

TOLL LAYOUT FACILITY RECORDS

1. GENERAL

1.01 This section describes certain standard facility record forms as well as several others which have been printed and used locally by various operating areas to meet the particular needs of their circuit layout assignment and field people who are involved in toll circuit layout work. The latter forms are not being standardized but are included for the information of all Companies.

1.02 Forms illustrated include toll cable pair records, small office facility records, central office equipment records, repeating coil (line transformer records), telephone repeater records, and telegraph equipment records.

1.03 This section includes information regarding Form E-2179 Toll Cable Pair Record.

2. TOLL LAYOUT FACILITY RECORDS

Toll Cable Pair Records

2.01 Form E-2179, Toll Cable Pair Record: This form is designed for use both in the layout assignment center and as a toll test room toll cable pair record for primary board and circuit layout work.

2.02 This record is a page type form, 9-5/16" x 17" printed on both sides of a durable buff stock. It is organized to accommodate detail with respect to the make-up of a toll cable or complement and the occupancy of both the telephone and telegraph facilities. Space is provided for listing 25 quads, or 75 non-quadded pairs, on each of its two pages. Standard 6-ring binders are available for filing the forms.

2.03 Examples of this form and a typical index sheet are shown in Figs. 1, 2, 3, 4 and 5.

2.04 Form E-2179-A: This form, the top of which is illustrated in Fig. 5A, is essentially the same as Form E-2179 except that it is designed to fit in binders made for 8-1/2" x 11" forms. The same figures illustrate the use of this form.

2.05 Fig. 6 illustrates another type of cable pair record which has been found particularly applicable to very large toll layout assignment centers. This is a heavy card stock 10" x 15" form and can easily be adapted to "Vision Index" type records such as are used in larger exchange assignment centers.

Toll Central Office Equipment Records

2.06 Form E-2307, Record of Central Office Equipment: This is a page type 8-1/2" x 11" form printed on both sides of a durable buff paper stock. Fig. 7 illustrates this form.

2.07 Small Office Jack Panel Assignment Record: Fig. 8 illustrates one type of record suitable for this purpose.

2.08 Form E-2308, Record of Repeating Coil Groups: This is also a page type form printed both sides on the same color and weight paper as Forms E-2307, E-2179 and E-2179A. A facsimile is shown in Fig. 9.

2.09 Record of Telephone Repeaters: Fig. 10 illustrates two forms which are used by one Associated Company and Fig. 11 shows a more detailed type of telephone repeater equipment record used in a number of large toll layout assignment centers of another Company.

2.10 Record of Telegraph Equipment and Assignments: Fig. 13 shows one type of record and Fig. 12 illustrates a larger 10" x 15" form which is adaptable to "Vision Index" type records.

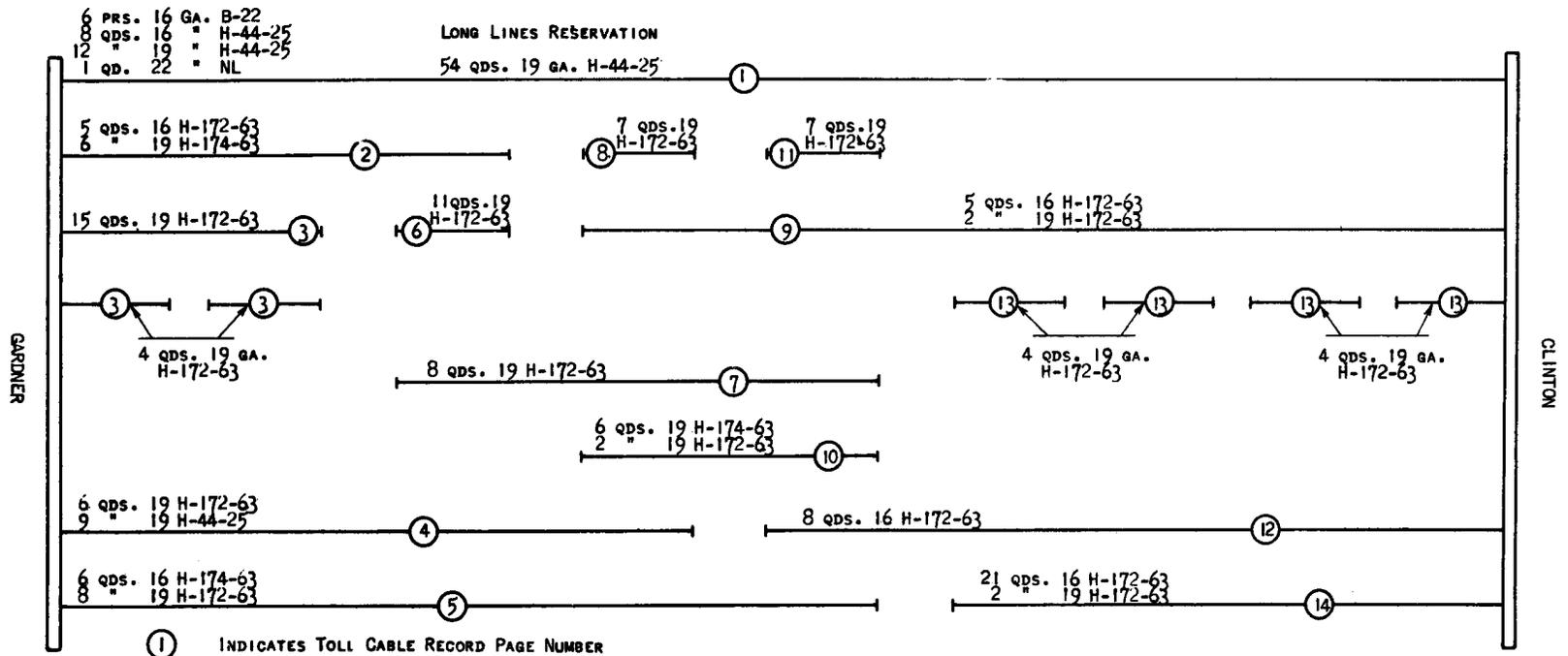
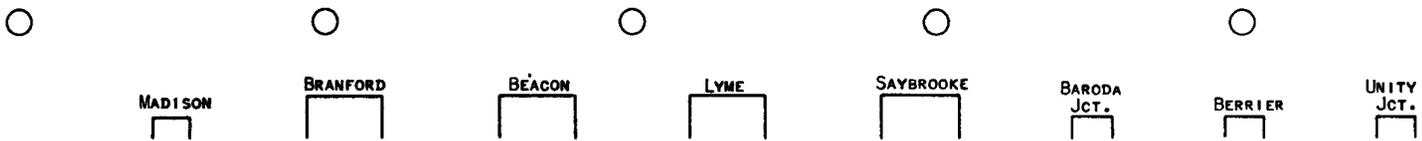
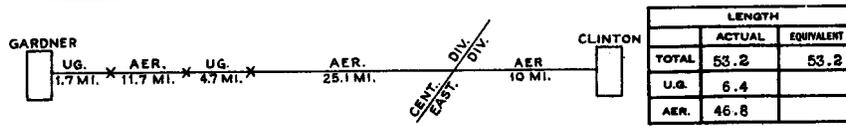


FIGURE 1
 TOLL CABLE RECORD INDEX SHEET
 WITH SPECIMEN ENTRIES ILLUSTRATING ITS APPLICATION TO A PARTICULAR CABLE

GARDNER-CLINTON "A"

Form E-2179
 CABLE Gardner - Clinton "A" PAIRS BETWEEN Gardner - Clinton Page 1

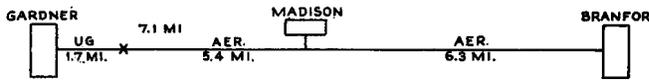


GAUGE, LOADING AND OTHER PAIR DETAILS	PAIR OR PHANTOM	TELEPHONE		OTHER 4W PAIR	MISCELLANEOUS
		CIRCUIT OR CIRCUIT UNIT	ORDER NO.		
Ga. 16 Ldg. B-22 Opr. Program Side Loss 8.51	1	PG. C.U. FAIR-JAC	867		RED NETWORK
	2				
	3				
	4	PG. C.U. FAIR-JAC	867		RED NETWORK
	5				
	6				
Ga. 16 Ldg. H-44-25 Opr. 2-W Side Ph Loss 13.3 11.2	7	R- 2101 Z CLI	925		
	8	R- 2201 Z CLI			
	Ph	R- 2301 Z CLI			
	9	R- 2102 Z CLI			
	10	R- 2202 Z CLI FAIRMOUNT-			
	Ph	R- 2302 Z CLI JACKSON			
	11	R- 2103 Z CLI			
	12	R- 2203 Z CLI			
	Ph	R- 2303 Z CLI			
	13				
	14				
	Ph				SX 300 S.O. 512
	15	FT 866 JAC-MINN	103		
	16				SX S.O. 190
Ga. 19 Ldg. H-44-25 Opr. 4-W (H-W) Side Ph Loss 25.5 21.3	17	1 CLI-GAR	162		
	18	6 CLI-GAR	162		
	Ph	3 CLI-GAR	162		SX
	19		190		
	20	FT 168 JAC-MINN	211		
	Ph		190		
	21	4 CLI-GAR	162		
	22	2 CLI-GAR	162		
	Ph	5 CLI-GAR	162		
	23				
Ga. 19 Ldg. H-44-25 Opr. 4-W (H-W) Side Ph Loss 25.5 21.3	79	R- 101 Z CLI	924	179	PMCX MX 1Z
	80	R- 201 Z CLI		180	PMCX MX 2Z
	Ph	R- 301 Z CLI		Ph	
	81	R- 102 Z CLI		181	PMCX MX 3Z FAIR-JAC
	82	R- 202 Z CLI FAIRMOUNT-		182	PMCX MX 4Z C.O. 115
	Ph	R- 302 Z CLI JACKSON		Ph	
	83	R- 103 Z CLI		183	PMCX MX 5Z
	84	R- 203 Z CLI		184	PMCX MX 6Z
	Ph	R- 303 Z CLI		Ph	
	85			185	MCX TWX 1 FAIR-JAC (E) C.O. 271
	86			186	MCX TWX 1 FAIR-JAC (W) C.O. 271
	Ph			Ph	
	87			187	
	88			188	
Ph			Ph		
89			189		
90			190		
Ph			Ph		
91	Reserved for				
144	Long Lines				
Ga. 19 Ldg. H-44-25 Opr. 4-W (H-W) Side Ph Loss 25.5 21.3	179	R- 101 Z CLI	924	79	PMCX MX 7Z
	180	R- 201 Z CLI		80	PMCX MX 8Z
	Ph	R- 301 Z CLI		Ph	
	181	R- 102 Z CLI		81	PMCX MX 9Z FAIR-JAC
	182	R- 202 Z CLI FAIRMOUNT-		82	PMCX MX 10Z C.O. 115
	Ph	R- 302 Z CLI JACKSON		Ph	
	183	R- 103 Z CLI		83	PMCX MX 11Z
	184	R- 203 Z CLI		84	PMCX MX 12Z
	Ph	R- 303 Z CLI		Ph	
	185			85	MCX
	186			86	MCX
	Ph			Ph	
	187			87	
	188			88	
Ph			Ph		
189			89		
190			90		
Ph			Ph		
191	Reserved for				
244	Long Lines				
Ga. 22 Ldg. XL	273				
	274				
	Ph				

FIGURE 2
 TOLL CABLE PAIR RECORD, FORM E-2179
 WITH SPECIMEN ENTRIES

IN THIS ILLUSTRATION ALL OF THE PAIRS ON THE SHEET EXTEND BETWEEN THE TWO TERMINATING POINTS SHOWN AT THE TOP OF THE SHEET. NONE OF THEM IS LOOPED OR TERMINATED AT ANY INTERMEDIATE POINT.
 THE ORIGINAL IS 9-5/16" x 17" AND IS PRINTED ON BUFF PAPER.

Form E-2179 Page 3
 CABLE Gardner - Clinton "A" PAIRS BETWEEN Gardner-Madison-Branford



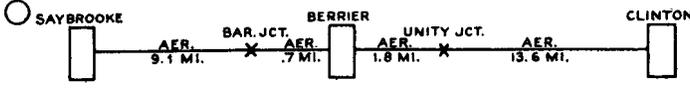
	LENGTH	
	ACTUAL	EQUIVALENT
TOTAL	13.4	13.4
U.G.	1.7	
AER.	11.7	

GAUGE, LOADING AND OTHER PAIR DETAILS	PAIR OR PHANTOM	TELEPHONE		OTHER 4-W PAIR	MISCELLANEOUS	
		CIRCUIT OR CIRCUIT UNIT	ORDER NO.			
	41	1	BRAN - GAR	414		
	42	3	BRAN - GAR	414		
	Ph	2	BRAN - GAR	414	SX 326	S.O. 419
	43	7	BRAN - GAR	936		
	44	9	BRAN - GAR	936		
	Ph	8	BRAN - GAR	936		
	45					
	46					
	Ph				SX 1023	S.O. 391
	47	1	BRAN - OTT	731		
	48	3	BRAN - OTT	731		
	Ph	2	BRAN - OTT	731	SX 431	S.O. 516
	49					
	50					
	Ph					
	51					
	52					
	Ph					
	53					
	54					
	Ph					
	55	1	GAR - MAD	233		4 BRAN-MAD 314
	56	3	GAR - MAD	233		3 BRAN-MAD 314
	Ph	2	GAR - MAD	233		2 BRAN-MAD 314
	57	5	GAR - MAD	233		
	58	4	GAR - MAD	233		1 BRAN-MAD 314
	Ph	6	GAR - MAD	233		
Ca. 19						
Idg. H-172-63						
Opr. 2-W						
Loss						
Side Ph						
3.75 3.75 Gar-Bran						
	63	31	BEA - GAR	682		
	64	32	BEA - GAR	682		
1.99 1.99 Gar-Mad						
	Ph					
	65	3	GAR - HAV.	829		
1.76 1.76 Mad-Bran						
	66	2	GAR - HAV.	829		
	Ph	1	GAR - HAV.	829		
	67	4	GAR - HAV.	829		
	68	5	GAR - HAV.	829		
	Ph					
	69			615		
	70			615		
	Ph			615		
	71					
	72					
	Ph					
	73					
	74					
	Ph					
	75					
	76					
	Ph					
	77					
	78					
	Ph					

FIGURE 3
 TOLL CABLE PAIR RECORD, FORM E-2179
 WITH SPECIMEN ENTRIES

IN THIS ILLUSTRATION A FEW OF THE PAIRS ARE LOOPED AT A POINT INTERMEDIATE BETWEEN TWO MAJOR TERMINATING POINTS. THESE FEW PAIRS ARE SHOWN ON THE SAME SHEET WITH THE PAIRS WHICH GO STRAIGHT THROUGH, THUS AVOIDING THE USE OF SEPARATE SHEETS FOR THESE FEW LOOPED PAIRS.

Form E-2179 Page 13
 CABLE Gardner - Clinton "A" PAIRS BETWEEN Saybrooke-Baroda Jct.-Berrier-
Unity Jct.-Clinton



	LENGTH	
	ACTUAL	EQUIVALENT
TOTAL	25.2	25.2
u.g.		
AER.	25.2	

GAUGE, LOADING AND OTHER PAIR DETAILS	PAIR OR PHANTOM	TELEPHONE		OTHER 4-W PAIR	MISCELLANEOUS
		CIRCUIT OR CIRCUIT UNIT	ORDER NO.		
SAYBROOKE - BARODA JCT. Ga. 19 Idg. H-172-63 Side Ph Loss 2.55 2.55	253	4	BAR. JCT - SAY	182	
	254	5	BAR. JCT - SAY	182	
	Ph				
	255	1	BERR - SAY	194	
	256	3	BERR - SAY	194	
	Ph	2	BERR - SAY	212	
	257	4	BERR - SAY	112	
	258	6	BERR - SAY	112	
	Ph	5	BERR - SAY	196	
	259				
260					
Ph					
BARODA JCT. - BERRIER Ga. 19 Idg. H-172-63 Side Ph Loss .20 .20	253	31	BAR. JCT - BERR	196	
	254	4	BAR. JCT - CLI	216	
	Ph				
	255	1	BERR - SAY	194	
	256	3	BERR - SAY	194	
	Ph	2	BERR - SAY	212	
	257	4	BERR - SAY	112	
	258	6	BERR - SAY	112	
	Ph	5	BERR - SAY	196	
	259				
260					
Ph					
BERRIER - UNITY JCT. Ga. 19 Idg. H-172-63 Side Ph Loss .50 .50	253				
	254	4	BAR. JCT - CLI	216	
	Ph				
	255	1	BERR - CLI	129	
	256	3	BERR - CLI	129	
	Ph	2	BERR - CLI	129	
	257	4	BERR - CLI	129	
	258	6	BERR - CLI	129	
	Ph	5	BERR - CLI	129	
	259				
260					
Ph					
UNITY JCT. - CLINTON Ga. 19 Idg. H-172-63 Side Ph Loss 3.8 3.8	253				
	254	4	BAR. JCT - CLI	216	
	Ph				
	255	1	BERR - CLI	129	
	256	3	BERR - CLI	129	
	Ph	2	BERR - CLI	129	
	257	4	BERR - CLI	129	
	258	6	BERR - CLI	129	
	Ph	5	BERR - CLI	129	
	259				
260					
Ph					

FIGURE 4
 TOLL CABLE PAIR RECORD, FORM E-2179
 WITH SPECIMEN ENTRIES

IN THIS ILLUSTRATION A SINGLE SHEET IS USED FOR SHOWING A NUMBER OF SMALL PAIR-GROUPS WHICH ARE IN SERIES ALONG A CABLE ROUTE

CABLE Lewis - Madisonville "A" PAIRS BETWEEN Lewis - Boonville

GAUGE AND LOADING	PAIR	Lewis		CIRCUIT	Boonville		ORDER NO.	MISCELLANEOUS
		LINE EQUIP.	REPT.		REPT.	LINE EQUIP.		
16 Ga. H-44-25	1			ASSOC.				
	6			CO.				
	7	SX PH		0675		SX PH	3627	
	8							
	9			SIG. CCT. FT 214 DT-WTON			3781	
	10							
	11			SIG. CCT. FT 249 DT-MAD			3672	
	12							
	13		13-B-1	7706			3582	
	14							
16 Ga. H174-63	15		12-A-1	KSP 6089			4117	
	16							
	17		12-A-1	KSP-6071			4117	
	18							
	19		12-A-1	KSP 6109			4117	
	20							
	21		12-A-1	0104			3975	
	22							
	23		MCX	20-BX-1	KSP-1127 (E)		MICX	4034
	24			20-BX-1	KSP-1127 (W)			4034
16 Ga. H174-63	25							
	26		20-AX-1	0241			4325	
	27		20-A-1	016 (E)			4110	
	28		20-A-1	016 (W)			4110	
	29		20-B-1	0248 (E)			3958	
	30		20-B-1	0248 (W)			3958	
	31		20-B-1	KSP 4179 (E)			4871	
	32		20-B-1	KSP 4179 (W)			4871	
	33		SX	7718		SX	3941	
	34		SX			SX		
16 Ga. H174-63	35			ASSOC.				
	46			CO.				
	47		MCX			MICX		
	48		MCX			MICX		
	49		SX PH	12-A-1	0117		SX PH	3975
	50							
	51		12-A-1	0503			3980	
	52							
	53			SIG. CCT. FT 173 LEW-MAD			4833	
	54							
16 Ga. H174-63	55			SIG. CCT. FT 480 LEW-MAD			4764	
	56							
	57			ASSOC.				
	84			CO.				
	85		MCX			MICX	3958	
	86		MCX			MICX		
	87		SX PH			SX PH		
	88							
	89			0697			4259	
	90							
16 Ga. H174-63	91		MCX			MICX		
	92						4020	
	93						4034	
	94						4034	
	95		PMCX	MX 95		PMICX	4001	
	96			MX 96	LEW-			
	97			MX 97	MAD			
	98			MX 98				
	99		E			E		
	100		E			E		
16 Ga. H-44-25	101		PMCX	MX 99		PMICX	4001	
	102			MX 100				
	103			MX 101				
	104			MX 102	LEW-MAD			
	105			MX 103				
	106			MX 104				
	107			MX 105				
	108			MX 106				
	109			KMO-VF				
	110							
16 Ga. NL	111	M	20-B-1	TWX 2 LEW-MAD (E)			5881	PR 161 E
	112	M	20-B-1	TWX 2 LEW-MAD (W)			5881	PR 162 E
	113	PX		7661			4681	PR 163 E
	114			KMO CO. 3429				
	115	M	20-A-1	7718 7703 N (E)			4772	PR 165 E
	116	M	20-A-1	7718 7703 N (W)			4772	PR 166 E

FIGURE 5
TOLL CABLE RECORD

THIS FIGURE ILLUSTRATES A SUGGESTED FORM FOR USE AS THE TELEGRAPH FACILITIES RECORD, WHERE A LARGE VOLUME OF TELEGRAPH ASSIGNMENT WORK, AND THE METHOD OF HANDLING IT, MAKE IT DESIRABLE TO HAVE SEPARATE RECORDS OF THE TELEPHONE AND TELEGRAPH FACILITIES.

FORM E-2179-A Page _____

CABLE _____ PAIRS BETWEEN _____

LENGTH	
TOTAL	
U.S.	
ASR.	

GAUGE, LOADING AND OTHER PAIR DETAILS	PAIR OR PHANTOM	TELEPHONE		OTHER 4-W PAIR	MISCELLANEOUS
		CIRCUIT OR CIRCUIT UNIT	ORDER NO.		

FIG. 5A TOLL CABLE PAIR RECORD, FORM E-2179A

CABLE								SECTION	
LAY UP									
PAIR	SA AND SEC.	LOADING SYSTEM	TYPE OF COIL	BINDING POINT E W	OTHER SURVEY PAIR	CIRCUIT	CIRCUIT ORDER NO.		
Ph									
Ph									
Ph									
Ph									

FIG. 6 TOLL CABLE PAIR ASSIGNMENT RECORD

PRINTED IN U.S.A. FORM E-2807 (7-38)

RECORD OF CENTRAL OFFICE EQUIPMENT
(OTHER THAN REPEATING COIL GROUPS)

SHEET NO. _____

EQUIPMENT _____

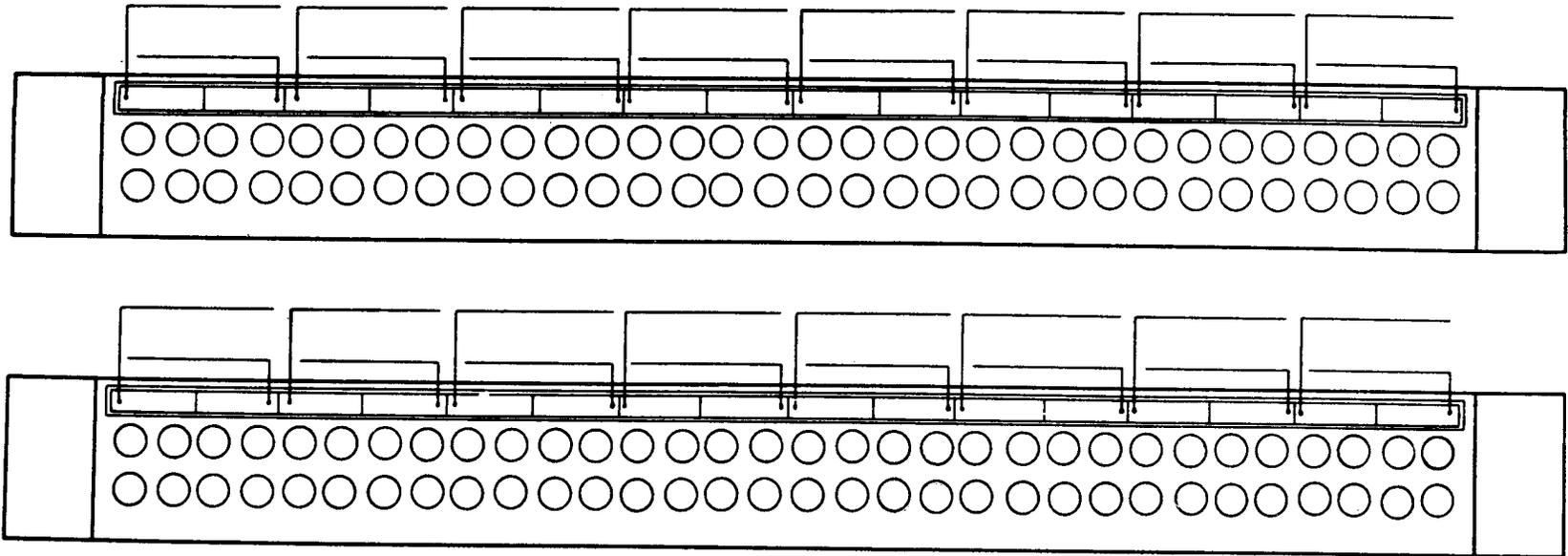
OFFICE _____ TYPE _____

DIST. FRAME _____ STRIP _____ SEC. _____ DRAWING AND FIGURE NOS. _____

RACK OR BAY LOCATION	EQUIPMENT NO.	CIRCUIT IN USE	RACK OR BAY LOCATION	EQUIPMENT NO.	CIRCUIT IN USE	RACK OR BAY LOCATION	EQUIPMENT NO.	CIRCUIT IN USE

FIG. 7 RECORD OF CENTRAL OFFICE EQUIPMENT

SMALL OFFICE TOLL TEST JACK PANEL OR TEST UNIT RECORD



CIRCUIT SKETCHES

OFFICE

ISS 1, SECTION 682-000-010

Fig. 8 - SMALL OFFICE JACK PANEL RECORD

PRINTED IN U.S.A. FORM 8-5906
(7-59)

RECORD OF REPEATING COIL GROUPS

SHEET NO. _____

OFFICE _____ EQUIPMENT _____
 TYPE _____
 DIST. FRAME _____ STRIP _____ SEC. _____ DRAWING AND FIGURE NOS. _____

RACK OR BAY LOCATION	EQUIPMENT NO.	IN USE - CIRCUIT				RACK OR BAY LOCATION	EQUIPMENT NO.	IN USE - CIRCUIT			
		A-1 S-1	B-1 S-2	A-2 NS-1	B-2 NS-2			A-1 S-1	B-1 S-2	A-2 NS-1	B-2 NS-2

Fig. 9 - RECORD OF REPEATING COIL GROUPS
(LINE TRANSFORMERS)

RECORD OF TELEPHONE REPEATERS (2 WIRE TYPE)

SHEET NO. _____

OFFICE _____ REPEATER TYPE _____
 DRAWING AND FIGURE NOS. _____ REGULATOR _____ RINGER TYPE _____

REPEATER NO.	IN USE CIRCUIT	FACILITY	FRAME BLOCK	REG. NET	RINGER SUPPLY RESISTOR	OUTPUT TRANS-FORMER	MONITOR WINDING STRAP	E - W			W - E		
								FILTER	PAD	EQN.	FILTER	PAD	EQN.

RECORD OF TELEPHONE REPEATERS (4 WIRE AND V TYPE)

SHEET NO. _____

OFFICE _____ REPEATER TYPE _____
 DRAWING AND FIGURE NOS. _____ REGULATOR _____

REPEATER NO.	IN USE CIRCUIT	EQUALIZATION		REG. NET	ODD	IN	ODD	OUT	EVEN	IN	EVEN	OUT
		E-W	W-E		E-W	IN	E-W	OUT	W-E	IN	W-E	OUT
		BLOCK	FACILITY		BLOCK	FACILITY	BLOCK	FACILITY	BLOCK	FACILITY		

Fig. 10 - RECORD OF TELEPHONE REPEATERS

VOICE FREQUENCY TELEPHONE EQUIPMENT

OFFICE _____

REPEATERS		AUTHORIZATION	PREV	A	B	C	D	E	F	TOTAL
2A=1 REPTR.		LETTER TO								
2AG=3 REPTS.+2 Gps. SD COILS		DATE & INITIALS								
+1 Gp. PH COILS		FILE								
+NETWORKS		PROJECT								
2AGT=3. REPTS.+1 Gp. SD COILS		EST., ITEM, J.O.								
+½ Gp. PH COILS		SPECS.								
+NETWORKS		DATE START								
REFER BSP E14.001 FOR CODES		DATE SCHED-COMPL								
		DATE COMPL-FILE								

- 1 2AG.No
- 2 2AG.21
- 3 2AG.22
- 4 2AG.30
- 5
- 6 2AGRA.No
- 7 2AGRA.21
- 8 2AGRA.22
- 9 2AGRA.30
- 10 2AGRB.No
- 11 2AGRB.21
- 12 2AGRB.22
- 13 2AGRB.30
- 14
- 15 2ARA.No
- 16 2ARA.21
- 17 2ARA.22
- 18 2ARA.20
- 19 2ARA.30
- 20 2ARB.No
- 21 2ARB.21
- 22 2ARB.22
- 23 2ARB.20
- 24 2ARB.30
- 25
- 26 2A2.No
- 27 2A2.11
- 28 2A2.21
- 29 2A2.22
- 30
- 31 2A2RA.No
- 32 2A2RA.11
- 33 2A2RA.21
- 34 2A2RA.22
- 35 2A2RB.No
- 36 2A2RB.11
- 37 2A2RB.21
- 38 2A2RB.22
- 39
- 40
- 41
- 42
- 43
- 44

NOTES

REPEATERS

4A=1 REPTR.
 4AG E/W PE=3 REPTS.+2(IPE)
 +2(OPE)
 4AGT E/W PE=3 REPTS.+1(IPE)
 +1(OPE)

REFER BSP E14.001 FOR CODES

- 1 4AG E/W PE
- 2 4AG E/W PCE
- 3 4AGT E/W PE
- 4 4AGT E/W PCE
- 5 4AGRA E/W PE
- 6 4AGRA E/W PCE
- 7 4AGRB E/W PE
- 8 4AGRB E/W PCE
- 9 4AGTRA E/W PE
- 10 4AGTRA E/W PCE
- 11 4AGTRB E/W PE
- 12 4AGTRB E/W PCE
- 13
- 14
- 15 V1
- 16 V3
- 17 4A
- 18 4ARA
- 19 4ARB
- 20 4A -
- 21 4ARA
- 22 4ARB
- 23 4A
- 24 4ARA
- 25 4ARB
- 26 4APX
- 27 4APX
- 28 4AF

- 29
- 30
- 31 2A.No
- 32 2A.11
- 33 2A.21
- 34 2A.22
- 35 2A.20
- 36 2A.30
- 37
- 38 2A.PX

LINE EQUIPMENT UNITS

PHANTOMING EQUALIZING SETS
 AND
 REPEATING COIL HYBRIDS
 PE=IPE+OPE

REFER BSP E14.001 FOR CODES

- 1 PE
- 2 P3
- 3 P8
- 4 MP
- 5 PCE
- 6 PC3
- 7 PC8
- 8 MPC
- 9 PV3
- 10 PV4
- 11 PV8
- 12
- 13
- 14
- 15 REPEATING COIL HYBRID GROUPS FOR:
- 16 OPEN WIRE
- 17 16H44-25
- 18 19H44-25
- 19 16 OR 19H88-50

Fig. 11

