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JUNE 1966

AMSI-SMECG

SUBJECT: Trip Report to Ft Bliss, Texas

e. The entire modification kit was removed during the week of 6 June and the equipment returned to the OID (HAM) Dept on 9 June. The following day was utilized in correcting two small problems in the system and clearing Fort Bliss.

f. The component assemblies of the removed kit were retained by WECO for possible re-use. However, the branched harness was not retained in that several changes had to be made and the entire item could be fabricated in several days if needed.

g. The contents of this change added the following additional components to the existing computer circuitry:

(1) Three Relay Panel Assemblies composed of 13 relays and 18 resistors.

(2) Two Resistor Assemblies composed of 60 resistors.

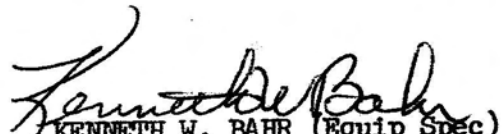
(3) A 180 wire branched harness.

h. The Target Data Unit (TDU) in the first proposed 8 kits will be operated at and stored in the equipment vent cabinet and connected to the computer by an overhead cable. The TDU inputs to the computer (X_T , Y_T , H_T) are set in on the TDU and certified by a NVIS. The system can operate under the present SS mode data input concept or from the added TDU thus eliminating the use of the tracking radar equipment.

i. In the event that this change goes across the board or results in a formal DAMWO, a new TDU concept will be employed using a direct read input and the TDU relocated within the computer.

8. CONCLUSION: All design expectations, build-in checks and mechanical interface with the system were met.

9. RECOMMENDATION: Upon final approval of this change (Informal Field Change 1020), it is recommended that it be documented and printed as a formal DAMWO.


KENNETH W. BAHR (Equip Spec)
AMSMI-SMECG/876-4996

DISPOSITION FORM

AMSMI-SC-2110-66

(AR 340-15)

REFERENCE OR OFFICE SYMBOL	SUBJECT
AMSMI-SMECG	Trip Report to Ft Bliss, Texas
EX THRU: AMSMI-SMEG AMSMI-SME	FROM: Kenneth W. Bahr
	DATE: 29 June 66
	CMT 1
TO: AMSMI-SM	
<p>1. PLACE VISITED: Fort Bliss, Texas</p> <p>2. AUTHORITY: AMSMI-SC-2110-66</p> <p>3. DATE OF DEPARTURE: 14 May 66.</p> <p>4. DATE OF RETURN: 12 June 66.</p> <p>5. PURPOSE OF VISIT: Installation of Hercules Surface to Surface Modification Trial Kit of System 1013.</p> <p>6. PERSONNEL CONTACTED: Col Sulkowski, MICOM Liaison Officer Major Lacey, (HAM), Dept, Ft Bliss, Texas CWO Dryden, (OID) Dept, Ft Bliss, Texas Coy Harrison, WECo, W-S, NC Fred Joseph, WECo, Burl, NC John Rand, WECo, Burl, NC Fred Spivey, WECo, Burl, NC Bill George, WECo, Burl, NC Charles Bothner, Bell Labs WSMR</p> <p>7. DISCUSSION OF DETAILS:</p> <p>a. The initial purpose of the trip was to observe the installation of the proposed improvements to the existing Hercules Surface to Surface capabilities. The trial kit was installed on Basic Hercules System 1013 on a temporary basis by the contractor for the sole purpose of kit and system evaluation. After which time, the kit was removed and the system returned to its original condition. This entire operation required approximately 22 days for completion.</p> <p>b. During the week of 16 May 66, the computer portion of the system was checked out and all pertinent static and dynamic data recorded. A nominal amount of small troubles were encountered and corrected during this time by Mr. Harrison and myself.</p> <p>c. Installation of the modification commenced on 23 May. The first phase (cut-out) was completed by 24 May. However, no actual cut-outs were made. All of these connections were disconnected, tagged and tied back for future reconnection. The second phase (kit installation and ring out) was completed by 28 May. This work was performed by Mr. Joseph and Mr. Rand.</p> <p>d. From 30 May through 3 June, the overall change was evaluated by Mr. Spivey and Mr. Bothner. A few resistor values were changed in the SS-Z1 and SS-Z2 networks and several wiring changes made. Other than that all static and dynamic checks came out as expected.</p>	

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April 2012

SOME EARLY BACK GROUND ON HERCULES SURFACE TO SURFACE EFFORTS

Durring the Cubin crisis time frame, the interest in a mobile

S.S. concept came up again using only a MTR, RC Van, and a BC Van. The TTR would be replaced, using a "Black Box" to simulate the TTR data required for a S.S. mission.

A "Black Box" (TDU) was designed by WECO which looked like a NVTS with variable resistor knobs representing the TTR data (X_t Y_t H_t) which would be connected to the computer.

The 32nd ORD at Redstone field marched system 1031 down to Carol City Fl. and WECO provided a quick and dirty hook-up along with new un-verified firing tables, which I guess wouldn't have mattered much considering the warheads in use.

I was the third echelon support to that system IFC. The military from Florida, Shreveport and lord only knows from where else did all of the rest which was a hell of a good job done. All history now.

In 1966, South East Asia requested a mobile S.S. capability. This time a new design was used for a TDU which was validated on system 1013 at Ft Bliss. Four kits bought as (Field Change 1020), one installed in the Alaskin area and fired-out with good outcome. Kit 2 went to Okinawa site 2 I think, don't have any notes on any S.S. firings. A kit was provided to Korea for the 1972 Sea Range ASP and the South East Asia requirement was set aside.

However, from these dates on, HERCULES SS program got a lot of attention from NATO and was a requirement for inclusion in the Allied Solid State Computer design.

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