MULTIFREQUENCY INCOMING REGISTERS
TESTS USING AUTOMATIC MONITOR,
REGISTER AND SENDER TEST CIRCUIT SD-25680-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.001 This addendum supplements Section 218-143-501.

1.002 It is reissued to change paragraph designations, bring Table A up-to-date, and correct the requirement in Step 6 of the Twist Test (BB).

1.003 It also outlines a test to measure the level of multifrequency pulsing from the test frame to MF receivers. The 3db IN pad is standard for MF receivers per SD-95087-01; uniform test procedures can be used for old and new type receivers.

The following changes apply to Part 1 of the section:

(a) 1.03 - added tests BA and BB.

1.03 *BA. MF Pulsing Level and Modulation Product:* This test verifies that the test frame transmits MF pulses to the MF receiver at the proper levels.

BB. Twist Test: This test verifies that the test frame can transmit MF pulses with the higher frequency attenuated.

2. APPARATUS

The following changes apply to Part 2 of the section:

(a) 2.06 - added

Tests BA and BB

2.06 *No. 23A Transmission Measuring Set:* Two No. 893 cords, equipped with two No. 360A Tools, one No. 419A Tool and one No. 365 Tool; Test cord, W2DL.

3. PREPARATION

The following changes apply to Part 3 of the section:

(a) Steps 10d and 10e - added

Tests BA and BB

10d Connect power plug of No. 23A set to AC power outlet. Allow two minutes to warm.

10e Using two No. 893 cords, patch the IN binding posts of the No. 23A set to contacts 8t and 8b of relay C.

4. METHOD

The following changes apply to Part 4 of the section:

(a) Test BA and BB - added

STEP	ACTION	VERIFICATION
	BA MF Pulsing Level and Modulation Product	
1	Restore all keys to normal	
2	Momentarily operate RN key	All lamps extinguished
3	Block operated KA relay	
	MF Pulsing Level	
4	Manually operate in turn - 0F to 9F, KPF and STP relays	At each relay operation, No. 23A meter reads MF pulsing level to receiver in accordance with Table A within $\pm$ 1 db.

STEP	ACTION	VERIFICATION
	Modulation Product	
5	Block operated LL relay	
6	Manually operate in turn, relays as shown in Step 4	At each relay operation, No. 23A meter reads modulation product to receiver in accordance with Table A within ± 1 db.
7	Remove block from KA and LL relays	
8	Restore LL key to normal	
9	Disconnect No. 23A Test Set	

TABLE A

MF CURRENT SUPPLY DISTG. RESISTORS FOR TEST CKT.	*dbm LEVEL TO TEST CIRCUIT	db VALUE OF PADS		MF PULSING *dbm LEVEL TO RECEIVER	MODULATION PRODUCT *dbm LEVEL TO RECEIVER	NOTES
		SWITCH PAD FIG. L,M, OR N	PLUG IN FIXED "C" PAD			
Offices with SD-95087-01 or SD-95536-01 Receivers Only and Offices Equipped with Both Types of Receivers						
470 Ohms	+ 5.6	L = 14	12db	-20.4	-6.4	1
619 Ohms	+ 4.3	M = 12.75	12db	-20.45	-7.7	1,2
619 Ohms	+ 4.3	N = 9.0	12db	-16.70	-7.7	1,2

*MF Current supply dbm level, to test circuit, to MF receiver, and modulation product is based on a combination of two frequencies.

Notes:
1. The value of figure and "C" pad shown in table is standard. If value of "C" pad is other than specified, compute dbm level to receiver by subtracting combined db value of the figure and "C" pads from dbm level to test circuit.

2. In order to test the new or earlier MF receivers at the new reduced MF sending power which was made to reduce the possibility of interference from crosstalk, the test circuit uses a 12 db (c) pad on a standard basis; and the MF receiver SD-95087-01 uses a 3 db (In) pad on a standard basis with fig. N.

STEP	ACTION	VERIFICATION
	BB. Twist Test	
Steps 1, 2, and 3 same as in Test BA		
4	Using W2DL cord, patch No. 23A set to V1 jack of test frame	
5	Operate VO key, block operated TWT relay	Meter shows reading
6	Restore VO key, operate V7 key	In offices equipped with new type receivers (SD-95536-01), meter shows reading 6.25 db ± 0.25 db lower than reading in Step 5. In offices with old type receivers (SD-95087-01) or old and new type, meter shows reading 6.24 db ± 0.25 db lower than reading in Step 5.
7	Remove block from TWT relay restore V7 key	
8	Disconnect No. 13A Test Set	