Installation Engineering Handbook 269
Western Electric Company, Incorporated
Northern Illinois Works

Section

**622**

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# NO. 3 ESS
## OPERATIONAL TEST OF
## E2A TELEMETRY AND INTERFACE CIRCUIT

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## 1. GENERAL INFORMATION

### 1.1 Description

1.11 This section provides a method to verify the ability of an SCC to monitor and control the No. 3 ESS via the E2A Telemetry.

1.12 In order to perform the tests of this section, actions and observations must be made at the TELCo SCC console, as well as the System Status Panel. Therefore, it is necessary for the SCC to connect its console to this office.

### 1.2 Sequence

1.21 The E2A Telemetry Unit must be tested per Handbook 239, Section 510G prior to attempting this section. The Telemetry Unit must be tested even if this section cannot be completed due to the lack of an SCC console.

### 1.3 Records

1.31 The results of the tests of this section shall be recorded on forms SD-97-1313 and SD-97-1315. For detailed information on filling out test records, see Section 6B of Handbook 3.

### 1.4 References

1.41 The following documents may be useful as references during the performance of this test:

| Document | Title |
|---|---|
| SD-1C907-01 | System Status Panel Controller Circuit |
| SD-1C909-01 | Maintenance Frame Power Circuit |
| SD-1C912-01 | Maintenance Frame Circuit |
| IM-3H300-01 | Input Message Manual |
| OM-3H300-01 | Output Message Manual |
| HB 239, Sect. 510G | E2A Telemetry System SCC Remote Per J-92621AE |

### 1.5 Software Coordination

1.51 The verification of correct remoting of lamps requires Iss. 4 or later of the No. 3 ESS generic program.

## 2. TEST EQUIPMENT

2.1 The operational tests of paragraphs 3.2 (Table A) require that a SCCS console be connected to the system, since actions and observations must be made at both the System Status Panel and the SCCS console.

## 3. PROCEDURE

3.1 Verify that fuse A1 (-48V) and fuse AA4 (+24V) are inserted in the maintenance frame.

3.2 Release the DISABLE REMOTE ACCESS key (if operated) and verify that no apparent system malfunctions occur. Then perform each test in Table A.

TABLE A

1.  At the console, verify that all console lamps can be lit using both the LOCAL ON
    and TELEMETRY ON keys.  Verify that all lamps can be extinguished using the
    TELEMETRY OFF key.

2.  Verify at the console that the correct system lamp (No. 2B/No. 3) is lit.

3.  At the console, operate the ENABLE key.  Verify that the ENABLE lamp lights and a
    MAJOR ALARM is indicated.

4.  At the console, operate the ALARM REL key and verify that the MAJOR ALARM indication
    is momentarily retired.

5.  At the console, for each of the following keys, a) operate the key and verify that
    the lamp lights, and b) release the key and verify that the lamp extinguishes.

                        STABLE
                        MEM RELOAD
                        PAST OFFICE DATA
                        BACKDATE OFFICE DATA

6.  Depress the INIT EXECUTE Key at the console and verify that an initialization does
    occur and the SERVICE LOSS lamp is flashing.

7.  At the console depress TTY INIT and verify that INIT TTYC ALL is outputted on the
    Maintenance TTY.

8.  At the console, for each of the following keys, a) operate the key and verify that
    the lamp at the console lights, and b) release (by depressing again) the key and
    verify that the lamp extinguishes.

                        EMER LINE TRFR
                        SELECT 0
                        SELECT 1
                        INH BLDG ALARM
                        ALARM TFR
                        DISABLE REMOTE ACCESS (at SSP and verify that the
                                              first 5 keys are disabled
                                              from the console.  Then
                                              release the DISABLE key).

9.  Remove the offline CU from service

                        RMV:CU!

10. At the console, operate the LOCK key.  Verify that the LOCK, SELECT (for the on-line
    CU) and FORCE lamps light.

TABLE A (Cont'd)

11. At the console, reset the FORCE key.  Verify that the LOCK and FORCE lamps extinguish.

12. Reset the active SELECT key and restore the offline CU.

                              RST:CU!

    Verify that the RST CU COMPL message is generated.

13. At the SSP, operate the CKT PWR key and verify that the lamp extinguishes at the console.  (This may take several seconds.)  Then restore power.

14. NOTE:  This step may cause the SSP to go into a random state.  At the SSP, depress and hold operated the ALT BUS key and verify that the lamp is lit at the console.  Then release the key and verify that the lamp extinguishes.  Reset any key-lamps that are lit.

15. Request a CU step diagnostic.  (This will reset some of the lamps at the SSP which may have come on in Step 14.)

                          DGN:CU;STEP:11!

16. After the UPD OMAS COMPL message is generated, at the console, momentarily operate the EXECUTE Key.  Verify that the test is rerun.  (The EXECUTE Lamp will light while the test is running and extinguish when the test completes.)

17. Clear the step request

                          CLR:RPT:STEP!

18. Verify that the SSP lamps are remoted correctly by typing

                              TST:SCC!

    (See IM for use of this message.)

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