

CIRCUIT NOTES:

101.	DESIG	AMP	POTENTIAL FUSED	ONE PER
	1-1/3		23V SIG BAT.	CIRCUIT
		BATTERY SYMBOL -23		VOLTAGE RANGE 18-28V

102.	FEATURE OR OPTION	PROVIDE		
		FIG	APP OR WRG	QUANTITY
	UNATTENDED STATION CIRCUIT	1		1 PER INST.

103.				NETWORK VALUES		
NETWORK		RESISTANCE IN OHMS	CAPACITANCE IN UF			
NO.	CODE					

104.							RECORD OF FIGURES, WIRING AND APPARATUS CHANGES			
CHANGED ON ISSUE	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT						
				STD	A&M	MD				
5D	Z OR Y	Z		Y		Z				
6D	W OR X	X		W		X				
7D				V		U				
				S		T				
				R		Y				
8D	P OR Q	Q		P		Q				

105. WHERE LOCAL BATTERIES ARE EMPLOYED FOR SIGNALING THE EQUIPMENT, NEED NOT BE GROUNDED AND THE GROUND SYMBOL INDICATES + BATTERY.

CIRCUIT NOTES (CONT):

- 106. COMMERCIAL 110 VOLT POWER SHALL NOT BE CONNECTED DIRECTLY TO THE START CIRCUIT ON TERMINALS 3, 4 & 7 OF THE TERMINAL STRIP. WHEN THE START CIRCUIT CONTROLS 110V AC POWER, CONNECT TO THESE TERMINALS (USING RUBBER COVERED WIRE SUCH AS TELEPHONE INSIDE WIRE) A 12V SECONDARY OF A BELL RINGING TRANSFORMER IN SERIES WITH A B1-TYPE SIGNAL ENGINEERING AND MANUFACTURING COMPANY RELAY OR EQUIVALENT. THE RELAY CONTACTS WILL CONTROL THE POWER CIRCUIT. THE TRANSFORMER AND POWER RELAY SHOULD BE FURNISHED AND MAINTAINED BY THE SUBSCRIBER. THE POWER SUPPLY SHALL BE SUITABLY INSULATED FROM THE TELEPHONE CHANNEL BY INSULATION CAPABLE OF WITHSTANDING AT LEAST TWICE THE NORMAL LINE VOLTAGE PLUS 1000V RMS FOR ONE MINUTE (A.I.E.E. STANDARD). THE 110V COMMERCIAL POWER FOR THE LEVEL INDICATOR SHALL BE FUSED WITH A ONE AMPERE FUSETRON.
- 107. START LEADS DESIGNATED S PROVIDE A SHORT START INTERVAL FOR WEIGHT DRIVEN RIVER LEVEL INDICATORS. START LEADS DESIGNATED L PROVIDE A START INTERVAL FOR TELECHROM MOTOR DRIVEN RIVER LEVEL INDICATORS THAT CONTINUES FOR THE DURATION OF THE CALL.
- 108. PRIOR TO ISSUE 7D, (AW) RELAY RESISTANCE WAS SHOWN AS 200 OHMS.

INFORMATION NOTES.

- 301. UNLESS OTHERWISE SPECIFIED; RESISTORS ARE IN OHMS, CAPACITORS ARE IN MICROFARADS.

WORKING LIMITS:

	MAX. CONDUCTOR LOOP RES	INS. RES
SUPERVISION MANUAL AREAS	650	10,000
SUPERVISION PANEL AREAS	670	10,000
SUPERVISION S.X.S. AREAS	1250	15,000

FIGURES AND OPTIONS ON THIS DWG			
FIGS.	APP OR WIRING		
1	Z	P	
	Y	Q	
	X		
	W		
	V		
	U		
	T		
	S		
	R		

CIRCUIT REQUIREMENTS

UNATTENDED STATION CIRCUIT FOR TRANSMITTING EXTERNAL AUDIBLE SIGNALS BACK TO A CALLING PARTY (UNATTD. STA.)

8D R/T
DNC
DLV

APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRESS.	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG			TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.		
								CONN BAT.	CONN GRD									
MAGNETS																		
	8A RINGER	Q	1															
	C4A RINGER	P	1															
RELAYS																		
A	Y74		1	188/115	H	35		3T(B)	GRD		0	70	39.5	37.5				
								3T(B)	GRD		H	70	3.7	3.5				
								3T(B)	GRD		R	70	2.2	2.4				
AW	KS-7816		1				3B(W), 3T(R1), 1B(AW1), 3B(AW1)	1B(L)	GRD							WITH 18V B.AT. OB- SERVE THAT (AW1) OPERATES IN APPROX 5 SEC		
AW1	U1437	S	1	153/311			W(NO), (RL)O, 4B(AW1), 3T(R1)	9T(AW1)	GRD		0		30.5	29.0				
AW1	U PER D-157034	T	1	153/311			W(NO), (RL)O 4B(AW1), 3T(R1)	9T(AW1)	GRD		0		30.5	29.0				
B	Y74		1	188/115	H	35	3T(B), (A)O	2T(A)	GRD		0	70	39.5	37.5				
								2T(A)	GRD		H	70	3.7	3.5				
								2T(A)	GRD		R	70	2.2	2.4				
D	B42		1	3		30	3T(R1)	3T(R1)	4T(L)	B/G	P/S/T	0	150	21.0	20.0			
							3T(R1)	3T(R1)	4T(L)	B/G	P/S/T	R	150	8.2	8.7			
L	Y72		1	190/115	H	29	7B(AW1) 3T& 2B(R1)	3B(R1)	GRD		0	69	39.0	37.0				
								3B(R1)	GRD		H	69	4.7	4.4				
								3B(R1)	GRD		R	69	2.3	2.5				
R	85P		1				(R1)NO									SEE BSP C31.805		
R1	U293		1	132/110	H	47	3B(R1)	4T(R1)	GRD		0		19.0	18.0				
RL	U354		1	142/108	H	53		1B(Z)	GRD		0		56.5	53.5				
W	U376		1	108/132	H	47	1B(W)	2B(AW1)	GRD		0		24.0	22.5				
Z	U633	X	1	106/101	H	44	1B(Z)	1T(W)	GRD		0	13.3	7.8	7.4				
											R	13.3	0.4	0.6				
Z	UA65	W	1	106/101	H	44	1B(Z)	1T(W)	GRD		0		6.6	6.3				

TEST NOTES:

- ADJUST THE AIR GAP TO 60 ON THE BIASING SPRING SIDE OF THE RINGER, AND TO 24 ON THE STOP SCREW SIDE. WITH 17V TO 18V DC SUPPLY, BLOCK THE (L) RELAY OPERATED, AND THE (AW1) RELAY NONOPERATED. ADJUST THE RINGER BIASING SPRING UNTIL THE RINGER JUST OPERATES WITH THE COMMON COVER OFF. THEN BACK OFF THE BIASING STUD 1/8 TURN IN A COUNTER-CLOCKWISE DIRECTION. WITH THE SAME DC SUPPLY AND BLOCKING INFORMATION, ADJUST BOTH GONGS TO HAVE MINIMUM CLEARANCE WITH THE CLAPPER BALL, CONSISTENT WITH GIVING A CLEAR UNBLURRED SIGNAL. CHECK FOR OPERATION ON A RING FROM THE CENTRAL OFFICE WITH THE BLOCKING REMOVED AND THE COMMON COVER ON. RECONNECT TO +22-1/2V TAP OF BATTERY FOR SERVICE.
- THE ARMATURE OF THE C4A RINGER WHEN MANUALLY DISPLACED, SHALL RESTORE TO NONOPERATED SIDE OF AIR GAP, WITH BIAS SPRING IN LOW NOTCH AND VOLUME CONTROL WHEEL IN HIGH POSITION. SHOULD ARMATURE FAIL TO RESTORE, REPLACE RINGER. THE VOLUME CONTROL SHOULD BE SET ON MAXIMUM VOLUME. WITH 17V TO 18V DC SUPPLY BLOCK THE (L) RELAY OPERATED, AND THE (AW1) RELAY NONOPERATED. CHECK THAT THE ARMATURE OPERATES AND THE CLAPPER STRIKES GONG. WITH THE GROUND REMOVED, THE BIAS SPRING SHALL RESTORE THE CLAPPER AND STRIKE THE GONG WITH A CLEAR UNBLURRED SIGNAL. CHECK THE OPERATION ON A RING FROM THE CENTRAL OFFICE WITH THE BLOCKING REMOVED AND THE COMMON COVER ON. RECONNECT TO +22-1/2V TAP OF BATTERY FOR SERVICE.

STATION SYSTEMS		SD-69110-01-D1
UNATTENDED STATION CIRCUIT		
BELL TELEPHONE LABORATORIES INCORPORATED		DUO SIZE 3S PRINTED IN U.S.A.

FIG. 1K

