TELEPHONE CONVENTIONS, ABBREVIATIONS AND NOMENCLATURE

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TELEPHONE CONVENTIONS, ABBREVIATIONS AND NOMENCLATURE

This bulletin is issued to provide a ready reference to many of the conventions, abbreviations, and nomenclature used in Telephone work. No attempt will be made to keep this publication up to date and all information contained herein shall be used for training purposes only.

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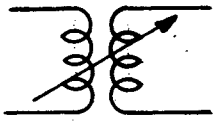

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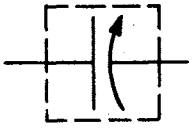

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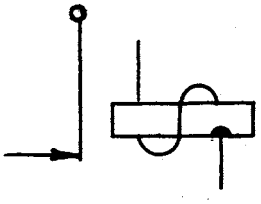

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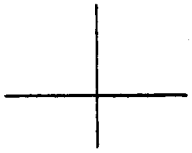

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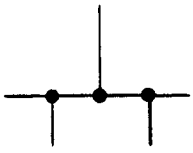

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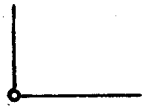
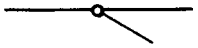
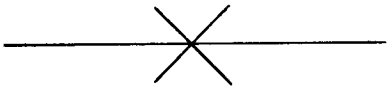


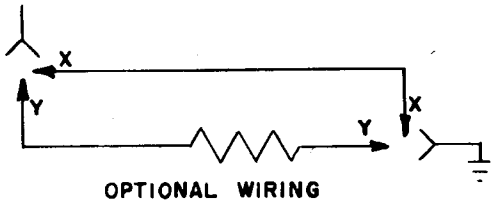
WIRES CONNECTED TO TERMINALS



INDICATING STRAP WIRES



SPLICED WIRES



OPTIONAL WIRING

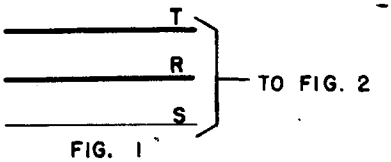


FIG. 1

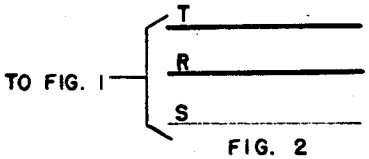
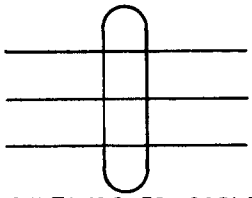
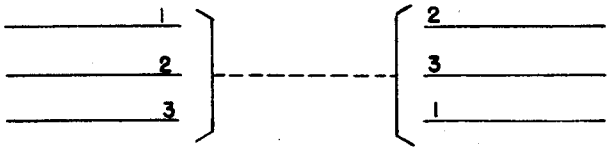


FIG. 2

FIGURE TO FIGURE CONNECTION

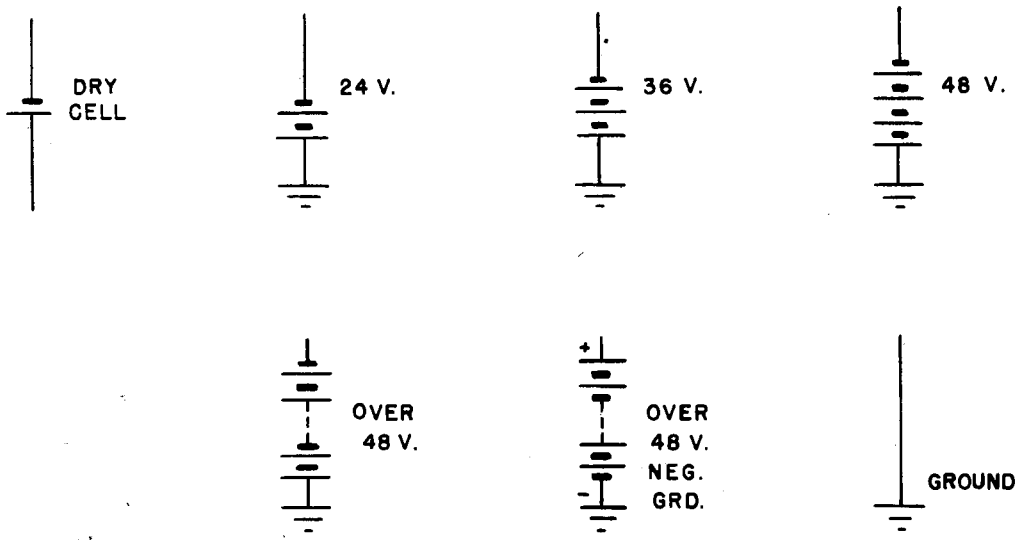


SWITCHBOARD CABLE



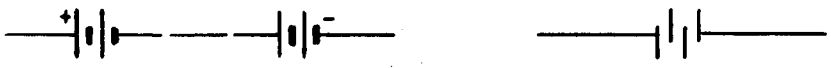
POINT TO POINT CONNECTION

BATTERY AND GROUND WIRING



SHORT HEAVY LINE (-) REPRESENTS NEGATIVE TERMINAL, LONG LIGHT LINE (—) REPRESENTS POSITIVE TERMINAL. SPECIFIC BATTERY VOLTAGE LIMITS ARE GIVEN ON SCHEMATIC.

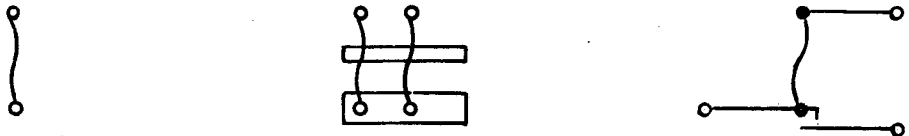
BATTERIES



MAIN BATTERY

C.E.M.F. CELLS

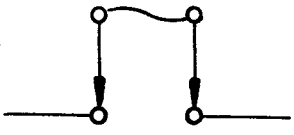
FUSES



PLAIN FUSE

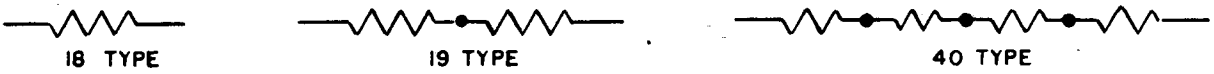
ALARM TYPE ON BUS BAR

ALARM TYPE ON PROTECTOR MOUNTING



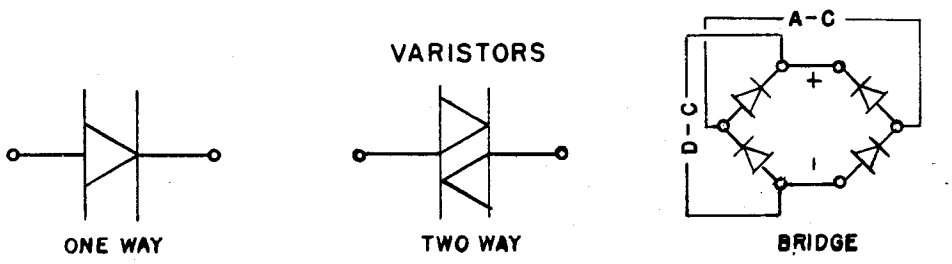
SAFETY TYPE

FIXED RESISTANCES

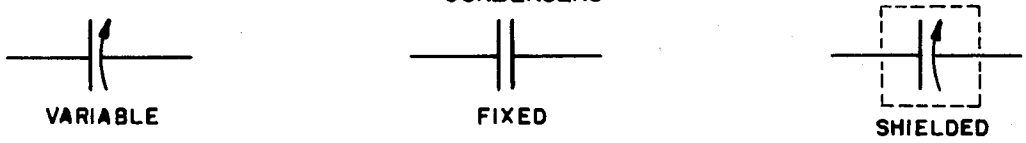


ADJUSTABLE RESISTANCES

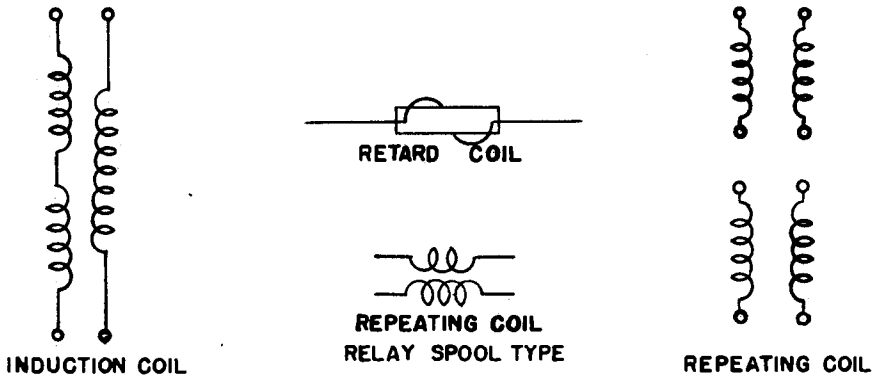
VARISTORS



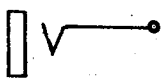
CONDENSERS



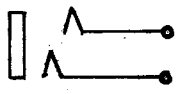
COILS



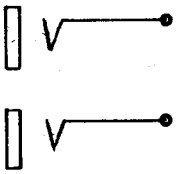
JACKS



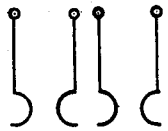
TWO CONDUCTOR



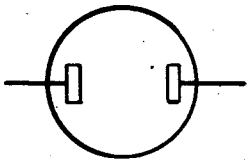
THREE CONDUCTOR



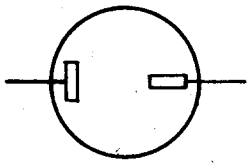
FOUR CONDUCTOR
TWIN TYPE



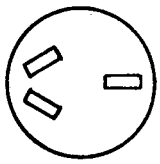
SPRING TYPE
(SXS)



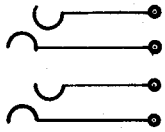
TWO CONDUCTOR
NON POLARIZED



TWO CONDUCTOR
POLARIZED

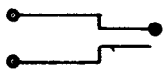


THREE CONDUCTOR
POLARIZED

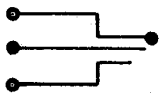


TEST

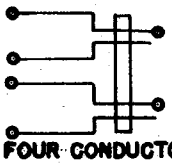
PLUGS



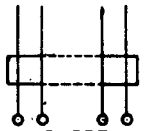
TWO CONDUCTOR



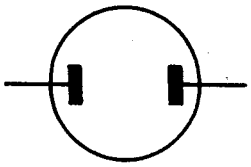
THREE CONDUCTOR



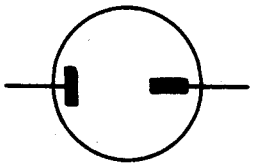
FOUR CONDUCTOR
TWIN TYPE



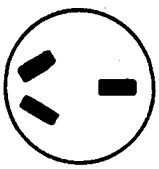
FOR SPRING
TYPE JACK
(SXS)



TWO CONDUCTOR
NON POLARIZED



TWO CONDUCTOR
POLARIZED



THREE CONDUCTOR
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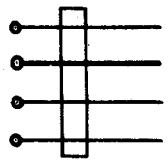
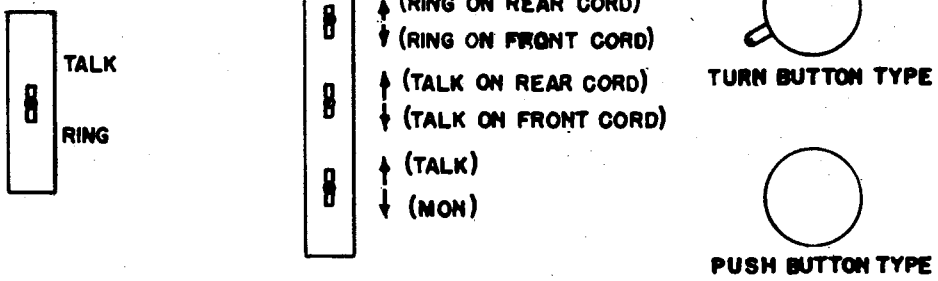
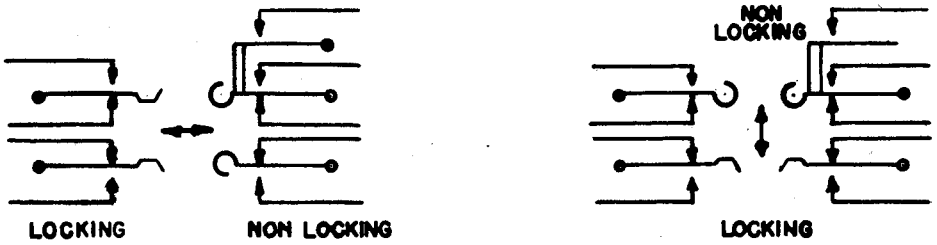


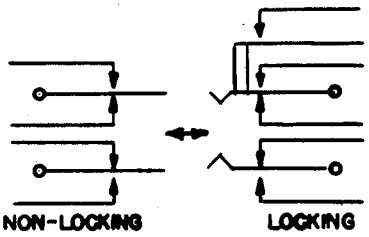
TEST

KEY TOP DIAGRAMS



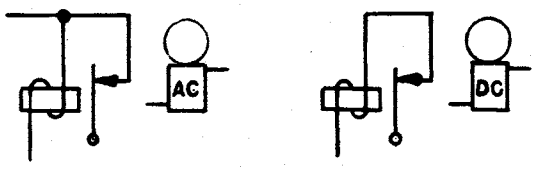
LEVER TYPE KEYS





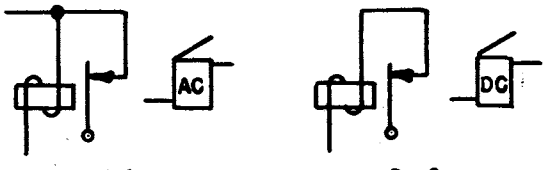
BUTTON TYPE KEYS

BELLS



A-C D-C

BUZZER



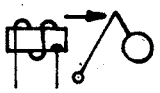
A-C D-C

DROPS

MANUALLY RESTORED ELECTRICALLY RESTORED

SIGNALS

SHUTTER TYPE BALL TYPE



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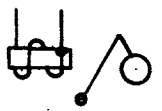
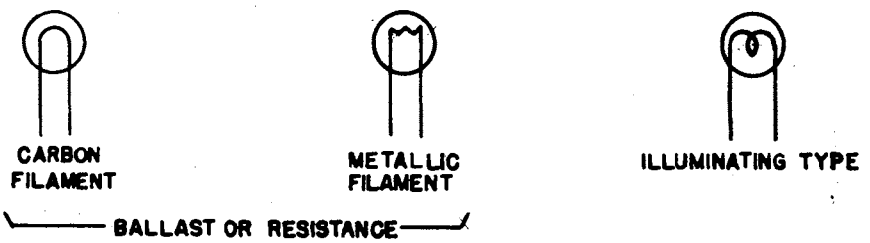
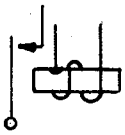


ELECTRIC CLOCK

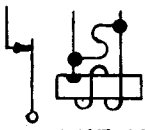
LAMPS



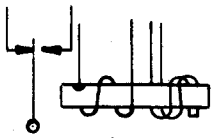
RELAYS



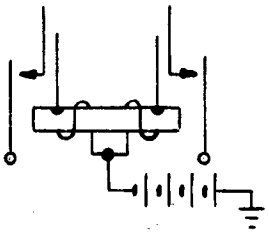
INDUCTIVE WINDING



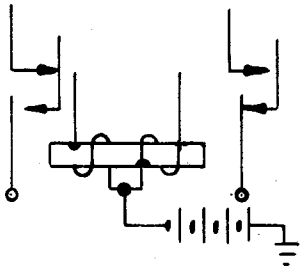
INDUCTIVE WITH NON-INDUCTIVE SHUNT WINDING



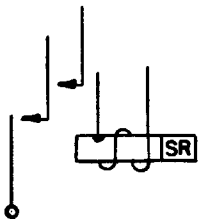
INDUCTIVE AND NON-INDUCTIVE WINDING



CUMULATIVE WOUND

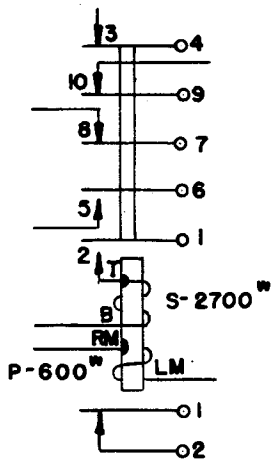


DIFFERENTIAL WOUND

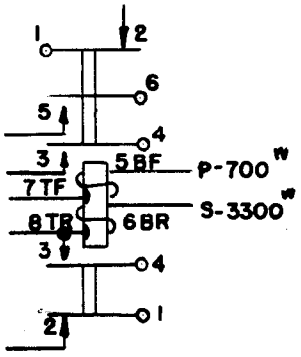


A-C -ALTERNATING CURRENT
D -DIFFERENTIAL
DP -DASH POT
FO -FAST OPERATE
FR -FAST RELEASE
MG -MARGINAL
P -POLARIZED
SO -SLOW OPERATE
SR -SLOW RELEASE

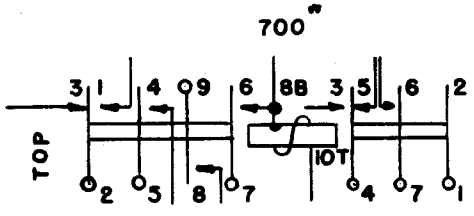
RELAYS WITH PARTICULAR OPERATING FEATURES



STEP BY STEP RELAY

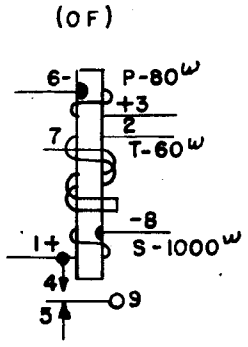


CROSSBAR RELAY

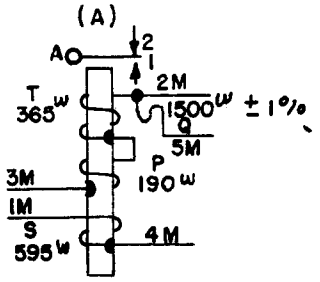


CROSSBAR RELAY

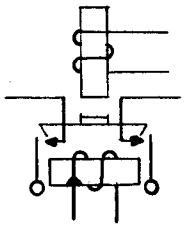
RELAYS



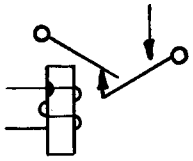
THREE WINDINGS
PRIMARY SECONDARY
TERTIARY



FOUR WINDINGS
PRIMARY SECONDARY
TERTIARY QUATERNARY

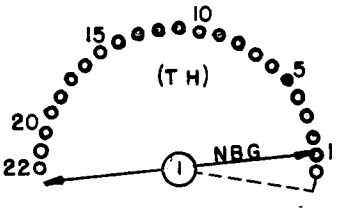


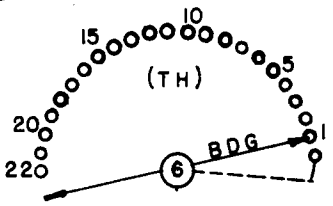
MECHANICALLY LOCKING
ELECTRICALLY RELEASING

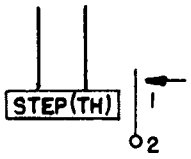


NORMALLY OPERATED

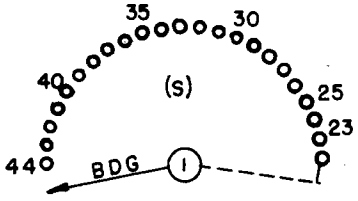
SELECTORS

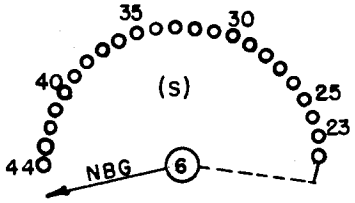


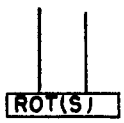


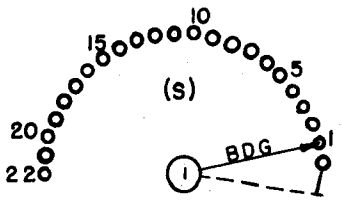


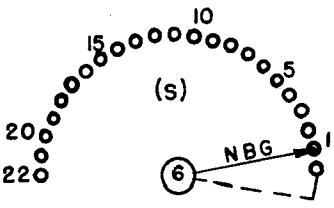
22 TERMINAL ROTARY TYPE

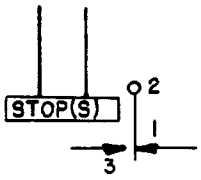






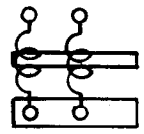




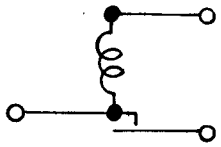


44 TERMINAL ROTARY TYPE

HEAT COILS

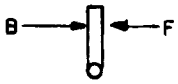


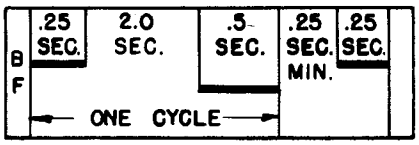
ALARM TYPE
ON BUS BAR



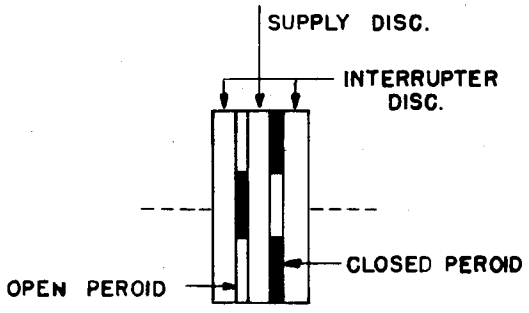
ALARM TYPE ON
PROTECTOR MOUNTING

INTERRUPTERS

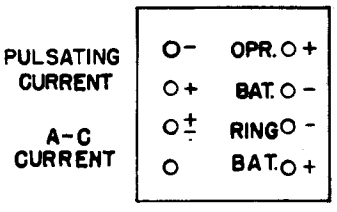




MOTOR DRIVEN TYPE



MERCURY TYPE

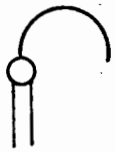


VIBRATOR TYPE

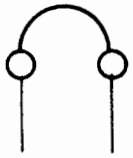
SUBSCRIBER STATION

RECEIVERS

HAND TYPE

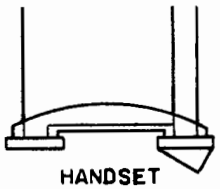


SINGLE HEADSET TYPE

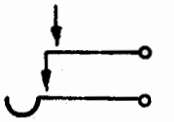


DOUBLE HEADSET TYPE

TRANSMITTERS

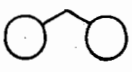


HANDSET



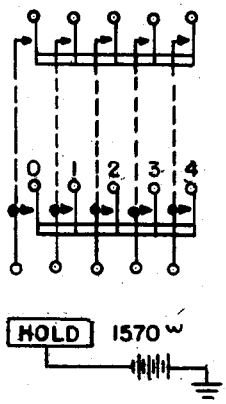
SWITCHHOOK

DIAL

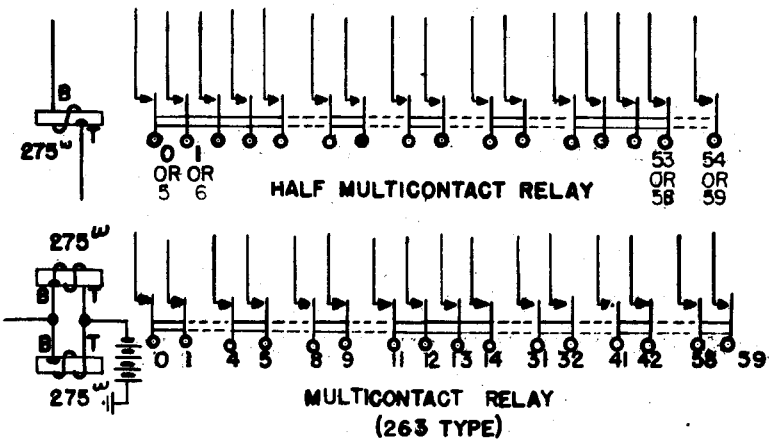


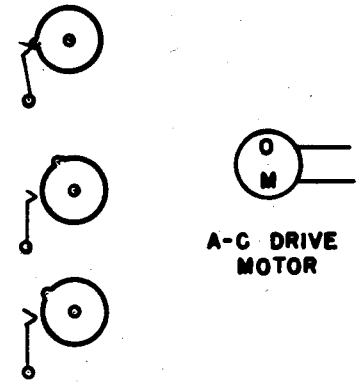
RINGER

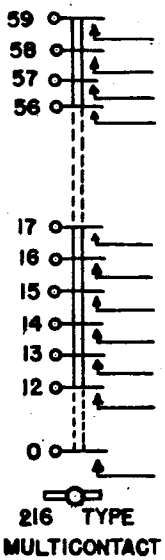
CROSSBAR



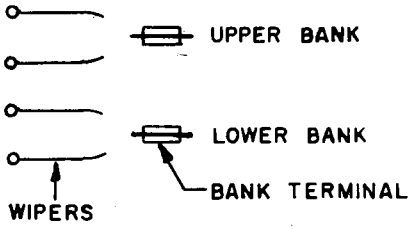
CROSSBAR VERTICAL UNIT

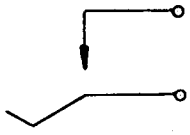




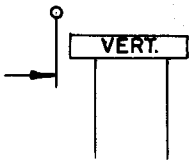


STEP BY STEP

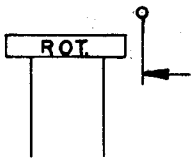




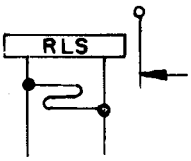
NORMAL POST SPRINGS



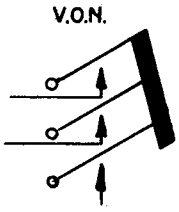
VERTICAL MAGNET



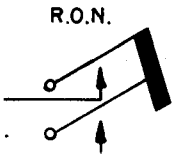
ROTARY MAGNET



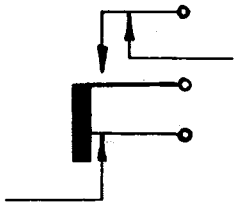
RELEASE MAGNET



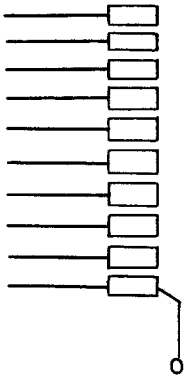
VERTICAL OFF-NORMAL SPRINGS



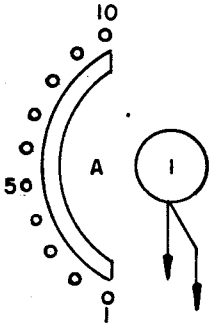
ROTARY OFF-NORMAL SPRINGS



11TH STEP ROTARY SPRINGS



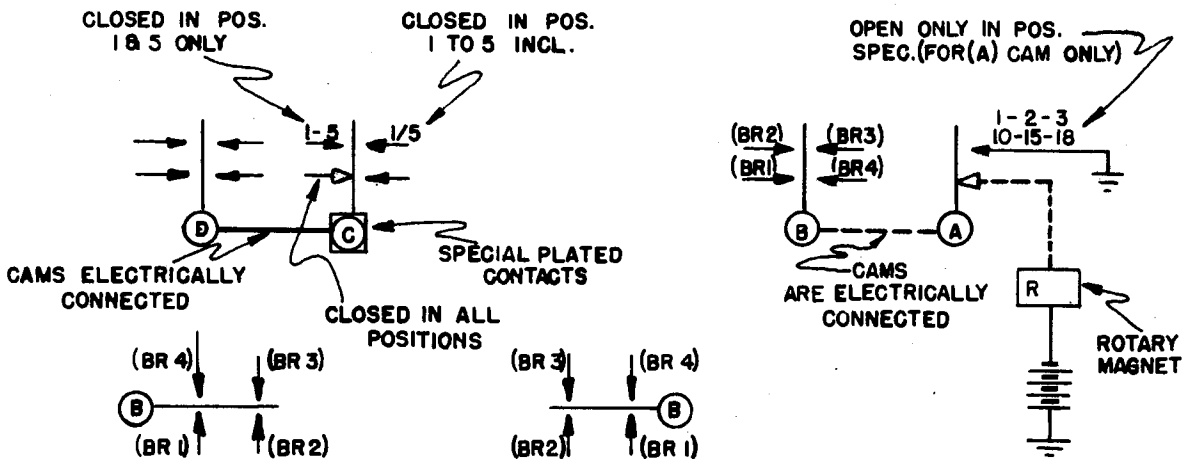
VERTICAL COMMUTATOR AND WIPER



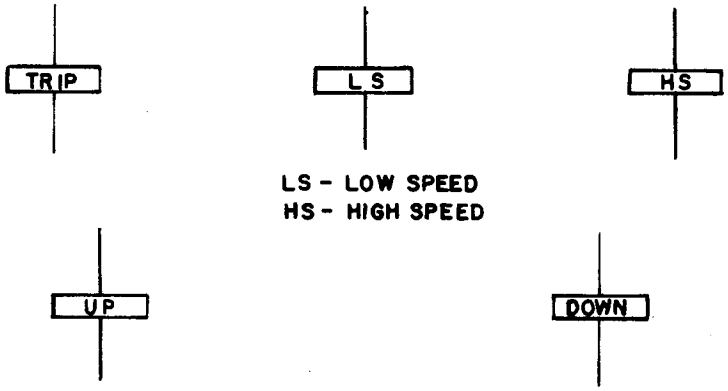
10 TERMINAL ROTARY TYPE SELECTOR -MINOR SWITCH-

PANEL

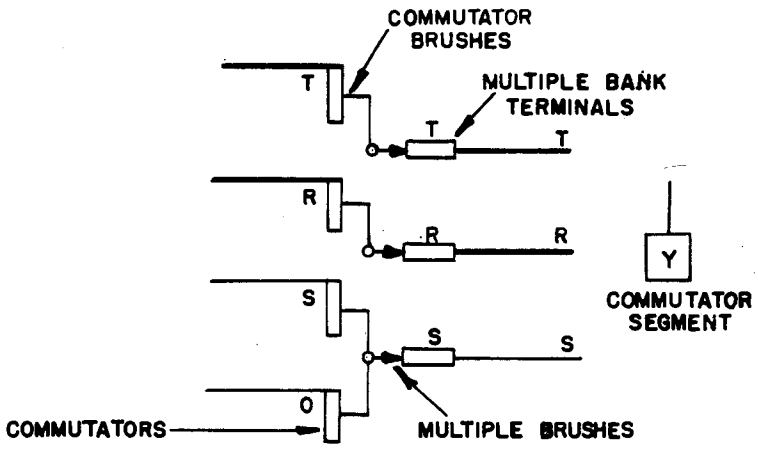
SEQUENCE SWITCHES



MAGNETS

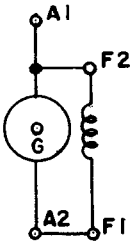


COMMUTATORS

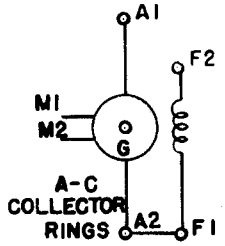


POWER

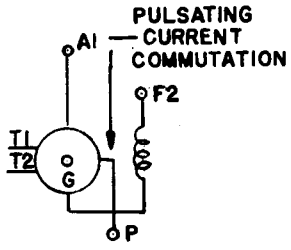
GENERATORS



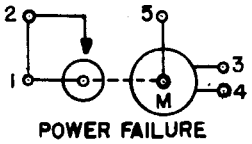
CHARGING GENERATORS
D-C SHUNT TYPE



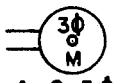
RINGING AND COIN
CONTROL GENERATOR



RINGING GENERATOR WITH
PULSATING CURRENT COMMUTATOR

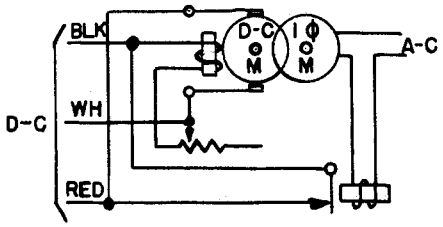


POWER FAILURE
CONTROL TYPE

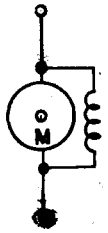


A-C 3ϕ
INDUCTION TYPE

MOTORS

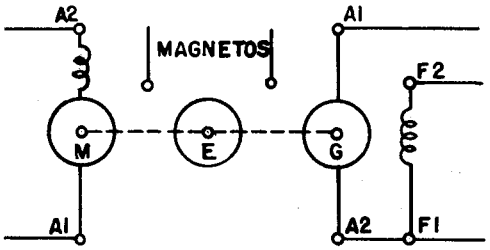


DUPLEX TYPE



D-C SHUNT TYPE

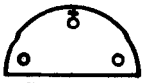
ENGINE GENERATOR



WITH STARTING MOTOR AND MAGNETOS

METERS

NON-DIFFERENTIAL
MILLIAMMETER



DIFFERENTIAL
MILLIAMMETER

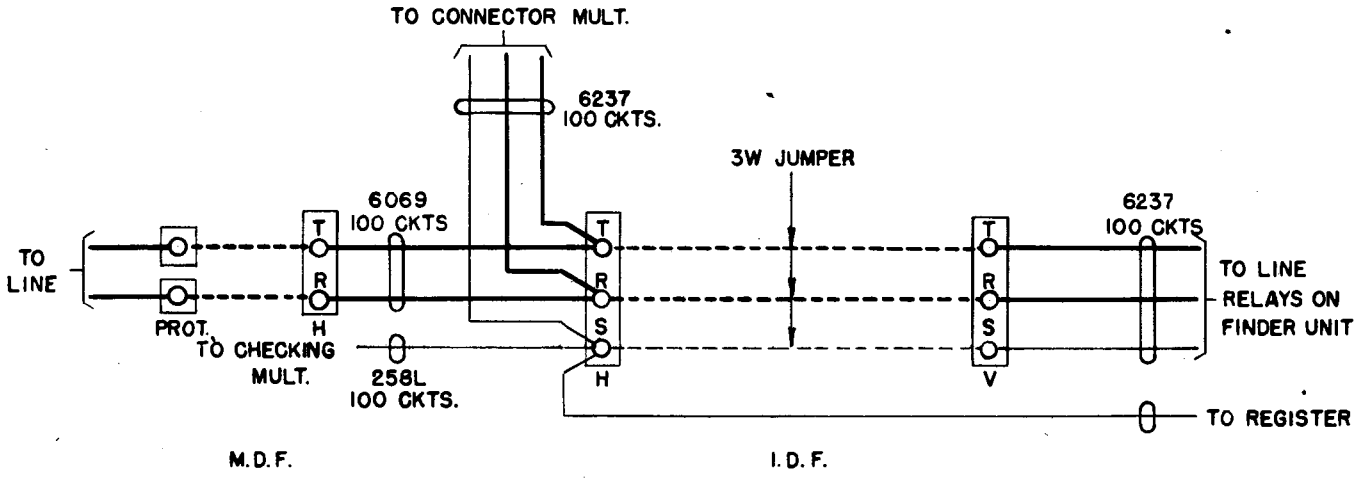
REGULAR
TYPE

A - AMMETER
G - GALVANOMETER
MA - MILLIAMMETER
V - VOLTMETER
V-A - VOLT-AMMETER
V-O - VOLT-OHMMETER

SHOW ABBREVIATON AS REQUIRED

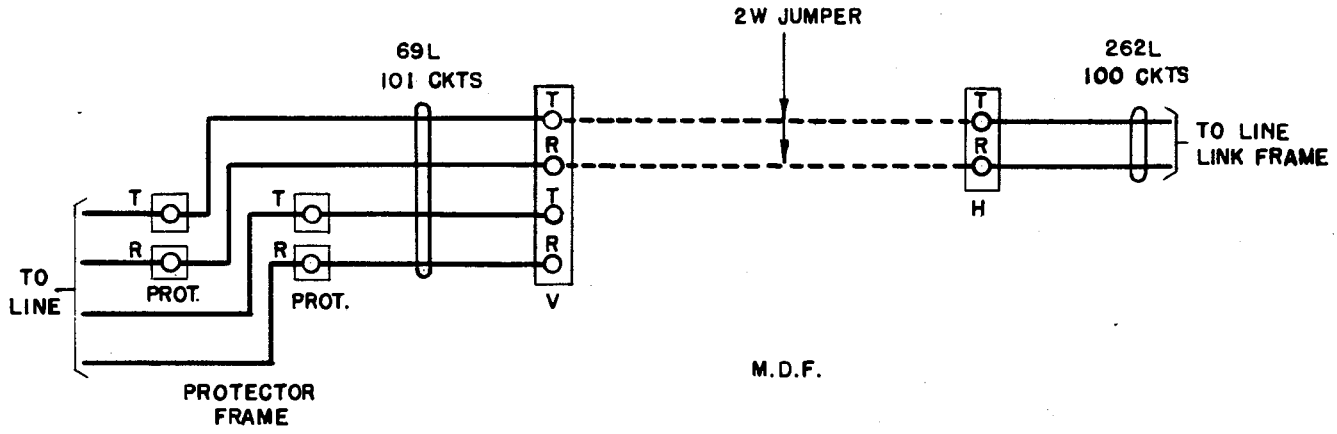
CROSS CONNECTION DIAGRAMS

STEP BY STEP



FOR USE IN OFFICES WHERE MESSAGE REGISTERS ARE CABLED DIRECT TO H.I.D.F.

CROSSBAR



FOR USE IN OFFICES HAVING A SEPERATE PROTECTOR FRAME

SECTION 2

ABBREVIATIONS

A. EQUIPMENT IN GENERAL

Word or Term	Abbreviation
A	
Activity	ACT
Adapter	ADPT
Adjust or Adjusting	ADJ
Advance	ADV
Airplane	APL
Airways Key Equipment	AW KEY
Aisle	AIS
Alarm	ALM or A
Alarm Battery Supply	ABS
All Trunks Busy	A TRKS BSY or ATB
Allotter	ALLR
Alternator	ALT
Alternating Current	AC (±)
Alternating 1 Ring	R1
Alternating 2 Ring	R2
Amber	AMB
Ammeter	AM
Ampere	AMP or A
Ampere Hour	AH
Amplifier	AMP or A
Ancillary	ANC
And	(&)
Announcement or Announcing	ANN
Annunciator	ANNUN or AN
Answer or Answering	ANS or A
Answering Cord	A CD
Answering Jack	A JK
Antenna	ANT
Applique	APLQ
Armature	ARM
Artificial	ART
Assignment	ASSIGN
Assistant	ASST or A
Attendant	ATT
Attenuator	ATTEN
Audible	AUD
Automatic	AUTO or A
Automatic Display	AD
Auxiliary	AUX or A
Auxiliary Line	AUX L
Auxiliary Relay Battery	ARB
Auxiliary Station	AUX STA
Awaiting	AWTG
B	
"B" Switchboard	B SWBD
Back	B
Balancing or Balance	BAL
Balancing Coil	BAL CL
Balancing Rheostat	BAL RHEO
Balancing Set	BAL S
Ballast Lamp	BALL L
Band Filter Cut-off	BFCO
Bank	BK or B
Basement	B
Basic Network	BAS NET
Battery	BAT or B
Battery Cut-off	BCO
Battery Fuse	BAT F or BF
Battery Supply	BAT SUP or BS
Beyond	BYD
Blank	BLK
Blank Incoming	BLK INC
Block	BLK
Blockade	BLKD
Blocking	BLKG
Board	BD or B
Booster	BOOST or BST
Bottom	BOT
Breakdown	BKDN or B
Breaker	BKR
Bridge or Bridging	BRDG
Bridge Cut-off	BCO
Broadcast Amplifier	BDCST AMP
Brush	BR
Brush Test	BR T
Building Out	BO
Busy	BSY or B
Busy Back	BB
Busy Back Flash	BBF
Busy Back Flash and Tone	BBFT
Busy Flash	BF
Busy Signal	BS
Busy Test	B TST or BT
Busy Tone	BT
Buzzer	BUZ
By-link	BL
By-pass	BP
C	
Cabinet	CAB or C
Cable	CA
Cable Turning Section	CTS
Call Announcer	CA or C
Call or Calling	CALL or C
Call Blocked	C BLK
Call Circuit	C CKT
Call Distributing "B" Switchboard	CDB SWBD
Call Indicator	CI
Call Indicator Impulser	CI IMP
Calling Cord	C CD
Call Waiting	CW
Call Wire or Call Wireless	CW
Call Wireless Cords	CW CDS
Call Wireless Trunks	CW TRKS
Candle-power	CP
Capacity	CAP
Card Record Clerk	CRC
Carrier	CARR or C
Carrier Frequency	CF
Carrier Input	C IN
Carrier Supply	CS
Ceiling Lamp Panel	CEIL LP
Central Information Desk	C INF D
Central Office	CENT OFF
Central Service Observing Desk	CSO DSK
Central Test Bureau	CTB
Central Test Desk	CTD
Chain	CH
Chain Relay Group	CH REL GRP
Channel	CHAN, CH, or C
Charge, Charging, or Charged	CHG
Checking or Check	CHK or C
Checking Multiple	C MULT
Check Tone	CT
Chief Operator	CO
Chief Operator (On Ans. Jk. Number Plates Only)	CH OP
Chief Operator's Desk	COD
Chief Switchman	CS
Choke	CH
Circuit	CKT
Circuit Breaker	CKT BKR or CB
Class	CLS or CL
Class of Service Tone	CL SERV T or CL ST
Clerk	CL or C
Clock	CLK
Closure	CLS
Code Group	CG
Coin Box	CB
Coin Box Lines	CB LINE
Coin Box Trunk	CB TRK

Word or Term	Abbreviation
Coin Collect, Coin Collector, or Coin Collection	CC
Coin Collect (For Coin Coll. Lamp Only)	PAY
Coin Control	C CON or CC
Coin Control Selector	CC SEL
Coin Return	CR
Coin Supervisory	CS
Collect	COL or C
Combination Connector	COMB CONN
Combined	COMB, CMB, or C
Combined Composite and Phantom Set	CXPX
Combined Distributing Frame	CDF
Commercial	COM
Common	COM
Common Battery	CB
Common Ground	CG
Community Dial	COM D
Commutator	COMM, COM, or C
Commutator Brush	COMM BR
Compensator or Compensating	COMP
Compensating Filter	COMP F
Complaint Operator	COMP OPR
Complaint Trunk	COMP TRK
Completing	COMPL or COM
Composite	CX
Composite Ringer	CXX
Compromising	COMP
Concentrating	CONC
Condenser	COND
Conference	CONF
Connecting Rack	CONN R
Connector	CONN or C
Connector Terminal Cords	CONN TERM CDS or CT CDS
Contactor	CONTR
Continuous or Continuity	CONT
Control or Controller	CONT, CON, or C
Converter	CONVR
Convertible or Conversion	CONV
Coordinate	CO ORD
Cord	CD
Cord Auxiliary	CD AUX
Cord Auxiliary (For Cord Auxiliary Lamp Only)	CA
Cord Finder	CD FDR
Cordless	CDLS
Cordless "B" Operator	CDLS B OPR
Cordless "B" Position	CDLS B POS
Cordless "B" Switchboard	CDLS B SWBD
Counter Electromotive Force	CEMF
Counting	CTG
Correcting or Corrector	CORR
Crossbar	CBR
Current	CUR or C
Current Transformer	CUR TRANS or CT
Cut-off	CO
Cycle	CYC (~)

D

Decibel	DB
Decoder	DR
Delayed Interval	DEL I OR DI
Delayed Ringing	DR
Demodulator	DEM or D
Demodulator Band Filter	DBF
Department	DEPT
Desk	DSK or D
Desk Ground	DG
Detector	DET
Deviation Equalizer	DEV EQL
Dial	D
Dial Monitoring	D MON or DM
Dial Observing	DO
Dial Pulsing	DP
Dial System	DS
Dial System "A" Operator	DSA OPR
Dial System "A" Position	DSA POS
Dial System "A" Switchboard	DSA SWBD
Dial System "B" Switchboard	DSB SWBD
Dial Test	D TST
Dial Tone	DT
Differential	DIF or D
Digit Absorbing	DA
Direct Current	DC
Directing or Directional	DIR
Directional Filter	DIR FLT
Directory Desk	DIR D
Discharge or Discharging	DISCHG or D
Disconnect	DIS
Discriminating	DISCR
Dispatcher	DISP
Distant	DST
Distortion	DIST
Distributing	DISTG or D
Distributing Power Terminal Strip	DPTS
Distributing Ticket Filing and Rate Quoting Desk	DTF & RQD
Distributor	DSTBR or DIST
District	DIST or D
District Brush	DB
District Group	DG
Division	DIV or D
Double Cord	D CD
Down Drive	D DR
Drop	D
Drum	DR
Dry Battery	DB
Dry Battery Cabinet	DB CAB
Duplex	DX
Dynamo	DYN
Dynamotor (Motor-generator)	MG

E

East	E
Electric or Electrically	ELEC
Electric Clock	ELEC CLK
Electrolytic or Electrolyte	ELECT or E
Electromotive Force	EMF
Elevator	ELV
Emergency	EM or EMG
Emergency (For Key-top Engraving Only)	EMER
Emergency Call Circuit	EC CKT
End of Line Indicator	EL IND or ELI
Engine, Engineer, or Engineering	ENG
Equalizer	EQL
Equipment	EQPT, EQ, or E
Even	E
Exchange	EXCH or X
Exciter	EXC
Exit	EXT
Expandor	EXP
Extension	EXT

F

Failure	FAIL
Feed Back Resistance	FBR
Field	FLD or F
Figure	FIG
Filament	FIL or F
Filament Ground	FIL G or FG
Filament Negative	F -
Filament Positive	F +
Filter	FILT, FLT, or F
Final	FIN or F

Word or Term	Abbreviation
Final Brush	FB
Final Tens	FT
Final Terminating Holding Cord	FIN TERM HOLD CD
Final Time Measure Release	FIN TIME MEAS RLS
Final Units	FU
Finder	FDR or F
Fire Protection Panel	FPP
First Selector	1ST SEL
Flash	FL or F
Flash Back	FB
Flashing	FLASH or FL
Flashing (For Key-top Engraving Only)	FLA
Flashing Recall	FL RECALL or FR
Flat	F
Flat Gain Regulator	FG REG
Flat Rate	FR
Flat Rate Individual	FRI
Flat Rate 2 Party	FR2P
Flat Rate 4 Party	FR4P
Floating	FLOAT or FLT
Floor	FL
Four Wire	4W
Frame	FR or F
Frames and Racks	(See Sec. 3)
Free Line	FREE L
Frequency	FREQ
Front	F
Full Selective	F SEL or FS
Full Universal	F UNIVER or FU
Fundamental Tip	FT
Fundamental Ring	FR
Fuse	F
Fuse Alarm	FA
Fuse Board	F BD
Fuse Panel	FP
Fusetron	FN

G

Gain Control	GC
Galvanometer	GALV
Gas Engine	GAS ENG
Generator	GEN or GN
Grid or Grid Battery	GT
Grid Leads (Vacuum Tubes with Filaments in Series - to +)	(GT1 (GT2 (GT3 etc.
Grid Leak	GT LK
Ground or Grounded	GRD or G
Grounded Telegraph	GRD TELEG or GRD TLG
Group	GRP, GR, or G
Group and Horizontal	GH
Guard	GD

H

Half Choice	HC
Handset	HND SET
Harmonic	HRM or H
Heater	HTR
High Frequency Patching	HF PTCH
High-Low Voltage	HLV
High Loss	HL
High Pass	HP
High Pass Input and Low Pass Output	HP IN LP OUT
High Potential	H POTL
High Resistance	H RES
High Resistance Ground	H RES G or HRG
High Speed	HS
High Tone	HT
High Voltage Regulator	HVR
Hold or Holding	HLD, HD, or H
Holding Cord	HLD CD
Holding Trunk	HLD TRK
Horizontal	HOR or H
Horsepower	HP
Howler	HLR or H
Hundreds	H
Hunting	HTG or H
Hybrid	HYB, HY, or H
Hybrid drop side 2 wire line	HYD
Hybrid drop side 4 wire line	HXD
Hybrid line side 2 wire line	HYL
Hybrid line side 4 wire line	HXL

I

Immediate	IM
Impulse or Impulser	IMP
Incoming	INC or I
Incoming Brush	IB
Incoming Call Circuit	INC C CKT
Incoming Group	IG
Incoming Pulse Correcting Repeater	INC PULS CORR REP
Incoming Repeater	INC REP
Indicator	IND or I
Induction or Inductor	IND
Information	INF
Input	IN
Instantaneous	INST
Instrument	INST
Instruction	INST
Insulation	INSUL or INS
Intercepted Service	INCPT SERV
Intercepting	INCPT
Intercepting Answering Jack	INCPT ANS JK
Intercepting Position	INCPT POS
Intercepting Trunk	INCPT TRK
Interference Suppressor	INT SPR
Intermediate	INT or I
Intermediate Distributing Frames	IDF
Intermediate Ringing	IX
Intermittent	INTR
Interoffice Trunks	IO TRKS
Interposition Trunks	INT POS TRKS or IP TRKS
Interrupted Low Tone	INT LT
Interrupter	INT
Interrupter Flash	INT FL
Interruptions per Minute	IPM
Interruptions per Second	IPS
Intertoll Trunk	IT TRK
Inverse Time Limit	ITL
Inward Denied Service	IN DS
Irregular	IRR

J

Jack	JK or J
Jack Panel	JK PAN or JP
Jack per Line	JPL
Jack per Station	JPS
Junctor	JTR or JR

K

Key Control	KC
Key Display	KD
Key Indicator	KI
Key Monitoring Desk	KEY MON DSK
Key Pulsing	KP

Word or Term	Abbreviation
Keyshelf	KYSH or K
Kilocycle	KC
Kilovolt Ampere	KVA
Kilowatt	KW

L

Lamp	LMP or L
Last Trunk Busy	LTB
Leak	LK
Left	LT or L
Left Lower	LL
Left Upper	LU
Level	LEV
Lighting Circuit	LTG CKT
Limit or Limiter	LIM
Line	L
Line Finder	L FDR or LF
Line Lamp	LL
Line Relay Prepayment	LRP
Line Switch	L SW or LS
Link	LK or L
Listening	LIST or L
Local	LOC or L
Local Number Switch	LNS
Local Station	LOC STA
Local Test Desk	LTD
Long Distance	LD
Long Distance Recorder	LD REC
Long Haul	LH
Long Lines	LL
Long Range	LR
Loop	LP
Loop Noise Killer	LP NK
Loud Speaker	L SPK
Loud Speaker Trunk	L SPK TRK
Low Loss	LL
Low Pass	LP
Low Pass Input and High Pass Output	LP IN HP OUT
Low Resistance	L RES
Low Resistance Ground	LR GRD or LRG
Low Speed	LS
Low Tone	LOW T or LT
Low Voltage	LOW V or LV
Lower Side Band	LOW SB

M

Machine	MACH or M
Machine Ringing	MR
Machine Ringing Brush Alarm	MACH R BR A
Magnetic Shield	MAG SH or MS
Magneto or Magnet	MAG
Main Distributing Frame	MDF
Main Station	MAIN STA
Maintenance	MTCE or M
Make Busy	MB
Manager	MGR
Manual	MAN or M
Manual Tandem Position	MAN TDM POS
Marker	MKR
Marking	MKG
Master	MAS or M
Master Controller	MAS CONT
Master Switch	M SW or MS
Maximum	MAX
Measuring	MEAS
Mechanical	MECH or M
Mechanical Ticket Distributing System	MTDS
Megohm	MEG (Ω)
Mercury Arc Rectifier	RECT
Message	M or MSG
Message Rate	MR
Message Rate Individual	MRI
Message Rate Party	MRP
Message Rate 2 Party	MR2P
Message Rate 4 Party	MR4P
Message Register	MR
Message Register (For Message Register Pilot Lamps Only)	REG
Messenger Call	MESS CALL or MC
Metallic	MET or M
Metallic Return	MET RET
Metallic Telegraph	M TELEG or MET TLG
Meter	M
Meter Battery Cut-off	MBCO
Microfarad	MF
Middle	MID
Milliammeter	MAM or MA
Millihenry	MH
Millivoltmeter	MVM
Minimum	MIN
Miscellaneous	MISC or M
Modulator or Modulation	MOD or M
Modulator Band Filter	MBF
Modulator-demodulator	MODEM
Monitor or Monitoring	MON or M
Motor	MOT or M
Motor-generator	MG
Motor Start Switch	MOT ST SW
Motor Stop Alarm	MA
Motor Transfer	MT
Multicall	MC
Multiline	ML
Multiple	MULT or M
Multiple Marking	MM

N

Negative	NEG (-)
Network	NET or N
Neutral	NTL
Night	N
Night Alarm	NA
Noise Reducer	N RDR
Non-coin Sender Alarm	NON COIN SDR A
Normal	N
North	N
No Test	NT
No Voltage	NV
Number	NO
Number Check or Checking	NC
Numerical	NUM

O

Odd	O
Office	OFF or O
Office Alarm	OA
Office Brush	OB
Office Group	OG
Official	OFF
Ohms	(ω)
Operate, Operating, or Operator	OPR
Order or Ordering	ORD or O
Originating	ORG
Oscillator	OSC
Oscillograph	OSCG
Out Dialing Trunks	ODT
Outgoing	OUT or O
Outgoing Repeater	OG REP or OGR
Outgoing Trunk	OGT
Out Trunk Switch	OTS
Output	OUT or OP
Output Resistance	OP R

Word or Term	Abbreviation
Outward	OUT
Outward Denied Service	OUT DS or ODS
Overflow	OFL or OVF
Overload	OVLD

P

Pair	PR
Panel	PAN or P
Particular Line	PL
Party	P
Patching	PTCH
Paths Busy	PB
Patrol	PTL or P
Pay Station	P STA
Peg Count	PC
Peg Count (Keyshelf No. Plate Only)	PEG
Peremptory	PER
Peremptory Disconnect Signal	PER DIS SIG
Permanent	PERM or P
Permanent Final Busy	PERM FIN B
Permanent Signal	PS
Permanent Signal Alarm	PSA or PA
Permanent Signal Holding Trunk	PER SIG HOLD TRK or PSHT
Permanent Signal Overflow Register	PER SIG OFL REG or PSOR
Permanent Signal Tone	PST
Phantom (Derived)	PH
Phantom (Drop End of Side Circuit)	PX
Phantom Coil Drop Side	PCD
Phantom Coil Line Side	PCL
Phase	PH
Phase Failure	PH FAIL
Physical	PHYS
Pick-Up	PK U or PU
Pick-Up Alarm	PUA
Pick-Up Battery	PK UB
Picture	PICT
Pilot	PLT or P
Pilot Cell	P
Pilot Channel	PC
Pilot Lamp	PL
Pilot Wire	PW
Plate	PLT
Plate Leads (Vac. Tubes with Filaments in Series, from - to +)	(P1 -(P2 (P3 etc.
Plugging-Up	PU
Pneumatic	PNEU
Pneumatic Ticket Distributing System	PTDS
Polar or Polarized	POL or P
Polyphase	P, PH, or 2 PH, 3 PH, etc.
Portable	PORT
Position	POS
Positive	POS or P (+)
Potential	POT or P
Potential Transformer	POT TRANS or PT
Potentiometer	POT
Power	PWR or P
Power Alarm Cabinet	PA CAB
Power Circuit	P CKT
Power Failure Alarm	PFA
Power Room	PWR RM
Power Service Distributing Fuse Cabinet	PS CAB
Power Terminal Strip	PWR TS
Preference	PREF
Preselector	PRSL
Primary	PRI or P
Primary Line Switch	PRI L SW or PLS
Primary Master Switch	PRI M SW or PMS
Printer	PTR
Privacy	PRV
Private Branch Exchange	PBX
Private Line	PL
Private Line Battery	PL BAT
Program Transmission	PROG TRANS
Projection Transmission Measuring	PROJ TRANS MEAS
Protector or Protective	PROT
Public Station	PS
Pulse or Pulsating	PULS or P
Pulse Machine	PM
Punching	PCHG

R

Rack	RK or R
Rear	R
Recall	RCL or R
Recall Disconnect	RD
Receiver	REC or R
Receiving	REC, R, or RECG
Receiving Amplifier	REC AMP or RA
Receiving Directional Filter	RDF
Receiving Leg	RL
Receiving Leg Battery	RLB
Recorder	RCDR or R
Recording	REC
Recording Completing Trunk	REC COM TRK or RC TRK
Rectifier	RECT
Regenerative	REGEN
Register	REG or R
Register Control	RC
Regular	REG
Regulate, Regulating, or Regulator	REG or REGT
Relay	REL or R
Relay Rack Ground	RRG
Release	RLS or R
Release (For Key-top Engraving Only)	REL
Release Alarm	RA
Remote Control	REM CONT or RC
Removal	REM
Reorder or Reordering	REODR or RO
Repair Clerk's Desk	REP CL D or RCD
Repair Service Desk	REP SER D or RSD
Repeater or Repeating	REP
Resistance	RES or R
Resonant	R or RES
Restore or Reset	RST or R
Retardation	RET
Return	R
Reversal	REV
Reverse	REV
Reverse Current	REV CUR
Reverting Busy Back	RBB
Reverting Busy Test	RBT
Reverting Call Selector	RC SEL
Reverting Flash Back	RFB
Rheostat	RHEO
Right	RT or R
Right Lower	RL
Right Upper	RU
Ring	R
Ringback	RB
Ringdown	RD
Ringer	RING
Ringer Test	RING TST
Ringing	RING or R
Rotary	ROT
Rotary Connector	ROT CONN
Rotary Line Switch	ROT LS
Rotary Out Trunk Switch	ROTS or ROT OT SW
Route Switch	RS
Routine Test	ROUT T
Routing	ROUT or R
Rural	RUR

Word or Term	Abbreviation

S

Sealed Test Terminal	SLD TT
Secondary	SEC
Secondary Line Switch	SEC L SW or SLS
Secondary Master Switch	SEC M SW or SMS
Second Selector	2ND SEL
Secretary or Secretarial	SECR
Section	SECT or S
Selective	SEL or S
Selector	SEL or S
Selector Test	SEL TST
Selsyn Receiver	SLN REC
Selsyn Transmitter	SLN TRS
Semimechanical	SM
Sender	SDR or S
Sender Cut-off	SCO
Sender Make Busy	SDR MB or SMB
Sender Monitor	SDR MON
Sender Ringdown	SDR RD
Sender Selector	SDR SEL or SS
Sender Test	SDR TST or S TST
Sending	SDG or S
Sending Battery	SB
Sending Leg	SL
Sending Leg Battery	SLB
Sensitivity	SENS
Sequence Switch	SEQ SW
Service	SERV or S
Service Observing	SERV OBS or SO
Service Observing Desk	SERV OBS D or SOD
Service Testing	ST
Shield	SHLD
Short Circuit	SH CKT
Shunt	SH
Side Band Input	SB IN
Side Band Output	SB OUT
Signal or Signaling	SIG or S
Signal Ground	SG
Silent, Silence, or Silencer	SIL
Simplex	SX
Singing	SNG or S
Single Cord	S CD
Single Line	SL
Single Phase	S PH or 1 PH
Skip Office	SK O
Sleeve	S
Soak	SK
Sounder	SDR
South	S
Spacing	SPCG
Spare	SP
Spare Amplifier	SA
Spare Amplifier Switching	SA SW
Spare Line Section Switching	SP LS SW
Special	SPL
Special Service Operator	SPL SERV OPR
Special Service Operator's Position	SPL SERV OPR POS or SSOP
Special Service Operator's Trunk	SPL SERV OPR TRK or SSOT
Splitting	SPLIT
Stability	STAB
Start	ST
Start Circuit Alarm	ST CKT A
Starting Box	START BOX
Station	STA
Stationary	STY
Step-by-Step	SXS
Stepper or Stepping	STP
Storing	STR
Straightforward	STFD
Stroboscope	STROB
Stuck	STK
Subgroup	S GRP
Subscriber	SUB or S
Subscriber Set	SUB SET or SS
Subscriber Switchboard or Position	A
Suburban	SUBUR or S
Superimposed	SUP or S
Superimposed Negative	SUP - or S - (+ -)
Superimposed Positive	SUP + or S + (+ +)
Supervision	SUPV
Supervisor or Supervisory	SR
Supply	SUP or S
Supplementary	SUPL
Suppressor	SPR
Switch and Horizontal	SH
Switch and Vertical	SV
Switch or Switching	SW
Switchboard	SWBD
Switchboard Ground	SG
Switchman	SWMN or S
Switch Room	SW RM
Synchronous	SYNCH or SYN
System	SYS

T

Talking	TALK, TLK, or T
Talking Battery	TALK BAT, TLK BAT, or TB
Talking Ground	TLK GRD or TG
Tandem	TDM
Team or Teamwork	TM
Telegraph	TELEG or TLG
Telegraph Ground	TG
Telegraph Test Board	TELEG TST BD
Telephone	TEL
Telephotograph	TPHO
Teletypewriter	TTY
Teletypewriter Exchange	TWX
Teletypewriter Switchboard	TTY SWBD
Teletypewriter Switchboard (On Number Plates Only)	TTSY
Tell-tale	TT
Temperature	TEMP
Tens	T
Terminal	TERM or T
Terminal Punching	TP
Terminal Strip	TS
Terminating	TER
Test	TST or T
Test and Control Board	TST & CONT BD
Test and Plugging Up	T & PU
Test Battery Supply	TBS
Test Board	T BD or TB
Test Board Telegraph	TB TG
Test Connector	T CONN
Test Cord	T CD
Test Distributor	TD
Test Line	TST L or TL
Test Pulse Machine	TPM
Test Relay	TR
Test Set	T SET
Thermocouple	TC
Third Selector	3RD SEL
Thousand	TH (M)
Three Digit	3 DIG
Through	THRU
Through Position	RX
Ticket	TKT or T
Ticket Distributing Desk	TD DSK
Ticket Filing and Rate Quoting Desk	TF & RQD
Ticket Pilot	TP
Tie Line	TL
Tie Trunk	T TRK

Word or Term	Abbreviation
Time Alarm	TA
Time Measure	TM
Timing Circuit	TMG CKT
Timing Failure	TMG FAIL
Tip	T
Toll	T
Toll Connecting	TC
Toll Diversion	T DIV
Toll Preceding Selector	TP SEL
Toll Selector	T SEL
Toll Switching	T SW
Toll Tandem	T TDM
Toll Test Board	TT BD
Tone	T
Tone Test	T TST or TT
Traffic	TR or T
Traffic Display Board	TR D BD
Traffic Register	TR
Training	TR
Transfer	TRNS or TR
Transformer	TRANS or T
Translation	TRNSL or T
Translator	TRNSL or T
Transmission	TRANS or T
Transmission Measuring	TRANS M or TM
Transmission Test Board	TRANS TST BD
Transmission Unit	TU
Transmitter	TRS
Transmitting	TRSG
Transmitting Amplifier	TRSG A or TA
Transmitting Directional Filter	TDF
Tributary	TRIB
Trickle	TKL
Tripping or Trip	TRIP, TP, or T
Trip Magnet	TM
Trouble	TBL
Trouble Desk	TBL D
Trouble Observation and Test Trunk	TBL OBS & T TRK
Trouble Test (Tone)	TBL T
Trunk	TRK
Trunk Distributing Frame	TDF
Trunk Finder	TRK FDR or TF
Trunk Switchboard or Position	B
Trunks Busy	TB
Tungar Rectifier	RECT or TGR
Turret	TUR or T
Twist Regulator	TW REG
Two Digit	2 DIG
Two-Three Digit	2-3 DIG
Two Number	2 NO
Two Wire	2W

U

Unanswered	UA
Unattended	UNATTD
Unbalance	UNBAL or U
Unit or Units	U
Universal	UNIV or U
Upper Side Band	UP SB
Utility	UT

V

Vacant	VAC
Vacant Codes	VAC CODES
Vacant Level Tone	VAC LEV T
Vacuum Tube	VT
Valve	V
Valve Signal	VS
Variable Condenser	VAR C
Varistor	VAR
Vertical	VERT or V
Verification Trunk	V TRK
Vibrating	VIB
Voice Frequency	VF
Voice Frequency Signaling	VF SIG
Voice Impedance Filter	VIF
Voice Input	V IN
Voice Operated Device, Anti-singing	VODAS or VOD
Voice Operated Gain Adjusting Device	VOGAD or VOG
Voice Output	V OUT
Voice Terminating Equipment	VTE
Volt or Voltage	V
Voltmeter	VM or V
Voltmeter Cord	VM CD
Voltmeter Relay	VM REL
Volume Limiter	VOL LIM

W

Waiting	WTG or W
Ward Leonard	WL
Watt Hour Meter Polyphase	PWHM
Watt Hour Meter Single Phase	SWHM
Watt Meter	WM
Watt Meter Polyphase Indicating	PIWM
Watt Meter Single Phase Indicating	SIWM
Weather	WEA
Weighting	WTG
West	W
Wheatstone Bridge	WH BG or WB
Wipe Out	WO
Wire Chief	WC
Wire Chief (On Ans. Jack No. Plates Only)	W CH

Z

Zone Registration	Z REG

B. FRAMES AND RACKS

B

Battery Control Board	BCB
Battery Distributing Fuse Board	BDFB
"B" Switchboard Link Frame	B LK
"B" Switchboard Sender Frame	BS
"B" Switchboard Sender and Position Test Frame	BS TST
Block Relay Frame	BR

C

Call Announcer Amplifier Frame	CA AMP
Call Announcer Alarm Frame	CA ALM
Call Announcer Test Frame	CA TST

Word or Term	Abbreviation
Call Distributing "B" Link Frame	B LK
Call Distributing "B" Sender Frame	BS
Call Distributing "B" Sender and Position Test Frame	BS TST
Call Indicator Make Busy Frame	CIMB
Call Indicator Trunk and Recorder Frame	CI TRK & REC
Coil Rack	C RK
Coin Supervisory Link Frame	CSL
Connector Frame	C

D

Decoder Connector Frame	DR CONN
Decoder Frame	DR
Decoder Test Frame	DR TST
Distant Office Frame	DO
District Frame	D
District Interrupter Frame	D INT
District Junctor Frame	DJ
District Junctor Grouping Frame	DJG
District Junctor Test Frame	DJT
District Link Frame	D
District Selector Test Frame	D TST
District Timing Frame	D TMG

E

Emergency Alarm Frame	EA

F

Final Frame	F
Final Multiple Test Line Frame	FMTL
Final Selector Test Frame	F TST
Floor Alarm Board	FL BD
Floor Alarm Frame	FL A

I

Incoming Frame	I
Incoming Link Extension Frame	IE
Incoming Link Frame	I
Incoming Selector Test Frame	I TST
Incoming Trunk Frame	IT
Incoming Trunk Test Connector Frame	ITC
Incoming Trunk Test Frame	ITT
Intercepting Trunk Finder Frame	TF

K

Key Pulsing Link Frame	LK
Key Pulsing Sender Frame	S
Key Pulsing Sender Link Frame	KSL
Key Pulsing Sender Test Frame	S TST

Word or Term	Abbreviation

L

Line Choice Connector Frame	LC
Line Distributing Frame	LDF
Line Finder Frame	LF
Line Finder Interrupter Frame	LF INT
Line Junctor Connector Frame	LJ
Line Junctor Grouping Frame	LJG
Line Link Frame	L
Local Test Desk Test Selector Frame	LTD TST

M

Main Control Board	MCB
Message Register Rack	MR
Message Register Connector Frame	MR CONN
Miscellaneous Frame	M
Miscellaneous Interrupter Frame	MISC INT
Number Group Connector Frame	NG

O

Office Alarm Frame	OA
Office Interrupter Frame	OI
Office Junctor Grouping Frame	OJG
Office Link Extension Frame	OE
Office Link Frame	O
Office Selector Test Frame	O TST
Originating Marker Connector Frame	OMC
Originating Marker Frame	OM
Originating Sender Frame	S
Originating Sender Test Frame	OST
Originating Trouble Indicator Frame	OTI
Outgoing Trunk Test Board	OGT T BD
Outgoing Trunk Test Frame	OGT T

P

Power Board	P BD
Power Protection Panel	PPP

R

Relay Rack	RR
Repeater Frame	R
Ringing Power Board	RPB

Word or Term	Abbreviation
S	
Selector Frame	SEL
Sender Make Busy Frame	SMB
Sender Test Interrupter Frame	S TST INT
Service Observing Jack Panel	SOJ
Stuck Connection Finder Frame	STK C FDR
Subscriber Decoder Sender Frame	S
Switch Frame	SW or SW F
Subscriber Link Frame	LK
Subscriber Sender Frame	S
Subscriber Sender Link Frame	SSL
Subscriber Sender Test Frame	S TST
Supplementary Incoming Trunk Frame	SIT
Tandem Call Announcer Alarm Frame	CA ALM
Tandem Call Announcer Amplifier Frame	CA AMP
Tandem Call Announcer Test Frame	CA TST
Tandem Decoder Connector Frame	DR CONN
Tandem Decoder Frame	DR
Tandem District Frame	D
Tandem District Selector Test Frame	D TST
Tandem Interrupter Frame	INT
Tandem Link Frame	LK
Tandem Office Selector Test Frame	O TST
Tandem Sender Frame	S
Tandem Sender Test Frame	S TST
Tandem Trouble Indicator Frame	TI
Tandem Trouble Recorder Frame	TBL RCDR
Tandem Trunk Finder Frame	TF
Terminating Marker	TM
Terminating Marker Connector	TMC
Terminating Sender	TS
Terminating Sender Link	TSL
Terminating Sender Test	TST
Terminating Trouble Indicator	TTI
Test Trunk Finder Frame	TST TRK FDR
Three Wire Office Frame	3WO
Traffic Register Distributing Frame	TRDF
Traffic Register Rack	TR
Trouble Indicator Frame	TI
Trunk Finder Frame	TF
Z	
Zone Registration Control	RC
Zone Registration District Connector	RDC
Zone Registration Test	RT
Zone Registration Timing Interrupter	RTI

REASONS FOR REISSUE

1. The crossbar abbreviations formerly covered in BSP AA613.009, Issue 2, have been added in this issue. Also the following new abbreviations have been added.

   Airplane
   Airways Key Equipment
   Amber
   Basement
   By-Link
   Call Blocked
   Community Dial
   Exit
   High Voltage Regulator
   Intertoll Trunks
   Loop Noise Killer
   Multicall
   Program Transmission
   Power Room
   Singing
   Stability
   Switch Room
   Toll
   Weighing

2. Term for which an alternative abbreviation has been added:

   Regulate, Regulating, or Regulator

3. Term for which an alternative abbreviation has been added in the frames and racks list:

   Switch Frame

4. Term for which an abbreviation has been changed:

   Circuit Breaker

5. Terms for which abbreviations have been omitted in the general list:

   Generator Alarm
   Generator Fuse
   Generator Ground
   Program Supply
   Weighing

SECTION 3

NOMENCLATURE

A. GENERAL TERMS

1. Manual Telephone System or Manual System
A telephone system in which telephone connections between customers are established manually by telephone operators in accordance with orders given verbally by the calling parties.

2. Dial Telephone System or Dial System
A telephone system in which telephone connections between customers are ordinarily established by electrical and mechanical apparatus controlled by manipulations of dials operated by the calling parties.

3. Panel Dial System
A type of dial telephone system in which the switching apparatus is generally characterized by the following features:

(1) The contacts of the multiple banks over which selection occurs, are mounted vertically in flat rectangular panels.

(2) The brushes of the selecting mechanisms are raised and lowered by motor driven apparatus.

(3) The dial pulses are received and stored by controlling mechanisms which govern the subsequent operations necessary in establishing a telephone connection.

4. Step-by-Step Dial System
A type of dial telephone system in which the switching apparatus is generally characterized by the following features:

(1) The wipers of the selecting mechanisms are moved both vertically and in horizontal circular arcs.

(2) The selecting mechanisms are individually driven by a combination of electromagnet and ratchet mechanisms.

(3) The dial pulses may either actuate the successive selecting mechanisms directly or may be received and stored by controlling mechanisms which in turn actuate the selecting mechanisms by pulses similar to dial pulses.

5. Central Office (May be abbreviated to Office)
A switching unit, in a telephone system providing service to the general public, having the necessary equipment and operating arrangements for terminating and interconnecting lines and trunks. There may be more than one central office in a building. The term "central office" applies to each unit of equipment having a separate office name or code and in addition having independent incoming trunks and terminating switching equipment.

Note: When a central office name is used to designate a building housing one or more central offices, the word "building" should be appended to avoid confusion.

6. Local Central Office or Local Office
A central office serving primarily as a place of termination for subscriber lines, and providing telephone service to the subscriber on these lines. A local central office may serve some subscribers on a theoretical office basis with additional office names or codes, and in this case for commercial or other reasons some separate incoming trunk groups may be provided for the traffic to these subscribers. The theoretical office arrangement is not, however, considered as a separate central office.

7. Tandem Central Office or Tandem Office
A central office used primarily as an intermediate switching point for traffic between other central offices. Unless qualified by a prefix or other explanation, this term is restricted by usage to an office employed primarily for the interconnection of local central offices.

8. Toll Central Office or Toll Office
A central office used primarily for completing and supervising toll calls.

Note: Certain types of toll calls are completed and supervised at local central offices.

9. Dial System Office (May be abbreviated to Dial Office)
A central office furnishing dial service.

10. Dial System Tandem Office
A tandem office employing mechanical switching equipment. The switching operation may be controlled by operators in the tandem office (Operator Tandem) or may be entirely mechanical (Full Selector Tandem). The tandem office may employ either or both of these methods of operation.

11. Panel Office
A dial system office where the switching apparatus is of the panel type. Battery Cut-off Relay Office is the designation used to distinguish the newer type of panel office where the cut-off relays of the line circuits are connected to battery. Ground Cut-off Relay Office is the designation used to distinguish the type of panel office where the cut-off relays of the line circuits are connected to ground.

12. Panel Tandem Office
Panel tandem offices are of two general types as follows:

(1) Sender Tandem
Tandem and completing office selections are controlled by a sender in the tandem office. This sender gets its setting either from a tandem operator's keyset (Operator Tandem) or from another office in the form of pulses (Full Selector Tandem).

(2) Office Selector Tandem
A group of distant office selectors controlled from the originating office or from a sender tandem.

13. Step-by-Step Office
A dial system office where the switching apparatus is of the step-by-step type.

14. Step-by-Step Tandem Office
Step-by-step tandem offices are of the Full Selector Tandem type.

15. Community Dial Office
A dial office of comparatively small size which serves a separate exchange area having its own numbering plan and which has no operating or maintenance force located in its own building. The operating is handled and the maintenance is directed from conveniently located points.

16. Operator Office
A central office which serves as the operating center for assistance traffic for a community dial office.

Note: The master office is usually, also, the maintenance headquarters and the toll operating point for the community dial office, but this is not necessarily the case.

17. Branch Office
An assembly of switching equipment (usually of the step-by-step type) located apart from the main office, but part of the main office so far as the numbering plan is concerned and at least partially dependent on it for its trunking.

18. Exchange
A unit of a communication company for the administration of communication service in a specified area which usually embraces a city, town, or village and its environs. It consists of one or more central offices together with the associated plant used in furnishing communication service in that area. Ordinarily an individual local tariff is filed for each exchange.

19. Exchange Area
The territory included within the boundaries of an exchange.

20. Local Service Area
The entire area within which are located the stations which a customer may call at local rates in accordance with the provision of the local tariff.

21. Local Call
Any call (attempted or completed) for a destination within the local service area of the calling station. A completed local call is frequently referred to as a local message.

22. Toll Call
Any call (attempted or completed) for a destination outside the local service area of the calling station. A completed toll call is frequently referred to as a toll message.

23. Manual System Subscriber
Any telephone subscriber whose line terminates in a manual office.

24. Dial System Subscriber
Any telephone subscriber whose line terminates in a dial office.

25. Manual Subscriber
A manual system subscriber or a dial system subscriber served by a central office line (or lines) arranged for originating calls on a manual basis.

Note: When a manual subscriber is served by a dial office and has dial incoming service he may be called a "Manual Subscriber with Final Multiple" or a "Manual Subscriber with Connector Multiple" as the case may be.

26. Dial Subscriber
A dial system subscriber served by a central office line (or lines) arranged to operate on a full dial basis.

27. Dial System Station
Any telephone station served by a dial system office.

28. Manual System Station
Any telephone station served by a manual system office.

29. Dial Station
A telephone station equipped with a dial.

30. Manual Station
A telephone station not equipped with a dial.

31. Manual Service
Telephone service furnished manual subscribers.

32. Dial Service
Telephone service furnished dial subscribers.

33. Measured Service
Service in connection with which message use is measured in terms of messages or message units for purposes of charging for the service.

34. Message Rate Service
A subscriber classification of measured local service in connection with which message use throughout the local service area is measured in terms of messages or message units for purposes of charging for the service; and in connection with which a coin collecting device is not included as part of the station equipment.

35. Coin Service
A subscriber, public or semi-public classification of measured local service in connection with which message use throughout the local service area is measured in terms of messages or message units for purposes of charging for the service; and in connection with which a coin collecting device is included as part of the station equipment.

36. Prepayment Coin Service
A type of coin service requiring the deposit of the coin before the customer can place his order for the called number. Provision is made for holding the coin in suspension and for collecting or returning the coin as necessary.

Note: In dial systems prepayment operation is referred to as "Coin First" when it is necessary to distinguish from "Dial Tone First."

37. Postpayment Coin Service
A type of coin service requiring the deposit of the coin on request after the called station has answered. Provision is not made for holding the coin in suspension, nor for the operator to have control of the coin after deposit.

38. Flat Rate Service
A subscriber classification of local service in connection with which a stipulated monthly charge is made, covering all message use to stations within a specified area which may include all or a part of the local service area. In the latter case, message use to stations in the balance of the local service are is charge for on a measured service basis, such charges being in addition to the stipulated monthly charge.

39. Assistance Call
A call which the customer could dial directly, but on which he dials the operator for assistance.

40. Multiple Registration
The generic term for the arrangement of operation of the subscriber message register wherein the register may be operated more than once on a completed call, the number of operations being dependent on (1) the conversation time, or (2) the combination of the destination and conversation time.

41. Zone Registration
Multiple registration based on both destination and conversation time.

42. Overtime Registration
Multiple registration based on conversation time only.

43. Zone (As applied to multiple registration)
An area or belt surrounding a specified central office, in connection with which the local rate treatment for a particular class of service is uniform for all calls directed to offices in that area or belt from stations served by the specified office. Zones are numbered with respect to any given central office to correspond to the number of message units for the initial period of conversation for calls originating at stations served by that office.

44. Message Unit
The unit of measurement for charging for message use where a multiple registration method of charging is employed, either by the use of multiple registration equipment or by the translation into equivalent message units of ticket charges for calls within a specified area.

45. Subscriber vs. Subscriber's
It is recommended that in equipment nomenclature the term "Subscriber" be used rather than the possesive form "Subscriber's" as for example, "Subscriber Line," "Subscriber Station," etc. This recommendation regarding the use of possesive forms does not apply to terms such as "Operator's Set," "Wire Chief's Desk," etc.

B. SWITCHBOARDS AND MANUAL SWITCHING EQUIPMENT

1. Local Switchboard
A switchboard at which the switchboard functions required by a local central office are performed.

2. Tandem Switchboard
A switchboard at which the switchboard functions required by a tandem central office are performed.

3. Toll Switchboard
A switchboard at which the switchboard functions required by a toll central office are performed.

4. Toll Tandem Switchboard
A switchboard used primarily as an intermediate switching point for reaching toll lines from other toll or local switchboards.

5. Dial System Switchboard
Any switchboard ("A" switchboard. "B" switchboard, etc.) in a dial office.

6. Dial System "A" Switchboard (May be abbreviated to DSA BOARD)
A local dial office switchboard at which are handled assistance calls, intercepted calls, and calls from miscellaneous lines and trunks such as manually operated coin lines. In most cases it is also employed for handling certain toll calls.

7. Combined Toll and DSA Board
A switchboard at which the functions of both a toll switchboard and a DSA switchboard are performed.

8. Central Dial System "A" Switchboard (May be abbreviated to CENTRAL DSA BOARD)
A dial system "A" switchboard handling calls from several dial office buildings. This term is recommended in place of "Centralized DSA Board" which has been used to some extent.

9. Dial System "B" Switchboard (May be abbreviated to DSB BOARD)
A switchboard in a dial system office for completing incoming calls received from operators over straightforward or call circuit trunks.

10. Dial System Tandem Switchboard
A switchboard in a Dial System Tandem Office associated with Operator Tandem equipment.

11. Panel "A" Switchboard (May be abbreviated to PANEL "A" BOARD)
An "A" switchboard in a panel office. It may be one of three types as follows:

(1) Dialing "A" Switchboard
Cords are double-ended and arranged to complete certain calls over dialing trunks.

(2) Key Pulsing "A" Switchboard
Similar to dialing "A" switchboard except that small keysets are substituted for dials and the trunk and sender equipment is arranged to work with the keysets. (See Key Pulsing.)

(3) Semi-Mechanical "A" Switchboard
Calls are answered with single-ended cords terminating on district selectors and selections are controlled by a large keyset of the locking type.

12. Panel "B" Switchboard
A "B" switchboard in a panel office. At present, there are two types as follows:

(1) Call Distributing "B" Switchboard
Calls are distributed automatically to the positions. No trunk equipment appears at the position and the operator has only to set up the number requested on a ten-button keyset.

(2) Key Listening "B" Switchboard
Each trunk appears at a position in lamps and keys. The operator answers a waiting call by depressing the assignment (listening) key on the trunk. The keyset is of the 40-button locking type.

13. Step-by-Step "A" Switchboard
An "A" switchboard in a step-by-step office. At present there are two types as follows:

(1) Dialing "A" Switchboard
Cords are double-ended and arranged to complete certain calls over dialing trunks.

(2) Key Pulsing "A" Switchboard
Similar to dialing "A" switchboard except that small keysets are substituted for dials and the trunk and sender equipment is arranged to work with the keysets. (See Key Pulsing.)

14. Step-by-Step "B" Switchboard
A "B" switchboard in a step-by-step office. Calls are distributed automatically to the positions. No trunk equipment appears at the position and the operator has only to set up the number requested on a ten-button keyset.

15. Operator's Bailiwick
That portion of a "B" or tandem switchboard which includes the trunks handled by a particular operator, when the board is so arranged that the number of trunks assigned to an operator may be varied to meet the traffic conditions. An example of this type of operation is found at the automatic display call indicator positions.

16. Toll Tandem Position
A position in a toll tandem switchboard or one serving similar purposes at a toll switchboard.

17. Call Indicator
Means for transmitting a called number from dial equipment to a manual office in such a manner as to provide a visual indication of the number before the manual operator.

18. Panel Call Indicator
Call indicator used for completing calls from panel offices.

19. Step-by-Step Call Indicator
Call indicator used for completing calls from step-by-step offices.

20. Key Display Call Indicator
A call indicator arrangement in which the "B" operator must depress a key associated with the trunk in order to cause the number to be displayed.

21. Automatic Display Call Indicator
A call indicator arrangement in which the number on each call is displayed automatically after the previous call has been disposed of.

22. Call Announcer
Means for transmitting a called number from dial equipment to a manual office in such a manner that a pronouncement of the number is heard by the manual operator.

23. Key Pulsing
A switchboard arrangement using a non-locking keyset instead of a dial and providing for the transmission of signal pulses corresponding to the key depressions over the tip and ring conductors of the cord circuit into senders associated with the trunks selected by the operator. Examples of Key Pulsing application are:

Key Pulsing Panel "A" Board
Key Pulsing Step-by-Step "A" Board
Key Pulsing Toll Board

24. Number Checking Terminal
A name for the individual metal insert in the test strip of the checking multiple.

C. MECHANICAL SWITCHING EQUIPMENT - GENERAL

1. Selector Multiple
Parallel connected terminals of one or more selector banks, such as are used in dial offices. Selector multiples correspond in a general way to the various multiples in a manual switchboard. Specific types of selector multiples are "District Multiple," "Incoming Multiple," "Line Finder Multiple," "Connector Multiple," etc.

2. Terminal Hunting Group
A general designation for a group of lines in a dial system office so arranged that the switching equipment will search over the group to find an idle line.

3. Terminal Hunting
The function performed by the switching equipment in a dial office in searching for an idle line in a P.B.X. or other terminal hunting group.

4. Subscriber Line Overflow Circuit
An arrangement for counting the attempts to connect to a particular line or terminal hunting group while the line or group is busy.

5. Switch Room
That part of the central office building which houses the selectors and associated apparatus in a panel or step-by-step office.

D. PANEL DIAL EQUIPMENT

1. Operator District Selector
The district selector used exclusively on connections set up by operators.

2. Distant Office Selector
A panel type office selector arranged to be located at a point distant from the originating office for the purpose of obtaining access in common with selectors from other originating offices to combined groups of completing trunks. The distant office selector has been referred to in the past as the "Two-Wire Office Selector."

3. Sender Arranged for Time Release
A sender so arranged that it automatically restores itself to service when a stuck condition is encountered.

4. Stuck Connector Finder
A finder for identifying circuits associated with stuck senders.

5. Automatic Alternate Routing
A feature of dial equipment providing for automatically diverting traffic for certain trunk or toll line groups (codes) to a substitute route, for example tandem, when the regular trunk group is in an "All Trunk Busy" condition.

E. STEP-BY-STEP DIAL EQUIPMENT

1. Step-by-Step Toll Train
The selector switches in a step-by-step office through which toll calls are completed. There are two ways necessary for designating the particular switches in this train. The first, used in traffic studies and on other occasions where the type of selector is not of interest but where its place in the train is the essential, uses numbers corresponding to the numbers of equivalent selectors in the local train as follows:

Toll First Selector
Toll Second Selector
Toll Third Selector
Toll Connector

Since these terms do not designate the types of selectors, names have also been assigned for use where such designations are necessary. These follow.

2. Toll Transmission Selector
A selector in the step-by-step toll train which furnishes toll grade transmission to the subscriber and controls the ringing.

3. Toll Preceding Selector
A selector in the step-by-step toll train ahead of the transmission selectors. Where necessary, two or more may be used in tandem.

4. Toll Intermediate Selector
A selector in the step-by-step toll train between the transmission selectors and the connectors. Where necessary, two or more may be used in tandem.

5. Toll Connector
One of the final switches in the toll train which connects with subscriber lines and which supplies machine ringing when started by a signal from a toll transmission selector.

6. Combination Local and Toll Connector (May be abbreviated to COMBINATION CONNECTOR)
A connector which will operate either as a toll connector or as a local connector depending on whether it is picked up by the toll train or the local train.

7. Hunting Connector
A connector in a step-by-step office which searches for an idle line in a P.B.X. group or other group of consecutive associated lines. There are two types as follows:

(1) Rotary Hunting Connector
Hunts over a maximum of ten lines all of which must be on the same bank level.

(2) Level Hunting Connector
Used for larger groups and will hunt over several consecutive bank levels.

8. Two Digit Rotary Hunting Selector
A step-by-step selector arranged for connecting to small groups of lines or trunks and requiring the dialing of two digits for its operation. The first digit steps it up and the second steps it in to the first trunk of the group and it then hunts for an idle trunk within the group.

9. Service Code Selector Train
The selector train in the step-by-step system which is used in reaching the service codes (112, 113, etc.) and to absorb preliminary pulses. The three switches in this train are:

Auxiliary First Selector
Service Code Selector
Auxiliary Service Code Selector

10. Out-Trunk Switch
A selector or switch arranged to hunt over a single group of outgoing trunks and to connect to an idle one.

11. Rotary Out-Trunk Switch
An out-trunk switch utilizing a rotary type selector as its basic mechanism. A recently developed circuit of this type is the "Rotary Out-Trunk Switch Arranged for Preselection."

12. Line Concentrating Unit
An arrangement wherein a group of manual subscriber lines terminates on line switches or line finders which route their originating calls to a nearby switchboard and where calls to the lines are completed through connectors controlled by dials at the switchboard.

F. LOCAL CROSSBAR DIAL EQUIPMENT

1. Local Crossbar Dial System No. 1
A type of dial telephone system in which the switching apparatus is generally characterized by the following features:

(1) A switching mechanism, called the crossbar switch, consisting of a rectangular field of contact springs arranged in sets and operated on the coordinate principle by horizontal and vertical members.

(2) Common circuits which select and test the switching paths and control the operation of the selecting mechanisms.

(3) A method of operation in which the dial pulses are received and stored by controlling mechanisms which determine the operations necessary in establishing a telephone connection beyond the interoffice trunk by means of revertive pulses generated by the distant equipment and counted by these mechanisms.

2. Crossbar Switch
A unit of switching apparatus consisting of a rectangular field of contact springs arranged in sets and operated on the coordinate principle by horizontal and vertical members. Any set of contacts may be operated by the operation of a selecting magnet, which determines the row followed by the operation of a holding magnet, which operates the particular set in that row. The contact set then remains operated under the control of the holding magnet. The following are constituent parts of the crossbar switch.

(1) Switch Frame
The rectangular structure on which the various elements of the switch are mounted.

(2) Vertical Unit
The complete assembly of the vertically mounted unit of the switch.

(3) Vertical Unit Base
The supporting structure of the vertical unit.

(4) Multiple Strip
One of the vertical strips of fixed contacts of a vertical unit.

(5) Holding Armature
The armature of the holding magnet including the holding bar.

(6) Holding Bar
The element of the holding armature which presses the selecting fingers against the actuating springs to operate the desired contacts.

(7) Holding Magnet
The magnet of the vertical unit.

(8) Actuating Spring
The spring of the vertical unit which transmits the pressure of the holding bar to the moving contact springs.

(9) Trap
The space between the holding bar and the actuating spring to which the selecting finger is moved preparatory to operating a particular cross point.

(10) Holding Off Normal Springs
The common contact springs of the vertical unit which are operated whenever the holding armature operates.

(11) Retaining Spring
The flat spring which bears against the holding armature and serves the double purpose of a locating and retractile spring.

(12) Selecting Armature
The double armature attached to the selecting bar and actuated by either of two selecting magnets.

(13) Selecting Bar
The horizontal rod carrying the selecting fingers and the selecting armature.

(14) Centering Springs
The springs which determine the normal position of the selecting bar.

(15) Armature Extension
The operating arm of a selecting armature the stud of which engages the centering springs.

(16) Selecting Finger
One of the wires projecting from the selecting bar which, when the bar is rotated, is positioned to identify the particular set of contacts to be closed by the operation of a holding bar.

(17) Damping Spring
The coil spring on the selecting finger provided for damping the finger.

(18) Selecting Magnet
The magnet which operates the selecting armature.

(19) Selecting Off Normal Springs
The common contact springs associated with the selecting armature and operated by it.

(20) Cross Point
The set of springs identified by the operation of one selecting and one holding magnet.

(21) Operated Cross Point
A particular set of contact springs being held in the operated position.

(22) Operating Springs
The moving springs of a cross point.

(23) Test Jack
The extension of the vertical unit multiple provided for temporary electrical access to this multiple.

3. 100-Point Switch
A crossbar switch with a capacity of 100 cross points.

4. 190-Point Switch
A crossbar switch with a capacity of 190 cross points.

5. 200-Point Switch
A crossbar switch with a capacity of 200 cross points.

6. Three-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close three sets of contacts.

7. Four-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close four sets of contacts.

8. Five-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close five sets of contacts.

9. Six-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close six sets of contacts.

Note: Two sizes of units may be combined on the same switch, making for instance a three-wire five-wire switch.

10. Primary Line Switch
A crossbar switch on a line link frame through which connections are made between subscriber lines and line links.

11. Secondary Line Switch
A crossbar switch on a line link frame through which connections are made between line links and district junctors or line junctors.

12. Primary District Switch
A crossbar switch on a district link frame through which connections are made from district junctors to district links.

13. Secondary District Switch
A crossbar switch on a district link frame through which connections are made from district links to office junctors.

14. Primary Office Switch
A crossbar switch on an office link frame through which connections are made from office junctors to office links.

15. Secondary Office Switch
A crossbar switch on an office frame or office link extension frame through which connections are made from office links to trunks outgoing from the office link frame.

16. Primary Incoming Switch
A crossbar switch on an incoming link frame through which connections are made from incoming trunks to incoming links.

17. Secondary Incoming Switch
A crossbar switch on an incoming link frame or incoming link extension frame through which connections are made from incoming links to line junctors.

18. No-Test Switch
A crossbar switch which connects no-test incoming trunks to the desired no-test junctors.

19. Zone Registration Switch
A crossbar switch which connects district junctors to zone registration circuits.

20. Line Secondary Multiple
The multiple of the secondary line switches of a line link frame outgoing to district junctors or incoming from line junctors.

21. District Secondary Multiple
The outgoing multiple of the secondary switches of a district link frame.

22. Office Secondary Multiple
The outgoing multiple of the secondary switches of an office link or extension frame.

23. Incoming Secondary Multiple
The outgoing multiple of the secondary switches of an incoming link or extension frame.

24. Line Choice
Four line link frames which are treated as a unit by the terminating markers.

25. Half Choice
Two of the line link frames of a line choice which are served by the same line junctors.

26. Number Group
A group of subscriber numbers (one or more blocks of a hundred numbers) which is treated as a unit by the terminating marker in setting up a call.

27. 20-Block
A group of 20 consecutive subscriber numbers cut in simultaneously for test by the terminating marker. The last two digits of the first number of each 20-block are "00," "20," "40," "60," or "80."

28. 100-Block
Five 20-blocks, normally consecutive and containing the numbers ending in "00" to "99."

29. Column of Lines
The files of a 100-line primary line switch bay or the left or right half of a 200-line primary line switch bay.

Note: Line Assignment Designation. The recommended method of designating subscriber line circuits for assignment purposes is as follows:

Choice	0 to 19
Frame	A,B,C or D
Column	00,01,02,etc.
Switch	0 to 9
Vertical	0 to 9

Thus, the designation 7B-62-94 identifies a line circuit in Choice 7, Frame B, (second frame), Column 62 (sixty-third column), Switch 9 (tenth column from bottom), Vertical 4 (fifth vertical of the switch). The number of the "Switch" is the same as the horizontal line group.

30. File of Lines
Ten vertical units located one above another on a primary line switch bay.

31. Horizontal Line Group
All of the lines served by the same ten line links.

32. No-Test File
The ten vertical units located one above another on a primary line switch bay used for "no-test" operation.

33. Block-End Hunting
Hunting from the last terminal of one 20-block to the first terminal of another 20-block.

34. Jump-Hunting
Non-consecutive terminal hunting wherein the departure from consecutive hunting occurs within a 20-block and hunting recommences at a designated point in a hundred block which is assigned to jump hunting.

35. Keyset Number Checking (May be abbreviated to Keyset Checking)
A number checking arrangement wherein the operator employs a keyset for setting up the number to be checked.

36. Dial Number Checking (May be abbreviated to Dial Checking
A number checking arrangement wherein the operator employs a position dial for setting up the number to be checked.

37. No-Connection Position - District Junctor
A condition of the district junctor, established by the originating marker, wherein the junctor is held by an originating bridge with the sender link released and the primary district link cross points not closed.

38. No-Connection Position - Incoming Trunk
A condition of the incoming trunk circuit established by the terminating sender or marker, wherein the trunk circuit is held by a trunk bridge with the sender link released and the primary incoming link cross points not closed.

39. Extra Number
A number outside the call number series and identified by a two digit number preceded by a letter. In effect, it is a four digit number, the letter prefix A, B, C, etc., used represents the digit 00, 01, 02, etc., respectively. The letters I and O are omitted. Thus, an arrangement of this kind provides a group of 2400 "extra numbers." Such "extra numbers," like numbers in the regular series, are furnished in 20 blocks.

40. Zone Call (As applied to multiple registration)
A call (attempted or completed) dialed by a customer for a destination which involves zone registration.

41. Non-Zone Call (As applied to multiple registration)
A call (attempted or completed) dialed by a customer for a destination which does not involve zone registration. A completed non-zone call is referred to as a non-zone message.

42. Originating Service Only
A term applied to the service on a subscriber line (usually a P.B.X. trunk) which handles calls outgoing from the customer only.

43. Terminating Service Only
A term applied to the service on a subscriber line (usually a P.B.X. trunk) which handles calls to the customer only.

44. Mate
Where a frame or circuit is paired with another frame or circuit for circuit operation, either is referred to as the mate of the other.

45. Coin Timer
A timer used to control overtime collection on coin service.

46. Zone Timer
A timer used to control zone and overtime registration on zone calls.

47. Non-Zone Timer
A timer used to control overtime registration on non-zone calls.

48. Coin Supervisory Circuit
A circuit arrangement which is called in by the district junctor to dispose of the initial coin and to test for the presence of additional coins for subsequent intervals, etc.

49. Zone Registration Circuit
A circuit arrangement for furnishing on zone calls the proper pulses for the operation of the subscriber message register via the district junctor.

50. Incoming Trunk Circuit
A trunk circuit connecting incoming trunks with incoming links. The incoming trunk circuits contain relay and other equipment for performing additional functions such as supplying ringing current and transmission battery.

51. Manual Auxiliary Trunk Circuit
A circuit arrangement ahead of an incoming trunk circuit to convert manual cord supervision to the proper supervision for the incoming trunk.

52. Non-Discriminating Incoming Trunk
A trunk (actually a trunk decade) which cancels the physical-theoretical discriminating feature.

53. District Junctor Decade (May be abbreviated to District Decade)
The ten district junctors connected to the same district primary link switch.

54. Incoming Trunk Decade (May be abbreviated to Incoming Decade
The ten incoming trunks connected to the same incoming primary link switch.

55. Terminating Office Selecting Feature
The feature in a multi-office terminating unit by which the desired 10,000 number series is indicated. The selecting may be by (1) Incoming Decade, (2) Pulsing, (3) Incoming Frame Number.

56. Physical-Theoretical Discriminating Feature
The feature by which it is indicated to the marker as to whether the physical or the theoretical office is wanted and as to whether the number is a physical or a theoretical number.

57. Junctor
A circuit extending between frames and terminating in a switching device on each frame.

(1) District Junctor
A junctor extending from line link frames to a district link frame and used for connecting line links with district links. This junctor contains relay and other equipment for performing additional functions such as supplying supervision, transmission battery, message registering, connecting to senders via sender links, etc.

(2) Office Junctor
A junctor extending from a district link frame to an office link frame and used for connecting district links with office links.

(3) Line Junctor
A junctor extending from an incoming link frame to one or two line link frames and used for connecting incoming links with line links.

(4) "A" Operator District Junctor (May be abbreviated to "A" District Junctor)
A junctor extending from the "A" switchboard to the district link frame and used for connecting the operator with district links. This circuit contains relay and other equipment for performing additional functions such as connecting to "A" operator senders via "A" operator sender links.

(5) Key Pulsing District Junctor
An "A" operator district junctor used with key pulsing "A" switchboards.

(6) Dialing District Junctor
An "A" operator district junctor used with dialing "A" switchboards.

(7) No-Test Junctor
A junctor extending from the no-test switch to vertical units in the no-test file on the line link frame.

58. Links

(1) Line Link
A switching arrangement for connecting subscriber lines to district junctors on originating calls and line junctors to subscriber lines on terminating calls.

(2) District Link
A switching arrangement for connecting district junctors to the junctors outgoing from a district link frame.

(3) Office Link
A switching arrangement for connecting office junctors to trunks outgoing from an office link frame.

(4) Incoming Link
A switching arrangement for connecting incoming trunks to line junctors.

(5) Number Checking Trunk Link
A circuit arrangement for connecting a position number checking circuit with a number checking incoming trunk.

(6) Subscriber Sender Link
A switching arrangement for connecting district junctors to subscriber senders.

(7) Terminating Sender Link
A switching arrangement for connecting incoming trunks with terminating senders, either full selector or "B" operator.

(8) Number Checking Sender Link
A switching arrangement for connecting a number checking incoming trunk with a number checking sender.

(9) Coin Supervisory Link
A switching arrangement for connecting coin district junctors to coin supervisory circuits.

(10) "A" Operator Sender Link (May be abbreviated to "A" Sender Link)
A switching arrangement for connecting "A" operator district junctors, "A" operator incoming trunks, and "A" operator outgoing trunks to "A" operator senders.

(11) Key Pulsing Sender Link
An "A" operator sender link operated on a key pulsing basis.

(12) Dialing Sender Link
An "A" operator sender link operated on a dialing basis.

59. Connector

(1) District Connector
A connecting arrangement through which the originating markers control switching operations on a district frame.

(2) Office Connector
A connecting arrangement through which the originating markers control switching operations on an office frame.

(3) Incoming Connector
A connecting arrangement through which the terminating markers control switching operations on an incoming frame.

(4) Number Group Connector
A connecting arrangement through which the terminating markers have access to a number group.

(5) Line Choice Connector
A connecting arrangement through which on terminating calls the terminating markers control switching operations on a line choice.

(6) Line Junctor Connector
A connecting arrangement through which on terminating calls the terminating markers have access to the line junctors.

(7) Originating Marker Connector
A connecting arrangement through which the subscriber senders have access to an originating marker.

(8) Terminating Marker Connector
A connecting arrangement through which the terminating senders have access to a terminating marker.

(9) Zone Registration Connector
A connecting arrangement through which the originating marker has access to a zone registration circuit.

60. Controllers

(1) Line Link Controller (May be abbreviated to Line Controller)
A circuit arrangement common to the links of a line link frame, which controls the operation of line links in associating a line with a district junctor.

(2) Subscriber Sender Link Controller (May be abbreviated to Subscriber Sender Controller)
A circuit arrangement common to the links of a subscriber sender link frame which controls the operation of these links in associating a district junctor with a sender.

(3) "A" Operator Sender Link Controller (May be abbreviated to "A" Sender Controller)
A circuit arrangement common to the links on the operator sender link frame which controls the operation of these links in associating an incoming trunk with an operator sender.

(4) Terminating Sender Link Controller (May be abbreviated to Terminating Sender Controller)
A circuit arrangement common to the links on a terminating sender link frame which controls the operations of these links in associating an incoming trunk with a terminating sender (either full selector or "B" operator).

(5) Coin Supervisory Controller
A circuit arrangement common to the links of a coin district frame for controlling the connection of coin district junctors to coin supervisory circuits.

61. Zone Registration Control Circuit
A circuit common to a district frame for controlling the connection of district junctors to zone registration circuits.

62. Senders

(1) Originating Sender
A generic term applying to both subscriber senders and "A" operator senders.

(2) Subscriber Sender
A sender arranged to receive the pulses dialed by the subscriber and, with the assistance of the originating marker, to direct the call to the proper destination.

(3) "A" Operator Sender (May be abbreviated to "A" Sender)
A sender arranged to receive pulses from the "A" operator and, with the assistance of the originating marker, to direct the call to the proper destination.

(4) "A" Operator Key Pulsing Sender (May be abbreviated to Key Pulsing Sender)
An "A" operator sender of the key pulsing type.

(5) "A" Operator Dialing Sender (May be abbreviated to Dialing Sender)
An "A" operator sender of the dialing type.

(6) Terminating Sender
A generic term applying to the senders which work with the terminating markers. Included are full selector senders, "B" operator senders, and number checking senders.

(7) Full Selector Sender
A sender arranged to receive from another sender, pulses representing the called number and to furnish the terminating marker with the information required for it to complete the connection.

(8) "B" Operator Sender (May be abbreviated to "B" Sender)
A sender arranged to receive the four digits keyed by the "B" operator to furnish the terminating marker with the information required for it to complete the connection.

(9) Number Checking Sender
A sender arranged to receive pulses from the "A" operator and with the assistance of the terminating marker to direct the equipment to the number on which a check is desired.

(10) Key Pulsing Number Checking Sender
A number checking sender of the key pulsing type.

(11) Dialing Number Checking Sender
A number checking sender of the dialing type.

63. Sender Group
All of the senders (originating or terminating) associated together on sender link frames.

64. Sender Sub-group
All of the senders to which a particular secondary switch of a primary-secondary link arrangement has access.

65. Marker Group
All of the markers to which a sender group has access.

66. Marker

(1) Originating Marker
A unit of equipment arranged to receive from the originating sender the office code registration, originating class of service, and other related information; to translate these data in accordance with cross connections associated with the code into the proper routing information for completing the call; to return to the sender the information required by it; and to control the switching operations on the district and office frames.

(2) Terminating Marker
A unit of equipment which on terminating calls controls the switching operations on the incoming and line link frames.

67. Line and District Frames

(1) Line Distribution Frame (LDF)
The cross connecting frame in a crossbar office where the sleeve and message register leads of the line circuits are cross-connected to the number sleeves and subscriber message registers respectively.

(2) Line Link Frame (May be abbreviated to Line Frame)
A frame containing line links with associated equipment and subscriber line relays.

Basic Unit of Line Link Frame
A unit of the line link frame containing the secondary switch bay or bays and one or more primary switch bays.

Supplementary Unit of Line Link Frames
A unit of the line link frame containing only primary switch bays.

Note: A complete line link frame always contains a basic unit and the proper number of supplementary units required to build out the frame to the desired line capacity. The subscriber line relays are mounted on the primary bays of the basic and supplementary units.

(3) District Frame
A term referring to a district junctor frame and its associated district link frame and sender link frame.

(4) District Junctor Frame
A frame containing the relays and other equipment of the district junctors.

(5) District Link Frame
A frame containing district links and other equipment for connecting district junctors with office junctors.

(6) Subscriber Sender Link Frame
A frame containing subscriber sender links and other equipment for connecting district junctors with subscriber senders.

68. Office and Incoming Frames

(1) Office Frame
A term referring to an office link frame with its associated office link extension frame if one is provided.

(2) Office Link Frame
A frame containing office links and other equipment for connecting office junctors with outgoing trunks.

(3) Office Link Extension Frame (May be abbreviated to Office Extension Frame)
A frame containing supplementary secondary switches to extend the outgoing terminal capacity of one or more office frames.

(4) Incoming Frame
A term referring to an incoming trunk frame and its associated incoming link frame, incoming link extension frame if provided, and terminating sender link frame.

(5) Incoming Trunk Frame
A frame containing the relays and other apparatus associated with incoming trunks.

(6) Incoming Link Frame
A frame containing incoming links and other equipment for connecting incoming trunks with line junctors.

(7) Incoming Link Extension Frame
A frame containing supplementary secondary switches to extend the outgoing terminal capacity of an incoming link frame.

(8) Terminating Sender Link Frame
A frame containing the terminating sender links and other equipment for connecting incoming trunks with terminating senders.

69. Sender and Grouping Frames

(1) "A" Operator Sender Link Frame (May be abbreviated to "A" Sender Link Frame)
A frame containing "A" operator sender links and other equipment for connecting district junctors with "A" operator senders.

(2) Terminating Sender Link Frame
A frame containing the terminating sender links and other equipment for connecting incoming trunks with terminating senders.

(3) Originating Sender Frame
A frame arranged for mounting subscriber senders and "A" operator senders as required.

(4) District Junctor Grouping Frame
The frame at which the line secondary multiple is connected to district junctors.

(5) Office Junctor Grouping Frame
The frame at which the district secondary multiple is connected to office junctors.

(6) Line Junctor Grouping Frame
The frame at which the incoming secondary multiple is connected to line junctors.

70. Test Frames

(1) District Junctor Test Frame
An automatic test frame for testing district junctors.

(2) Originating Sender Test Frame
An automatic test frame for testing originating senders.

(3) Terminating Sender Test Frame
An automatic test frame for testing terminating senders.

(4) Incoming Trunk Test Frame
An automatic test frame for testing incoming trunk circuits in its own office and incoming selectors and other terminating trunk circuits in connecting offices.

71. Connector Frames

(1) Number Group Connector Frame
A frame containing number group connector equipment.

(2) Line Junctor Connector Frame
A frame containing line junctor connectors.

(3) Line Choice Connector Frame
A frame containing line choice connectors.

72. Miscellaneous Frames

(1) Block Relay Frame
A frame containing 20-block and 100-block relays and the "F" and "C" cross-connecting field associated with these relays.

"F" Cross-Connecting Field
The cross-connecting field on the block relay frame whereon subscriber numbers are assigned to line choices and the type of ringing and terminal hunting feature determined.

"C" Cross-Connecting Field
The cross-connecting field on the block relay frame whereon subscriber numbers are assigned to horizontal line groups.

(2) Zone Registration Frame
A frame containing the zone registration switches and zone registration circuits.

73. Registers

(1) Peg Count Register
A traffic register, associated with a group of facilities, which operates each time one of these facilities is used.

(2) Time Register
A traffic register, operated by the six-second clock pulses. The reading of this register is taken along with other traffic registers and indicates the elapsed time between register readings.

(3) Overflow Register
A traffic register, associated with a group of facilities, which operates each time an attempt to use the facilities fails due to the entire group being busy.

(4) Group Busy Register
A traffic register, associated with a group of facilities, which operates each time the entire group is busy. In the past this register has also been known as a "paths busy" (PB) register or as an "all trunks busy" (ATB) register.

(5) Delay Register
A traffic register, associated with a group of facilities, which operates when an attempt to use these facilities encounters a delay greater than a predetermined interval.

(6) Load Register
A traffic register, associated with a group of facilities, which operates when a specified portion of the facilities in the group is busy.

74. Trouble Indicators

(1) Originating Trouble Indicator
A circuit used for indicating trouble conditions in originating equipment and also for making routine tests of the originating marker and originating marker connector circuits.

(2) Terminating Trouble Indicator
A circuit used for indicating trouble conditions in terminating equipment and also for making routine tests of the terminating marker and terminating marker connector circuits.

75. Unrestricted Numbers
Numbers in an office having the physical-theoretical discriminating feature for which the discriminating feature is cancelled. This feature is intended for Telephone Company numbers (usually 9900-9999).

G. NO. 4 (CROSSBAR) TOLL SWITCHING EQUIPMENT

1. No. 4 Toll Switching System (May be abbreviated to Toll Crossbar System)
A switching system within a toll central office in which the switching apparatus is generally characterized by the following features:

(1) A selector mechanism, called the crossbar switch consisting of a rectangular field of contact springs arranged in sets and operated on the coordinate principle by horizontal and vertical members.

(2) Common circuits which select and test the switching paths and control the operation of the selecting mechanisms.

(3) A method of operation in which the establishment of connections is directed by mechanisms controlled by keysets in the same office or by pulses received from other offices.

2. Crossbar Switch
A unit of switching apparatus consisting of a rectangular field of contact springs arranged in sets and operated on the coordinate principle by horizontal and vertical members. Any set of contacts may be operated by the operation of a selecting magnet, which determines the row, followed by the operation of a holding magnet, which operates the particular set in that row. The contact set then remains operated under the control of the holding magnet. The following are constituent parts of the crossbar switch.

(1) Switch Frame
The rectangular structure on which the various elements of the switch are mounted.

(2) Vertical Unit
The complete assembly of the vertically mounted unit of the switch.

(3) Vertical Unit Base
The supporting structure of the vertical unit.

(4) Multiple Strip
One of the vertical strips of fixed contacts of a vertical unit.

(5) Holding Armature
The armature of the holding magnet including the holding bar.

(6) Holding Bar
The element of the holding armature which presses the selecting fingers against the actuating springs to operate the desired contacts.

(7) Holding Magnet
The magnet of the vertical unit.

(8) Actuating Spring
The spring of the vertical unit which transmits the pressure of the holding bar to the moving contact springs.

(9) Trap
The space between the holding bar and the actuating spring to which the selecting finger is moved preparatory to operating a particular cross point.

(10) Holding Off Normal Springs
The common contact springs of the vertical unit which are operated whenever the holding armature operates.

(11) Retaining Spring
The flat spring which bears against the holding armature and serves the double purpose of a locating and retractile spring.

(12) Selecting Armature
The double armature attached to the selecting bar and actuated by either of two selecting magnets.

(13) Selecting Bar
The horizontal rod carrying the selecting fingers and the selecting armature.

(14) Centering Springs
The springs which determine the normal position of the selecting bar.

(15) Armature Extension
The operating arm of a selecting armature the stud of which engages the centering springs.

(16) Selecting Finger
One of the wires projecting from the selecting bar which, when the bar is rotated, is positioned to identify the particular set of contacts to be closed by the operation of a holding bar.

(17) Damping Spring
The coil spring on the selecting finger provided for damping the finger.

(18) Selecting Magnet
The magnet which operates the selecting armature.

(19) Selecting Off Normal Springs
The common contact springs associated with the selecting armature and operated by it.

(20) Cross Point
The set of springs identified by the operation of one selecting and one holding magnet.

(21) Operated Cross Point
A particular set of contact springs being held in the operated position.

(22) Operating Springs
The moving springs of a cross point.

(23) Test Jack
The extension of the vertical unit multiple provided for temporary electrical access to this multiple.

3. 100-Point Switch
A crossbar switch with a capacity of 100 cross points.

4. 190-Point Switch
A crossbar switch with a capacity of 190 cross points.

5. 200-Point Switch
A crossbar switch with a capacity of 200 cross points.

6. Three-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close three sets of contacts.

7. Four-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close four sets of contacts.

8. Five-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close five sets of contacts.

9. Six-Wire Unit or Switch
A unit or switch in which the contact springs are arranged to close six sets of contacts.

Note: Two sizes of units may be combined on the same switch, making for instance a three-wire five-wire switch.

10. Primary Incoming Switch
A crossbar switch on an incoming link or extension frame through which connections are made from incoming trunks to incoming links.

11. Secondary Incoming Switch
A crossbar switch on an incoming link or extension frame through which connections are made from incoming links to junctors.

12. Primary Outgoing Switch
A crossbar switch on an outgoing link or extension frame through which connections are made from junctors to outgoing links.

13. Secondary Outgoing Switch
A crossbar switch on an outgoing link or extension frame through which connections are made from outgoing links to outgoing trunks.

14. Intertoll Train
The incoming and outgoing link frames and associated equipment through which connections are established to intertoll trunks. Connec-

tions to tributary trunks and trunks to call order and inward positions, etc., may be established via either this train or the toll completing train.

15. Toll Completing Train
The incoming and outgoing link frames and associated equipment through which connections are established to toll switching trunks and TX trunks. Connections to tributary trunks and trunks to call order and inward positions, etc., may be established via either this train or the intertoll train.

16. Combined Train
A train combining the functions of the intertoll train and toll completing train.

17. Junctor
A circuit extending between incoming and outgoing link frames and terminating in a switching device on each frame.

18. Intertoll Junctor
A junctor in the intertoll train.

19. Toll Completing Junctor
A junctor in the toll completing train.

20. Trunk Assignment Patching Jacks
The pair of patching jacks (block jack and drop jack) by which assignments of trunk block terminals to trunks may be made on a temporary basis.

21. Jump Hunting
An arrangement for temporarily enlarging a trunk group beyond the number of terminals reserved for it on the trunk block relay by patching or cross connecting a block jack to a jump hunt jack at the trunk assignment patching board.

22. Trunk Block
A group of 40 trunk terminals cut in simultaneously for test by the marker.

23. Trunk Block Connector
A connecting arrangement through which the markers have access to trunk block relays.

24. Marker Connector
A connecting circuit arrangement through which incoming or position senders are connected to markers.

25. Link Controller Connector (May be abbreviated to Controller Connector)
A circuit through which a link (sender, operator loop, or repeater) is connected to a link controller.

26. Incoming Connector
A connecting arrangement through which markers control switching operations on incoming link frames.

27. Outgoing Connector
A connecting arrangement through which markers control switching connections on outgoing link frames.

28. Incoming Trunk Circuit
A trunk circuit extending an incoming trunk to one or more incoming link frames. The incoming trunk circuits contain relay and other equipment for performing necessary functions.

29. Outgoing Trunk Circuit
A trunk circuit extending from one or more outgoing link frames to an outgoing trunk. The outgoing trunk circuit contains relay and other equipment for performing necessary functions.

30. Two-Way Trunk Circuit
A trunk circuit combining the functions of incoming and outgoing trunk circuits.

31. Overflow Trunk Control Circuit
A circuit arrangement associated with an intertoll or two-way tributary trunk group which signals by a slow flash to the calling operator when all trunks in the group are busy and which changes to a rapid flash when one or more trunks become idle.

32. Overflow Trunk Circuit
A trunk circuit to the overflow trunk control circuit. One or more are provided per trunk group depending on the size of the group.

33. Master Busy Trunk Circuit
A trunk circuit to which calls are routed when all intertoll trunks and all overflow trunks in the desired group are busy.

34. Holding Trunk Circuit
A trunk circuit to which intertoll trunks can be connected for holding.

35. Reorder Trunk Circuit
A trunk circuit to which incoming trunks are connected to give a reorder signal (rapid flash).

36. Repeater Cut-In Relay Circuit
A relay circuit associated with a trunk circuit for connecting the trunk to a repeater link when a switched-in repeater is required.

37. Incoming Sender
A sender called in by an incoming trunk and taking its registration from pulses over the trunk. It transfers its code digits to the marker, which controls the selection of an outgoing trunk, and then spills its remaining digits, if any, into an outgoing sender. An incoming sender may be of the following types depending on the type of pulses received.

(1) Key Pulsing Incoming Sender.

(2) Dial Incoming Sender.

(3) Multi-frequency Incoming Sender.

38. Position Sender
A sender associated permanently with a crossbar toll switchboard position which receives its registrations from the operator's keyset and functions otherwise as an incoming sender.

39. Outgoing Sender
A sender called in by an outgoing trunk which receives its registration from an incoming or position sender (or under some conditions directly from a position keyset) and directs the further progress of the call. Outgoing senders are of two types depending on the manner by which they send the information forward.

(1) Revertive and PCI Outgoing Sender
An outgoing sender arranged for operation with outgoing trunks to panel and crossbar offices on a revertive pulse basis and to manual offices on a panel call indicator basis.

(2) Step-by-Step and Call Announcer Sender
An outgoing sender arranged for operation with outgoing trunks on a step-by-step pulsing basis and to manual trunks on a call announcer basis.

[illegible] ing or direct current.

36. Dial and Manual Selected Tie Trunk

Any tie trunk arranged to be selected by both dial and manual operation.

37. Number Checking Trunk

The trunk which permits an operator to obtain a check of the calling subscriber's number.

38. Vacant Code Trunk

The trunk reached by a dial subscriber when he dials a code which is not in use.

39. Vacant Incoming Multiple Trunk Circuit

A circuit for intercepting calls routed in error to vacant incoming multiple terminals.

40. Loop-Back Circuit From Intercepting Desk

The arrangement added to a straightforward intercepting trunk to enable the intercepting operator to call back and talk to the "B" operator.

41. Trunk Equipment

A general term signifying the equipment directly associated with a trunk.

Note: In the case of certain manual trunk equipments, the arbitrary designations "Type A Trunk Equipment," "Type B Trunk Equipment," etc. have been assigned for the sake of brevity.

I. POWER AND SIGNALLING ARRANGEMENTS

1. Talking Battery

The battery circuit which, because of special design precautions or the insertion of filters, is sufficiently quiet to be used as the power supply for transmission circuits. On some drawings the talking battery leads have in the past been labeled "Quiet Battery."

2. Tone Alternator

The tone generator of the inductor-alternator type which supplies dial tone, busy tone, audible ringing signal, order tone, etc.

3. Continuous Ringing

The designation for bus-bars, alarms, etc., for uninterrupted ringing current. This has been called "Manual Ringing."

4. Selective Ringing (Two or more parties)

A party-line ringing system wherein the bell or bells of the desired party only are rung.

5. Semi-Selective Ringing (Four or more parties)

A party-line ringing system wherein the station bells of two parties are rung simultaneously, differentiation being by a one-ring, two-ring code.

6. Code Ringing

A party-line ringing system wherein the number of rings or the duration, or both, indicate which party is being called. Although semi-selective ringing is one form of code ringing it is excluded from this classification in order to make the terms distinctive.

7. Multi-Party Ringing

Any ringing system which provides for ringing more than four parties. Two and four party ringing is arbitrarily excluded from this classification.

8. Bridged Ringing

A term applied to any party-line ringing system wherein all the ringers on a line are directly connected across the line.

9. Divided Ringing

A method of obtaining partial ringing selectivity by connecting one-half of the ringers from one side of the line to ground and the other half from the other side of the line to ground. This term is not ordinarily applied to selective and semi-selective ringing systems.

10. A.C.-D.C. Ringing

A ringing system utilizing a combination of an alternating current and a direct current, the direct current being provided to facilitate tripping.

11. Superimposed Ringing

A ringing system utilizing a combination of alternating and direct currents where both positive and negative d-c components are provided primarily to obtain selectivity.

12. Call Tone

Tone given to an operator to indicate that a call has been connected to her position and that she should announce herself. Examples of this tone are found at the No. 3 Information Desk and the No. 3 Order Turret.

13. Calls Waiting Signal Circuit

An arrangement, used primarily with call distributing switchboards, for indicating the presence of and in some cases the approximate number of waiting calls. Examples of its use are the circuits at the call distributing "B" board, the No. 3 information desk and the sender tandem board.

14. No-Such-Number Signal

The tone given a subscriber when he reaches a Vacant Code or Vacant Level Trunk.

15. Order Tone

The tone sent back over a trunk to indicate: (1) To the originating operator - that the order should be passed and (2) to the receiving operator - that an order is about to be passed. For certain types of operation, such as call announcer and automatic display call indicator, the tone serves function (2) only.

16. Single Order Tone

An order tone consisting of one tone signal of relatively long duration (about 1/2 second) indicating that the office name and desired number is to be passed.

17. Double Order Tone

An order tone consisting of two short tone signals in quick succession indicating that the desired number only is to be passed.

18. Triple Order Tone

An order tone consisting of three short tone signals in quick succession indicating that the office name only is to be passed and that the originating operator is to wait for a subsequent order tone.

19. Vacant Position Tone

Tone on a trunk terminating in a vacated position.

20. Warning Tone

Tone given to an operator to indicate that the circuit to which she is connected is not in a condition for normal operation. Examples of this tone are, the tone given an operator at an automatic display call indicator position when she plugs into the wrong telephone set jack, and the tone received by a sender monitor operator when she plugs into a sender supervisory jack while the sender is connected to the test set.