Request for Waiver Document for the Wing II LF(s) will be first prepared in preliminary form and will be submitted to TAT for review 19 days prior to the date on which Acceptance is scheduled to occur. Each open contractual item will be fully identified. A specific note will be made on any open items for which a permanent non-conformance to contractual requirements has been granted or requested i.e., a permanent waiver. The items listed in the Request for Waiver Document will be categorized as follows:

1) Base Assembly Drawing Shortages.

2) Deviation from Specifications.

*3) Unaccomplished TCTO's as authorized by the AF04(647)-757 Contract (those coded for incorporation prior to Delivery/Turnover).

*4) Unaccomplished facility modifications.

*5) Other AF04(647)-757 Contract items.

*Applicable only to Delivery/Turnover.

2.2.3.1.1 (Cont'd)

Boeing will furnish the following items of information on all Boeing requested waivers:

1) An estimate of the date by which all equipment, technical data, and personnel required to close out the waived item will be available.

2) A statement of the effect the waived item will have on the readiness status of the program.

3) An estimate of the calendar days required to accomplish the waived item.

4) Applicable interim ("work-around") procedures allowing continuation of the program to meet program schedules.

2.2.3.1.2 Final Request for Waiver Document -- During the 19-day period preceding actual Acceptance by the Government, the draft Request for Waiver Document will be continuously updated to reflect (1) all items worked off, (2) additions of any new items developed as a result of Air Force QC or Boeing QC activities, or (3) a change of data on existing items. The final Request for Waiver Document, reflecting all items which remain open at the time of Government Acceptance, will be formally submitted to the TAT six-days before the scheduled Acceptance date (one-day prior to the TAT Review). The TAT will review this document and will make a recommendation to the Procuring Authority (AFSC) through the Administrative Contracting Officer in order that appropriate contractual authorization may be issued to allow Air Force QC Acceptance for the Government with unaccomplished contractual requirements as reflected by the final Request for Waiver Document.

The Request for Waiver Document will be maintained after Acceptance by Boeing until all the Open contractual items in the document have been closed.

2.2.3.1.3 Non-Conformance Documentation — Each item in the Request for Waiver Document which is a deviation from the requirements of Contract AF04(647)-757 and requires an Air Force approved change to the contractual Model Specifications, Drawings, etc., shall be reviewed by Engineering and included as a Non-Conformance in D2-13001, "Non-Conformance Record - Base Assembly and Checkout".

2.2.3.2 Statement of Completion

The Acceptance and Delivery/Turnover Manager will be responsible for the preparation of a Boeing Statement of Completion. The Statement of Completion provides to the Air Force a Boeing certification that the M&C/O activities required by the Contract have been accomplished except as specified in the Request for Waiver Document. This will be submitted to the TAT Chairman one day prior to the TAT Review. The statement will be substantiated by the Data Requirements presented in Section 4.0, complemented by the Request for Waiver Document discussed in Section 2.2.3.1. Figure II-4 establishes the format and content required for the Statement of Completion.

2.2.3.3 Final Statement of Technical Approval

At the completion of the M&C/O activities and Class III Demonstrations, and two days prior to the scheduled Acceptance, the TAT will, if satisfied, submit to the 6595th Aerospace Test Wing, and concurrently to Boeing, a Statement of Technical Approval of the activities for the Wing II LF(s). This statement will be in the format shown in Figure II-5.

2.2.3.4 Department of Defense Form -250 (DD-250)

The Acceptance and Delivery/Turnover Manager will be responsible for insuring the preparation and submittal to the TAT of a DD-250 for the Wing II LF(s) six days prior to the scheduled Acceptance date and a final DD-250 two days prior to Acceptance of the M&C/O effort. This completed and signed DD-250 evidences the M&C/O Acceptance by the Government from Boeing. The DD-250 will reflect the specific portion and provisions of the Contract whereunder those M&C/O activities have been accomplished. AGE will be reflected on the inventory lists prepared in accordance with the requirements of Section 3.0, and will not be listed on the DD-250. A statement will be included to identify any required waivers to the contractual requirements. (Reference Section 2.2.3.1.2.) The contractual authorization issued by the Procuring Authority (AFSC) to permit Acceptance with these waivers will be annotated on the DD-250.

STATEMENT OF COMPLETION

THE BOEING COMPANY

Subject: Statement of Completion for (Identify Facility) Contract AF04(647)-____.

To: BSD Procuring Contracting Officer (Symbol)

Via: Administrative Contracting Officer

1. The Contractor has completed in accordance with applicable contractual requirements all (M&C/O and/or Demonstration tasks) as required by the subject contract except for those specific items outlined in the Contractor's Final Request for Waiver Document.

2. This completion is evidenced by documentation accumulated by the Contractor, by Air Force Quality Control and the TAT Chairman, during their surveillance of the Modification and Checkout task, and by the successful accomplishment of technical approval demonstrations conducted in accordance with the requirements.

_____
Authorized Boeing Representative

Figure II-4

FINAL STATEMENT OF TECHNICAL APPROVAL TEAM FOR

_____ (Identify Facility) Vandenberg Air Force Base, California

To: BSD Procuring Contracting Officer (Symbol) _____
Date

Thru: WCMR Detachment 1 VAFB TSO (Symbol)

From: WS-133A Technical Approval Team

1. This statement verifies that _____ (Contractor) has completed _____ (M&C/O and/or Demonstration) of the _____ (Identify Facility) in accordance with the requirements of _____ (Applicable specifications or AFBSD 61-32).

2. Deviations from contractual requirements which will be outstanding at the time scheduled for _____ (Acceptance and/or Delivery/Turnover) of this facility are listed in the Contractor's final Request for Waiver Document.

3. The _____ (Identify Facility) is in satisfactory condition to permit its use in support of applicable test, training, or operational programs.

4. *Recommend that the necessary contractual instrument be issued to permit Air Force Quality Control acceptance with those Request for Waivers requested by the Contractor.

** SIGNATURE:	** ORGANIZATION:
_____	_____
_____	_____
_____	_____
_____	_____

* Not applicable for Delivery/Turnover.

** To be signed by all TAT members for Delivery/Turnover only, and by BSD/WCMR for Acceptance.

Figure II-5

2.2.4 Acceptance Meetings/Reviews

This section describes the basic meetings/reviews which are required in order to accomplish Acceptance of the M&C/O effort for the Wing II LF(s). This description covers only Boeing/USAF meetings and reviews, and does not cover those meetings which are Boeing only. Reference is made to the other sections of this document that describe in detail those items prepared and submitted to the TAT/AFQC for review (e.g., preliminary Request for Waiver Document, DD-250, Inventories, etc.) and these reviews will not be covered herein. It should be noted that the basic Boeing/USAF meetings and reviews described herein and those shown in Figure II-1 are required; however, the Boeing Acceptance and Delivery/Turnover Manager may call additional meetings as the need arises.

2.2.4.1 Air Force Quality Control (AFQC) Records Review

Twelve days prior to the scheduled Acceptance of the Wing II LF(s), a Boeing/AFQC review will be held in order to review the M&C/O Data Package (minus the DD-250 and Statement of Completion) and will accomplish the following:

1) Boeing will present Acceptance data on work accomplished as of that time.

2) All problem areas concerning Acceptance will be reviewed, and a resolution agreed upon by Boeing and the Air Force, and appropriate action taken to insure Acceptance.

3) Boeing will verify that the following items have been, or will be, accomplished:

   a) M&C/O has been accomplished in accordance with Base Assembly Drawings and Model Specifications.

   b) The handling equipment and other non-installed equipment required by the program is available, and checked out.

   c) The following reference material is accounted for and available for the TAT Review:

      1. Boeing M&C/O procedures used during site activation.

      2. Boeing M&C/O records.

2.2.4.1 (Cont'd)

3. Equipment inventory and configuration records including AFTO forms.

4. Request for Waiver Document.

2.2.4.2 TAT Review

Five days prior to the scheduled Acceptance, a TAT Review will be held in order to review the complete Acceptance Package updated since the AFQC Records Review. This updated Acceptance Package, which consists of the final Request for Waiver Document, the DD-250, and the Boeing Statement of Completion, will be submitted to the TAT one day prior to this meeting (six days prior to Acceptance).

Upon completion of this TAT review, any required updating of the Acceptance Package will be accomplished, and upon TAT approval, the Acceptance Package will be submitted to WCMR (at least two days prior to the scheduled Acceptance) for procurement of the necessary CCN (Contract Change Notification) coverage and DD-250 signature-Acceptance.

2.3 DELIVERY/TURNOVER

Upon completion of the Modification and Checkout (M&C/O) Phase of the Wing II Program, the Wing II LF(s) and Supporting Facilities will be utilized to conduct the integrated Category I/Category II Test Program (hereby known as the Wing II Test Program) and the necessary Technical Approval Demonstrations. This section presents the requirements, procedures, coordination activities, and documentation utilized and/or provided by Boeing to accomplish the Delivery/Turnover of the Wing II LF(s) to SAC (Reference Figure II-2) at the completion of the Wing II Test and Demonstration Programs.

2.3.1 Delivery/Turnover Requirements - Wing II

The requirements for Delivery/Turnover of the Wing II LF(s) consists of the satisfactory completion of the Wing II Test Program, satisfactory completion of the Wing II Demonstration Requirements (Reference Section 5.0), and preparation of the necessary Inventory and Data Requirements (Sections 3.0 and 4.0). The Wing II Delivery/Turnover activities pertain only to the Wing II LF(s) since the Wing II Supporting Facilities which are not yet in SAC's custody will remain in Boeing's custody for support of the Wing III Program.

The formal Technical Approval Demonstration requirements necessary for Delivery/Turnover of the Wing II LF(s) are described in Section 5.0. The majority of these demonstration requirements on the Wing II LF(s) will be satisfied by (1) the successful accomplishment of the test objectives of the Wing II Test Program, and (2) the demonstrations already completed on the LF(s) during the Wing I Program utilizing equipment which did not change from the Wing I to the Wing II configuration. Reference is made to Section 5.0 for the detailed demonstration requirements and descriptions.

The operating procedures which will be utilized to accomplish the Class I and II Demonstrations for Wing II are contained below (Reference Section 2.3.2).

2.3.2 Operating Procedures

Prior to, and following each formal demonstration, meetings will be held between Boeing and the TAT to discuss demonstration plans, data requirements, test results and discrepancy disposition. Boeing will prepare an agenda for each meeting and notify the TAT of the meeting schedule and agenda. Satisfactory minutes will be kept and signed off by the appropriate Boeing and Air Force representatives.

The actual demonstrations will be accomplished by Boeing/SAC personnel under Boeing direction and utilizing SAC operating methods as described in AFM 66-1 and T.O. 00-20E-1.

2.3.2.1 Preparation for Demonstrations

Boeing will conduct a formal Pre-Demonstration Briefing for the TAT at least two days prior to the start of each formal Demonstration. The plans for each demonstration and the equipment and facilities which will be directly involved will be reviewed. This will require Boeing QC/AFQC examination of (1) current configuration, and (2) maintenance records. At this briefing Boeing will accomplish the following:

1) State that all required facility items are, or will be, installed, validated, and integrated in accordance with applicable drawings and specifications. This will involve presentation of appropriate documentation accumulated on a progressive basis since completion of M&C/O Acceptance. This type of statement will only be offered by Boeing where the custodial responsibility of the facility involved rests with Boeing.

2) State that all missiles and AGE required are installed and operating in accordance with applicable drawings and specifications except as covered by the Request for Waiver document. This will include a statement that time/cycle sensitive items are within their limitations at the start of demonstration.

3) State that the handling equipment and other non-installed equipment required to demonstrate an operational or maintenance capability will be ready for demonstration.

4) State that the following reference material is available for the TAT review:

   a) Contractor M&C/O procedures and records (If Acceptance has been accomplished, this review will include only those records accumulated since the Acceptance DD-250).

2.3.2.1 (Cont'd)

b) Equipment inventory and configuration records including AFTO Forms.

c) Preliminary Request for Waiver Document.

5) Identify all known descrepancies to Technical Manuals and Orders, or test limitations of equipment and/or facilities.

The TAT will provide Boeing with a "Ready to Demonstrate" condition upon verifying that the foregoing tasks have been satisfactory. A formal demonstration will not begin without this TAT approval.

Twenty-four hours prior to the start of the scheduled demonstration, Boeing will provide re-confirmation to the TAT of (1) where the demonstration will take place, and (2) when the demonstration will take place.

2.3.2.2 Demonstration Activities

In accordance with AFBSD Exhibit 61-32, Class I and II Technical Approval Demonstrations will be accomplished by Boeing, utilizing demonstration crews composed of both Air Force and Boeing personnel. Air Force personnel will be utilized to perform those functions which are normal Air Force operating or maintenance activities. The extent that Air Force personnel are utilized will be mutually agreed to by the SAC Missile Squadron Commander, the 6595th ATW Commander, and the Boeing Acceptance and Delivery/ Turnover Manager.

Determination of either Air Force or Boeing personnel requirements for demonstration functions which are normal Air Force operating or maintenance activities will be made in accordance with D2-5859, "Qualitative Personnel Requirements Information (QPRI) for WS-133A Minuteman Hardened and Dispersed." At no time will personnel in excess of the D2-5859 requirements be allowed to participate on site during the demonstration unless specifically approved by the TAT (this also applies to substitution of skill levels).

Discrepancies which arise during the demonstration will be satisfactorily resolved between Boeing and TAT (Reference Section 2.2.2.3). Maintenance functions required during the demonstration will be handled by the normal Air Force maintenance methods and will not result in a TAT discrepancy.

2.3.2.3 Post Demonstration Activities

Boeing will conduct a post demonstration review within 48 hours subsequent to the completion of a demonstration for the purpose of making disposition of any discrepancies which occurred during the demonstration, and obtaining the TAT approval of the demonstration. Upon satisfactory completion of each demonstration, the TAT will give Boeing written acknowledgement as evidence of completion.

2.3.3 Delivery/Turnover Documentation

The specific contractual documentation which will be transferred between Boeing and USAF at the time of Delivery/Turnover of the Wing II LF(s) is presented in this section. The sequence and methods of development of these documentations and records is presented herein; however, this documentation is actually the recording of, or certification of, the results of M&C/O activities and Class III Demonstration Requirements (Section 2.2.1 and 5.0), Class I and II Demonstration Requirements (Section 2.3.1 and 5.0) Inventory Requirements (Section 3.0), and Data Requirements (Section 4.0). Reference is made to the above sections for the development of these results. If Acceptance has already been accomplished prior to Delivery/Turnover, the M&C/O activities and Class III Demonstration Requirements mentioned above pertain to the additional effort accomplished subsequent to Acceptance; however, if Acceptance has not occurred, and therefore is being accomplished concurrent with Delivery/Turnover, the M&C/O activities and Class III Demonstration Requirements apply to the total M&C/O effort.

2.3.3.1 Request for Waiver Document

A Request for Waiver Document will be prepared eight days prior to the Delivery/Turnover for the Wing II LF(s). It will be prepared from, follow the same format, and have the same distribution as the Acceptance Request for Waiver Document discussed in Section 2.2.3.1. This document will be updated throughout the program to reflect deficiencies corrected or to record new deficiencies. This document will be reviewed periodically as the program proceeds.

The preliminary Request for Waiver Document will be presented to the TAT four days prior to Delivery/Turnover. The final Request for Waiver Document will be submitted to TAT one day prior to the TAT Review. If additional CCN coverage is required, refer to Section 2.2.3.1.2. The Request for Waiver Document will be maintained by Boeing after Delivery/Turnover until all open contractual items in the document have been closed.

2.3.3.2 Statement of Technical Approval

At the time of Delivery/Turnover, the TAT will, if satisfied, submit to the 6595th Aerospace Test Wing and concurrently to Boeing a Statement of Technical Approval of the activities performed on the Wing II LF(s). The format of this statement will be as shown in Figure II-5.

2.3.3.3 Statement of Completion

The Acceptance and Delivery/Turnover Manager will be responsible for the preparation of a Boeing Statement of Completion. This statement provides to the Air Force a Boeing certification that the activities required by the Contract have been accomplished, except as specified in the Request for Waiver Document. This statement will be submitted to the TAT Chairman. The statement will be substantiated by the Data Requirements presented in Section 4.0, complemented by the Request for Waiver Document discussed in Section 2.3.3.1. Figure II-4 establishes the format and content required for the Statement of Completion.

2.3.3.4 Department of Defense Form -250 (DD-250)

At the completion of the Demonstration and Wing II Test Program, Boeing will prepare a DD-250 covering the demonstration and additional M&C/O effort accomplished subsequent to Acceptance. In case the Wing II LF(s) has not been previously accepted by AFSC, the Acceptance will be accomplished concurrently with the Delivery/Turnover and the total M&C/O effort will be covered on this DD-250. (Note: The DD-250 is not a requirement for Delivery/Turnover as such.) The DD-250 will be presented to the TAT one day prior to the TAT Review (Reference Figure II-2), and upon TAT approval, will be submitted with the entire Delivery/Turnover Package to WCMR (Reference Section 2.3.4.6).

The DD-250 will reflect the specific portion and provisions of the contract whereunder those specific activities and demonstrations have been accomplished. All AGE will be reflected on inventory lists prepared in accordance with Section 3.0, and will not be listed on the DD-250. A statement will be included on the DD-250 to identify any waivers to the contractual requirements which will exist at time scheduled for DD-250 signature (Reference Section 2.3.3.1). Contractual authorization issued by the Procuring Authority (AFSC) for waivers from contractual requirements will be annotated on the DD-250.

2.3.4 Delivery/Turnover Meetings and Reviews

This section describes the basic meetings and reviews which are required in order to accomplish the Delivery/Turnover of the Wing II LF(s) and the associated updating of the M&C/O effort accomplished subsequent to Acceptance (Acceptance of the complete M&C/O effort if Acceptance has not been previously accomplished.) It should be noted that the actual Delivery/Turnover of the Wing II LF(s) is accomplished 15 days prior to the final approval of the entire Delivery/Turnover Package and the signing of the DD-250 which evidences M&C/O and demonstration effort (Reference Figure II-2).

2.3.4.1 Preliminary Inventory TAT Review

Thirteen days prior to the scheduled Delivery/Turnover, Boeing will conduct a physical inventory from which they will make an EDPM listing of the configuration location information (Reference Section 3.3). Five days prior to Delivery/Turnover the inventory will be presented by Boeing to TAT for preliminary approval.

2.3.4.2 Shortage Letter

Ten days prior to the scheduled Delivery/Turnover, Boeing will prepare and submit to the ACO a Shortage Letter listing all lost and missing bits and pieces. The ACO will reply to the Boeing Shortage Letter five days prior to Delivery/Turnover indicating what action, if any, should be taken by Boeing to replace the missing items.

2.3.4.3 Air Force Quality Control (AFQC) Shakedown

Three days prior to Delivery/Turnover, AFQC will conduct a "shakedown" inspection and submit the AFQC Discrepancies to Boeing. Work-off of these AFQC Discrepancies will be handled in accordance with Section 2.2.2.4.

2.3.4.4 Delivery/Turnover

Starting one day prior to Delivery/Turnover, the Inventory Team shall conduct a physical inventory of the equipment in the facility (Reference Section 3.0). This inventory shall compare the configuration of the installed equipment with the Preliminary Inventory List. During this Inventory, the DD-1149 and/or 1348 forms will be signed transferring the facility from Boeing to SAC (Delivery/Turnover) as the configuration of the facility is verified. In conjunction with the signing of the DD-1149's and/or 1348's, the

2.3.4.4 (Cont'd)

vacating SAC Form 261 will be signed transferring the accountability of the RP and RPIE to the Base Real Property Accountable Officer (Reference Section 3.2).

2.3.4.5 AFQC Records Review

Twelve days prior to the scheduled completion of the entire Delivery/Turnover and M&C/O effort (DD-250 signature) and 3 days after the actual Delivery/Turnover of the facility, a Boeing/AFQC meeting will be held in order to review the Delivery/Turnover Package. This review will accomplish the same items as described in the Acceptance AFQC Records Review (Section 2.2.4.1).

2.3.4.6 TAT Review

Five days prior to the scheduled completion of the entire Delivery/Turnover and M&C/O effort (DD-250 signature) and 10 days after actual Delivery/Turnover, a TAT Review will be held in order to review the complete Delivery/Turnover Package. This package including the inventory lists, the Request for Waiver Document, the DD-250, and Statement of Completion, will be submitted to the TAT one day prior to this meeting.

Upon completion of this TAT review, any necessary updating of the package will be accomplished, and upon TAT approval, the package will be submitted to WCMR (at least two days prior to the scheduled DD-250 signing) for procurement of required CCN coverage and DD-250 signature.

3.0 INVENTORY REQUIREMENTS

The inventory conducted for Acceptance of the Wing II LF(s) will be accomplished by Boeing, and the final inventory conducted for Delivery/Turnover will be conducted by the TAT and Boeing. The inventory reports the configuration of the equipment contained within the facility and documents the difference between the installed configuration and the configuration defined by AFBSD Exhibit 60-60 to the extent authorized by the contract.

That equipment which is contractually required to be installed is defined in D2-4336-2, Vol. II, "Dock Requirements Schedule - Status/Shortage Report for GFP - VAFB." The configuration required by the AF04(647)-757 Contract, for Acceptance only, is therefore defined by D2-4336-2, Vol. II. The configuration for Delivery/Turnover is defined by D2-4336-2, Vol. II, and TCTO's (ECP's) contractually authorized and coded for incorporation prior to Delivery/Turnover.

Differences between the contractual requirements and the installed inventory will be resolved through the Request for Waiver Document described in Section 2.0.

3.1 INVENTORY TEAM

An Inventory Team shall be formed a minimum of 30 days prior to scheduled Acceptance of the Wing II LF(s) and 15 days prior to Delivery/Turnover. The Boeing chairman and other members shall be assigned by the Acceptance and Delivery/Turnover Manager. The Acceptance and Delivery/Turnover Manager shall request assignment of representatives, as required, from the 6595th ATW and SAC through the TAT Chairman.

3.2 INVENTORY REQUIREMENT - RP, RPIE, AND CORPS OF ENGINEERS INSTALLED AGE

The Real Property (RP), Real Property Installed Equipment (RPIE), and Corps of Engineers installed AGE was received from the Base Real Property Accountable Officer on a SAC Form 261 with attachments which included the inventory of the facility transferred to Boeing.

The inventory contained as an attachment to the SAC Form 261 will be maintained by Boeing to reflect any work accomplished by Boeing. It will reflect such items as Facility Change Requests processed or completed, miscellaneous proposals processed and completed, and any other changes incorporated into the equipment or facility.

3.2 (Cont'd)

Boeing shall initiate a vacating SAC Form 261 to return the RP, RPIE and Corps of Engineers installed AGE to the custody of the Base Real Property Accountable Officer at time of Delivery/Turnover. This vacating SAC Form 261, with the updated attachments, is the complete inventory for RP and RPIE of the facility in question.

3.3 AGE INVENTORY REQUIREMENTS

Upon installation of the AGE, Boeing shall initiate Electronic Data Processing Method (EDPM) Records defining the equipment configuration and location. These equipment records will be maintained until Delivery/Turnover of the facility.

3.3.1 Acceptance

Twenty-eight days prior to scheduled Acceptance of the facility, Boeing will conduct a physical inventory, from which they will make an EDPM listing of the configuration location information. This listing will define the installed configuration and location of each item of equipment. This inventory will be detailed to the same part number level as AFBSD Exhibit 60-60.

Twenty days prior to scheduled Acceptance, preliminary Inventory Lists will be presented by Boeing to TAT for preliminary approval.

3.3.2 Delivery/Turnover

Thirteen days prior to scheduled Delivery/Turnover of the facility, Boeing will conduct a physical inventory (Reference Figure II-1 and II-2) from which they will make an EDPM listing of the configuration location information. This listing will define the installed configuration and location of each item of equipment. The inventory will be detailed to the same part number level as AFBSD Exhibit 60-60. The information contained on the EDPM Inventory List will at this time be transferred to DD Forms 1149 (Delivery/Turnover only).

Five days prior to Delivery/Turnover, preliminary Inventory Lists will be presented by Boeing to TAT for preliminary approval.

Starting one day prior to Delivery/Turnover of the facility, the Inventory Team shall conduct a physical inventory of the equipment in the facility. This inventory shall compare the

3.3.2 (Cont'd.)

configuration of the installed equipment with the EDPM Inventory List. During this inventory, the DD Forms 1149 will be signed transferring the facility from Boeing to SAC.

4.0 DATA REQUIREMENTS

4.1 DATA REQUIREMENTS - ACCEPTANCE

The data defined in this section will be progressively completed, collected, and presented for the AFQC Records Review and the TAT Review.

4.1.1 Modification and Checkout Integrated Record System (IRS) Material

Boeing will schedule, sequence, and record Modification and Checkout activities by use of the Integrated Records System (IRS). The IRS Forms are the objective evidence of Contractor compliance to specifications. AFQC will review these Records to the extent necessary to assure Boeing compliance with the drawings and specifications.

4.1.2 Historical Records (AFTO Forms)

Boeing shall prepare and maintain AFTO Forms in accordance with AFBSD Exhibit 61-87 and Boeing Document D2-12747, During the M&C/O activities, AFTO Forms 207, 209, and DD-829-1 will be maintained manually. Other AFTO Forms 208, EDPM Cards, and 2E will be maintained by the Reliability and Configuration Accountability (RECON) System.

4.2 DATA REQUIREMENTS - DELIVERY/TURNOVER

The data defined in this section will be progressively completed, collected, and presented for the AFQC Records Review and the TAT Review.

4.2.1 Delivery/Turnover Integrated Record System (IRS) Material

The IRS Material not reviewed during previous Acceptance activity will be collected, reviewed, and approved as previously described in Section 4.1.1 with reference to Delivery/Turnover instead of Acceptance.

These Records are made available for the AFQC Records Review and the TAT Review as required; however, they are not turned over to any Air Force Agency. They are retained by Boeing in accordance with contractual requirements.

4.2.2 Historical Records (AFTO Forms)

Historical Records (AFTO Forms) shall be prepared and maintained as described in Section 4.1.2 with reference to Delivery/Turnover instead of Acceptance. These AFTO Forms will be delivered to the Air Force Agencies in accordance with contractual requirements.

4.2.3 Indentured Parts List

The Indentured Parts List defines the configuration of the facility by showing the indentures of parts which fall out from the top drawing for field level maintenance.

4.2.4 As-Built Drawings

The "As-Built" Drawings define the configuration of the facility, including Corps of Engineers brick and mortar, GEEIA installed cable system, and the Environmental Control System. These drawings are the responsibility of their respective agencies and are not under control of Boeing. The Facility Change Requests (FCR's) will be incorporated into the facility drawings by the Architectural and Engineering (A&E) Contractor. In all cases where Boeing deviates from the detailed requirements of the Master Change Log (MCL) drawing during incorporation of a facility change, they shall provide "As-Built" sketches to TAT. In all other cases, Boeing shall notify the TAT Chairman that the change has been accomplished per the MCL drawing.

4.2.5 Calibration Status Report

Three days prior to scheduled Delivery/Turnover of the facility, Boeing Quality Control shall prepare a Calibration Status Report. The report shall (1) list the equipment in the facility which has calibration requirements, (2) indicate the date the last calibration was completed, and (3) indicate the date recalibration is required. Concurrently with the compiling of the Calibration Status Report, the AFTO Forms will be updated to reflect the latest calibration status. The purpose of the Calibration Status Report is to verify that the equipment in the facility has remaining at Delivery, 30 days or one-half its scheduled calibration life, whichever is greater. On items with 60 days or less scheduled calibration life, only one-half the calibration life is required.

4.2.6 Technical Manuals

Boeing shall complete a review 5 days prior to Delivery/Turnover of the availability of all operating and organizational maintenance Technical Manuals. To accomplish this review,

4.2.6 (Cont'd.)

Boeing Customer Service shall prepare a list of all required Technical Manuals and shall give the status of each item, i.e., validated and verified, preliminary release, interim data, etc.

5.0 DEMONSTRATION REQUIREMENTS

This section presents a description of the demonstration requirements which pertain to the A&C/O Contractor (Boeing), and must be satisfied for Acceptance and Delivery/Turnover of the Wing II LF(s) at Vandenberg AFB (VAFB). The semi-formal demonstrations required for Acceptance (Class III Demonstrations) of the M&C/O effort are contained in Section 5.3, and the formal demonstrations required for Delivery/Turnover (Class I and II Demonstrations) are contained in Sections 5.1 and 5.2 respectively. (Reference is made to Section 1.3 for definitions of Class I, II, and III Demonstrations.) The operating procedures utilized for performing the demonstrations, notification of the TAT, disposition of descrepancies, etc., are contained in Section 2.2.2 for Class III Demonstrations and Section 2.3.2 for Class I and II Demonstrations.

5.1 CLASS I DEMONSTRATION REQUIREMENTS

The Class I formal Technical Approval Demonstrations required for Delivery/Turnover are each described in this section. The requirements for each demonstration are to be fulfilled once and the demonstrations need not be accomplished on the same missile, facility, or equipment. A list of the demonstrations is provided showing the titles of the demonstrations and the facilities where they will be performed. The use of other Wing II facilities to support these demonstrations will be as programmed by the VAFB Tier III Wing II Schedules.

Certain Class I Demonstration requirements may be fulfilled by (1) the accomplishment of the test objectives of the Wing II Test Program, or (2) the Wing I Demonstrations already successfully accomplished providing the applicable equipment did not change during the modification to the Wing II configuration. If these above mentioned requirements are satisfied by the Wing II Test Program or previously accomplished Wing I Demonstrations, the applicable Class I Demonstration, or portion thereof, will be considered accomplished, and need not be conducted as a separate demonstration.

The requirements for the majority of the Class I Demonstrations will be satisfied as discussed above; however, the title sheets for each of these demonstrations will be included herein with a statement describing the means by which the applicable requirement(s) will be satisfied.

CLASS I DEMONSTRATIONS

No.	Title	Facility Used
1-1	Unloading Missile from Aircraft	Air Off-Loading Facility
1-2	Unload Missile from Railcar	Rail Off-Loading Facility
1-3	Missile Storage in SSCBM and Environmental Control Unit Check	Transient Missile Holding Facility
1-4	Missile Transfer SSCBM to T.E.	Facility Not Available
1-5	Transport Missile to Launch Facility	LF 6
1-6	Emplace Missile in Launcher	LF 6
1-7	Emplace R/V	LF 6
1-8	Remove R/V	LF 6
1-9	Remove G&C Section	LF 6
1-10	Emplace G&C Section	LF 6
1-11	Remove Missile from Launcher and Prepare T.E. for Travel	LF 6
1-12	Missile Alignment, Startup, and Targeting	LF 6, LCF 1
1-13	Test Bench, G&C Cooling Unit	SMSB
1-14	Field Level Maintenance - Card Level, Fault Isolation	SMSB
1-15	Removal and Replacement of G&C Cooling Unit Pump Package	LF 6
1-16	Removal and Replacement of a Battery at the Launch Facility	LF 6
1-17	Removal and Replacement of a Battery at the Launch Control Facility	LCF 1
1-18	Organizational Maintenance, Launch Facility Fault Isolation and Correction, Programmer Group	LF 6

CLASS I DEMONSTRATIONS (Cont'd)

No.	Title	Facility Used
1-19	Organizational Maintenance, Launch Facility Fault Isolation and Correction, Guidance and Control Coupler	LF 6
1-20	Organizational Maintenance, Launch Facility Fault Isolation and Correction, Status-Command Message Processing Group	LF 6
1-21	Remove and Replace Encoder at Launch Control Facility	LCF [1]
1-22	Test Set, Launch Control Console	LCF [1]
1-23	Code Inserter - Verifier	SMSB
1-24	Telephone Equipment Test Set	LF 6

[1] Use one LCF as programmed by the VAFB Tier III Wing II Schedule

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-1*

Unloading Missile from Aircraft

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of unloading a missile from its transporting aircraft.

SCOPE

This test demonstrates all the tasks involved in transferring a loaded Ballistic Missile Shipping and Storage Container (SSCBM) from its transporting aircraft to a Ballistic Missile Trailer (BMT). These tasks will range from positioning and stabilizing the aircraft to dispatch of the loaded BMT to a missile storage area or Destruct Package Installation Facility (DPIF).

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2-3-1. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-120 (Addendum I)	Model Spec. Strategic Missile Support Base - VAFB
T.O. 21-SM80A-2-2	Missile Handling and Transporting
S-133-121-1	Missile Transportation and Handling Equipment Spec.
S-133-12.1	Maint. Ground Equip. System Spec. - VAFB
S-133-11.1	Oper. Ground Equip. System Spec. VAFB
D2-5859	Qualitative Personnel Reqs. Info.

DEMONSTRATION 1-1
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-2 *

Unload Missile from Railcar

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of unloading a Transporter Erector semi-trailer containing a missile from the T-E railcar.

SCOPE

This demonstration includes all functions normally performed in receiving a loaded railcar, removing the T.E. semi-trailer from the railcar, returning the railcar to railroad service, and preparing the missile for road transport from the railhead.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2.3.1. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1	Maintenance Ground Equip. and System Specification-VAFB
S-133-11.1	Operational Ground Equip. System Specification-VAFB
T.O. 21-SM80A-2-2	Missile Handling and Transporting
D2-5859	Qualitative Personnel Requirements Information
D2-133-120	(Addendum I) Model Spec. Strategic Missile Support Base-VAFB

DEMONSTRATION 1-2
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-3 *

Missile Storage in SSCBM and Environmental Control Unit Check

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform those tasks necessary to place a Ballistic Missile Shipping and Storage Container (SSCBM), containing a missile, in transient storage; and to check the Environmental Control Unit.

SCOPE

This demonstration includes all functions normally performed at the transient missile holding facility in order to provide proper missile environmental control during storage and to prepare the SSCBM for transport after a storage period.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2.3.1. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

T.O. 21-SM80A-2-2	Missile Handling & Transporting
S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec.-VAFB
S-133-11.1 (D2-12130)	Operational Ground Equip. System Spec.-VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120	(Addendum I) Model Spec., Strategic Base-VAFB

DEMONSTRATION 1-3
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-4 *

Missile Transfer SSCBM to T.E.

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of transferring the missile from the Ballistic Missile Shipping and Storage Container to the Transporter Erector.

SCOPE

This demonstration involves the performance of all functions necessary to align and stabilize the T.E. and SSCBM, transfer the missile from SSCBM to the T.E. and prepare both trailers for transportation.

*Note: There are no facilities at VAFB with which this demonstration requirement can be accomplished. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec.-VAFB
S-133-11.1 (D2-12130)	Operational Ground Equip. System Spec.-VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120	(Addendum I) Model Spec., Strategic Missile Support Base-VAFB
T.O. 21-SM80A-2-2	Missile Handling & Transporting

DEMONSTRATION 1-4
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-5*

Transport Missile to Launch Facility

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of transporting the missile to the launch facility.

SCOPE

This is a demonstration of the functions normally performed in preparing the T.E. for highway transport, assembling the convoy, and transporting the missile to the LF.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2.3.4 and is part of all three Wing II missile launches. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec. - VAFB
S-133-11.1 (D2-12130)	Operational Ground Equip. System Spec. - VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120 (Addendum I)	Model Spec., Strategic Missile Support Base - VAFB
T.O. 21-SM80A-2-2	Missile Handling & Transportation

DEMONSTRATION 1-5
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-6 *

Emplace Missile in Launcher

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of emplacing a missile in a launch tube.

SCOPE

This demonstration includes all functions normally performed in positioning the T-E, erecting the T-E, opening the launcher closure, installing the missile in the launcher tube, closing the launcher closure, and preparing the empty T-E for the highway travel.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Sections 2.1.6 and 2.1.7. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec.-VAFB
S-133-11.1 (D2-12130)	Operational Ground Equip. System Spec.-VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120 (Addendum I)	Model Spec.,Strategic Missile Support Base-VAFB
T.O. 21-SM80A-2-2	Missile Handling & Transporting
T.O. 21-SM80A-2-10	Standard Launch Facility & Launch Control Support Building Procedures

DEMONSTRATION 1-6
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-7 *

Emplace R/V

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities to install the R/V on the missile at the launch facility.

SCOPE

This demonstration includes all functions normally performed in transporting a R/V to the LF, penetrating the LF and installing missile safing pins and installing the R/V.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Sections 2.1.2, 2.1.0, and 2.1.14; also, the installation part of this operation will be part of all three Wing II missile launches. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Eq. System Spec.-VAFB
T.O. 21-SM80A-2-8	Re-Entry Vehicle & G&C Section Handling & Transporting
T.O. 21-SM80A-2-10	Standard Launch Facility & Launch Control Support Building Procedures
S-133-120 (Addendum I)	Model Spec, Strategic Missile Support Base-VAFB
D2-5859	Qualitative Personnel Req'ts Info.

DEMONSTRATION 1-7
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-8 *

Remove R/V

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data prescribed crews, and facilities to remove the R/V from the missile at the launch facility.

SCOPE

This demonstration includes all functions normally performed in removing the R/V, removing safing pins, and securing the LF.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2.1.14. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec.-VAFB
T.O. 21-SM80A-2-8	Re-Entry Vehicle & G&C Section Handling & Transporting
T.O. 21-SM80A-2-10	Standard Launch Facility & Launch Control Support Building Procedures
S-133-120 (Addendum 1)	Model Spec, Strategic Missile Support Base-VAFB
D2-5859	Qualitative Personnel Req'ts Infomation

DEMONSTRATION 1-8
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-9*

Remove G&C Section

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities to remove the G&C section from the missile at the Launch Facility.

SCOPE

This demonstration includes all functions normally performed in removing a G&C section, removing safing pins, securing the L.F. and transporting the G&C section.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2.1.13 and 2.1.4. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification - VAFB
T.O. 21-SM80A-2-8	Re-Entry Vehicle & G&C Section Handling & Transporting
T.O. 21-SM80A-2-10	Standard L.F. & Launch Control Support Bldg. Procedures
S-133-120 (Addendum I)	Model Spec., Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 1-9
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-10*

Emplace G&C Section

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to transport and emplace the G&C Section on the missile at the LF.

SCOPE

This demonstration includes all functions normally performed in transporting a G&C Section to the LF, penetrating the LF, installing the missile safing pins and installing the G&C Section.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Sections 2-1-8 and 2-1-3. The installation part of this operation will be a part of all three Wing II missile launches. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification - VAFB
T.O. 21-SM80A-2-8	Re-Entry Vehicle & G&C Section Handling & Transporting
T.O. 21-SM80A-2-10	Standard L.F. & Launch Control Support Bldg. Procedures
S-133-120 (Addendum I)	Model Spec., Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 1-10
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-11 *

Remove Missile from Launcher and Prepare T.E. for Travel

REQUIREMENT

AF BSD Exhibit 6-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of removing the missile less R/V from a launcher tube and preparing the loaded T.E. for transport.

SCOPE

This demonstration includes all functions normally performed in preparing the missile for removal from the launcher, preparing the T.E. for receiving the missile, attaching the T.E. hoisting mechanism to the missile, hoisting the missile from the Launch Tube, and securing the missile to the T.E. in preparation for transport.

* Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29 Section 2.1.15. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification - VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base-VAFB
T.O. 21-SM80A-2-2	Missile Handling and Transporting
T.O. 21-SM80A-2-10	Standard Launch Facility and Launch Control Support Building Procedures
T.O. 21-SM80A-2-8	G/C Section Removal

DEMONSTRATION 1-11
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-12 *

Missile Alignment, Startup, and Targeting

REQUIREMENT

AF BSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews and facilities used to perform the task of missile startup, targeting and alignment.

SCOPE

The missile will be targeted, fine aligned, and placed in a simulated strategic alert condition.

* Note: The intent of this demonstration is satisfied in the Wing I Demonstration 1-9 Sections 2.1.10 and 2.1.11. Also this operation will be a part of all three Wing II Missile Launches. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-111-0-1	Launch Facility Model Specification
S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80B-2-1	Missile Guidance-Control System Maintenance and Targeting/Alignment Procedures

DEMONSTRATION 1-12
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-13 *

Test Bench, G&C Cooling Unit

REQUIREMENT

AF BSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews and facilities used to perform tests on the G&C environmental control equipment using the G&C Cooling Unit Test Bench (Figure A 4150).

SCOPE

This demonstration includes the performance of all functions normally performed in testing the refrigerating water chiller and the liquid cooler pumping assembly on the G&C Cooling Unit Test Bench.

*Note: The intent of this demonstration is satisfied in the Wing I Demonstration 1-10. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec.-VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base-VAFB
T.O. 35E9-35-1	Ground G&C Liquid Cooling Equip.
T.O. 35D9-83-3-1	Test Bench Checklist

DEMONSTRATION 1-13
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-14 *

Field Level Maintenance - Card Level Fault Isolation

REQUIREMENT

AFBSD Exhibit 61-32 Section 2-6.4-1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of isolating and replacing the faulty circuit card in a faulty drawer assembly.

SCOPE

This demonstration includes the accomplishment of all functions necessary to properly install the faulty drawer on the test bench, install the proper programming tape, and perform the prescribed tests. The equipment to be demonstrated shall include the C90 Test Adapter Group, the C91 Programmer-Fault Locator Test Center, and the BGS 72 Test Adapter Group. Two drawers will be tested during the demonstration. Each drawer will contain a faulty circuit card and each drawer will have been removed from a launch facility during a previous demonstration. One drawer will be from the G&C Coupler (Fig. A 604.2) and one from the Programmer Group (Fig. A 1201).

* Note: The intent of the demonstration of Fig. A 1201 is the same as that for Wing I Demonstration 1-11 and will not be duplicated for Wing II. Only the demonstration of Fig. A 604-2 will be run for Wing II.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment Specification - VAFB
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base-VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 31X3-12-8-2	Field Maintenance Programmer Group
T.O. 31X2-45-3-2	Field Maintenance Control - Guidance Coupler

DEMONSTRATION 1-14
SHEET 1 OF 14

DEMONSTRATION 1-14

Field Level Maintenance - Card Level Fault Isolation

PRE-DEMONSTRATION TASKS	EQUIPMENT REQUIRED
1. Verify the availability of the following drawer from Demonstration 1-19. a. G&C Coupler - Logic Drawer (35330-315) with ACO-168.2 installed. 2. Prior to performing the checkout of the above drawer, verify (or accomplish) the following: a. Test equipment calibration is current. b. Self-test has been accomplished on AN/GJM-15 (C91) per T.O. 33D9-74-12-1 Section 4-30. c. Operational Checkout has been accomplished on OA-3544/GJM-15 and AN/GJM-15 (C90 and C91) per T.O. 31X2-2-19-1 Section 4-30 prior to checkout of G&C Coupler Drawer.	35330-315 ACO-168.2

DEMONSTRATION 1-14
SHEET 2 OF 4

DEMONSTRATION 1-14

Field Level Maintenance - Card Level Fault Isolation

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Isolate the fault in the Logic Drawer to the card level, replace the card (ACO-168.2), and complete the drawer checkout per T.O. 31X2-45-3-2 Section VIII	Equipment per T.O. 31X3-12-8-2 Section III, and T.O. 31X2-45-3-2 Section III Personnel Per D2-5859.

DEMONSTRATION 1-14
SHEET 3 OF 4

DEMONSTRATION 1-14

Field Level Maintenance - Card Level Fault Isolation

POST DEMONSTRATION TASKS	EQUIPMENT REQUIRED
1. Return the following to stores: a) Logic Drawer (35330-315) b) ACO-168.2	

DEMONSTRATION 1-14
SHEET 4 OF 4

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-15 *

Removal and Replacement of G&C Cooling Unit Pump Package

REQUIREMENT

AFBSD Exhibit 61-22 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of removing and replacing the Liquid Cooler Pumping Assembly at the launch facility.

SCOPE

This demonstration includes all functions normally performed in removing the Pumping Group from the G&C liquid cooling system, hoisting the package into the Mechanical Maintenance Truck, and installing a replacement Pumping Group in the G&C liquid cooling system. The operation of the Control Circuitry Test Set is also demonstrated by performing the checkout of the Electronic Control Amplifier (Usually performed upon replacement of amplifier).

*Note: The intent of this demonstration is satisfied in the Wing I Demonstration 1-12. Therefore, there will be no Wing II Demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-111-0-1	Launch Facility Model Specification
T.O. 21-SM80A-2-6	Ground Guidance & Control Liquid Cooling System
S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
S-133-111-0-1-1(Addendum I)	Launch Faciliey Model Specification
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 1-15
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-16*

Removal and Replacement of a Battery at the Launch Facility.

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of removing and replacing a battery unit at the launch facility.

SCOPE

This demonstration includes all functions normally performed in removing a battery unit from the equipment room of the launch facility, hoisting the battery from the equipment room to the Mechanical Maintenance Truck, lowering a replacement unit into the equipment room, and installation the battery unit in the battery enclosure.

*Note: The intent of this demonstration is satisfied in the Wing I Demonstration 1-13. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equip. System Spec.-VAFB
S-133-120 (Addendum 1)	Model Spec., Strategic Missile Support Base-VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-11	Aero-Space Ground Equip. Power & Miscellaneous Systems
T.O. 36A12-24-3-1	Mech. Maint. Truck Crane Oper.

DEMONSTRATION 1-16
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-17 *

Removal and Replacement of a Battery at the Launch Control Facility.

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews and facilities used to perform the task of removing and replacing a battery unit at the Launch Control Facility.

SCOPE

This demonstration includes all functions normally performed in removing a battery unit from the Launch Control Center, transferring the unit to the Mechanical Maintenance Truck, and installing a replacement unit in the LCC batter enclosure.

* Note: The intent of this demonstration is satisfied in Wing I Demonstration 1-14. Therefore, there will be no Wing II Demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
D2-5859	Qualitative Personnel Requirements Information
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base-VAFB
T.O. 21-SM80A-2-11	Aero-Space Ground Equipment Power & Miscellaneous Systems

DEMONSTRATION 1-17
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-18 *

Organizational Maintenance, Launch Facility Fault Isolation and Correction, Programmer Group

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of isolating and replacing a faulty drawer in the Programmer Group (P/G) and to replace the Mechanical Decoder at the LF.

SCOPE

For the purpose of this demonstration, a known fault will be installed in one of the P/G drawers. Without prior knowledge of the nature of the fault, the Demonstration crew will isolate and replace the faulty drawer and conduct an end-to-end check to verify the operating condition of the P/G.

This demonstration includes the removal and replacement of the Mechanical Decoder.

* Note: The intent of this demonstration is satified in Wing I Demonstration 1-15. The requirements for the removal and replacement of the Mechanical Decoder will also be satisfied during the Wing II Test Program per BSD-TR-63-29, Section 2.1.17. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment Specification - VAFB
S-133-120 (Addendum 1)	Model Specification, Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-3	Control & Monitoring System
T.O. 21-SM80A-2-10	Standard Launch Facility Procedure

DEMONSTRATION 1-18
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-19

Organizational Maintenance, Launch Facility Fault Isolation and Correction, Guidance and Control Coupler

REQUIREMENT

AFBSD Exhibit 61-32, Section 2.6.4.1

OBJECTIVE

To demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of isolating and replacing a faulty drawer in the G&C Coupler at the LF.

SCOPE

For the purpose of this demonstration, a known fault will be installed in one of the G&C Coupler drawers. Without prior knowledge of the nature of the fault, the Demonstration crew will isolate and replace the faulty drawer and checkout the G&C Coupler to verify its operating condition.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-1213)	Maintenance Ground Equipment Specification - VAFB
S-133-120 (Addendum I)	Model Spec., Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Info.
T.O. 21-SM80B-2-1	Missile Guidance - Control System AN/DJW-16 (Mod. NS10Q) Maintenance and Targeting/ Alignment Procedures.

DEMONSTRATION 1-19
SHEET 1 OF 4

DEMONSTRATION 1-19

Organizational Maintenance, Launch Facility Fault Isolation and Correction, Guidance and Control Coupler

PRE-DEMONSTRATION TASKS	EQUIPMENT REQUIRED
1. Dispatch Targeting Truck to LF.	ACO-168.2
2. Enter LF and equipment room per T.O. 21-SM80A-2-10, paragraph 2-5A.	Vacuum Clearner Electrical Connector Covers
3. Install ACO-168.2 in G&C Coupler drawer as follows:	Circuit Card Shipping and Storage Container
Note: The identity and location of the ACO-168.2 fault should be concealed from the Demonstration Crew.	
a. Remove power from G&C Coupler by activating "shutdown" Button on Programming Group and opening CB 4 on Power Supply Group No. 1.	
b. Remove G&C Coupler drawer per T.O. 21-SM80B-2-1.	
c. Remove operational circuit card per T.O. 31x2-45-3-2.	
d. Install ACO-168.2 and clean and reassemble drawer per T.O. 31X2-45-3-2. (Testing not required)	
e. Replace drawer per T.O. 21-SM80B-2-1.	
f. Close CB 4 on Power Supply Group No. 1.	
4. Dispatch operational circuit card to support area.	
Note: Site power will remain off for this demonstration.	

DEMONSTRATION 1-19
SHEET 2 OF 4

DEMONSTRATION 1-19

Organisational Maintenance, Launch Facility Fault Isolation and Correction, Guidance and Control

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Lower required equipment into Equipment Room per T.O. 21-SM80B-2-1. 2. Perform the following per T.O. 21-SM80B-2-1. a. Fault isolation. b. Remove and replace faulty drawer. c. Checkout G&C Coupler. 3. Remove equipment from Equipment Room per T.O. 2.-SM80B-2-1.	LF per 24-3749 Targeting Truck with spare G&C Coupler Drawers Equipment per T.O. 21-SM80B-2-1 Personnel per D2-5859

DEMONSTRATION 1-19
SHEET 3 OF 4

DEMONSTRATION 1-19

Organizational Maintenance, Launch Facility Fault Isolation and Correction, Guidance and Control

POST DEMONSTRATION TASKS	EQUIPMENT REQUIRED
1. Secure LF per T.O. 21-SM80A-2-10 as required. 2. Dispatch Targeting Truck and spare equipment as required. 3. Return G&C Coupler drawer with ACO-168.2 installed to SMSA for Demonstration 1-14.	

DEMONSTRATION 1-19
SHEET 4 OF 4

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-20*

Organizational Maintenance Launch Facility Fault Isolation and Correction, Status-Command Message Processing Group.

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of isolating and replacing a faulty drawer in the Data Analysis Central (DAC) and to replace the Volatile Decoder at the LF.

SCOPE

For the purpose of this demonstration, a known fault will be installed in one of the DAC drawers. Without prior knowledge of the nature of the fault, the Demonstration Crew will isolate and replace the faulty drawer and verify the proper operation of the DAC equipment.

The Volatile Decoder will also be removed and replaced in the demonstration.

* Note: The intent of this demonstration is satisfied in the Wing I Demonstration 1-17. Therefore, there will be no Wing II Demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment Specification - VAFB
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-3	Control and Monitoring System

DEMONSTRATION 1-20
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-21 *

Remove and Replace Encoder at Launch Control Facility

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1 .

OBJECTIVE

To demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to replace the encoder at the LCF.

SCOPE

This test will demonstrate those functions involved in removing and replacing the Launch Control Panel in the Launch Control Console.

* Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29, Section 2.1.17. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-3	Control & Monitoring System

DEMONSTRATION 1-21
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-22 *

Test Set, Launch Control Console

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To formally demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform tests on the Launch Control Console.

SCOPE

This demonstration includes the performace of all functions normally performed in self testing the Launch Control Console Test Set, connecting the test set to the Launch Control Console, and performing a complete test of the Launch Control Console.

* Note: The intent of this dmonstration is satisfied in the Wing I Demonstration 1-20. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
S-133-120 (Addendum VAFB)	Model Specification, Strategic Missile Support Base - VAFB
T.O. 21-SM80A-2-3	Control & Monitoring System
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 1-22
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-23 *

Code Inserter - Verifier

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities used to perform the task of inserting and verifying the code in an Encoder.

SCOPE

This demonstration includes the performance of all functions which make use of the Inserter-Verifier, Fig. "A" 4252 in the SMSF.

* Note: The intent of this demonstration is satified in the Wing I demonstration 1-22. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
S-133-120 (Addendum I)	Model Specification, Strategic Missile Support Base - VAFB
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-16	Code Changing Operations, Encoders and Decoders

DEMONSTRATION 1-23
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 1-24 *

Telephone Equipment Test Set

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.4.1

OBJECTIVE

To demonstrate the adequacy of equipment, technical data, prescribed crews, and facilities involved in the utilization of the Telephone Equipment Test Set.

SCOPE

This task will demonstrate the functions accomplished with Telephone Equipment Test Set by the performance of certain LF SIN Communication System troubleshooting procedures established in T.O. 21-SM80A-2-5.

Note: The intent of this demonstration is satisfied in the Wing I Demonstration 1-23. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-12.1 (D2-12131)	Maintenance Ground Equipment System Specification-VAFB
S-133-110 (Addendum I)	Launch Operational System (Squadron/Flight Model Specification)
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-5	Communications Systems,

DEMONSTRATION 1-24
SHEET 1 OF 1

5.2 CLASS II DEMONSTRATION REQUIREMENTS

The Class II formal Technical Approval Demonstrations required for Delivery/Turnover are each described in this section. A list of the demonstrations is provided showing the titles of the demonstrations and the facility where they will be performed. The use of other Wing II facilities to support these demonstrations will be as programmed by the VAFB Tier III Wing II Schedules.

Certain Class II Demonstration requirements may be fulfilled by (1) the accomplishment of the test objectives of the Wing II Test Program, or (2) the Wing I Demonstrations already successfully accomplished providing the applicable equipment did not change during the modification to the Wing II configuration. If these above mentioned requirements are satisfied by the Wing II Test Program or previously accomplished Wing I Demonstrations, the applicable Class II Demonstration, or portion thereof, will be considered accomplished, and need not be conducted as a separate demonstration.

The requirements for the majority of the Class II Demonstrations will be satisfied as discussed above; however, the title sheets for each of these demonstrations will be included herein with a statement describing the means by which the applicable requirement(s) will be satisfied.

CLASS II DEMONSTRATIONS

No.	Title	Facility Used
2-1	SCN Test	LF 6, LCF [1]
2-2	Perform "Test" and "Calibrate" Tests	LF 6, LCF [1]
2-3	Security System, Power, and SIN Test	LF 6, LCF [1]
2-4	Launch Enable System Test	LF 6, LCF [1]
2-5	Voice Reporting Signal Assembly (VRSA) Test	LF 6, LCF [1]
2-6	Remote Targeting System	LF 6, LCF [1]
2-7	Communications	LF 6, HLCF

[1] Use one LCF as programmed by the VAFB Tier III Wing II Schedules.

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-1 *
SCN Test

REQUIREMENT
AFBSD Exhibit 61-32, Section 2.6.5.1

OBJECTIVE
The purpose of this test is to verify the operational capability of the SCN in handling the launch signals.

SCOPE
This test will check the ability of a selected LF to perform a launch, to verify the ability of the LCC to perform as a command station, and to verify the operational condition of the flight's hardened SCN.

*NOTE: The intent of this demonstration is satisfied in the Wing II Test Program per AFBSD-TR-63-29, Section 3.1.2. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

T.O. 21-SM80A-1	Weapon System Operating Instructions.
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 2-1
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-2 *
Perform "Test" and "Calibrate" Tests

REQUIREMENT
AFBSD Exhibit 61-32, Section 2.6.5.1

OBJECTIVE
To establish the operational condition of the missile and supporting OGE at the LF.

SCOPE
The "Test" and "Calibrate" operations will be initiated from the LCF. Telemetry measurements will be recorded to evaluate whether or not the commands were correctly processed.

* NOTE: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29, Sections 3.1.1 and 3.1.3. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

T.O. 21-SM80A-1	Weapon System Operating Instructions
S-133-110-0-1-1	Launch Operational System (Squadron/Flight Model Spec.) (VAFB Addendum)
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 2-2
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-3

Security System, Power, and SIN Test

REQUIREMENT

AF BSD Exhibit 61-32, Section 2.6.5-1

OBJECTIVE

The purpose of this demonstration is to verify that the proper alarm signals and readouts are received at the LCF in the event of LF security violation and that momentary commercial power interruption will not disrupt strategic alert. This demonstration will verify the operation of the Support Information Network (SIN) between any selected LF and the LCF.

SCOPE

The tests will demonstrate all the tasks involved in the LF security penetration and communication and/or coordination required between personnel at the LF and LCF.

Interruption of the commercial power momentarily demonstrates the ability of the system to maintain strategic alert when power is lost under this condition.

*NOTE: The intent of this demonstration is satisfied in the Wing I Demonstration 2-2 and the Wing II Test Program. The Security System requirements are satisfied in BSD-TR-63-29, Section 4.1.4, while the Power and SIN Test remains the same as for Wing I. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-110-0-1-1	Launch Operational System(Squadron/Flight Model Specification)(VAFB Addendum)
D2-5859	Qualitative Personnel Requirements Information
T.O. 21-SM80A-2-10	Standard Launch Facility & Launch Control Support Building Procedures

DEMONSTRATION 2-3
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-4

Launch Enable System Test

REQUIREMENT

AF BSD Exhibit 61-32, Section 2.6.5.1

OBJECTIVE

The purpose of the Launch Enable System (LES) test is to demonstrate the capability of remotely controlling the arming or safing function of the missile critical ordnance devices in the LF.

SCOPE

This test is initiated at the LCF communication console by actuating the controls associated with the LES to remotely position the safety control switch in the LF to the safe and to the armed positions. The safety control switch in turn controls the critical ordnance devices in the missile.

For results of this test the aural-visual display signals must be monitored at the LCF, the loss of a tone signal and an "armed" indicator light on indicates the SCS to be in the armed condition.

*NOTE: The intent of this demonstration is satisfied in the Wing I Demonstration 2-3. Therefore, there will be no Wing II Demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-110-0-1-1	Launch Operational System(Squadron/Flight Model Specification)(VAFB Addendum)
21-SM80A-1	Weapon System Operation Instructions
D2-5859	Qualitative Personnel Requirements Information.

DEMONSTRATION 2-4
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-5 *

Voice Reporting Signal Assembly (VRSA) Test

REQUIREMENT

AFBSD Exhibit 61-32, Section 2.6.5.1

OBJECTIVE

The purpose of this demonstration is to verify the LCF capability to interrogate the fault reporting system of the launch facility.

SCOPE

The LF voice reporting signal assembly equipment transmits fault information and target status to the LCF over an existing SIN wire pair in response to LCF interrogation. The system will report target selection status, up to 39 launcher faults, and a sign off message. Each fault, target status or R/V fuzing error present will initiate the playing of a pre-recorded voice message identification. The interrogation is initiated at the communications control console.

*Note: The intent of this demonstration is satisfied in the Wing II Test Program per BSD-TR-63-29, Section 4.1.1. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

S-133-110-0-1-1	Launch Operational System (Squadron/Flight Model Specification) (VAFB Addendum)
D2-5859	Qualitative Personnel Requirements Information
21-SM80A-1	Weapon System Operating Instructions

DEMONSTRATION 2-5
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-6*

Remote Targeting System

REQUIREMENT

AF BSD Exhibit 61-32, Section 2.6.5.1

OBJECTIVE

To demonstrate the remote targeting system capability.

SCOPE

The remote targeting system will be demonstrated by selecting each targeting capability at each launch facility from the LCF and noting the proper response.

*NOTE: The intent of this demonstration is the same as that of the Wing II Test Program per BSD-TR-63-29, Sections 3.1.12 and 4.1.1 and therefore, will not be duplicated as a Wing II Class II demonstration.

TECHNICAL MANUALS & REFERENCES

T.O. 21-SM80A-1	Weapon System Operating Instructions
D2-5859	Qualitative Personnel Requirements Information

DEMONSTRATION 2-6
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 2-7 *

Communications

REQUIREMENT

AFBSD Exhibit 61-32, Section 2.6.5.1

OBJECTIVE The purpose of this demonstration is to (1) demonstrate the satisfactory communication capability of the LF and LCF Intercom Systems under maximum load conditions, including the LCO to SCC direct line; (2) demonstrate the capability to control, transmit, and receive from the LCF communications panels using the VHF radio; and (3) demonstrate the operation of the PAS Monitor Panel by initiation and satisfactory reception of a voice message from Headquarters SAC or the appropriate Numbered Air Force Headquarters.

SCOPE

This demonstration will accomplish the following:

(1) Establish satisfactory voice communication throughout each LF and LCF utilizing the SIN Intercom System under maximum load conditions (utilization of all SIN jacks and telephones simultaneously).

(2) Establish satisfactory voice communication over the direct security line between the Launch Control Officer (LCO) and the Security Control Center (SCC).

(3) Communicate by voice between LCF communication panel on the Launch Control Console and Communication Control Console and a maintenance vehicle via VHF radio.

(4) Satisfactorily receive voice message from Headquarters SAC or appropriate Numbered Air Force Headquarters over the PAS Monitor speaker at an LCF.

* Note: The intent of this demonstration is satisfied in the Wing I Demonstration 2-5. Therefore, there will be no Wing II demonstration.

TECHNICAL MANUALS & REFERENCES

T.O. 21-SM80A-1 Weapon System Operating Instructions
T.O. 21-SM80A-2-10 Standard Launch Facility & Launch Support Build. Procedures
D2-5859 Qualitative Personnel Requirements Information
S-133-111-0-1 Model Spec. LF
S-133-112-0-1 Model Spec. LCF

DEMONSTRATION 2-7
SHEET 1 OF 1

5.3 CLASS III DEMONSTRATIONS

The Class III semi-formal Technical Approval Demonstrations required for Acceptance of the Modification and Checkout (M&C/O) effort are described in this section. A list of the demonstration titles is provided. The combination of facilities required to accomplish these activities will be as programmed by the VAFB Tier III Wing II Schedules.

Certain Class III Demonstration requirements may be fulfilled by the Wing I Class III Demonstrations already accomplished on the applicable facility or procedures where the equipment or procedures did not change during modification to the Wing II configuration. Where these requirements are satisfied by the above, the applicable Class III Demonstration, or portion thereof, will be considered accomplished and need not be conducted as a separate demonstration.

If the requirements of a Class III Demonstration, or portion thereof, will be satisfied as mention above, a statement of explanation will be included on the title page of the applicable demonstration contained herein.

CLASS III DEMONSTRATIONS

3-1	Launch Facility End-to-End Test
3-2	Single Thread Tests - LF/LCF Integration
3-3	Missile Alignment, Start-up, and Targeting
3-4	Voice Reporting Signal Assembly (VRSA)
3-5	LF Power Transition Tests
3-6	LF Security Tests
3-7	Launch Message Propagation Tests
3-8	Environmental Control System
3-9	Receipt through Emplacement (Designed to Demonstrate CTLI Equipment Processing)
3-10	Missile Suspension and Alignment System Checkout
3-11	Functional Test of C-153 Downstage Tester
3-12	Equipment Cooling Air-Flow Adjustment
3-13	Standby and Emergency Power Test

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-1 *

Launch Facility End-To-End Test.

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.6.

OBJECTIVE

To witness those tests which verify that when proper commands are received at the input to the line monitor units in the data processing equipment, the LF equipment under test will function, as required.

SCOPE

The functions to be witnessed are described in D2-7871, Function 4.4.

The LF end-to-end tests are divided into two groups:

a. Command Tests - A series of three tests which verify:
   1) The Data Analysis Central equipment will receive properly encoded commands;
   2) Transmit these commands to the Programming Group; and
   3) In the case of the launch command, that the LF OGE will successfully execute a launch sequence.

b. Launch Interlock Tests - The purpose of this series of tests is to verify that the logic circuitry is capable of distinguishing between events that will stop or alter the launch sequence or events that will not influence the launch sequence.

*Note: Only the command test portion of this demonstration will be performed because all other requirements are the same as for Wing I and have been satisfied.

TECHNICAL MANUALS & REFERENCES

D2-7871 Supp. A - A&C/O System Requirements - VAFB
S-133-111-0-2-1 - Launch Facility System Model Specification
D2-14652 Vol. 6 - Acceptance Functional Test Procedures VAFB

DEMONSTRATION 3-1
SHEET 1 OF 2

DEMONSTRATION 3-1

Launch Facility End-to-End Test

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Command Tests a. Test Command Initiation Test b. Calibration Command Initiation Test c. Target Command Initiation Test d. Initial Launch Test e. Launch Environmental Protective System Test f. Safety Control Switch Interlock Test g. "Ready for Launch" Test	Procedure D2-14652-6, Section 1.3 D2-14551, Volume II, Section 1 Paragraph 7.1.1

DEMONSTRATION 3-1
SHEET 2 OF 2

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-2 *

Single Thread Tests - LF/LCF Integration.

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.6.

OBJECTIVE

To witness the tests which verify the operational condition of the SCN and equipment associated with command and monitor functions.

SCOPE

The functions to be witnessed are described in D2-7871, Functions 9.2.2 and 9.2.3.

During integration each separate launch facility is connected directly to a launch control facility in a single thread connection prior to missile emplacement. At this time the status network is tested by introducing alarm and No-Go signals at the LF. Various messages are generated at the launch control console and sent to the LF to test the launch control system. The ability of the LF to complete a launch sequence is tested by "launching" a missile simulator on command from the launch control console.

The single thread end-to-end consists of two sets of tests which are:

1. SCN Single-Thread Tests.
2. Single-Thread Command and Monitor Tests.

*Note: This demonstration will not be performed because all requirements are the same as for Wing I and have been performed.

TECHNICAL MANUALS & REFERENCES

D2-7871 Supp. A	WS-133A A&C/O System Requirements VAFB
D2-14652 Vol. 3	Acceptance Functional Test Procedures VAFB
S-133-110-0-2-1	VAFB Addendum - System Model Spec. Launch/Squadron
S-133-111-0-2-1	VAFB Addendum - LF System Model Spec.

DEMONSTRATION 3-2
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-3

Missile Alignment, Start-up and Targeting

REQUIREMENT

AF BSD Exhibit 61-32 Section 2.6.6
STL Document 6680.4-1559 Section 2-k

OBJECTIVE

To witness the tests performed during A&C/O to verify that the launch facility is capable of achieving a simulated strategic alert condition.

SCOPE

The Missile Targeting Tests to be witnessed are described in D2-7871, Function 4.10.

After a ground test missile (less R/V) is emplaced, the missile is targeted, aligned and placed in a simulated strategic alert condition. A warhead alarm will be simulated at the R/V - G&C section interface and observed at the launch control console. The bench mark method of alignment will be included for each launch facility.

TECHNICAL MANUALS & REFERENCES

D2-7871-Supp. A	WS-133A A&C/O System Requirements
D2-14652, Vols 1-6	Acceptance Functional Test Procedures-VAFB
S-133-110-0-2-1	VAFB Addendum - System Model Spec. Launch/Squadron
S-133-111-0-2-1	VAFB Addendum LF System Model Spec.

DEMONSTRATION 3-3
SHEET 1 OF 2

DEMONSTRATION 3-3
Missile Start-up, Targeting, and Alignment

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Verify reference azimuth marker location.	Procedure D2-7871, Sections 4.10.1 through 4.10.16 D2-14652, Vols. 1-6
2. Check positioning of azimuth reference mirrors.	
3. Extablish primary reference mirror azimuth.	
4. Establish secondary reference mirror azimuth.	
5. Secondary ordnance device continuity check.	
6. R/V Air ground monitor lines test.	
7. G&C - R/V interface circuit test.	
8. Warhead monitor circuit tests.	
9. No-Go loop check.	
10. Test, Missile Alignment.	
(a) Test, C21, Missile Alignment Group (Fig. A 602)	
(b) Conduct alignment group test.	
(c) Align G&C Platform Mirror to Theodolite.	
(d) Energize the airborne G&C section.	
(e) Determine missile offset.	
Correct for missile elevation error.	
Correct for missile horizontal offset.	
(f) Position C21 Autocollimator.	
(g) Test Seismic Alarm.	
11. Fill and verify.	
12. Alignment Test.	
13. Calibration Sequence.	
14. Test Sequence.	
15. Target check from launch control console.	DEMONSTRATION 3-3 SHEET 2 OF 2

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-4 *

Voice Reporting Signal Assembly (VRSA)

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.6

OBJECTIVE

To witness the tests which verify that all voice reported Status, Alarm, and No-Go monitoring circuits are in operating conditions.

SCOPE

The operations to be witnessed are described in D2-7871, Functions 4.3.1, 4.3.2.4, 4.3.2.6, and 4.3.3.

LF Monitoring circuit verification is a normal part of the Launch Facility Startup test sequence. Status, Alarm, and No-Go monitor circuit tests are performed. The tests are conducted successively as each operational component at the LF is progressively integrated and tested until all voice reported monitoring circuits are completely installed and verified by receipt of the proper VRSA message when simulated.

*Note: The objectives of this demonstration have been satisfied by Wing I Demonstration 3-4 and will not be duplicated for Wing II.

TECHNICAL MANUALS & REFERENCES

D2-7871 Supp. A	WS-133A Assembly and Checkout System Requirements-VAFB
D2-14652 Vols 1-7	Acceptance Functional Test Procedures
S-133-111-0-2-1	VAFB Addendum LF System Model Spec.

DEMONSTRATION 3-4
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-5 *

LF Power Transition Tests

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.6

OBJECTIVE

To demonstrate the ability of the LF systems to transfer to standby and emergency power sources without losing "Strategic Alert".

SCOPE

1. Power Tests

These tests are part of the LF Startup Tests and are described in D2-7871 Supplement A function 4.3.2.2.

During these tests the launch control system in the Launch Facility will be placed in a simulated strategic alert condition and final tests will be conducted on the power system by turning off commercial power and then standby power to insure the ability of the Site to maintain strategic alert on both standby and emergency power and to check the automatic start feature of the standby power. The automatic exerciser will be checked through a complete one hour cycle.

*Note: The objectives of this demonstration have been satisfied by the power portion of Wing I Demonstration 3-6 and will not be duplicated for Wing II.

TECHNICAL MANUALS & REFERENCES

D2-7818 Vol. VII Power Supply Set DC, LF
D2-7871 Supp. A Assembly and Checkout Requirements - VAFB
D2-14652 Vol. 4 Acceptance Functional Test Procedures - VAFB

DEMONSTRATION 3-5
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-6

LF Security Tests

REQUIREMENT

AF BSD Exhibit 61-32 Section 2.6.6

OBJECTIVE

To witness the tests which verify the operational condition of the Security System.

SCOPE

These tests are described in D2-7871 Supplement A, Fucntion 4.5.

During these tests each detector in the inner and outer security system will be violated while monitoring the system for proper alarm signals.

TECHNICAL MANUALS & REFERENCES

S-133-111-0-2-1	VAFB Addendum LF System Model Specification
D2-14652, Vol. 7	Acceptance Functional Test Procedures - VAFB
D2-7871, Supp A,	Assembly and Checkout, Requirements-VAFB

DEMONSTRATION 3-6

LF Security Tests

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
	Procedures
1. Perform outer zone violation test for each detector.	D2-14652-7
2. Perform inner zone violation test for each detector.	D2-14652-7

DEMONSTRATION 3-6
SHEET 2 OF 2

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-7 *

Launch Message Propagation Tests

REQUIREMENT

AFBSD 61-32 Section 2.6.6

OBJECTIVE

To witness the tests which verify the propagation of launch net messages throughout the entire complex.

SCOPE

The functions to be witnessed are described in D2-7871, Function 9.5.

The retransmission capability of the SCN system is verified by sending test messages through the complex when all LF's and LCF's are tied together by the SCN. The ability of the LCF's to generate commands, receive and display status signals, and to operate properly on emergency and standby power is verified in these tests.

*Note: The objectives of this demonstration have been satisfied by Wing I demonstration 3-17 and will not be duplicated for Wing II.

TECHNICAL MANUALS & REFERENCES

D2-7871 Supp. A WS-133A A&C/O System Requirements
D2-14652 Vols. 1-7 Acceptance Functional Test Procedures - VAFB
S-133-110-0-2-1 VAFB Addendum - System Model Spec. - Launch/Squadron

DEMONSTRATION 3-7
SHEET 1 OF 1

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-8

Environmental Control System

REQUIREMENT

AFBSD Exhibit 61-32 Section 2.6.6.

OBJECTIVE

To verify that the environmental control system is operating properly during checkout activities.

SCOPE

No special activities will be performed for this demonstration. Operation of the environmental control system will be observed during normal witnessing of demonstrations 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, and 3-7. The environmental control system shall be considered as functioning properly if (1) no LF environmental alarms are reported on the VRSA, and (2) no LCF environmental alarms occur in the Security Control Center in the LCSB.

TECHNICAL MANUALS & REFERENCES

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-9

Receipt through Emplacement (Designed to Demonstrate CTLI Equipment Processing).

REQUIREMENT

STL Document 6680.4——1559 Section 2-a, b, c, and d.

OBJECTIVE

To witness those tests which will demonstrate the conversion of an operational missile into a CTLI missile.

SCOPE

The operations to be witnessed are described in S133-11.1 (D2-12130) Vol. I on the following Functional Flow Drawings:

25-27003
25-27007
25-27008
25-27009
25-27012

This demonstration covers the processing of an operationally configured ground test missile during (1) installation of downstage CTLI components in the DPIF, (2) the mating of the G&C section and CTLI wafer in the SMSF, and (3) the final CTLI installations in the LF.

TECHNICAL MANUALS & REFERENCES

S-133-11 OGE System Specification for VAFB
T.O. 21-SM80A-2-17-1 CTL Systems

DEMONSTRATION 3-9
SHEET 1 OF 3

DEMONSTRATION 3-9

Receipt through Emplacement

PRE-DEMONSTRATION TASKS	EQUIPMENT REQUIRED
The following operations, which are not a part of the demonstration, must be performed in order to prepare for the demonstration. 1. Prior to function No. 1 the following operations must be performed: a) Transport missile to the Destruct Package Installation Facility (DPIF). b) Roll transfer missile into DPIF. 2. Prior to function No. 5 the following operations must be performed: a) Roll transfer missile from DPIF to Transporter - Erector (TE). b) Transport missile to and emplace in LF. c) Remove G&C section and transport G&C section to SMSF. 3. Prior to function No. 10 the following operations must be performed: a) Transport G&C/CTLI section from SMSF to LF.	

DEMONSTRATION 3-9
SHEET 2 OF 3

DEMONSTRATION 3-9

Receipt through Emplacement

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Prepare missile for installation of downstage CTLI components at DPIF.	Procedure 21-SM80A-2-17-1 Section III
2. Install downstage CTLI components.	
3. Perform CTLI downstage electrical system test.	
4. Complete missile assembly and prepare missile for transport.	
NOTE: See Pre-demonstration tasks.	
5. Receive and checkout G&C section at CSA.	21-SM80A-2-17-1 Section IV
6. Install G&C-CTLI interface cable on G&C section.	
7. Mate G&C and CTLI sections.	
8. Test combined G&C/CTLI.	
9. Prepare G&C/CTLI section for transport.	
NOTE: See Pre-demonstration tasks.	
10. Complete installation of downstage CTLI on missile in LF.	21-SM80A-2-17-1 Section V
11. Install G&C/CTLI Unit.	
12. Install R/V.	

DEMONSTRATION 3-9
SHEET 3 OF 3

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-10

Missile Suspension and Alignment Checkout

REQUIREMENT

STL Document 6680.4- 1559, Sections 2e and 2g.

OBJECTIVE

To witness the tests which verify the missile suspension and alignment system design compatibility and functional checkout.

SCOPE

This demonstration will functionally test the drive assembly and receiver ring and insure that the missile suspension and alignment system has been properly leveled.

TECHNICAL MANUALS & REFERENCES

D2-7871 Supplement A	A&C/O System Requirements - VAFB
D2014652-1	Site Acceptance Test Procedures

DEMONSTRATION 3-10
SHEET 1 OF 2

DEMONSTRATION 3-10

Missile Suspension and Alignment Checkout

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Checkout missile suspension and alignment system. a. Inspect for conformance to assembly drawing. b. Test drive assembly and receiver ring.	D2-7871, Sections 4.1.4.2 and 4.2.2 D2-14652-1 Section 3.1.2 D2-14702
	DEMONSTRATION 3-10 SHEET 2 OF 2

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-11

Functional Test of C-153 Downstage Tester

REQUIREMENT

STL Document 6680.4-1559

OBJECTIVE

To verify that the C-153 Downstage Tester is functioning properly prior to utilization at site locations.

SCOPE

This test will verify that the C-153 Test Set is functioning properly upon receipt at the site test station and is the minimum test to be conducted prior to utilization.

TECHNICAL MANUAL REFERENCES

D2-11326	Pre-assembly Test Procedure for Test Set Missile Control Group AN/DJM-20 (Model C-153A)
D2-14279	Calibration/Alignment Procedure for Test Set, Missile Control Group AN/DJM-20 Figure A No. 10709

DEMONSTRATION 3-11
SHEET 1 OF 3

DEMONSTRATION 3-11

Function Test of C-153 Downstage Tester

PRE-DEMONSTRATION TASKS	EQUIPMENT REQUIRED
1. Procure the following test equipment. (It must have a valid calibration sticker). a. Hewlett - Packard Co. Digital Voltmeter Model 405 AR Figure A No. 523 or John Fluke Mfg. Co., Inc. Precision AC/DC Differential Voltmeter Model 803 Figure A No. 3141 or John Fluke Mfg. Co., Inc. Precision DC Differential Voltmeter Model 801 2. Power Requirements which are required for this functional test. a. 120 ± 6 VAC 60 ± 3 CPS single phase	

DEMONSTRATION 3-11
SHEET 2 OF 3

DEMONSTRATION 3-11

Functional Test of C-153 Downstage Tester

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Set-up test equipment.	D2-11326 Section 5.0
2. Perform tests.	D2-11326 Section 6.0
	All facilities and equipment are described in detail in D2-11326.
3. Calibration and Alignment of C-153 tester. This function will be required if the C-153 tester does not have a valid calibration and alignment certification.	All facilities, equipment, and procedures are described in detail in D2-14279.

DEMONSTRATION 3-11
SHEET 3 OF 3

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-12

Equipment Cooling Air-Flow Adjustment

REQUIREMENT

STL Document 6680.4-1559, Section 2-h.

OBJECTIVE

To witness adjustment of equipment Cooling Airflow required by newly installed equipment.

SCOPE

Adjustment of equipment cooling airflow of all newly installed will be accomplished per D2-7871, Supplement A, Section 4.2.6 and D2-14652-2. Cooling airflow dampers are adjusted to provide the proper cooling air to LF equipment.

TECHNICAL MANUALS & REFERENCES

D2-7871, Supp. A, Section 4.2.6	Assembly and Checkout Requirements
D2-14652-2	Site Acceptance Test Procedures, Wing II VAFB Air Flow Adjustment.

DEMONSTRATION 3-12
SHEET 1 OF 2

DEMONSTRATION 3-12

Equipment Cooling Air Flow Adjustment

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Adjustment of Equipment Air Flow Dampers	Procedure D2-14652-2

DEMONSTRATION 3-12
SHEET 2 OF 2

DEMONSTRATION FOR WEAPON SYSTEM TECHNICAL APPROVAL

DEMONSTRATION 3-13

Standby and Emergency Power Test

REQUIREMENT

STL Document 6680.4-1559

OBJECTIVE

To verify the automatic switching capability of the Standby and Emergency Power Systems.

SCOPE

The Standby Power Test will be performed to verify that standby power will automatically be supplied to the electrical power subsystem upon loss of commercial power per D2-7871, Supplement A, Section 4.2.9.13 and D2-14652-4.

The Emergency Power Test will be performed to verify that emergency power will automatically be supplied to the electric power subsystem upon the loss of standby power per D2-7871, Supplement A, Section 4.2.9.14 and D2-14652-4.

TECHNICAL MANUALS & REFERENCES

D2-7871, Supp. A	Assembly and Checkout Requirements-VAFB
D2-14652-4	Site Acceptance Procedures-VAFB Wing II LCF and LF Electrical Power Systems.

DEMONSTRATION 3-13
SHEET 1 OF 3

DEMONSTRATION 3-13

Standby and Emergency Power Test

PRE-DEMONSTRATION TASKS	EQUIPMENT REQUIRED
1. The requirements for this demonstration are accomplished in the LF Start-Up Test. Therefore, this demonstration should be coordinated with the LF Start-up Test during checkout to avoid any duplication of effort. The applicable Start-Up test sequences are 20 and 21.	

DEMONSTRATION 3-13
SHEET 2 OF 3

DEMONSTRATION 3-13

Standby and Emergency Power Test

FUNCTIONS TO BE PERFORMED	EQUIPMENT, FACILITIES & PERSONNEL REQUIRED
1. Simulate Commerical Power Failure.	D2-14550-2 Paragraph 7.1.1 Test 21
a. Observe that the system switches over to standby power automatically.	
2. Simulate Standby Power Failure.	D2-14550-2 Paragraph 7.1.1 Test Seq. 20
a. Observe that the system switches over to emergency power automatically.	

DEMONSTRATION 3-13
SHEET 3 OF 3