

TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
3-10	B-58 Flight Control System (U)

STATUS

f. 1932 - Tester returned to Convair for modification. Compliance with E.O. 3860 (Senior Flight-Up). Scheduled return to Crowell 1 September 1960. (U)

g. 1933 - Tester responsibility transferred from Field Maintenance section to Flight Control group of A&E. Tester was calibrated in preparation for 1st Article Demonstration 17 August 1960. Three RFA's were submitted: (U)

(1) RFA #9 - Service T.O. 3307-3-4-12 dated 23 April 1960. (U)

(2) RFA #10 - Labeling Missing on Test Set. (U)

(3) RFA #11 - Revision to Field Maintenance Manual T.O. 3P5-4-2-22 dated 5 August 1960. (U)

The capability of Air Force personnel to independently support critical calibration requirements is questionable at this time. Calibration problem is now under study by Air Force and contractor personnel. (U)

h. 3905 - Unsatisfactory Report (TF-60-761), dated 19 August 1960, was submitted on this item. Due to modifications of PCLA; recommend that sling be redesigned to include turn buckles on cables in order that length adjustment can be made to accommodate all configurations of PCLA's. (U)

i. 3912 - During 1st Article Demonstration 15 August 1960 on 1904 - Test Set - Gyro and Accelerometer Unit this test fixture, which holds the gyro package while 1904 is being utilized, was found to be undesirable and inadequate. Numerous minor discrepancies were noted which have resulted from wear in usage and could be corrected; however, basically the problem is the original design and fabrication of fixture. The 1904 tester, and the Genisco Rate Table that the 3912 fixture is attached to are both precision made and capable of precision adjustments. The 3912 fixture is not precision made, nor precision adjustable, and therefore inadequate to fulfill its designed function properly. A UR is presently being prepared requesting major changes in design. (U)

j. 5917 - Unsatisfactory Report (TF-60-711), dated 26 July 1960, was submitted on this item. "Hinge pin pulley SE-2934 is not properly designed to exert the necessary force for removing hinge pins from B-58 elevons." Recommendation: "Redesign the elevon hinge pin....." (U)

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<p>3. Items not utilized:</p> <p>a. 3902 - No maintenance to date has necessitated the removal of the B-58 rudder, therefore this item has not been utilized in the field to date. (U)</p> <p>b. 3945 - This test fixture not used by maintenance to date. Action required by Convair to effect marriage of fixture to Hyd. Test Stand. (U)</p>	
<p>4. Additional comments:</p> <p>a. An extensive program of data recording, collection, and analysis of both the aircraft flight control system and the tester capabilities is presently in progress. Specific details are to be covered in an SIR at a later date. (U)</p> <p>b. To date 23 RTR's have been written on flight control TGSE; however, no analysis, report, or advisement has been received from the Convair reliability group as to whether the problems submitted are correctable or not. Absence of feed back information of this nature has left many decisions questionable, and created doubts as to which course of action to follow during the interim period. (U)</p>	
<p><u>30 September 1958</u></p>	
<p>1. The Category II TGSE Evaluation Plan that became effective 1 August 1960 designates data collection and TGSE evaluation during normal maintenance usage of the Flight Control system as Category TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation: CSEL 190, 1900, 1903, 1, 1904, 1914, 1921, 1932, 1933, 1934.</p>	
<p>2. Discrepancies:</p>	
<p>a. CSEL 190:</p>	
<p>Flight Utilization:</p>	<p>89.3 Hours</p>
<p>Total:</p>	<p>940.5 Hours</p>
<p>Five (5) Convair RTR's were written on tester components as follows:</p>	

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C-10	B-58 Flight Control System
<p align="center"> 2 Tape Reader (2" - Reader head) 2 Power Supply (2 - Transistors P/N 2N277) 1 Test Points (1 - J2015 open circuit) </p> <p> Combined Air Force and Vender maintenance enabled tester to support mission requirements. A new T.O. covering trouble shooting procedures is scheduled for release in October. Analysis of the tester tape is also scheduled to commence in October upon the completion of new tape for Flight Control System Mobile Test Set (GSEL 1903. 1). </p> <p> b. GSEL 1903. 1 </p> <p> Period Utilization 2.2 hours Total 1386.2 hours </p> <p> Two (2) Convair RTFR's were written on tester components as follows: </p> <p> 2 - Tape Reader (2 - Reader heads) </p> <p> Soroban Tape Reader problems are being studied and will be the subject of a SIR. </p> <p> Since 22 August 1960 a combined Air Force and Vender team have been working to produce, as quickly as possible, a new tester tape with accompanying tech data which will give to the operating personnel a significantly higher degree of reliability and confidence in the tester and its designed capability. The specific objectives of the test tape analysis are as follows: </p> <p> (1) Detailed Procedure: </p> <p> (a) Review purpose of test (b) Ascertain whether there are similar or other identical tests on tape. (c) Confirm the necessity for the basic test purpose (reference (1) above). (d) Confirm test procedures. (e) Eliminate any redundant testing and attempt to utilize tester to its fullest automatic capability. (f) Determine desired revisions to procedures, to test nominals and/or test tolerances. </p>	

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- (g) Complete documentation of all decisions and pertinent information.
- (h) Devise, where practical, new tests and procedures to be added.

Tabulate any tests desired, but not incorporated in new tape due to present tester limitations.

- (2) Re-program and punch new tape.
- (3) Simultaneously, prepare T.O. revisions.
- (4) Run new tape, for compatibility, on Convair aircraft.
- (5) Deliver tape to Carewell - 15 October 1950.
- (6) Establish a separate review to assure GSEL 1901 tape compatibility with revised GSEL 1903.1 tape.

A summary of the flight control system GSEL 1903.1 (F/N 13933) tester tape review to date is as follows:

(1) Completion of task	80%
(2) Total Changes	57%
(a) Specification changes	29%
(b) Tests deleted	28%

c. GSEL 1931 - This test set is a suitable means to establish "electrical zero" of the control surface position transmitters with respect to the control surfaces and FCLA neutral position. This is necessary in order to have the position transmitters properly aligned or calibrated with respect to control surface position.

(1) The tester has been used continuously to accomplish this task; however, due to the individual characteristics of each aircraft, when the tester zeroing is accomplished and tester disconnected, the system transmitter must, in most cases, still be "wet-nulled." This requirement actually cancels out the utility and basic function of the tester. What is needed here appears to be a parallel hook-up which would allow the zeroing of transmitters with the aircraft power source on. At the present time tester power source only is used to null transmitter, the cannon plug to aircraft power source is disconnected. An engineering study is now being initiated to determine the practicability

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of devising a "Y" connection and/or parallel hook-up in which aircraft and tester power, are used simultaneously through harnesses, or perhaps utilize only aircraft power in both system and tester.

d. GSEL 1932 - Tester to be returned to 43 AEMS on 5 October 1960.

e. GSEL 1933 - Period Utilization 35. hours (approx)

Total 657.5 hours

Four (4) Convair RTFR's were written on tester components as follows:

4 - Mach comparators (4 relays)

Tester capability, reliability, and performance has been entirely unsatisfactory since the first article demonstration 17 August 1960. Tester repeatedly fails self test operation. Malfunctions in four cases have been traced to burned-out relays. The relays were replaced and reported on RTFR's. For the other malfunctions, the cause, or causes, remain unknown.

Convair and special Eclipse - Pioneer technicians are trying to determine causes. Testers, when fixed, will require calibration again prior to use.

f. GSEL 1934 - Period Utilization 15.7 hours

Total 134 hours

One (1) Convair RTFR was written:

(1) Broken cover hinges.

This is the second occurrence of the lock open cover hinges breaking. The hinges appear to be crystallized. The break, adjacent to the pivots, is located at the smallest cross-sectional area. Hinges were returned to Convair for diagnostic check.

g. GSEL 3912 - Reference Specific Item Report Nr G-10-1, 28 September 1960 for a detail report of the inadequacies of this item of TCSE.

h. GSEL 3945 - Eclipse-Pioneer, Convair, and Air Force personnel started working on the mating of this test fixture 26 September 1960. Progress to date has been slow. Elevator, elevon, and rudder servo's have been acquired for operational check out of the test fixture mated to the hydraulic test stand. Vendor personnel are revising listing technical data to include corrected procedures, more adequate instructions, photographs and diagrams where applicable and necessary. Formal approval of test

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fixture tester mating is presently scheduled for the week of October 10th.

3. Items not utilized:

- a. GSEL 3902 - No maintenance requirement.

4. Additional comments:

- a. To date 35 RTFR's - no feedback information.
- b. Added emphasis and priority is essential in regard to the early development of a 43 BW Flight Control TCSE calibration capability. Present calibration of testers cannot be accomplished by Air Force Personnel for the following reasons.
 - (1) Inadequate or non-existent calibration procedures.
 - (2) Lack of special calibration equipment.
 - (3) Identity of special calibration equipment so that procurement through channels could be initiated.
 - (4) Comprehensive listing of testers calibration requirements.

The critical urgency of the present lack of tester calibration capability must not be minimized. In most cases, shop testing and trouble shooting of flight control sub-system components is entirely dependent upon the individual capability of a single tester. If the one special tester is inoperative, the 43rd BW loses the support and trouble shooting capability of that tester for the entire wing.

At the present time a lack of spares in pre-issue for the major components and sub-assemblies of flight control line and shop testers and aircraft flight control sub-assemblies makes it impossible to utilize effectively testers during inactive time for purposes of training, checking trouble shooting procedures, and adequacy of technical data. For example, a reader head was removed from S/N 10 GSEL 1903.1 for use on S/N 1-CSEL 1901 in July 1960. The defective reader head has not yet been repaired and returned to CAFE, and S/N 10 - GSEL 1903.1 has been inoperative since the reader head removal.

Procurement and stocking of spare critical and hi-value items for aircraft sub-system and testers such as reader heads, air data computer, PCLA, CUA's, etc., would definitely strengthen the present TCSE support capability and accelerate the engineering and evaluation program effort.

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B-58 Flight Control System

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Of significant interest in October, will be a conference between Air Force and Convair regarding numerous recommendations for modification of the various flight control systems. Objectives of consolidating the proposed modifications for approval are to minimize re-cycling of B-58 aircraft factory modification program, and maximize flight control system and engine support capability at the earliest date and at the lowest cost.

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PROJECT NUMBER G-11		PROJECT TITLE E-58 Hydraulic System TGSE (U)	
REPORT SECTION C-3 of Part IV		PROJECT OFFICER Capt W. R. Southerland	
PROBLEM To evaluate the TGSE associated with the E-58 Hydraulic System. (U)			
REQUEST AGENCY E-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated January 1961	AUTHORIZATION APR 80-14
STATUS Nine Key Items: 6 Testers, 3 Ground Handling, 0 Tools (U)			
<u>GSEL</u>	<u>NOMENCLATURE</u>	<u>P/N</u>	<u>1st Art Del Date</u> <u>Est Comp Date</u>
2001	Pumping Unit-Hyd. Port Eng.	SE2940	Mar 60 Dec 60
2002	Pumping Unit, Hyd, Port Elect.	SE2941	Nov 59 Dec 60
2003	Kit Assy-Hyd Fluid Contam CK	SE2882	Nov 59 Dec 60
2004	Stand Assy-Hyd Comp Test	Mod 100	Dec 59 Jan 61
2009	Holding Fixture Kit	SE8817	Feb 60 Jan 61
2011	Pumping Unit-Hyd, Elect Mot Dr	SE3785	Aug 60 Jan 61
4001	Cart Assy-Hyd Fluid Servicing	SE2982	500 60 Jan 61
4002	Stand Assy-Perm Elem Filter	SE2888	Nov 59 Dec 60
4004	Kit Assy-Hyd System Flushing	SE2916	Feb 60 Dec 60
			(U)
<u>31 May 1960:</u>			
1. Items in use with no reported discrepancy: 2004, 2009, 4002. (U)			
2. Discrepancies:			
a. 2001 - Four misc. failures reported in Convair RTFR's. One misc. failure reported in TF UR 60-559. (U)			
b. 2002 - Twenty RTFR's written by Convair personnel. Drive shaft, sending unit, regulator and misc. deficiencies reported in TF UR's 60-338, 60-365, 60-558, 60-559, 60-583 & 60-584. (U)			
c. 2003 - TF UR 59-1512 reported numerous deficiencies in this item. AMC Form 118J dated 18 March 1960 stated that these			
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G-11	B-58 Hydraulic System TGSE (U)
STATUS	
<p>items would be corrected on Serial Nr 8. This corrective action will be evaluated upon receipt of kit with corrective action incorporated. (U)</p>	
<p>d. 4004 TF UR 52-1512 reported numerous deficiencies on Unit Sr Nr 1. ACA 4-101-20661-4 should correct these deficiencies. (U)</p>	
<p><u>31 August 1960:</u></p>	
<p>1. 2001 - In commission rate of 62% for past 62 days. In commission rate of 46.4% for past 35 days. (U)</p>	
<p>2. 2002 - In commission rate of 58.4% for past 62 days. In commission rate of 51.3% for past 35 days. (U)</p>	
<p>The primary problems with 2001 and 2002 are pressure and flow control motors. United Control Systems, Inc., Dennison Engineering Company and Convair engineers met with the 43rd Bomb Wing personnel the 1st week of August to discuss this problem area. Interim operating procedures to reduce failure have been put into effect. An engineering change is being processed to eliminate this problem. (U)</p>	
<p>3. 2003 - Kit is satisfactory except for microscope--Convair is presently procuring a new type microscope to replace item in present Tactical Kits. (U)</p>	
<p>4. 2004 - TF UR 60-696 lists DC control circuit deficiency--otherwise item is used approximately once monthly and is satisfactory. (U)</p>	
<p>5. 2009 - Used with 2004--no reported discrepancies. (U)</p>	
<p>6. 2011 - Had 1st Article Demonstration August 1960. Minor RFA's were written, however, unit is performing satisfactorily with the exception of a leaking nitrogen pressure regulator. This type regulator will be replaced as an answer to one RFA. (U)</p>	
<p>7. 4002 - Specific Item Report J-11-1, Dated 31 August 1960, reported on the 43DTES and Convair evaluation of the 4002 (P/N SB2888) Permanent Element Cleaning Stand compared to the ultrasonic cleaning method used by Convair, Fort Worth. This report recommended that expedited action be taken to procure an ultrasonic cleaning stand for the 43rd Bomb Wing. (U)</p>	
<p align="center">IW-155</p>	

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G-11	B-58 Hydraulic System TGSE (U)
<p>STATUS</p> <p>8. 4004 - Used a minimum of once weekly with no reported deficiencies since ACA 4-101-20661-4 has been accomplished. (U)</p> <p><u>30 September 1960:</u></p> <ol style="list-style-type: none"> The Category III TGSE Evaluation Plan that became effective 1 August 1960 designates data collection and TGSE Evaluation during normal maintenance usage of the Hydraulic System peculiar TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation: GSEL: 2001, 2002, 2004. GSEL 2001 and 2002. Interim operating procedures have reduced the number of pressure and flow control motor failures. ACA 4-102-70562 and -70563 will add dynamic strategies to these matters. In commission rate for 2001, <u>75.3%</u>. In commission rate for 2002, <u>74.0%</u>. GSEL 2003. No change from 31 August 1960 status. GSEL 2004. Interim operating procedures have reduced for approximately 24 hours during this period. GSEL 2005. Checked with 4004 - No reported discrepancies. GSEL 2006. Interim operating procedures have reduced by 42.5 hours. No RFA's have been cleared. GSEL 2007. Interim operating procedures have reduced by 27.5 hours that drain valve. Interim operating procedures have reduced by 27.5 hours. EDD of 10.0 is 10.0. GSEL 2008 and 2009. No change from status from 31 August 1960 report. 	

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PROJECT NUMBER G-12		PROJECT TITLE B-58 IBDA System TGSE (U)	
REPORT SECTION C-3 of Part IV		PROJECT OFFICER Capt C. E. Fyock	
PROBLEM To evaluate the TGSE associated with the B-58 IBDA System. (U)			
REQUEST AGENCY B-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated February 1961	AUTHORIZATION AFR 8C-14
STATUS Five Key Items: 5 Testers, 0 Ground Handling, 0 Tools (U)			
<u>GSEL</u>	<u>NOMENCLATURE</u>	<u>F/N</u>	<u>1st Art Del Date</u> <u>Est Comp Date</u>
2101	Test Set-IBDA System	1401	Apr 60 Feb 61
2102	Test Set-IBDA Data Package	1402	Nov 59 Nov 60
2103	Test Set-Component, IBDA D Pack	1404	Nov 59 Per 61
2104	Test Set-IBDA Camera	1403	Nov 59 Nov 60
2105	Fixture Assy-Boresight	SE2703	Nov 59 Feb 61
			(U)
<u>31 May 1960:</u>			
1. Items in use without reported discrepancies, 2103, 2104, 2105. (U)			
2. Discrepancies:			
a. 2101 - UR (TF60-603) submitted on time digitalizer in data package resetting before test cycle is completed. After approximately 10 hours of operation tester gear train became jammed; tester sent to Convair as UR exhibit. (U)			
b. 2102 - Test Set would not operate camera light "on" on system test set. Tester returned to Convair for required maintenance action, because A&E shop does not have adequate technical data nor the trained personnel at this time to accomplish maintenance task. (U)			
<u>31 August 1960:</u>			
1. A 1st Article Demonstration on GSEL 2101, 2103 and 2104 was conducted on 18-19 August 1960. Due to the inadequacy of Technical Data (T.O.'s 11B1, 2-2-2, 33D2-2-2-2, 33D2-26-2-3, 33D2-26-2-11 and 33D2-26-2-12) the demonstration was cancelled on GSEL 2101 and 2103. The 1st Article Demonstration			

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STATUS	
<p>on these items will be rescheduled at a later date. The First Article Demonstration on GSEL 2104 was completed successfully. Thirteen RFA's were generated during the demonstration, five of which were written on Tech Data encompassing the entire manuals. (U)</p> <p>2. 2101 - Of the three testers assigned, only one has been operated during this reporting period for a total of 30 hours. Seven hours were expended to check three IBDA Data Package LRU's, 15 hours were used for the First Article Demonstration, and 8 hours were used for OJT training. The remaining two testers are at Convair for repair and calibration. UR's TF 60-603 and TF 60-721 submitted. (U)</p> <p>3. 2102 - Test set is used in conjunction with 2101. Two tests have been made on the IBDA Data Package with satisfactory results. The limited number of tests performed has been due to the low incommision rate of 2101. (U)</p> <p>4. 2103 - Test set has been used satisfactorily on a limited basis. This test set is used in conjunction with 2101. (U)</p> <p>5. 2104 - This test set has been used on an average of six times per day with no reported discrepancies. (U)</p> <p>6. 2105 - Two items were delivered in an unsatisfactory condition. UR submitted. This fixture was used once with unsatisfactory results. (U)</p>	
<u>30 September 1960:</u>	
<p>1. The Category III TGSE Evaluation Plan that became effective 1 August 1960 designates data collection and TGSE evaluation during normal maintenance usage of the B-58 IRDA System TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation: GSEL 2101, 2103, and 2104.</p> <p>2. GSEL 2101 - Test Set, Serial No. 2, was in commission during the reporting period and was used 6.5 hours without any discrepancies. Serial No. 9, which has been out of commission since August 1960, is at Convair for repair.</p> <p>3. GSEL 2103 - The one Test Set assigned has been in commission during the reporting period and has been used 6.3 hours without any discrepancies.</p> <p>4. GSEL 2104 - This test set was used 0.4 hours and has been in commission during the reporting period.</p>	
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PROJECT NUMBER E-13		PROJECT TITLE E-56 MNAS IGSE (U)	
REPORT SECTION C-3 Part IV		PROJECT OFFICER CMS R. V. Kiff	
PROBLEM To evaluate the IGSE associated with the E-56 MNAS. (U)			
REQUEST AGENCY E-56 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated May 1961	AUTHORIZATION AFR 80-14
STATUS Four Key Items Authorized: Four Testers (U)			
<u>USEL</u>	<u>NOMENCLATURE</u>	<u>P/N</u>	<u>1st Art Del Date</u> <u>Est Comp Date</u>
2200	Test Set-AA-AQ/IFF, Modals	201-10520	Jan 60 (Aug 60) May 61
2201	Tester-Confidence, AQ/IFF	201-10150	Dec 59 Dec 60
2207	Test Set-Component AA-AQ/IFF	201-22999	Jan 60 May 61 (Jun 60)
2231	Tester-Confidence, AA/IFF	201-10147	Dec 59 Dec 60 (U)
<u>31 May 1960:</u>			
1. Items in use without reported discrepancies: 2201, 2231. (U)			
2. Discrepancies.			
a. 2200 and 2207 have been returned to the vendor for modification. (U)			
3. 2200 - Composite Antenna, Remote Test, P/N 201-12405 is an authorized key item and cannot be evaluated until ancillary equipment is furnished. WADD Labs have requested that evaluation be delayed. (U)			
<u>31 August 1960:</u>			
1. 2200 - The tester was returned to Carswell 4 August 1960. Self check tape has been run successfully. The tester has been used three times to check aircraft systems. Most functions of the tester appear to be satisfactory but erratic results were			

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B-58 MNAS TGSE (U)

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experienced on some tests which were apparently caused by interference from the local GCA interrogator. (U)

2. 2207 - The tester was returned to Carswell 24 June 1960. A vendor engineer checked out the tester and demonstrated its use to A&E shop personnel. A 1st Article Demonstration was completed 22 July 1960. Only three RPA's were written, two on technical data and one on the lack of identification of an attenuator dial. Technical orders used during the demonstration had been thoroughly checked and correction made in pencil prior to the demonstration. RPA #1 was written on the penciled corrections to ensure they were incorporated in the next Technical Order change. A total of 112 pages in three applicable Technical Orders were affected. The tester has been in satisfactory daily use since the demonstration. (U)

30 September 1960:

1. The Category III Evaluation Plan that became effective 1 August 1960 designates data collection and TGSE evaluation during normal maintenance usage of the peculiar TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation: CSEL 2200, 2201, 2207 and 2231.

2. CSEL 2200 - Tester was operated 19.1 hours during the month of September. Most of the operating time resulted from daily self checks. Interference from the local GCA interrogator causes the tester to read high on some pulse count checks. An agreement has been made between maintenance and GCA operating personnel to restrict GCA modes of operation when the tester is being used to check out an aircraft system. This will provide interim relief from the interference but a permanent fix will be required before the tester operation is considered satisfactory.

3. CSEL 2201 - The tester was used twice this month to check out installed aircraft systems. Results were satisfactory both times. Limited use of the tester was due to lack of maintenance requirements.

4. CSEL 2207 - Normal system maintenance provided a very small workload for the tester this month. The tester was operated 21.9 hours, primarily for daily tester self checks. The low band multiplier module became intermittent and was replaced. Replacement of the module has apparently compromised the calibration of the low band RF Generator Drawer. Test equipment required for calibration is not available locally. Maintenance personnel are preparing request for U. A. L. changes which should provide a more realistic authorization. Calibration of the tester does not appear to have deteriorated to a point which would prevent its use.

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B-56 MNAS TGSE

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5. GSEL 2231 - Tester was not used this month and has required no maintenance. Systems which would normally require use of the tester, have apparently had little or no use and consequently have required no maintenance.

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PROJECT NUMBER G-14		PROJECT TITLE B-58 Pod System TGSE (U)	
REPORT SECTION C-3 of Part IV		PROJECT OFFICER Capt W. R. Southerland	
PROBLEM To evaluate the TGSE used to support the B-58 Pod System. (U)			
REQUEST AGENCY B-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated December 1960	AUTHORIZATION AFR 80-14
STATUS Nine Authorized Key Items: 8 Ground Handling, 1 Tool (U)			
<u>GSEL</u>	<u>NOMENCLATURE</u>	<u>P/N</u>	<u>1st Art Del Date</u> <u>Est Comp Date</u>
4301	Cover Assy-MB-1 Pod Protect	SE2771-1	Feb 60 Dec 60
4306	Sling Assembly-Pod Handling	SE2799-1	Feb 60 Dec 60
4310.1	Trailer Assy-Pod	SE2550-1	May 60 Dec 60
4311.1	Trailer Assy-Trans	SE2551-1	May 60 Dec 60
4313.1	Cradle Assy-Pod T&I	SE2553-1	May 60 Dec 60
4318.1	Cradle Assy-Pod T&I	SE2554-1	May 60 Dec 60
4319.1	Adapter-MB Pod, AFT Cradle	SE2555-1	May 60 Dec 60
4320.1	Adapter Assy-MB Pod, Fwd Crd	SE2556-1	May 60 Dec 60
6302	Kit Assy-Pod Installation	SE2222-1	May 60 Dec 60
2702	Test Set MB-1 Pod	SE2994	May 60 Dec 60
<u>31 May 1960:</u>			
1. Above items plus key items GSEL 4307 (P/N SE-2959), 4312.1 (P/N SE2552-1), 4314.1 (P/N SE2557-1), 4316 (P/N SE2778-1), 4321.1 (P/N SE2558-1) and 2702 (P/N SE2994) are being evaluated during EBT of Pod System to be completed o/a 10 June 1960. (U)			
2. There are 38 total key items applicable to MB and/or TOP Pods. ADS ECL's 681 & 691 are being revised to include POD TGSE. Equipment will be evaluated as received. (U)			
<u>31 August 1960:</u>			
1. An Engineering Evaluation Test of the Pod System Equipment was conducted by a composite team of AFSWC, B-58 Test Force, and SAC personnel under the supervision of AFSWC officers with Sandia			

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G-14	B-58 Pod System TGSE (U)
STATUS	
<p>Corporation and Convair, Fort Worth Engineering Consultants. A partial objective of this test was to determine the functional and engineering suitability of the pod, its ancillary equipment and its operating procedures when associated with the B-58 aircraft. As of 31 August 1960 the final report on this test has not been received by the 43rd Bomb Wing. (U)</p> <p>2. The modified positioning trailer has not been received for evaluation. (U)</p> <p>3. Evaluation of the unmodified positioning trailer has been hindered by the mismatch of the pod cradle assemblies and the pod. Only four (4) pods have been modified to accept the Tactical Handling equipment. An ACA is pending on this pod modification. (U)</p> <p><u>30 September 1960:</u></p> <p>1. The Category III TGSE Evaluation plan that became effective 1 August 1960 designates data collection and TGSE evaluation during normal maintenance usage of the pod system peculiar to TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation. GSEL 4310.1, 4311.1, 2702.</p> <p>2. GSEL 2702 - Two tactical items have been delivered to the 28th MMS. Serial #4 would not function properly when received and was returned to Convair where a leak was found in the pneumatic system. Serial #1 worked satisfactorily until modified per ACA 4-102-70529 which modified the tester to check the arming circuit. Subject tester had an electrical failure described in EUR 43BW 60-18.</p> <p>3. GSEL 4313.1 EUR 43BW60-11 submitted on GSEL 4310.1 should have been on failure of brake assembly of GSEL 4313.1 to hold pod stationary on trailer rails with sudden pitch down of pod nose during down loading.</p> <p>4. Item 1 in the 31 August status report is unchanged.</p> <p>5. GSEL 4310.1: Three tactical items on hand, Serial Numbers 5, 7, & 8. All three units have hydraulic problems that are presently under investigation by Convair and the 43rd DTES.</p>	
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TEST AND EVALUATION PROJECT STATUS SHEET

PROJECT NUMBER G-15		PROJECT TITLE B-58 Weapon Control System TGSE (U)	
REPORT SECTION C-3 of Part IV		PROJECT OFFICER Capt C. B. Fyock	
PROBLEM To evaluate the TGSE used to support the B-58 Weapon Control System. (U)			
REQUEST AGENCY B-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated October 1961	AUTHORIZATION APR 80-14
STATUS Twenty Authorized Key Items: 9 Testers, 8 Ground Handling, 3 Tools (U)			
<u>GSEL</u>	<u>NOMENCLATURE</u>	<u>P/N</u>	<u>1st Art Del Date</u> <u>Estimated Comp Date</u>
2401	Test Set-Weapons Cont Sys, Mobile	1975000	--- Oct 61
2403	Test Set-Line Repl Unit, Computer	1975002	--- Oct 61
2404	Test Set-Line Repl Unit Inertial	1975003	Jul 60 Jul 61
2406	Test Set-Line Repl Unit, Radar	2375393	--- Oct 61
2409	Test Set-Amplifier	1975004	Jul 60 Jul 61
2413	Test Set-System, Confidence	1950000	Dec 59 Dec 60
2414	Calibrator-Magnetic Compass	1780606	Feb 60 Dec 60
2415	Fixture Assy-Axis Align	487103	Mar 60 Jun 61
2417	Kit-Simulacra Align & Calb	489806	--- Jun 61
4410	Sling Assy-Search radar RTM	SE8798	Nov 59 Dec 60
4411	Lock Assy-Longeron Pos	SE2611-1	Mar 60 Sep 60
4412	Truck Radome, Search Radar	486909	May 60 Oct 60
4413	Truck, Antenna, Search Radar	486908	Aug 60 Feb 60
4414	Fixture-Holding, RTM Unit	487473	Feb 60 Dec 60
4415	Fixture-Holding, RCVR Ant	487267	Feb 60 Oct 60
4416	Fixture-Holding, XMTING Ant	487268	Feb 60 Oct 60
4417	Cases-LRU Transit	487462	Mar 60 Dec 60
6401	Tool Kit-Computer LRU	486948	Mar 60 Dec 60
6403	Tool Kit-Inertial LRU	486947	Mar 60 Dec 60
6408	Kit-Tool, Electronic Altimeter	487474	Feb 60 Dec 60
(U)			

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-15	B-58 Weapon Control System TGSE (U)
STATUS	
<p><u>31 May 1960:</u></p>	
<p>1. Items in use without reported discrepancies:</p> <p>a. 2414 - Used once without malfunction. (U)</p> <p>b. 6409 - Sealing Unit, Astrotracker, P/N 628268. This key item is not authorized. One on hand used four times without malfunction. (U)</p> <p>2. Discrepancies:</p> <p>a. 2413 - Difficulties encountered in using single star simulacrum previously reported. EOCP condition for flexible waveguide assemblies P/N 2650775 and P/N 2650776 since 16 March 1960. (U)</p> <p>b. 2415 - TF UR's 60-572, -573, -574, -575, -576, and -577 submitted pointing out major discrepancies of the basic equipment and instructions for use. Convair and Sperry are attempting to resolve Doppler Axis Alignment problems. (U)</p> <p>c. 4410 - TF UR 60-538 submitted on inadequacies of item to perform satisfactorily. (U)</p> <p>d. 4414 - TF UR's 60-537, -538 & -539 submitted on inadequacies of this item. (U)</p>	
<p>3. Items not utilized:</p> <p>Because of no A/C system support requirement the following items have not been used to date: 4411, 4412, 4415, 4416, 4417, 6401, 6403, 6408. (U)</p>	
<p><u>31 August 1960:</u></p>	
<p>During this reporting period a detailed coordination plan for 1st Article Demonstration has been prepared for the shop testers and forwarded to higher headquarters. A detailed coordination plan for the mobile WCSO Test Set is being prepared and will be forwarded to higher headquarters. (U)</p>	
<p>1. 2401, 2403, 2406 - Estimated delivery date o/a 1 October 1960. (U)</p> <p>2. 2404 - Delivered on 22 July 1960. 1st Article Demonstration was initiated on 1 August 1960. During the first four weeks of</p>	

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER

G-15

PROJECT TITLE

B-58 Weapon Control System TGSE (U)

STATUS

the demonstration on F-1, 336 hours of tester time were available for self test and prime LRU testing. The tester has operated (Power "on") for 230 hours. Thirty-two prime unit tests were run and twenty-nine self tests were run. During the course of these tests twenty-six Reliability Trouble and Failure Reports (RIFR's) and forty Requests for Alteration or Study (RFA's) were generated. Approximately 75% of all RFA's generated were on Technical Data. The low utilization time on the tester is primarily attributed to the non-availability of TGSE spares. To date the test set has not demonstrated a capability to support the tactical operation of ASQ-42V equipped B-58 aircraft for the following reasons: (U)

- a. Inadequate technical data. (U)
- b. Test tapes with improper sequencing and/or lack of required tests. (U)
- c. Incomplete data on compatibility of a prime LRU which passed the tester when "married" to the prime system. (U)

3. 2409 - Delivered on 27 July 1960. 1st Article Demonstration was initiated on 1 August 1960. During the first four weeks of the demonstration on F-1, 312 hours of tester time were available for self-test and amplifier testing. The tester was operated (Power "on") for 191 hours. One hundred and fifty-nine prime unit amplifiers were tested which represent fifty-nine types out of seventy-five. Fifty-five self-tests were run. Fourteen RIFR's were submitted and sixty-five RFA's generated. Approximately 80% of the RFA's generated have been on Technical Data. To date the test set has not demonstrated a capability to isolate to a malfunctioning amplifier component because: (U)

- a. Test logic for secondary testing is incomplete. (U)
- b. Tech data inadequate. (U)
- c. Test tapes with erroneous parameters (known bad amplifiers checked out good on tester). (U)
- d. Incomplete compatibility data. (U)

4. 2413 - EOCF status unchanged since last report. An additional problem regarding poor battery life was presented to the B/N TGSE Problem Area Meeting on 8 April 1960 as Problem Nr. G-50. This problem is currently open. (U)

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

OBJECT NUMBER	PROJECT TITLE
G-15	E-58 Weapon Control System TGSE (U)
<p>STATUS</p> <p>5. 4409 - Cases, Rack and Panel Transit, P/N 487012. Three transit cases of this set were not compatible with the LRU's. This problem was presented to the E/X TGSE Problem Area Meeting on 8 April 1960 as Problem Nr. G-48. This problem is currently open. (U)</p> <p>6. Items used daily with no reported discrepancies:</p> <p>4411 4412 4415 4416 6403 (U)</p> <p>7. Items not used because of:</p> <p>a. No A/C support requirements - 2414, 6408. (U)</p> <p>b. Non-delivery - 2417, 6401. (U)</p> <p>c. Unsatisfactory condition - 2415. (U)</p> <p>d. Newly delivered - 4413 (delivered 26 August 1960). (U)</p> <p>e. 4417. (U)</p> <p>8. Items used daily but are unsatisfactory as reported in May 1960:</p> <p>4410 4414 (U)</p> <p>-----</p> <p>9. The Original ITC TGSE Evaluation Plan that became effective 1 August 1959 was revised. Unit collection and TGSE evaluation during the reporting period of the E-58 Weapon Control System TGSE and related problems require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation. ITC# 2401, 2402, 2404, 2405, 2409, 2413 and 2414. During this reporting period a detailed coordination plan for First Article Demonstration has been prepared for the Mobile W300 Test Stand and has been forwarded to higher headquarters.</p> <p>10. ITC# 2401, 2405, 2406 - Estimated delivery date c/a 25 October 1960.</p> <p>11. ITC# 2413 and 2414 - Status the same as reported on 31 August 1960.</p> <p>12. ITC# 2404 and 2409</p> <p>13. The First Article Demonstration is continuing on these two items. The progress made during this reporting period on the</p> <p align="center">IV 167</p>	

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-15	B-58 Weapon Control System TQSE

STATUS		GSEL 2404 (ILRUTS)		GSEL 2409 (WTS)	
		1 Sep 60	1st Art.	1 Sep 60	1st Art.
		to	Demons.	to	Demons.
		30 Sep 60	Totals	30 Sep 60	Totals
371	707			371	683
224	454			159	350
14	46			54	233
26	55			29	84
47*	102**			21	79
16	36			13	27

*Includes 10 General RPA's applicable to all B/N Testers.
 **Includes 36 General RPA's applicable to all B/N Testers.
 NOTE: Above data on P-1 Testers only at CAPB.

b. 2404 - The overall status of the First Article Demonstration which is being conducted at Carswell AFB on P-1 model testers and at Convair on X-2 model testers is as follows:

- (1) All primary and secondary self tests have been verified
- (2) 27 of 56 sub-assembly tests have been verified on the Prime Navigation Stabilization Unit (PNSU), whereas 7 of 85 sub-assembly tests have been verified on the Auxiliary Reference Unit (ARU).
- (3) All secondary tests have been verified on the PNSU, whereas 74 of 84 secondary tests have been verified on the ARU.
- (4) All primary functional and primary continuity tests have been verified on both the PNSU and ARU.
- (5) All sub-assembly tests have been verified on the Vertical Accelerometer Unit (VAU).

c. GSEL 2409 - All 75 type amplifiers of the ASQ-42V B/N System have been tested through primary test. 27 amplifiers have been partially tested in secondary test. Handbook procedures for secondary testing of amplifiers are being revised by the Contractor and should be available by December 1960; therefore, secondary testing at this time is practically nil. Of the 75 type amplifiers tested, 25 were actual malfunctioning amplifiers from prime equipment, the remaining 50 were supplied from pre-issue and/or spares. During the

TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-15	B-58 Weapon Control System TGSE

STATUS
 limited testing of amplifiers & incompatibility problems between prime system and/or ILRUTS sub-assembly tests and the ATS have been identified. At least 8 more amplifiers are suspected as being incompatible. Compatibility of these amplifiers will be proven upon delivery of secondary test procedures, the Radar LRU Test Set and Computer LRU Test Set.

4. On 24 September an RFA Review Meeting on the ILRUTS and ATS was held at Convair, Fort Worth, with representatives from B-58 WSFO, Headquarters SAC, AFPR, 43AEMS, 43DIES and Contractor in attendance. The purpose of this meeting was to review 239 RFA's generated as of 22 September. 191 RFA's were either corrected or were in the process of being corrected by the Contractor as Category I items (Contractor Deficiency) prior to the review. Air Force Board action was required on 48 RFA's. The following is a summary of the board actions on the 48 RFA's.

(1) Contractor deficiency	21
(2) Desirable item	3
(3) Study item	8
(4) Rejected by board	15
(5) Held in abeyance	1

5. Additional Comments - Calibration of B/N TGSE Automated Testers poses a problem which at this time has not been resolved by the Contractor. First, is there a need for calibration if the Tester passes self test? If the requirement exists T.O. procedures must be outlined, calibration equipment procured and AF area of responsibility must be delineated as to Field Maintenance Shop, PME Laboratory and/or Depot. Until this calibration problem is solved, the B/N A&E Maintenance Field Shop would lose maintenance capability on B/N Inertial LRU's if, for example, the Inertial LRU Test Set required calibration.

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TEST AND EVALUATION PROJECT STATUS SHEET

PROJECT NUMBER		PROJECT TITLE		
G-16		B-58 Spike Positioning System TGSE (U)		
REPORT SECTION		PROJECT OFFICER		
C-3 of Part IV		Capt W. R. Southerland		
PROBLEM				
To evaluate the TGSE associated with the B-58 Spike Positioning System (U)				
REQUEST AGENCY		DATE INITIATED	COMPLETION DATE	AUTHORIZATION
B-58 Test Force		May 1960	Est Apr 1961	AFR 80-14
STATUS				
Four Key Items: 3 Testers, 1 Ground Handling, 0 Tools (U)				
<u>CSEL</u>	<u>NOMENCLATURE</u>	<u>P/N</u>	<u>1st Art Del Date</u>	<u>Est Comp Date</u>
2602	Test Set-Spike Pos Sys Pneumatic	UG291C-1	Feb 60	Dec 60
2604	Test Set-Spike Pos Sys Elect	UG910A-1	Feb 60	Dec 60
2605	Tester-Actuator, Spike Pos	SE8808	Feb 60	Apr 61
4601	Fixture Assy-Spike and AC Gen	SE2890	Feb 60	Comp May 60
				(U)
<u>31 May 1960:</u>				
1. Items in use with no reported discrepancy: 2602, 2604. (U)				
2. Discrepancies:				
a. 4601 - Item was evaluated and found unsatisfactory for SAC maintenance concept reference TF UR 60-494 dated 22 April 1960. Item has been cancelled and satisfactory interim items CSEL 3617 and 4613 substituted. (U)				
3. Items not used.				
a. 2605 - Aircraft and Engine Technical Orders do not clearly state the requirement for use of this item. FSE 45D-5A1-6-2-2 dated 12 December 1959 has not been incorporated in TO 5A1-6-2-2 to date. Action is being taken to bring this discrepancy to the attention of the proper Convair personnel. (U)				

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-16	B-58 Spike Positioning System TGSE (U)

STATUS

31 August 1960:

1. 2602 - Item is satisfactory for shop use, utilized approximately three times weekly. Item is not satisfactory for flight line use as vibration causes calibration problems. FSE 4-101 states that vibration tests were performed on components and vibration test will not be performed on unit. (U)
2. 2604 - Used approximately once each day with good results. (U)
3. 2605 - No change from May 1960 status. (U)

30 September 1960:

1. The Category III TGSE Evaluation Plan that became effective 1 August 1960 designates data collection and TGSE Evaluation during normal maintenance usage of the spike positioning peculiar TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation: GSEL 2602, 2604, 2605.
2. GSEL 2602 and 2604: No change from 31 August status.
3. GSEL 2605: Item is scheduled for operational check and Technical Data review 4 October 1960. Item has been used a total of 18 hours.

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TEST AND EVALUATION PROJECT STATUS SHEET

PROJECT NUMBER G-17		PROJECT TITLE B-58 Radar Beacon System TGSE (U)	
REPORT SECTION G-3 of Part IV		PROJECT NCO CMS M. V. Kiff	
PROBLEM To evaluate the TGSE associated with the B-58 Radar Beacon System. (U)			
REQUEST AGENCY B-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated September 1961	AUTHORIZATION AFR 80-14
STATUS Four Key Items Authorized: 4 Testers (U)			
<u>GSEL</u>	<u>NOMENCLATURE</u>	<u>PSN</u>	<u>1st Art Del Date</u> <u>Est Comp Date</u>
2801	Test Set-Confidence, RV Bea	105044-1	30 Aug 60 May 61
2802	Test Set-Performance	1050530	--- Jun 61
2803	Test Set-Components	1054651	--- Sep 61
2851	Test Set-Confidence, PI Bea	1050438	--- May 61
(U)			
<u>31 May 1960:</u>			
No delivery on any item. (U)			
<u>31 August 1960:</u>			
2801 - Delivered 30 August 1960. Beacon Systems are installed in eight assigned aircraft. The maintenance activity has had no tactical test equipment. With delivery of 2801, only a very limited capability has been realized. (U)			
<u>30 September 1960:</u>			
The Category III Evaluation Plan that became effective 1 August 1960 designates data collection and TGSE evaluation during normal maintenance usage of the peculiar TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation: GSEL 2801, 2802, 2803, and 2851.			
GSEL 2801 - The Tester was used three times during the month of September in attempts to check out installed aircraft systems.			

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
9-17	B-58 Radar Beacon System TGSE

STATUS

each occasion, interference was experienced, apparently from local radars, which caused excessive code readouts on the Tester. No corrective action has been taken to date.

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TEST AND EVALUATION PROJECT STATUS SHEET

PROJECT NUMBER G-18		PROJECT TITLE B-58 AF Standard and Commercial Common TGSE (U)	
REPORT SECTION C-3 of Part IV		PROJECT OFFICER Capt W. R. Southerland	
PROBLEM To evaluate the TGSE associated with the B-58 Air Force Standard and Commercial Common TGSE. (U)			
REQUEST AGENCY B-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Estimated Indefinite	AUTHORIZATION AFR 80-14
STATUS Three Key Items Authorized: 3 Testers (U)			
<u>GSEL</u>	<u>NOMENCLATURE</u>	<u>P/N</u>	<u>1st Art Del Date</u> <u>Est Comp Date</u>
7057	Generator-Signal, BC-3/6-L	BC376L	Dec 59 Jan 61
7068	Generator-Signal	SG-13-ARN	Nov 59 Dec 60
7348	Radio Test Set	AN/ARM-25- TACAN	May 60 Jun 61
<u>31 May 1960:</u>			
1. 7068 - being evaluated with tactical aircraft. (U)			
2. 8078, MD-3 Nitrogen Trailer Non-Key Item, specific item report G-18-1 dated 31 May 1960 lists deficiencies and recommended corrective action. (U)			
3. Item not Utilitized:			
7348 - "Suitable substitute" received end of May 1960. No technical data delivered with them. (U)			
<u>31 August 1960:</u>			
1. 8094 - A/M 320-6, Air Conditioner, Ground, Engine Driven (MA-3 modified). A prototype inspection and preliminary testing meeting was held at Recony, Richmond, Va., 3-5 August 1960, with representatives of the 43rd Bomb Wing, MOAMA, WADD and Recony in attendance. The 1st Article for Service Test by the 43rd Bomb Wing was scheduled to be shipped by Recony 15 August 1960; however, MOAMA had not issued shipping instructions as of 30 August 1960. (U)			
2. 8095 - A/M 320-7, Air Conditioner, Ground, Electric Driven (A/M 320-5 modified). Estimated delivery date of 1st article			

TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-18	B-58 AP Standard and Commercial Common TGSE (U)
<p>STATUS</p> <p>for Service Test by the 43rd Bomb Wing is 15 October 1960. (U)</p> <p>3. Specific Item Report Nr. G-18-2, dated 31 August 1960, reports on the evaluation of the Model 640-110 portable ARD-PAK Lubricator (Grease Gun). It was recommended that this item be authorized for B-58 Wings in a quantity of one per periodic dock. (U)</p> <p>4. 8042 - Tractor Wheeled, Industrial, MB-4 - Reference GSE Sub Comm at SAAMA, 23-24 August 1960, Memphis AFD stated that new modified MB-4's would be delivered to Carswell AFB according to the following schedule: 1 on or about 15 September 1960, 8 on or about 15 October 1960. These MB-4's are to have provisions for air and 6 volt electrical systems. (U)</p> <p>5. Items in use without discrepancies: 7057, 7068. (U)</p> <p>6. Item not utilized:</p> <p>7348 - No TACAN systems are installed on assigned B-58 aircraft. However, the item is used regularly to check out TACAN systems on the assigned TF-102 aircraft, operating instructions are on hand and in use. (U)</p> <p><u>30 September 1960:</u></p> <p>1. The Category III TGSE Evaluation plan that became effective 1 August 1960 designates data collection and TGSE Evaluation during Normal Maintenance usage of the AF Standard and Commercial Common TGSE. The following exceptions require a special effort to evaluate through all possible modes of operation in the limited time available for the evaluation. GSEL: 8094, 8095.</p> <p>2. 8042 - Specific Item Report Nr G-18-3, dated 8 September 1960 reports on the limited evaluation of Five Commercial Tractors for B-58 pod handling.</p> <p>3. No changes in items 2, 3, 5, and 6 of August 60 status.</p> <p>4. 8094 - A/M 32C-6, Air Conditioner, Ground, Engine Driven (MA-3 Modified). Item delivered 10 September 60 with 122.95 hours on unit. Service test presently on stop as one (1) micron inlet air filters failed. New type filters to be delivered on or about 5 October 1960. Unit has 177.83 hours as of 29 September 1960. Recommendations for minor modifications have been given to MOAMA and Recony Corporation.</p>	

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-18	B-58 AF Standard and Commercial Common TGSE

STATUS

5. Specific Item Report Nr G-18-4, dated 19 September 1960, reports on the evaluation of the IC2874-G2 Inlet Guide Vane and Afterburner Fuel Manifold Tester, and the IC2873-G2 Nozzle Actuator Tester for use in J-79 Engine Maintenance for the B-58 aircraft.

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TEST AND EVALUATION PROJECT STATUS SHEET

PROJECT NUMBER 0-19	PROJECT TITLE Special Projects, TGSE (U)
REPORT SECTION C-3 of Part IV	PROJECT OFFICER Capt W. R. Southerland

PROBLEM
To evaluate the TGSE associated with the B-58 not covered in other systems. (U)

REQUEST AGENCY	DATE INITIATED	COMPLETION DATE	AUTHORIZATION
B-58 Test Force	May 1960	Indefinite	AFR 80-14

STATUS
31 May 1960:

1. Bar Assy, "Vee" Aircraft Movement. An evaluation of a prototype "Vee" tow bar was conducted by the B-58 Test Force. It was recommended that two of these be provided each B-58 Wing for other than normal towing of the B-58. Convair submitted GSEL Nr 3109.1 on this item. (U)
2. Stand Assy Sheltered Maint. The B-58 Test Force submitted a letter to the B-58 WSPO 1 February 1960 outlining the problems associated with foul weather maintenance of the B-58. Hq SAC Msg DM4B40497, 5 May 1960, voiced non-concurrence in the requirements for portable sheltered aircraft maintenance stands. Convair submitted GSEL Nr 3108.3 on this item. (U)
3. B-58 Maintenance Platforms (Periodic Maint. Stands). The B-58 Test Force evaluated a set of prototype periodic maintenance stands manufactured by the Mid-States Ornamental Iron Company. Recommended modifications were forwarded to the B-58 WSPO 1 February 1960. Action is being taken to incorporate the intent of these recommendations in production models of these stands. (U)

31 August 1960:

1. No change in paragraphs 1 and 2 above. (U)
2. B-58 Maintenance Platforms as of 19 August 1960 Purchase Request had not been initiated by MOAMA (Ref GSE Sub Comm meeting SAAMA 23-24 Aug 60). Normal lead time for this type item is six months. (U)

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER

G-19

PROJECT TITLE

Special Projects, TGSE

STATUS

30 September 1960:

1. No change in 31 August 1960 status.

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TEST AND EVALUATION PROJECT STATUS SHEET

PROJECT NUMBER G-20	PROJECT TITLE B-58 TGSE Technical Data (U)
REPORT SECTION C-3 Part IV	PROJECT OFFICER Capt Kilpatrick

PROBLEM
To evaluate adequacy of technical data for B-58 TGSE (U)

REQUEST AGENCY B-58 Test Force	DATE INITIATED May 1960	COMPLETION DATE Indefinite	AUTHORIZATION AFR 80-14
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STATUS
31 May 60

1. Technical Data Index (IB-58A-01) has gross omissions of TGSE T.O. Nrs. (U)
2. TGSE technical data inaccuracies are prevalent (i.e. 41 T.O. RFA's on DECM first article demonstration of four shop testers). (U)
3. Technical Orders for TGSE call for TGSE support equipment not authorized or Air Force identifiable (GSEL 3156: TO 35D12-2-2-71) Calls for 18 items of special equipment to support compressor pack air gas turbine. None are ECL listed, seven have recent GSEL's submitted without action). (U)
4. A report is being prepared to present the status of technical data being delivered to the Test Force to support TGSE of the B-58 Weapon System (U)

31 Aug 60

1. A Technical Data Sub-Committee has been formed composed of representatives from 43d BW, 19 AD, 2AF, SAC, CVAC, AFPR, SAAMA, AMC-ASC, AMC, WRAMA, and Convair. An initial meeting was held on 13-15 July 60 and the second meeting on 9 Aug 1960. (U)
2. The Sub-Committee is reviewing the technical data for the entire B-58 Weapon System including the B-58 TGSE and taking aggressive action to correct identified discrepancies. (U)
3. As a result of the greatly increased emphasis placed on correcting TGSE technical data inadequacies including the sub-committee action indicated above the following action has been taken. (U)

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-20	B-58 TGSE Technical Data (U)
STATUS	
<p>a. <u>Bomb/Nav System TGSE</u></p>	
<p>(1) T.O. 11B2-2-10-8-1, 11B2-2-10-8-2 and 33 D5-2-14-8-1 pertinent to GSEL 2409 inertial LRU Test Set (ILRUTS) have been RFA'd 57 times to date with some RFA's listing 20 to 50 page changes. (U)</p>	
<p>(2) T.O. 33D5-7-12-8-1, 11B42-4-2-8-1, 11B42-4-2-8-2, 11B42-4-2-8-3, 11B47-9-2-8-1, 11B47-9-2-8-2, and 11B47-9-2-8-3 pertinent to GSEL 2403, Amplifier Test Set (ATS) have been RFA'd 26 times. Several RFA's list 40 or more page changes (U)</p>	
<p>(3) Status of 66 T.O. 's involved in first article demonstration of ILRUTS and ATS is: (U)</p>	
<p>(a) 60 T.O. 's on TGSE Modules (TGSE Drawers) exist by T.O. number. No revisions have been made even though most basic T.O. dates are as old as August 1959. Sperry has promised complete revision and up-dating by 30 Oct 60. (U)</p>	
<p>(b) The -1, -2, and -4 T.O. 's on the ILRUTS and ATS are being revised during the demonstration. (U)</p>	
<p>(c) T.O. 's 33DA17-5-12 and 33DA 17-5-14 (Servo Voltage Comparator Module), 33D7-41-3-2 and 33D7-41-3-4 (Inertial Central Routing Assembly Modules) and 33D7-41-2-2 and 33D7-41-2-4 (Amplifier Central Routing Assembly Modules) are to be revised by Sperry at Carswell AFB during demonstration (U)</p>	
<p>(4) The Operator's Instruction Notebooks (preliminary -8T.O. 's) on amplifier checkout are being revised to include a general section for amplifier checkout as well as complete secondary testing procedures for amplifier component fault isolation. Completion of these revisions is programmed for approximately 75 days from now. (U)</p>	
<p>b. <u>IBDA System TGSE</u></p>	
<p>(1) RFA's were submitted during First Article Demonstration (18 -19 Aug 60) on multiple corrections in the following T.O. 's: 11B1-2-2-2 (Sections 3, 6, & 7), 33D2-2-2-2 (Sections 1, 2, & 4), 33D2-26-2-3 (Sections 1, 3, & 4), 33D2-26-2-11 (Sections 2 and 3) and 33D2-26-2-12 (Sections 1, 4, 6, & 7). (U)</p>	
<p>(2) First Article Demonstration was cancelled in August on two items because of inadequate Technical Data. (U)</p>	
<p>(3) T.O. 's 33D2-26-2-21 (Sections 2 & 3) and 33D2-26-2-22 (Sections 1, 2, 4 & 6) have been revised by Supplemental Data. (U)</p>	

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TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-20	B-58 TGSE Technical Data
<p>c. <u>Bomber Recording System</u>: 1 RFA at QMI #3 and 2 RFA's on First Article Demonstration on Technical Data. Technical Data is now at a workable level. (U)</p> <p>d. <u>Defensive ECM</u>: 1 RFA at QMI #3 and 41 RFA's at First Article Demonstration on Technical Data. Voluminous supplemental data has been received to raise Technical Data to workable level. (U)</p> <p>e. <u>Civil Nav Aids</u>: 25 RFA's on Technical Data at First Article Demonstration. Supplemental Data has been received to raise Technical Data to workable level. (U)</p> <p>f. <u>Mil Nav Aids</u>:</p> <ol style="list-style-type: none"> (1) 2 RFA's at QMI #3 and 2 at First Article Demonstration on Technical Data. (U) (2) 1 RFA covered 112 pages in three technical orders with pages requiring up to twenty corrections per page. (U) (3) Supplemental data has been received to raise Technical Data to a workable level. (U) <p>g. <u>Communications</u>:</p> <ol style="list-style-type: none"> (1) 28 RFA's on technical data at First Article Demonstration (2) Many items are still uncorrected and data is in an unsatisfactory condition. (U) <p>h. <u>Fire Control System</u></p> <ol style="list-style-type: none"> (1) 6 RFA's at First Article Demonstration on Technical Data. (2) Corrections have been reviewed and data is at a workable level. (U) <p>4. Continued aggressive action is being taken by the 43EW to provide detailed T.O. evaluation and report all discrepancies through AFTO Form 22 action. (U)</p> <p><u>20 September 1966</u></p> <p>1. Third Tech Data Sub-Committee meeting held at Convair, Fort Worth, on 13 September 1966. Summary of First Article Demonstration (FAD) Tech Data RFA Action: 150 RFA's submitted, 93 RFA's corrected, 55 RFA's in process.</p>	

TEST AND EVALUATION PROJECT STATUS CONTINUATION SHEET

PROJECT NUMBER	PROJECT TITLE
G-20	B-50 IGSE Technical Data

STATUS

2. The above does not include Bomb/Nav FAD RFA's or Tech Data. There have been 140 Tech Data RFA's submitted listing 1-50 pages of data per RFA. A Convair-Sperry team is at Carswell AFB correcting these deficiencies as they are noted during FAD.
3. With four exceptions the Tech Data for TGSE is basically at a workable level and can be corrected, as necessary, through AFIO Form 22 or AMA authorized contractor support on an on-call basis as a routine matter:
 - a. Bomb/Nav as noted above.
 - b. Communications - 15 of 28 RFA's on Tech Data have not been corrected since the FAD 72 days ago.
 - c. IBDA TGSE Tech Data inadequacies still uncorrected as per 31 August 1960 status.
 - d. DECM IGSE maintenance Tech Data on GSEL 1509, Mobile Tester, has been demonstrated as inadequate and incomplete. Action is being taken to effect necessary revisions.
4. The next Tech Data Sub-Committee is scheduled to be held on 21 October at Convair, Fort Worth.

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SECTION C PROJECTS

4. Projects completed but awaiting action by agencies other than 43rd Bomb Wing (M).

<u>SIR No.</u>	<u>Subject</u>	<u>Date</u>
A-1	Failure of Drag Chute Compartment Doors to remain Latched	30 Sep 1960
A-7	Taxi Light Evaluation for Adequacy	30 Sep 1960
A-11	Air Leakage through C-4 Valve Core	30 Sep 1960
* C-2-1	Evaluation of Landing Gear Demount Fixture Assembly	31 May 1960
G-3-1	Communications TCSE	30 Sep 1960
G-10-1	Evaluation of Test Fixture for Gyro & Accelerometer Table, GSEL 3912, FNSE 2836	26 Sep 1960
G-11-1	Evaluation of Permanent Hydraulic Filter Cleaning Methods	31 Aug 1960
G-15-1	Photo Recorder Camera	30 Sep 1960
* G-18-1	Evaluation of MD-3 Nitrogen Servicing Trailer	31 May 1960
G-18-2	Evaluation of MOD 640-110 Aro-Pak Lubricator	31 Aug 1960
G-18-3	Limited Evaluation of Five Commercial Tractors for Pod Handling.	8 Sep 1960
G-18-4	Evaluation of the IC2874-G2 Inlet Guide Vane and Afterburner Fuel Manifold Tester and the IC2873-G2 Nozzle Actuator Tester for J-79 Engine.	19 Sep 1960

*These Specific Item Reports were submitted by the B-58 Test Force to the B-58 WSPO.

SECTION C PROJECTS

6. Index of Specific Item Reports (SIR's) published on completed projects.

<u>SIR NO</u>	<u>Subject</u>	<u>Date</u>
A-1	Failure of Drag Chute Compartment Doors to remain Latched	30 Sep 1960
A-7	Taxi Light Evaluation for Adequacy	30 Sep 1960
A-11	Air Leakage through C-4 Valve Core	30 Sep 1960
* G-2-1	Evaluation of Landing Gear Demount Fixture Assembly	31 May 1960
G-3-1	Communications TGSE	30 Sep 1960
G-10-1	Evaluation of Test Fixture for Gyro & Accelerometer Table, GSEL 3912, PNSE 2836	26 Sep 1960
G-11-1	Evaluation of Permanent Hydraulic Filter Cleaning Methods	31 Aug 1960
G-15-1	Photo Recorder Camera	30 Sep 1960
* G-18-1	Evaluation of MD-3 Nitrogen Servicing Trailer	31 May 1960
G-18-2	Evaluation of MOD 640-110 Aro Pak Lubricator	31 Aug 1960
G-18-3	Limited Evaluation of Five Commercial Tractors for Pod Handling.	8 Sep 1960
G-18-4	Evaluation of the IC2874-G2 Inlet Guide Vane and After-burner Fuel Manifold Tester and the IC2873-G2 Nozzle Actuator Tester for J-79 Engine.	19 Sep 1960

* These Specific Item Reports were submitted by the B-58 Test Force to the B-58 WSPO

PART V SUPPLY

SECTION A General Analysis

1. The B-58 Supply Effectiveness for the month of September 1960, as shown in Section B, has improved. The requests covered priority requisitions in the areas of AOCP ANFE, A/AOCP, A/ANFE, EOCP, W/S, ASSOC, and SFR.

a. Joint action is being taken by the B-58 Test Force, Base Supply, Convair (WSSS), and LSM (SAAMA) to improve the WSSL and aircraft dash 4. The September WSSL listing had approximately 58,128 line items and the October supplement will contain about 2,000 more line items. Further, informal information from personnel at Kelly B-58 LSM indicate that future amendments to the WSSL will be skimpy and probably will never be in final format document, because of a recent Hq USAF decision in this area.

2. The following information is submitted regarding Repair and Return Program and items that were verified as AOCP and ANFE.

- a. Repair and Return to WSSS
- | | |
|-----------------------|----|
| Processed for R&R | 55 |
| Returned as of 30 Sep | 40 |
- b. Verified AOCP and ANFE
- | | |
|--------------------------|----|
| L/I verified as AOCP | 86 |
| Rcvd in less than 12 hrs | 77 |
| Rcvd in less than 24 hrs | 9 |
| L/I verified as ANFE | 14 |
| Rcvd in less than 12 hrs | 9 |
| Rcvd in less than 24 hrs | 5 |

3. Consolidated Organizational Supply Division:

a. This activity has completed mechanization of the account. AF Form 158, Unit Authorization and Property Record have been prepared and submitted to statistical services for processing into stock number sequence and the printing of a list for verification of on hand quantities. This project was completed 3 days prior to the scheduled date of 30 Sep 60.

b. The AF Form 538, (Individual Clothing and Equipment Record Branch) has been completely rewarehoused to comply with current directives. This included such items as fabrication of metal racks with individual boxes for each assigned mechanic and all flying Officer, repainting as necessary and insuring the proper marking of all property on hand.

c. The Organizational Supply Division function is progressing toward a well organized and productive division in support of the 43rd Bomb Wing. Within the next 60 days there will be a UAL Review and alignment with UMD, ECL Review, printing of a new UAL and the annual in use inventory. Manning is good body wise. however there is considerable room for improvement in experience level of the newly assigned personnel.

4. Aircraft Support Division.

a. TF-102 Equipment Review: A joint maintenance and supply team ECL/UAL review was completed on 2 Sep 60. The SAC Forms 144, covering 2 ECL Changes and 70 Line Items on UAL Change Requests, were forwarded to Base ERB on 21 Sep 60.

b. Reevaluation of TF-102 Bench Stock for Dock 7 was completed on 28 Sep 60.

c. The B-58 Quickie List was completed and assembled and issued to maintenance on 28 Sep 60.

d. J-79 Engine QEC Kit and afterburner requirements: The phased requirement during the buildup period of 1 Oct 60 were forwarded to the base Supply Office with information copies to the WSSS, AFPR, and SAAMA Liaison Office. Total requirements as set forth in SAC Message DM3A2-12432, 10 August 60 were present.

e. Field Maintenance Pre Issue: The chain link security fence was completed on 22 Sep 60. All Individual shop Pre-Issue, except EBU, Ground Power, and Tire Buildup, will be consolidated by 3 Oct 60. We have also consolidated a second tool crib in this area thereby reducing manpower requirements. This is a second area of consolidation as the A&E Pre-Issue and tool crib consolidation was completed during August 60. This manpower saving will allow for future consolidation of EBU and Ground Power Pre-Issue, as well as the tool crib within their work areas in the near future.

SECTION B Specific Data

1. The B-58 Supply Effectiveness for the month of September is as follows:

Request to:	Sub-Store	1308
	Base Supply	1679
	Total	2987
Issues From:	Sub-Store	814-88.5%
	Base Supply	734-46.4%
	Total	1548

Back Orders by:	WSSS:	106 - 11.4%
	Base Supply	848 - 53.6%
	Total	954

Cancelled for all causes	WSSS	388
	Base Supply	97
	Total	485

2. Bench Stock and Pre-Issue status as of 30 September 1960, as follows:

Bench Stock:	<u>FIIN</u>	<u>Non-FIIN</u>
Number of shops	17	11
Number of items auth	2098	457
Additions this month	89	81
Deletions this month	35	30
Pre-Issue:		
Number of shops	7	6
Number of line items	240	104
Deletions this month	9	6
Additions this month	24	5

3. The Weapons System Index Card Inventory in Base Supply for September 60 consists of:

	<u>-90 (B-58)</u>	<u>24 (TF-102)</u>
Category I	548	120
Category II	4004	699
Category III	7199	779
TOTAL	11751	1598

4. Support Equipment status as follows:

Line items auth:	<u>UME</u>	<u>USE</u>	<u>TOTAL</u>
LP	48	203	251
CP	741	572	1313
			1564
Line Items on-hand:			
Complete	587	544	1131
Partial	94	91	185
		TOTAL	1316

Dollar Value Auth:	<u>LINE</u>	<u>USE</u>	<u>TOTAL</u>
LP \$	10,326.42	\$ 235,826.60	\$ 249,153.02
CP	9,719,064.64	6,765,119.13	16,424,183.77
			<u>\$16,673,336.79</u>

Dollar Value on Hand:			
CP	\$5,914,022.62	\$4,980,335.58	\$10,894,358.20
LP	8,103.18	214,331.54	222,434.72
			<u>\$11,116,792.92</u>

5. CME (S-83) status - as of 30 September 1960:

a.	<u>LINE ITEMS</u>	<u>END ITEMS</u>
Total line items controlled:	324	Total end items controlled: 1224
Total line items complete:	256	Total end items on-hand: 951
Total line items marginal:	39	Total end items short: 273
Total line items deficient:	29	Percent end items on-hand: 77.6
Total line items critical:	24	
Percent line items complete:	79.0	

b. As of 22 Sep 60 total line items controlled was reported as 333. Reasons are as follows: CME line item #741,743,748,762,765, and 778 were deleted from CME List, authority SAAMA letter, dated 16 Sep 60. CME line item #761 was deleted from CME List, authority SAAMA S-83 Report, 1 Aug 60. CME line item #301 and 790 were deleted from CME List authority SAAMA S-83 Report, 1 Sep 60

6. Individual Proficiency Training:

a. The IPT Program within the supply directorate is progressing very satisfactorily. At the present time there are 13 airmen on training; 7 of these airmen are AFSC 64630; 2 are AFSC 70230; 2 are AFSC 64650; 1 is AFSC 70250, and 1 is AFSC 70010. Two airmen were upgraded from AFSC 64630 to AFSC 64650 during the month of September. (U)

SECTION C Problem Areas

1. Lack of a lay-in of spares for common ground support equipment in the WSSS: This problem was assigned to SAAMA Liaison Office for corrective action. The Base Supply Officer was requested to lay-in a Table VI for this equipment by the 43DSUP. Follow-up on status will be reflected each month until spares are available.

2. QEC Kit Shortage: This problem was created by long procurement lead time and uncertain status of TOC Kits to update spare QEC Kits. It appears that a temporary solution will alleviate the immediate problem around 1 Nov 1960. This situation will reoccur unless TOC Kits are procured to update the spare QECs whenever a change is made. One such change is in the process of being published now is T.O. 1-858-561.

At that time sufficient basic kits will be available to buildup assigned engines. The 43BW requirement will be projected over the procurement schedule by the AFPR (Convair) for presentation to 43DSUP and 43DCM for their concurrence on 7 Oct 60.

3. Afterburners: WSSS informed 43DSUP that afterburners were available in sufficient quantities but ROC's, 2J-J79-660, were not available for installation. Further status will be forthcoming on these items on 7 Oct 60.

4. MC-1 Type Sleeping Bag: A sleeping bag was received for evaluation and possible packing for north-bound flights. We have tested packing it in the seat cushion cover and found that the plastic bag, in which sleeping bag was packed was not strong enough to hold a good vacuum, thereby allowing the cushion to stretch over emergency handle and wedge assemblies. Found information in T.O. 1483-1-51 to the effect that no kit can be used on the back style parachute in the B-58 ejection seat. We have also tested packing the bag inside forward compartment of survival kit and found that this would necessitate removal of survival rifle, ammunition, desalter kit, and one ration. We are presently working on the feasibility of using a stronger non-stretch material on top of bag. Wright Air Development Division is assisting with information on feasibility of packing sleeping bag in seat cushion. Will request assistance from 2AF at a later date, if required.

5. Movement of WSSS to SAAMA: Reference SAAMA message SANB-9-36, 29 Sep 60, and 2AF message DM3-3910, Sep 60. The movement of the WSSS to San Antonio before the completion of the following actions at Carswell will be detrimental to the SAC B-58 Program:

- a. Laying-in of adequate aircraft spares in Base Supply, plus purification of these stocks.
- b. Completion of all phases of Category III airframe, systems, and ground support equipment testing in accordance with AFR 80-14.
- c. Lay in of Table VI spares in support of ground powered equipment.
- d. Stabilization and purification of the bench stock and preissue requirements.
- e. Lay-in of FAK and initial purification of this kit.
- f. Overall AF improvement in the transportation of equipment and supplies in support of a tactical wing's requirements.
- g. Additional purification of FOL 285, 43UAL, lay-in of new equipment, and their ultimate successful testing and evaluation as to adequacy and applicability to the B-58 Weapons System.

h. This organization believes wholeheartedly in the JM and LSM concept within AMC and has no quarrel with this concept, the exception is timing. We firmly believe that the movement of the storage site is premature by 1 year, i.e. retain the WSSS in its present location until the end of Fiscal Year 62, based on the facts cited above.

SECTION D Recommend Action

1. Second AF expedite the manning document changes requested.
2. Retain the WSSS in its present location thru fiscal year 62.
3. Prevail upon the LSM to improve the WSSL without further delay.
4. Expedite procurement of TOC Kits for existing lowered configured QEC Kit, as well as increasing quantity of updated QEC Kits to meet later replacement engine allocation.

Pete M. Vasalie
PETE M VASALIE
Major, USAF
Director of Supply

PART VI SAFETY

SECTION A General Analysis

September was a accident free month for Flying and Ground Safety.

SECTION B Specific Data

1. Flying Safety.

- a. Nine Operational Hazard Reports (OHR), were received by the 43d Bomb Wing Flying Safety Office. Four OHR's were forwarded to 2AF.
- b. A 35mm Slide Presentation was completed and is being used to brief new flight crews and Staff Officers.
- c. Aircraft Pre-Accident guide notebooks were completed and all 43d Bomb Wing Accident Board Members were briefed on contents of notebooks.

2. Ground Safety.

An accident free month was attained by the 43d Bomb Wing.

SECTION C Problem Areas

The 43d Bomb Wing Safety Officers Pre-Accident Kit was requested 20 Apr 60, to meet requirements of AFM 62-5, Attachment 3, 24 Mar 60. The equipment in this kit is mandatory for the USAF Industry Accident Investigation Board which will investigate any B-58 Major accident. Portions of this kit will be used in the daily accident prevention program. Unit Authorization List Change (DJGG-142-300) was forwarded to SAC 1 Jun 60. This is a repeat item.

SECTION D. Recommended Action.

Request that equipment needed for Pre-Accident Kit be approved as soon as possible so the kit can be assembled and available for the Industry Investigation Board.

SECTION E. Project Status. None

Robert F. Erbe

ROBERT F. ERBE
Major, USAF
Director of Safety

PART VII - CIVIL ENGINEERING

SECTION A General Analysis

In FY 1960 seven projects totaling \$187,034 were placed under contract for items in direct support of the 43rd Bomb Wing. The FY 61 O & M program includes 15 projects totaling \$527,583 required for direct support of the 43BW and two projects totaling \$14,100 which are required for other units due to relocation of facilities caused by activation of the 43BW. Initiation of design on FY 61 items by the Civil Engineer was delayed due to the urgency of his Engineering Division completing design work on items in the FY 60 program, to revisions to projects under contract such as project CRS 45-0 (facility for B-58 simulators), and to inspection work on projects under contract. Since original submission of the 43rd Bomb Wing O & M Program, a number of changes have been initiated by the various wing organizations which have, in some instances, changed the scope of projects. Although such changes were necessary to meet variables in operational requirements, they did result in some delays and additional expenditure of engineering manhours.

SECTION B Problem Areas

1. The Civil Engineer's UMD provides for normal maintenance and operation of the base and is not designed for crash engineering programs. His new UMD provides for additional engineers who, when employed, will enable design work to move at a faster pace; however, major projects such as CRS 13-1, On Base Pod Storage; CRS 12-1, Modify M & I Bldg, will require the services of Hq 2AF's centralized Architectural Engineer.

2. No additions have been made to the Civil Engineer's UMD to provide for the additional work load in the Repairs and Utilities Division caused by the activation of the 43BW; rather, his current UMD provides for fewer spaces than the March 60 UMD.

c. The attainment of the FY 61 O & M program will be dependent upon the engineering of projects and the funding of that program.

SECTION C Recommended Action

Expeditious action on project approvals as required and funding of projects when projects are ready for contractual action.

SECTION D Project Status

P341 Funds (O & M Program)

Project Number: CRS 13-1

Project Name: Pod Storage on Base, \$118,000

Estimated Completion Date: Unknown

Remarks: This project is being processed by higher headquarters. SAC has requested USAF approval. Design will be accomplished by 2AF A-E. New siting has been submitted to higher headquarters (7 Oct 60) for final determination.

Project Number: CRS 56-1

Project Name: Paved access to igloos SSF area, \$67,300

Estimated Completion Date: Unknown

Remarks: SAC has requested USAF approval. Design will be accomplished by Base and is approximately 50% complete.

P459.3 Funds (O & M Program)

Project Number: CRS 139-0

Project Name: Heat Maint Dock, Bldg 1048, \$35,183

Estimated Completion Date: 29 Nov 1960

Remarks: Project under construction

Project Number: CRS 140-0

Project Name: Heat Maint Dock, Bldg 1049, \$35,183

Estimated Completion Date: 29 Nov 1960

Remarks: Project under construction.

Project Number: CRS 12-1

Project Name: Modify M & I Bldg, SSF Area, \$42,800

Estimated Completion Date: Unknown

Remarks: Design directive issued by SAC. Design will be accomplished by 2AF A-E.

Project Number: CRS 14-1

Project Name: Modify igloos, SSF area Pod Storage, \$23,200

Estimated Completion Date: 1 March 1960

Remarks: Project has been funded; however, design is being delayed due to work being accomplished on projects 15-1, 19-1, and 16-1.

Project Number: CRS 19-1
Project Name: Ground power equip, Bldg 2121, \$20,200.
Estimated Completion Date: February 1961
Remarks: Design being accomplished by Base Civil Engineer, approximately 15% complete.

Project Number: CRS 141-0
Project Name: Electrical Modification, Bldg 1050, \$53,000
Estimated Completion Date: March 1961
Remarks: Project is in procurement for advertising.

Project Number: CRS 9-1
Project Name: Air Condition Bldg 1550, \$42,400 (includes 7BW Command Post)
Estimated Completion Date: Unknown
Remarks: SAC must get project included in FY 61 USAF Air Conditioning Program. Design has been completed by the Civil Engineer and submitted to 2AF for approval.

P459.1 Funds (Not in approved O & M Program)

Project Number: CRS 21-1
Project Name: Rehab Bldg 2160, \$27,500
Remarks: Form 734 submitted to 2AF 1 Sep 60.

P458 Funds (Base level approval, funding by 2AF)

Project Number: CRS 129-9
Project Name: Increase Air Cond in Rapcon, \$6,300
Remarks: Plans previously forwarded to 2AF for technical review have been returned for further revision. Such revision is now under way. This project was included in FY 60 USAF Air Conditioning Program, but is not approved in the FY 61 Air Conditioning Program. Present policy does not permit carry-over of a project from one fiscal year to the next without specific approval by USAF for air conditioning.

Project Number: CRS 100-0
Project Name: Modify Sq Ops, Bldg 2164, \$9,900
Estimated Completion Date: 15 December 1960
Remarks: Project is now being advertised with bid opening date 11 October.

Project Number 101-0
Project Name: Modify Classrooms, Bldg 2164A, \$12,300
Estimated Completion Date: 15 Dec 60
Remarks: Bids Received, contract awarded.

Project Number: CRS 15-1
Project Name: Whse Stor & Issue Base, Bldg 1133C, \$16,000
Estimated Completion Date: Feb 61
Remarks: Engineering design is 90% complete. This is a composite project including electrical rehabilitation for A & E, 65 CCTS, and 415 FTD Bomb Nav training classrooms. The project, including all work scheduled for Bldg 1133C, will increase the funding requirement indicated in original project.

Project Number: CRS 16-1
Project Name: Whse Stor & Issue Base, Bldg 2122, \$7,400
Estimated Completion Date: Feb 61
Remarks: Design will be by base, 10% complete.

Project Number: CRS 20-1
Project Name: Mod Shop Arm & Elec, Bldg 1055, \$4,500
Estimated Completion Date: Unknown
Remarks: Design will be by base, 0% complete. some electrical work included in the scope of this project has been completed by Civil Engineering forces

Project Number: CRS 24-1
Project Name: Education Center, Bldg 2177, \$8,400
Estimated Completion Date: Unknown
Remarks: Building required for IPT program and on base educational program.

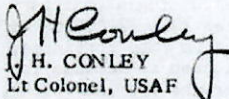
Project Number: CRS 32-1
Project Name: Education Center, Bldg 2178, \$5,700
Estimated Completion Date: Unknown
Remarks: Design will be by base, 0% complete. Building required for IPT program and on base educational program.

P341 Funds

Project Number: CRS 87-0

Project Name: Base Deflectors for B-58 Aircraft

Remarks: Form 734 submitted to higher headquarters on FY 60 O & M program. Unofficial information indicates that headquarters SAC is questioning the validity of this requirement and that they are withholding action at this time. The base considers this project essential and will resubmit during October 1960


H. CONLEY
Lt Colonel, USAF
Deputy Base Commander
for Civil Engineering

PART VIII COMPTROLLER

SECTION A General Analysis

1. TDY Funds

a. The original ABA for Base TDY funds (Military and Civilians) amounted to \$75,000. As of 30 September 1960, \$47,840 had been obligated. This represents 63.8% of the ABA. If this rate continues, and there is certainly no reason to expect it to slacken as demands for briefings on Category III Testing by higher headquarters are increasing, the original ABA will be expended prior to the end of November. This ABA is for the entire base including the 7th Bomb Wing.

b. The first revision to the FY 1961 Financial Plan was submitted to higher headquarters 8 September 1960. The additional TDY funds requested amounted to \$111,800 which would result in a total ABA of \$186,800 for FY 1961. Of this \$186,800 it is estimated that the 43d Bomb Wing will expend \$108,700 or 58%. This is a very conservative estimate in that numerous unplanned higher headquarters directed trips have occurred during the period between submission of the Financial Plan Revision and the end of this month. The establishment of Contractor - Air Force panels designed to resolve various weapon systems and associated problems after initial revision of FY 1961 Financial Plan has increased requirements also. During Category III Testing, it has become apparent that anticipating actual TDY fund requirements is most difficult as there is no precedence and the overwhelming majority of TDY requirements are generated by organizations external to 43d Bomb Wing control.

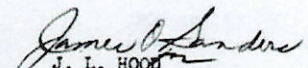
2. Base Non-Tactical Radio Systems

a. The original ABA for Base Non-Tactical Radio Systems totalled \$28,900. This was \$3,600 short of requirements. The first revision to the FY 1961 Financial Plan Part II requirements amounted to \$11,494 which resulted in a net increased requirement of \$15,494. This amount is still short \$2,479 in meeting the minimum maintenance communications prescribed as a result of a meeting held at Headquarters SAC, 11 February 1960. These amounts are for the entire base.

b. Recent approval of \$1,000 for immediately required A and B net mobile radios has temporarily satisfied needs of the 43d Bomb Wing. No funds were made available for the C net yet, but these requirements were included in the revised Financial Plan.

SECTION B Recommended Action

It is recommended that the entire amounts requested in the first revision to the FY 1961 Financial Plan for O2122 and O411C funds be approved.


J. L. HOOD
Lt Colonel, USAF
Director of Comptroller

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Hq USAF, DCS/Mat, Washington 25, D.C.	Attn: AFNME-AR AFMEP-AC	3 4,5
CINSAC, Offutt AFB, Nebraska	Attn: DORQ EM-3 EM-4 EM-4A EM-4D EM-6 DPLC DOTFS	6,7 8 9,10 11 12 13 14 15
Comdr, ARDC, Andrews AFB, Washington 25, D.C.	Attn: RDR RDRO RDM	16,17 18-20 21
Comdr, AMC, Wright-Patterson AFB, Ohio	Attn: MCS MCM LMSB	22 23 24
Comdr, 2AF, Barksdale AFB, La.	Attn: DPLM DCRM DPLC DM2C DOTB DPP DES D/SAFETY	25 26 27 28-32 33 34-36 37 38
Wright Air Development Center, ARDC Wright-Patterson AFB, Ohio	Attn: WWZ WWZSE WWZSL	39 40-47 48,49
Comdr, WADD, Wright-Patterson AFB, Ohio	Attn: WWOP WWRMO WWDG WDDA WWRPP WVO WVG WVDO WVDS WVDSF WVDSSE WVDSF WVDSSE WVDSF	50,51 52 53,54 55 56 57 58 59 60,61 62-64 65-68 69-71

Comdr, SAAMA, Kelly AFB, Texas	Attn: SALF	72-74
Comdr, WRAMA, Robbins AFB, Ga.	Attn: WRFU	75-78
Comdr, OCAMA, Tinker AFB, Okla.		79
Comdr, AFFTC, Edwards AFB, Calif.	Attn: FTF	80
Comdr, APCC, Eglin AFB, Fla.	Attn: PGO PGS PGTF	81 82 83
Comdr, AFSWC, Kirtland AFB, N.M.	Attn: SWWOB	84
Comdr, AFMDC, Holloman AFB, N.M.		85
Chief, B-52/KC-135 OES, Castle AFB, Calif		86
Comdr, 19th Air Div, Carswell AFB, Tex	Attn: C ISO DM DO	87 88-91 92 93
Deputy Inspector General for Inspection, Norton AFB, Calif	Attn: AFCDI	94
Comdr, 33rd Air Div, Oklahoma City AF Station, Oklahoma City, Okla.		95
Comdr, 3535 Navigator Training Wing, Mather AFB, Calif., Attn: Capt. C.C. Jacoby Jr.		96
Comdr, 824th Combat Support Group Carswell AFB, Texas	Attn: C BP BDCE	97 98 99
Comdr, 305th Bombardment Wing, Bunker Hill AFB, Ind.	Attn: C	100
AF Plant Representative, AF Plant Nr 4, P.O. Box 371, Convair, Ft Worth, Tex	Attn: SARF SARFE SARFF SARFP SARFS SARFQ	101 102 103 104 105 106
Convair, Attn: Mr. A.S. Witchell, Carswell AFB, Texas		107-146

Sperry Gyroscope Co, via AFPR Carlis Places, N.Y. Attn: Mr. J. R. Ericson		147,148
Sperry Gyroscope Co, via AFPR Great Nick L.I., N.Y.,	Attn: MARLQ	149,150
General Electric Co., Carswell AFB, Texas	Attn: Mr. H.A. Barnes	151,152
Comdr, 43d Bombardment Wg	Attn: C	153
	DCO	154,155
	DCM	156
	DSUP	157
	DSAFE	158
	DTE	159-164
	DCR	165
	S/A Test	166
	S/A AMC	167
	65 BS	168

CARSWELL AIR FORCE BASE, TEXAS
PERSONNEL STRENGTH REPORT
AS OF 30 SEPTEMBER 1960

ORGANIZATION	AUTHORIZED			ASSIGNED			CIVILIAN	
	OFF	AMN	TOTAL	OFF	AMN	TOTAL	AUTH	ASGN
HQ 19TH ADIV	12	11	23	14	10	24	2	2
USAF HGSP	123	262	385	111	248	359	102	99
824TH MED GRU	14	60	74	16	63	79		
<u>SUB TOTAL</u>	<u>149</u>	<u>333</u>	<u>482</u>	<u>141</u>	<u>321</u>	<u>462</u>	<u>104</u>	<u>101</u>
HQ 824TH CMBT SUPP GP	65	495	560	56	427	483	76	80
824TH CMBT DEF SQ	5	217	222	4	199	203		
28TH MUN MAIN SQ	6	118	124	8	91	99		
824TH FD SVS SQ	2	185	187	1	138	139		
824TH CIVIL ENGR SQ	3	278	281	4	256	260	125	123
824TH OPNS SQ	16	132	148	16	125	141	6	5
824TH SUPPLY SQ	6	203	209	5	201	206	79	73
824TH TRANS SQ	4	186	190	4	154	158	19	18
824TH ACFT SUPP SQ	4	175	179	2	163	165	1	1
<u>SUB TOTAL</u>	<u>111</u>	<u>1989</u>	<u>2100</u>	<u>100</u>	<u>1754</u>	<u>1854</u>	<u>306</u>	<u>300</u>
HQ 7TH BOM WG (H)	40	130	170	52	131	183	3	3
7TH A&E SQ	6	119	125	6	140	146		
9TH BOM SQ	123	27	150	156	33	189		
7TH OMS	6	201	207	5	196	201		
H FMS	6	257	263	6	293	299	7	6
<u>SUB TOTAL</u>	<u>181</u>	<u>734</u>	<u>915</u>	<u>225</u>	<u>793</u>	<u>1018</u>	<u>10</u>	<u>9</u>
HQ 43RD BOM WG (M)	85	222	307	86	187	273	5	5
63RD BOM SQ	60	3	63	25	1	26		
64TH BOM SQ	60	3	63	1	1	2		
65TH BOM SQ	67	49	116	58	44	102	3	3
403RD BOM SQ	0	1	1	0	1	1		
43RD A&E SQ	9	342	351	8	370	378		
43RD OMS	9	364	373	8	323	331		
43RD FMS	8	419	427	6	408	414	6	3
<u>SUB TOTAL</u>	<u>298</u>	<u>1403</u>	<u>1701</u>	<u>192</u>	<u>1335</u>	<u>1527</u>	<u>14</u>	<u>11</u>
2048TH AACS	25	366	391	26	313	339	3	3
1ST RBS GP	18	55	73	19	74	93	4	4
10TH RBS SQ	6	43	49	6	38	44	0	0
26TH WEATHER	13	25	38	12	22	34	2	2
DET 1108 GSI	3	2	5	5	3	8	1	1
415TH FTD	3	64	67	2	72	74		
6592nd TEST SQ	26	30	56	14	21	35	3	3
<u>SUB TOTAL</u>	<u>94</u>	<u>585</u>	<u>679</u>	<u>84</u>	<u>543</u>	<u>627</u>	<u>13</u>	<u>13</u>
<u>CARSWELL AFB TOTAL</u>	<u>833</u>	<u>3044</u>	<u>3877</u>	<u>742</u>	<u>4746</u>	<u>5488</u>	<u>447</u>	<u>434</u>

THIS REPORT IS BASED ON AUTHORIZATIONS REFLECTED ON UMD EFFECTIVE 1 JULY 1960.

HEADQUARTERS
19TH AIR DIVISION
UNITED STATES AIR FORCE
CARSWELL AIR FORCE BASE, TEXAS



REPLY TO
ATTN OF: DCRM

17 Oct 1960

SUBJECT: Analysis of SAC Management Control System Data, RCEI SAC-705(2ND-1)
(Part I)

TO: 2AF (DCRM)
2AF (IG)

September report for Carswell Air Force Base is submitted as Attachment in compliance with 2AF Supplement 1 to SADR 170-4, dated 6 May 1960.

FOR THE COMMANDER

Joseph W. Buckinson, Jr.

KENNETH J. KERN
1/Lt, USAF
Chief, Statistical
Services Division

2/12/60

- 7 Atty
- 1 Personnel
- 2 Material
- 1 Civil Engineering
- 4 Services
- 1 Medical
- 6 Chaplain
- 7 Dental

MONTHLY ANALYSIS OF SAC MANAGEMENT CONTROL SYSTEM DATA (PART I)

RCS SAC-715 (2ND-1)

Period Covered: September 1960

824TH COMBAT SUPPORT GROUP (SAC), CARSWELL AFB, FT WORTH, TEXAS

PERSONNEL

1. Problem Item: Officer MIRS, Percent of Required - 82%

Director of Personnel - Lt Colonel Emmett L. Branceux

2. Cause and Corrective Action

a. Percent of Required

- (1) Shortage of Officers as indicated below:

Unit	Asgd	Asgd	IRS	% Reqd	% Asgd
19th AD	12	12	9	75	75
7th BW	18	221	175	97	97
43d BW	298	192	184	62	96
824th CSO	111	101	91	82	90
824th Med Gp	107	124	108	79	87
CAFBI Totals	739	652	605	82	93

- (2) Major shortages which continue to exist are:

(a) 43d Bomb Wing

AFSC	Description	Nr Short
1235B	Pilot B-58	43
1525B	Nav-Bomb	29
1575A	Elect Warfare	25
4144	Acft Maint Officer	4
2726	Research & Development Administrator	3

Headquarters SAC is programming input of crew personnel based upon the assignment of B-58 aircraft to the 43d Bomb Wing. Most of the remaining shortages in the 43d Bomb Wing have either been filled (assigned pending EDCSA) or have been programmed in by Headquarters SAC.

Atch 1

MONTHLY ANALYSIS OF SAC MANAGEMENT CONTROL SYSTEM DATA (PART 2)

PCS SAC-775 (2ND)

Period Covered: September 1960

824TH COMBAT SUPPORT GROUP (SAC), CARSWELL AFB, FT WORTH, TEXAS

PERSONNEL

(b) 824th Combat Support Group:

AFSC	Description	Nr. Short
7124	Personnel	5
7024	Administrative	4
3034	Communications	1

Higher headquarters is aware of these shortages and is programming inputs as they become available.

(c) 824th Medical Group:

AFSC	Description	Nr. Short
9426	Medical Officer - General	2
9486	Orthopedic Surgeon	4
9746	AF Nurse	3
9744	Nurse - General	7
9826	Dental Officer - General	3

Higher headquarters is aware of the shortages and as personnel are made available they are assigned to units based on overall command manning.

3. Additional Requires Data:

AFSC	AUTH	ASCD	OVER	SHORT
0036	4	7	3	
0046	2	3	1	
0056	2	1		1
1235C	57	68	15	
1215D	64	21		43
1416	32	31	1	
1435A	1	0		1
1514Z	11	9		2
1525B	107	92		15
1575A	85	70		15
1584	8	7		1

MONTHLY ANALYSIS OF SAC MANAGEMENT CONTROL SYSTEM DATA (PART 1)

HQS. SAC-735 (2ND-1)

Period Covered: September 1960

824TH COMBAT SUPPORT GROUP (SAC), CARSWELL AFB, FT WORTH, TEXAS

PERSONNEL

<u>AESC</u>	<u>AUTH</u>	<u>ASCD</u>	<u>OVER</u>	<u>SHORT</u>
2726	6	3		3
2816	3	4	1	
2826	6	7	1	
2836	3	4	1	
3034	4	3		1
3216	6	7	1	
3275A	2	3	1	
3275B	1	2	1	
4316	13	14	1	
4344	24	19		5
4724	1	2	1	
6016	2	1		1
6424	12	14	2	
6624	2	1		1
6724	3	2		1
6896	3	2		1
7024	15	12		3
7224	1	0		1
7324	15	10		5
7524	3	2		1
7724	7	5		2
8044	3	2		1
8095	4	3		1
8816	3	2		1
9025	9	11	2	
9046	1	0		1
9056	1	0		1
9124	1	2	1	
9156E	1	0		1
9166	2	4	2	
9226	1	2	1	
9236	3	5	2	
9326	8	6		2
9336	1	0		1
9356	5	4		1
9366	3	2		1
9386	3	4	1	