AUTOMATIC INTERCEPT SYSTEM
OUTGOING SENDER SD-27882-01
TESTS USING OFFICE TEST FRAME SD-27633-01 (J23260)
NO. 5 CROSSBAR OFFICES NOT ARRANGED FOR LINE LINK PULSING

1. GENERAL

1.01 This section describes a method of testing automatic intercept system outgoing senders SD-27882-01 used for extending service calls to an automatic intercept center for disposition. These senders are arranged for multifrequency outpulsing in No. 5 crossbar offices not arranged for line link pulsing.

1.02 The reasons for reissuing this section are listed as follows. Revision arrows are used to emphasize the more significant changes. This reissue does not affect Equipment Test Lists.

(a) To amend Test C to delete verification of the TGT lamp at the TIC.

(b) To revise Test J to include provisions for the elimination of stuck sender plant registration on test calls when the sender is made busy at the jack, lamp, and key circuit.

(c) To add paragraph 1.10 to include application of the lamp display control feature (option YR).

(d) To make minor changes as required.

1.03 The tests covered are:

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1.04 Test M will normally be used to make a comparative frequency test of an oscillator output. When the results of this test are not within limits specified, or when a precise measurement of a frequency is required, Test O should be performed.

1.05 If it is found that the oscillator output voltage or frequency is not within the limits specified in a test, corrective measures should be applied per circuit notes of SD-27882-01.

1.06 Tests L and M require that all senders and/or lines be made busy.

1.07 ***Lettered Steps:*** A letter, a, b, c, etc, added to a step number in Parts 3 and 4 of this section indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, the steps designated by that letter should be omitted.

1.08 In Tests C, G, and H, the plant register associated with SS lead will score. Local instructions should be followed for recording and reporting register operations.

1.09 If the trouble indicator and connector circuit (TIC) is not associated with the master alarm release key of the alarm sending circuit, the TIC MB key at TIC should be operated in unattended offices to prevent lamps from being lighted and generating heat sufficient to discolor and warp designating strips. A large number of lamps lighted could also result in lamp fuses operating and causing a major alarm.

1.10 ▶When lamp display control feature (option YR) is provided at the trouble indicator and connector circuit (TIC), a stored trouble condition is indicated by a lighted red DR lamp. Momentary operation of the LD key will cause the trouble indicating lamps to light. These lamps will be

extinguished with the momentary operation of the RLS key. Application of this feature will prevent trouble lamp displays from occuring in unattended offices.◀

1.11 A Test Chart is provided which shows priming information required for each test. Spaces are provided on the charts for listing specific priming information depending on local conditions. This chart should be filled out from local records in accordance with the instructions provided in Part 5, Preparation of Test Chart.

2. APPARATUS

2.01 The apparatus required for each test is listed in Table A. The details of each item are covered in the paragraph indicated by the number in parentheses.

2.02 Vacuum tube voltmeter (voltohmyst, RCA WV-98A senior or equivalent) (for measuring oscillator output voltages).

2.03 Frequency meter, Berkley EPUT or Hewlett-Packard 521C counter with 10-second gates or equivalent.

2.04 67C test set or equivalent, equipped with one KS-6278 connecting clip and one 518B (test pick) tool (for use in checking the presence or absence of battery or ground).

2.05 67C test set or equivalent, equipped with two 624B (test connector) tools (for use in making test connections to terminals arranged for solderless-wrapped connections).

2.06 Load resistor 19LM or equivalent, 275 ohms ±1 percent.

2.07 Load resistor, 19SE or equivalent, 1100 ohms ±1 percent.

2.08 Testing cord, Pomona Electronics MG-C-BNC-36 cable assembly, 3-feet long, equipped with one UG-88C coaxial connector and two alligator clips (red clip connected to cable conductor, black clip connected to shield) (for use with Berkley EPUT meter).

2.09 Testing cord, Hewlett-Packard 11001A cable assembly, 45 inches long, equipped with one UG-88C coaxial connector and one dual banana plug (plug nearest knurled section connected to cable center connector) (for use with Hewlett-Packard 521C).

2.10 Two No. 60 Mueller clips (for use with Hewlett-Packard 11001A cable assembly).

2.11 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one 624B (test connector) tool, and one KS-6278 connecting clip.

2.12 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) and two KS-6278 connecting clips (to connect ground).

2.13 Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord), one KS-6278 connecting clip, and one 419A tool (for use in connecting ground to relay contacts).

2.14 Blocking and insulating tools as required. Use tools and apply as covered in Section 069-020-801.

3. PREPARATION

3.01 ▶For Test B and P, determine from office records all AIS line circuit assignments in the preference chain for each AIS sender. Record which assignments are associated with the LHA and LHB cross-connection terminals.◀

STEP	ACTION	VERIFICATION
Tests A Through I, L, P		
1	At OTF— Restore all keys and switches.	
2	At TIC— Momentarily operate RLS key.	All lamps extinguished.

STEP **ACTION** **VERIFICATION**

TABLE A

APPARATUS	TESTS															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
322A (make-busy) Plug		√					√	√	√	√		√	√	√	√	√
KS-3008 Stopwatch or Equivalent			1	1			1	1								
32A Test Set					1		1					1				
Head Telephone Set				1				1	1			1				1
Voltmeter (2.02)														1		
Frequency Meter (2.03)															1	
67C Test Set (2.04)										1	1					
67C Test Set (2.05)													1			
Load Resistor (2.06)														1		
Load Resistor (2.07)															1	
Cord (2.08)															1*	
Cord (2.09)															1†	
Clips (2.10)															1†	
Cord (2.11)														2	2	
Cord (2.12)													1			
Cord (2.13)								1								
Tools (2.14)			\				√	√	√	√			√	√	√	

\ As required.

*Use with Berkley EPUT meter.

†Use with Hewlett-Packard 521C.

3 At OTF—
Operate AIS, MFS, OTL, WK keys.

4 Operate MCB, MKR_ keys to select completing marker.

5 Operate 7D key.

6 Set PS switch to 11 pps, 56 percent BREAK.

7 Set L-L switch to 0.

STEP	ACTION	VERIFICATION
8	Operate AIRI key.	
9	Operate AIS 0/1 key to select sender to be tested.	
10a	If line circuit used for test is arranged for E and M signaling— Operate EM key.	
Tests A Through E, G Through I, L, P		
11	Operate 8SD key.	

4. METHOD

STEP	ACTION	VERIFICATION
	◗*Note:* Refer to paragraph 1.10.◖	
A. Regular Call		
12	Operate REC key.	
13	Set AIL switch to select AIS line.	
14	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
15	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
16	Operate ST key.	OS lamp lighted. At completion of dialing— ED lamp lighted. At completion of outpulsing— EP, TOK lamps lighted. At TIC— Lamps lighted corresponding to LL_, VG_, HG_, VF_ of AIS line selected. RI lamp lighted.
17	At OTF— Restore ST key.	OS, ED, EP, TOK lamps extinguished.
18	At TIC— Momentarily operate RLS key.	All lamps extinguished.
19	Repeat Steps 13 through 18, as required, using digits of Tests 1B through 1E of Test Chart and using each AIS line at least once.	
20	Restore AIRI key.	

STEP	ACTION	VERIFICATION
21	Repeat Steps 13 through 18 using Tests 8 and 9 of Test Chart.	BN lamp lighted instead of RI.
22	Repeat Steps 13 through 18 using Test 7 of Test Chart.	TBI lamp lighted instead of RI.
23	Repeat Steps 13 through 18 using Tests 2 through 6 and 10 of Test Chart as applicable to office.	RI lamp lighted.
24	At OTF— Restore all keys and switches not required in next test.	

B. Line Preference Test

▶***Note:*** Refer to paragraph 3.01.◀

12	Operate REC key.	
13	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
14	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
15	At jack, lamp, and key circuit— Insert make-busy plug into MB_jack associated with sender under test.	
16	At OTF— Operate ST key.	At TIC— Determine from LL_, VG_, HG_, VF_ lamps lighted if AIS line selected is cross-connected to terminal LHA or LHB.
17	At OTF— Restore ST key.	
18	At TIC— Momentarily operate RLS key.	All lamps extinguished.
19	At OTF— Operate ST key.	At TIC— Determine from LL_, VG_, HG_, VF_ lamps lighted if AIS line selected is cross-connected to terminal LHA or LHB. ***Note:*** If first line is associated with terminal LHA, the second line must be associated with terminal LHB.
20	At OTF— Restore ST key.	

STEP	ACTION	VERIFICATION
21	At TIC— Momentarily operate RLS key.	All lamps extinguished.
22	At jack, lamp, and key circuit— Insert 322A make-busy plugs into MB_ jacks associated with lines referred to in verification of Steps 16 and 19.	
23	At OTF— Operate ST key.	At TIC— LL_, VG_, HG_, VF_ lamps lighted identify next idle line in the preference chain.
24	At OTF— Restore ST key.	
25	At TIC— Momentarily operate RLS key.	All lamps extinguished.
26	At jack, lamp, and key circuit— Insert 322A make-busy plug into MB_ jack associated with line referred to in Step 23.	
27	Repeat Steps 23 through 26 until all remaining lines in the preference chain are tested.	
28	Remove 322A make-busy plugs from all MB_ jacks placed in Steps 22 and 26.	
29	Remove 322A make-busy plug from MB_ jack associated with sender under test.	
30	Restore all keys and switches not required in next test.	

C. Open Line Test

12	At marker being used for test— Block nonoperated HTR relay.	
13	At jack, lamps, and key circuit— Operate (pull-out) CTR_ key associated with sender under test.	
14	At OTF— Operate RTL, REC keys.	
15	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
16	Set A through H SDR switches as indicated in Test 1A of Test Chart.	

STEP	ACTION	VERIFICATION
17	Operate ST key.	OS lamp lighted. At completion of dialing— ED, TGT lamps lighted.
18	When ED, TGT lamps light, ***start timing.***	After 2 to 5 seconds— Overflow tone heard. At TIC— OS_ lamp lighted.
19	At OTF— Restore ST key.	Overflow tone silenced. OS, ED, TGT lamps extinguished.
20	At TIC— Momentarily operate RLS key.	All lamps extinguished.
21	At marker used for test— Block operated HTR relay.	
22	At OTF— Operate ST key.	OS lamp lighted. At completion of dialing— ED, TGT lamps lighted.
23	When ED, TGT lamps light, ***start timing.***	After 13 to 24 seconds— Overflow tone heard. At jack, lamp and key circuit— TO_ lamp lighted associated with sender under test.
24	At OTF— Restore ST key.	OS, ED, TGT lamps extinguished. Overflow tone silenced.
25	At jack, lamp, and key circuit— Momentarily restore (push-in) CTR_ key associated with sender under test.	TO_ lamp extinguished.
26	At marker used for test— Remove blocking tool from HTR relay placed in Step 21.	
27	At OTF— Restore all keys and switches not required in next test.	
D. Reversed Line Test (SD-27893-01 Provided)		
12	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
13	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
14	Operate RVT key.	

STEP	ACTION	VERIFICATION
15	Operate ST key; ***start timing.***	After 13 to 24 seconds— Overflow tone heard.
16	Restore ST key.	Overflow tone silenced.
17	Restore all keys and switches not required in next test.	
E. Abandoned Call		
12	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
13	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
14	At sender frame of sender under test— Insert plug of 32A test set into RC jack.	
15	Operate white (ST) button of 32A test set. ***Note:*** Proceed immediately to Step 16.	
16	Immediately after sender SP relay operates, operate red (RL) button of 32A test set.	EP relay does not operate. ON relay released.
17	Remove 32A test set from RC jack.	
18	At OTF— Restore all keys and switches not required in next test.	
F. 10X Test Line Call		
11	Set A through G DIAL switches as indicated in Test 11 of Test Chart.	
12	Set A through H SDR switches as indicated in Test 11 of Test Chart.	
13	Operate REC, DL4 keys.	
14	Operate 4SD key.	
15	Operate ST key.	OS lamp lighted. At completion of dialing— ED lamp lighted. AT completion of outpulsing— ED, TOK lamps lighted. At TIC— Lamps lighted corresponding to digits outpulsed by sender.

STEP	ACTION	VERIFICATION
16	At OTF— Restore ST key.	OS, ED, EP, TOK lamps extinguished.
17	At TIC— Momentarily operate RLS key.	All lamps extinguished.
18	Restore all keys and switches not required in next test.	
G. Timing Features		
12	At jack, lamp, and key circuit— Insert 322A make-busy plug into MB_ jack associated with sender under test.	
13	Restore (push in) CTR_ key associated with sender under test.	
14	At OTF— Operate TEL key.	
15	At sender frame of sender under test— Insert plug of 32A test set into RC jack.	
16	Insert plug of head telephone set into TEL jack.	
17	Block nonoperated EP relay.	
18	Operate white (ST) button of 32A test set; ***start timing.***	After 13 to 24 seconds— TM relay operated. Overflow tone heard. Sender released.
19	Operate red (RL) button of 32A test set.	
20	Remove blocking tool from EP relay placed in Step 17.	
21	Remove 32A test set from RC jack.	
22	Remove head telephone set from TEL jack.	
23	At jack, lamp, and key circuit— Remove 322A make-busy plug from MB_ jack associated with sender under test.	
24	Operate (pull out) CTR_ key associated with sender under test.	
25	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
H. Cancel Timed Release and Alarm		
12	At jack, lamp, and key circuit— Insert 322A make-busy plug into MB_ jack associated with sender under test.	
13	At sender under test— Block nonoperated EP relay.	
14	Connect ground to 4B of MB relay.	
15	At OTF— Operate ST key; ***start timing.***	TGT lamp lighted. After 13 to 24 seconds— At jack, lamp, and key circuit— TO_ lamp lighted. Overflow tone heard. In 10 to 15 seconds after TO_ lamp lighted— R-S-TOA lamp lighted. Major alarm sounds.
16	At OTF— Momentarily operate DL key.	Overflow tone silenced.
17b	If alarm sending circuit is provided— At jack, lamp, and key circuit— Operate alarm transfer key to DB. ***Note:*** All alarms are transferred while alarm transfer key is operated to DB.	TO_, R-S-TOA lamps extinguished. Major alarm silenced.
18b	Operate alarm transfer key to NTR.	
19b	Momentarily operate RS key.	
20	At OTF— Restore ST key.	
21	Operate ST key; ***start timing.***	TGT lamp lighted. After 13 to 24 seconds— At jack, lamp, and key circuit— TO_ lamp lighted. Overflow tone heard. In 10 to 15 seconds after TO_ lamp lighted— R-S-TOA lamp lighted. Major alarm sounds.
22	Momentarily restore (push in) CTR_ key associated with sender under test.	TO_, R-S-TOA lamps extinguished. Major alarm silenced.
23	At OTF— Restore ST key.	

STEP	ACTION	VERIFICATION
24	At sender frame— Remove blocking tool from EP relay placed in Step 13.	
25	Remove ground from 4B of MB relay placed in Step 14.	
26	At OTF— Remove 322A make-busy plug from MB_ jack associated with sender under test.	
27	Restore all keys and switches not required in next test.	

I. Marker Reorder

12	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
13	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
14	At marker used for test— Block nonoperated HTR relay.	
15	At TIC— Insert make-busy plug into TIC MB MKR_ jack associated with marker used for test.	
16	At OTF— Operate RTL key.	
17	Operate ST key.	At completion of dialing— Overflow tone heard.
18	Restore ST key.	Overflow tone silenced.
19	At marker used for test— Remove blocking tool from HTR relay placed in Step 14.	
20	At TIC— Remove make-busy plug from TIC MB MKR_ jack.	
21	At OTF— Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
J. Sender Busy		
1	At AIS sender frame— When sender to be tested is idle— Block operated SB relay.	
2	At jack, lamp, and key circuit— Insert 322A make-busy plugs into MB_ jacks of all other senders in group associated with sender under test.	At sender under test— Check for presence of ground on terminals 17, 44, 54 of terminal strip B on sender and pulse control unit.
3	At jack, lamp, and key circuit— Insert 322A make-busy plug into MB_ jack associated with sender under test.	
4	At sender under test— Remove blocking tool from SB relay.	Check for presence of ground on terminals 17, 44, 54 of terminal strip B on sender and pulse control unit.
5	At jack, lamp, and key circuit— Remove 322A make-busy plug from MB_ jack associated with sender under test.	At sender under test— Check for absence of ground on terminals 17, 44, 54 of terminal strip B on sender and pulse control unit.
6a	▶If option is provided for the elimination of stuck sender plant registration on test calls when sender is made busy at OTF— At jack, lamp, and key circuit— Insert 322A make-busy plug into MB_ jack associated with sender under test.	
7a	At sender under test— Block operated TRL, CT relays.	Check for absence of ground on terminal 54 of terminal strip A on sender and pulse control unit.
8a	At jack, lamp, and key circuit— Remove 322A make-busy plug from MB_ jack associated with sender under test.	TO_ lamp lighted. R-S-TOA lamp lighted. Major alarm sounded. At sender under test— Check for presence of ground on terminal 54 of terminal strip A on sender and pulse control unit.
9a	Remove blocking tools from TRL, CT relays.	At jack, lamp, and key circuit— TO_, R-S-TOA lamps extinguished. Major alarm silenced.
10	Remove all 322A make-busy plugs from MB_ jacks placed in Step 2.◀	

STEP	ACTION	VERIFICATION
K. Stuck Sender Guard Test		
1	At sender frame— Momentarily operate MB relay of sender 1.	At sender 0— Check for absence of ground on terminal 51 of terminal strip B on sender and pulse control unit during time that MB relay is operated.
2	Momentarily operate CTR relay associated with sender 1.	At sender 0— Check for absence of ground on terminal 51 of terminal strip B on sender and pulse control unit during time that CTR relay is operated.
3	Momentarily operate MB relay associated with sender 0.	At sender 1— Check for absence of battery on terminal 18 of terminal strip A on sender and pulse control unit during time that MB relay is operated.
4	Momentarily operate CTR relay associated with sender 0.	At sender 1— Check for absence of battery on terminal 18 of terminal strip A on sender and pulse control unit during time that CTR relay is operated.
FOR SENDERS USING MF CURRENT SUPPLY		
L. Multifrequency Current Supply Trouble Release		
12	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
13	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
14	Operate TEL key.	
15	At jack, lamp, and key circuit— Insert make-busy plug into MB_jack associated with sender under test.	
16	At multifrequency current supply frame— Operate 1-4, 2-5, or 3-6 key associated with sender under test.	
17	At sender frame— Insert plug of 32A test set into RC jack.	
18	Insert plug of head telephone set into TEL jack.	
19	Connect ground to terminal 52 on terminal strip A on sender and pulse control unit of either sender.	

STEP	ACTION	VERIFICATION
20	Momentarily operate white (ST) button of 32A test set.	Overflow tone heard.
21	Momentarily operate red (RL) button of 32A test set.	Overflow tone heard.
22	Remove head telephone set from TEL jack.	
23	Remove ground from terminal 52 on terminal strip A of sender and pulse control unit.	
24	At multifrequency current supply frame— Restore key operated in Step 16.	
25	At jack, lamp, and key circuit— Remove make-busy plug from MB_ jack associated with sender under test.	
26	Restore all keys and switches not required in next test.	

FOR SENDERS EQUIPPED WITH MF GENERATORS (SD-27882-01 APP FIG. 9)

M. Comparative Frequency Test

▶***Note:*** Refer to paragraph 1.04.◀

1	At jack, lamp, and key circuit— Insert make-busy plugs into MB_jacks associated with both senders.	
2	At each sender— Block operated ON relay.	
3	Connect one lead of 67C test set to terminal 12 on terminal strip M of MF supply unit associated with sender 0. (Refer to paragraph 2.05.)	
4	Connect other lead of 67C test set to terminal 12 on terminal strip M of MF supply unit associated with sender 1.	
5	Listen for beat frequency.	Beats should be about five beats per second or less.
6	Remove 67C test set from terminal strips.	
7	Repeat Steps 3 through 6, connecting 67C test set leads to terminals 15, 21, 22, 25, and 35 of terminal strips M on MF supply	

STEP	ACTION	VERIFICATION
	unit in same manner as in Steps 3 and 4 for the remaining frequency outputs.	
8	Remove blocking tools from ON relays placed in Step 2.	
9	At jack, lamp, and key circuit— Remove make-busy plugs from MB_ jacks associated with both senders.	

N. Oscillator Output Voltage

	Note: Refer to paragraph 1.05.	
1	At jack, lamp, and key circuit— Insert make-busy plug into MB_ jack of sender to be tested.	
2	At sender under test. Connect 275-ohm resistor between terminal 12 and terminal 11 (ground) of terminal strip M on MF supply unit.	
3	Set voltmeter to read ac volts.	
4	Block operated ON relay.	
5	Connect voltmeter GND lead to terminal 11 (ground) of terminal strip M on MF supply unit.	
6	Touch voltmeter probe to terminal 12 of terminal strip M on MF supply unit.	Output voltage is between 1.25 and 1.75 volts. ***Note:*** If output voltage of any of the six oscillators is not within the limits specified, proceed as outlined in notes of corresponding schematic drawing.
7	Disconnect voltmeter and resistor from all terminals on MF supply unit.	
8	Repeat Steps 2 through 7 for remaining output voltages by connecting resistor and voltmeter to terminals 15, 21, 22, 25, and 35 of terminal strip M on MF supply unit in same manner as in Steps 2 and 6.	
9	Remove blocking tool from ON relay placed in Step 4.	

STEP	ACTION	VERIFICATION
10	At jack, lamp, and key circuit— Remove make-busy plug from MB_ jack associated with sender under test.	

O. Frequency Test Using Frequency Meter (SD-27882-01, App Fig. 9 Provided)

▶*Note:* Refer to paragraph 1.05.◀

1 At jack, lamp, and key circuit—
Insert make-busy plug into MB_ jack of sender to be tested.

2 At sender under test—
Connect one end of 1100-ohm resistor to terminal 11 (ground) of terminal strip M on MF supply unit using 893 cord.

TABLE B

M_ TERMINAL	OSCILLATOR OUTPUT FREQUENCY	MAXIMUM PERMISSIBLE VARIATION (HZ ±1 PERCENT)
12	700	698 to 707
15	900	897 to 909
21	1100	1097 to 1108
22	1300	1296 to 1309
25	1500	1495 to 1510
35	1700	1695 to 1712

Note: The 624B tool provides means for connecting to M_ terminals. The KS-6278 connecting clip provide means for connecting to resistors.

3 Connect other end of 1100-ohm resistor to first terminal in Table B, using 893 cord.

4 Connect testing cord to frequency meter.

5 Connect clip associated with center conductor of testing cord to same side of 1100-ohm resistor as Step 3.

6 Connect clip associated with shield of testing cord to ground side of 1100-ohm resistor as in Step 2.

7 Block operated ON relay.

STEP	ACTION	VERIFICATION
8	Measure frequency.	Frequency is within limits indicated in Table B.
9a	If output frequency is not within limits specified in Table B— Proceed as outlined in notes indicated on corresponding schematic drawing.	
10	Move test connection from terminal used in Step 3 to next terminal indicated in Table B.	
11	Repeat Steps 8 through 10 until all frequencies are measured.	
12	Remove test connections from all terminals on MF supply unit.	
13	Remove blocking tool from ON relay placed in Step 7.	
14	At jack, lamp, and key circuit— Remove make-busy plug from MB_ jack associated with sender under test.	

P. All-Lines-Busy Test

◗*Note:* Refer to paragraph 3.01.◖

12	Set A through G DIAL switches as indicated in Test 1A of Test Chart.	
13	Set A through H SDR switches as indicated in Test 1A of Test Chart.	
14	Set AIL switch to select AIS line.	
15	At jack, lamp, and key circuit— Insert make-busy plug into MB_jack associated with selected line.	
16	At OTF— Operate ST key.	Overflow tone heard.
17	Restore ST key.	Overflow tone silenced.
18	Remove make-busy plug from MB_ jack associated with selected line.	
19	Repeat Steps 14 through 18 for each remaining line in the preference chain.	
20	Restore all keys and switches not required in next test.	

5. PREPARATION OF TEST CHART

5.01 The Test Chart is used to provide DIAL switch setting and SDR switch setting information for each test. Information obtained from local office records should be used to fill in the Test Chart.

5.02 Fill in the A, B, and C columns under DIAL switch setting as follows:

(1) ***Tests 1A Through 2:*** Enter each local office code at least once when all numbers are physical.

(2) ***Tests 3 and 4:*** Enter proper office code for any theoretical number.

(3) ***Tests 5 and 6:*** Enter proper office code for any extratheoretical number.

(4) ***Test 7:*** Enter one of the office codes listed in Tests 1A through 6.

(5) ***Test 8:*** Enter an office code which has access to blank numbers identified by the hundreds digit.

(6) ***Test 9:*** Enter an office code which has access to blank numbers identified by the thousands digit.

(7) ***Test 10:*** Fill in only if there are numbers in the office that are reached on a nondiscriminating basis in accordance with the VOA or VOB to OCA_ cross-connections in the sender.

(8) ***Test 11:*** Enter one of the office codes listed in Tests 1A through 6.

5.03 Fill in the TH, H, T, and U columns as follows:

(1) ***Test 2 Through 6 and 10:*** Use digits as listed in any of Tests 1A through 1E.

(2) ***Test 7:*** Use digits corresponding to a local directory number arranged for trouble intercept. If there are no local numbers on trouble intercept, establish one in the number group.

(3) ***Test 8:*** Use digits corresponding to an unequipped number in the number group selected.

(4) ***Test 9:*** Use digits corresponding to a number group which is not equipped.

(5) ***Test 11:*** Fill in the TH column using any digit in an equipped number group.

5.04 The B through H digits columns of SDR switch setting must contain the office code plus the TH, H, T, and U digits shown under DIAL switch settings of the same test number.

TEST CHART

TEST NO.	OFFICE FEATURE	TYPE OF INCPT	DIAL SWITCH SETTING							SDR SWITCH SETTING							
			A	B	C	TH	H	T	U	A	B	C	D	E	F	G	H
1A	Office A	RI				1	3	6	0	3				1	3	6	0
1B	Office A	RI				3	6	0	7	3				3	6	0	7
1C	Office A	RI				6	0	7	1	3				6	0	7	1
1D	Office A	RI				0	7	1	3	3				0	7	1	3
1E	Office A	RI				7	1	3	6	3				7	1	3	6
2	Office B	RI								3							
3	Office A	RI								3							
4	Office B	RI								3							
5	Office A	RI								3							
6	Office B	RI								3							
7	Office A	TBI								1							
8	Office A	BN								0							
9	Office A	BN								0							
10	Unidentified Office (PTN)	RI								3							
11	Office A	RI					1	0	2	3	1	0	2				