CENTRAL STOCK PLAN FOR PLUG-IN UNITS -

PLUG-IN UNITS FOR MAINTENANCE SPARES

In connection with the establishment of Detailed Continuing Property Record of Central Office Equipment, a review of all types of plug-in equipment was necessary to establish standarized requirements for plug-in unit spares. Spares in this sense refer to only those plug-in units retained at an office or maintenance location and used for replacement of defective in-service units.

Attached is a list of maximum authorized spares for the following types of equipment using plug-in units.

1. N1 Carrier Terminal Equipment
2. N2 Carrier Terminal Equipment
3. N3 Carrier Terminal Equipment
4. O, ON1, ON2 Carrier Terminal and Junction Equipment
5. T1 Carrier Terminal Equipment
6. N Type Repeaters
7. O, ON Type Repeaters
8. T1 Type Repeaters
9. Signaling Equipment - SF
10. E Type Telephone Repeaters
11. V Type Telephone Repeaters
12. Carrier Telegraph Channel Equipment
13. Telegraph Repeater Equipment
14. Telegraph Coupling Equipment
15. L Carrier Supergroup Connector Equipment

16. L Carrier Multiplex Transmitting and Receiving Bay Equipment for L60, L120, L600 and L1860 Type Bays

17. L Carrier Multiplex Common and Mix Bay Equipment

18. LMX1 Receiving Group Bank Bay Equipment

19. L Carrier WM Wideband Equipment

20. A5 Channel Bank Equipment

21. Wire Line Entrance Link Equipment of Microwave Systems

22. L1 and L3 Carrier Terminal and Repeater Equipment

23. No. 1 Electronic Switching System Equipment

24. A1 Digital Data Equipment

25. 1 Type Terminating Sets

26. 3A Echo Suppressor Equipment

27. T1 Carrier Wideband Bank Equipment

28. TD, TH, TJ and TL/TM Microwave Radio Systems Equipment

29. B1 Data Carrier Terminal and Junctor-Converter Bay Equipment

30. B1 Data Carrier Frequency Shift Pulsing Transmitting and Receiving Equipment

31. 10A and 10B Telegraph Testboard Equipment

32. Calculagraph Equipment

33. A2A and A2B Video Channel Equipment

Requirements above the authorized spares shall be handled on the normal Central Office Equipment Recommendation basis.

PLUG-INS FOR MAINTENANCE SPARES

N1 Carrier Terminal

Group Transmitter
Group Receiver

No. of Units in Service by Type	Spare Units
1-50 (see Note 1 and 2)	1
51-100	2
Over 100	3

Channel Units (see Note 2)

No. of Units in Service by Type (Msg, Thru, Pgm, etc.)	Spare Units
1-25	1
26-50	2
51-75	3
76-100	4
Over 100	5

Note: Provide as replacement spare one of each type carrier frequency sub-assembly in service (see Note 4).

N2 Carrier Terminal

Group Transmitter
Group Receiver
Alarm Unit
Line Terminating Unit
Power Supply Unit
CGA Signal Receiver
Restoral Oscillator
Alarm and Restoral Unit
Alarm Link Unit

No. of Units in Service by Type	Spare Units
1-50 (see Note 1 and 2)	1
51-100	2
Over 100	3

Modem Unit (see Note 2)

No. of Units in Service by Type	Spare Units
1-50	1
51-100	2
Over 100	3

Compandor (see Note 2)
VF Amplifier

No. of Units in Service by Type	Spare Units
1-50	2
51-100	4
Over 100	6

N3 Carrier Frequency Supply

Power Converter and Regulator (see N3 Carrier Terminal for Spares)
4 KHz Generator
Doubler-amplifier
Dual Amplifier

Note: For the above plug-ins furnish 1 spare of each type with first carrier supply bay only. Spares do not include bay installed alternate units.

N3 Carrier Terminal

Group Transmitter
Group Receiver
Power Converter and Regulator
Alarm and Restoral Unit
Line Terminating Unit
Combining and Switching Unit

No. of Units in Service by Type	Spare Units
1-50 (see Note 1 and 2)	1
51-100	2
Over 100	3

Frequency Correction Unit
Channel Group Modem

No. of Units in Service by Type	Spare Units
1-50 (see Note 2)	1
51-100	2
Over 100	3

Channel Modem and Associated Filters (see Note 2)

No. of Units in Service	Spare Units
1-50	2
51-100	4
Over 100	6

Note: Provide as replacement spare one of each type channel filter in service (see Note 4).

Compandor (see Note 2)
VF Amplifier

No. of Units in Service by Type	Spare Units
1-50	2
51-100	4
Over 100	6

Double Channel Regulator and Associated Filter

No. of Units in Service	Spare Units
1-50 (see Note 2)	1
51-100	2
Over 100	3

Note: Provide as replacement spare one of each type filter in service (see Note 4).

Restoral Oscillator

No. of Units in Service by Type	Spare Units
1-50	1
51-100	2
Over 100	3

O-ON Carrier Terminal and Junction Equipment

Group Transmitter
Group Oscillator
Twin Channel
Miscellaneous Oscillator

No. of Units in Service by Type	Spare Units
1-25	1

O-ON Carrier Terminal and Junction Equipment (cont'd.)

No. of Units in Service by Type	Spare Units
26-50	2
51-100	3
101-200	5
Above 200	7

Group Receiver and Associated Filters

No. of Units in Service by Type	Spare Units
1-25 (see Note 2)	1
26-50	2
51-100	3
101-200	5
Above 200	7

Note: Provide as replacement spare one of each type filter in service (see Note 4).

Channel Unit and Associated Filter (see Note 2)

No. of Units in Service by Type	Spare Units
1-50	1
51-100	2
101-150	3
151-200	4
201-250	5
251-300	6

Notes:

(a) Provide 1 additional spare for each 50 channels or portion thereof.

(b) Provide as replacement spare one of each type filter in service (see Note 4).

T1 Carrier Terminal and Repeater Equipment	Spare Units
1-12 Terminals	1 ea J98711F-L1 (32 boards)
13-48 Terminals	2 ea J98711F-L1 (32 boards)
49-96 Terminals	2 ea J98711F-L1 (32 boards)

T1 Carrier Terminal and Repeater Equipment (cont'd.)

	Spare Units
Control Units	2 ea J98710B for offices having 201B's
Channel Units	2% of each type in service, 1 minimum 5 maximum
Repeaters	5% of each type in service, maximum 10 of each type (201's or 206's)
Power Supply Load Units (Initial Installations, only)	2 ea J98711R-L1 (for offices with 9'0" bays) 3 ea J98711R-L1 (for offices with 11'6" bays)
Test Boards	J98711T-L1 (4 boards) 1-12 Terms - 1 13-24 Terms - 2 25-48 Terms - 3 Over 48 Terms - 4
LBO's	4 of each type in service, 10-836A for testing
130V Power Dissipation Unit	2 ea J98710M for offices having 206B Repeaters
24V Regulators	J86498-L3 1-24 Terminals 2 25-48 Terminals 3 Over 48 Terminals 4
Convertors	J86498-L4 1-24 Terminals 1 25-48 Terminals 2 Over 48 Terminals 3
42-48V Regulators	J86498-L5 1-24 Terminals 1 25-48 Terminals 2 Over 48 Terminals 3

N Type Repeater - Central Office Locations

J98703 Tube or Transistorized
J99321 N2 Repeater, Adapters, Constant Current Regulators, etc.

N Type Repeater - Central Office Locations (cont'd.)

No. of Units in Service by Type	Spare Units
1-50 (see Notes 1 and 2)	2
Over 50	3

N Type Repeater - N Repeater Stations (see Note 3)

J98703 Tube or Transistorized
J99321 N2 Repeater, Adapters, Constant Current Regulators, etc.
240 Type Flat Gain Amplifier
4038 Type Network

No. of Units in Service by Type	Spare Units
1-25 in maintenance area (see Note 1)	2
26-50	4
51-150	6
Over 150	8

Note: Spare repeaters, amplifiers, etc. for repeater route maintenance are not to be located at or charged to individual repeater stations, but shall be located at and charged to the maintaining office or location.

O-ON Repeater

O Repeater Amplifier and Associated Filters (see Note, below)
O Repeater Oscillator
ON Repeater

No. of Units in Service by Type	Spare Units
1-50 (see Note 1 and 2)	2
51-100	3
Over 100	4

Note: Provide as replacement spare one of each type filter in service (see Note 4).

Signaling Equipment - SF

E & F - Type SF

No. of Units in Service by Type	Spare Units
1-20	2

Signaling Equipment - SF (cont'd.)

No. of Units in Service by Type	Spare Units
21-100	4
101-500	6
Over 500	8

Tube Type SF

No. of Units in Service by Type	Spare Units
1-20	1
21-100	2
101-500	4
Over 500	6

E Type Telephone Repeater Equipment

E2 Repeater
E3 Repeater
E6 Repeater and Associated Networks
E7 Repeater and Associated Networks

No. of Units in Service by Type	Spare Unit
Any Amount	1%, 2 minimum

Carrier Telegraph Channel and Repeater Equipment

43A1 Telegraph Channel and Networks
144 Telegraph Coupling Unit
96A1 Telegraph Repeater
143 Type Regenerative Repeater
145 Type Regenerative Repeater

No. of Units in Service by Type	Spare Units
1-5	1
6-10	2
11-40	3
41-100	4
101-200	6
201-500	8
Over 500	8

V Type Telephone Repeater Equipment

V3 Amplifier (J68647A)
227 Type Amplifier
359 Type Equalizer
849 Type Network

No. of Units in Service by Type	Spare Units
Any Amount	1%, 2 minimum

1 Type Terminating Sets

No. of Units in Service by Type	Spare Unit
Any Amount	1%, 2 minimum

Echo Suppressor Equipment

No. of Units in Service by Type	Spare Units
1-50	1
51-100	2
Over 100	3

Calculagraph Equipment

Calculagraphs

No. of Units in Service by Type	Spare Units
Up to 50	3
51-100	4
Over 100	6

L Carrier and Multiplex Equipment

Solid state plug-in modules used as cold maintenance spares should be provided on the basis of 2% spare with a minimum of two and a maximum of ten for each type required per office.

MMX2 Mastergroup	1 spare module per working mastergroup level (1-6) per 3 line (coax) bay

L Carrier and Multiplex Equipment (cont'd.)

LMX2	
Supergroup Bank	1 spare module per 3 working
Group Bank	1 spare module per 30 working (3 adjacent bays on a common carrier supply)
Channel Bank	No dedicated spare; however, due to office rearrangements and growth, spares are usually available.
Mastergroup Connectors	1 spare per type per office
Supergroup and Group Connectors	2% spare with a minimum of 2 and a maximum of 5 per office
L1 and L3	
Pilot Alarm Units	5% spare of each type of unit in use with a minimum of 2 units for each type.
Line Amplifiers, Regulators	10% spare of each type of unit in use with a minimum of 2 units for each type

For the following list of equipment the spare plug-in equipment will be determined jointly by the Area Plant and Engineering groups:

TD, TH, TJ and TL-TM microwave radio systems equipment
MJ Mobile Radio (IMTS) Control Terminal equipment
No. 1 Electronic Switching Systems equipment

A2A and A2B video channel equipment

A1 digital data equipment

B1 data carrier terminal and junctor-converter bay equipment

B1 data carrier frequency shift pulsing transmitting and receiving equipment

10A and 10B telegraph testboard equipment

Note 1: Plug-in units used in switching sets are not to be considered as unmounted spares. They are to be provided at the time the switching sets are provided and considered as "in service."

Note 2: The amount of spare plug-ins for a main toll office in a division headquarters city should be double that as listed.

Note 3: Unattended offices should not be provided spare plug-in units. However, a minimum of spares should be placed at a maintenance center for maintenance truck, i.e., a maintenance central office should have its normal spares plus the amount needed for maintenance service of local nonattended offices.

Spare units at maintenance location for use at unattended offices.

No. of CDO's Maintained by a Maintenance Location	Amount of Equipment
1-5	Provide same as Auth. for 1 office
Over 5	Provide same as Auth. for 2 offices

Note 4: The cost of such filters and/or sub-assemblies which are less than retirement units shall be charged to the appropriate maintenance (R) account effective January 1, 1969.