



WS No. 19 Mark III

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TELECOMMUNICATIONS PARTINTRODUCTION AND INDEX

Note: This Issue 25, Pages 1 to 18, supersedes Issue 20, Pages 1 to 4, dated Feb 64 and Issue 24, Pages 5-13 dated Feb 68. The regulation has been revised.

INTRODUCTION - TELECOMMUNICATIONS PART

1. This regulation provides essential information for users, such as workshop sections, which hold only this Part.
2. It includes technical information on miscellaneous electronic equipment, miscellaneous electro-acoustic equipment, radio transmitters, radio receivers, radio stations A series and old nomenclature transmitter-receivers, radio stations B series, radio stations C series, radio stations D and E series, telecommunications components and sub-assemblies, power supply units for telecommunications equipment, radio and line accessory equipment, tools and miscellaneous telecommunications engineering equipment, trunk ancillaries, multi-channel line equipment, d.c. telegraph machines, telephones, telephone lines, switchboards, exchanges and radiac equipment.
3. Information on an equipment is published in loose leaf in the categories shown in Table 2 which together make up the Technical Handbook of the equipment.

General

4. The Telecommunications Part is arranged to conform with the General Part, to which reference should be made for detailed information. The more important are:-

- Gen A 003 - General description of EMERs
- Gen A 004 - Allocation of Parts
- Gen A 010 - Central reference library of local EMEIs
- Gen A 011 - Local instructions in EMERs
- Gen A 031 - Suspension of EMERs
- Gen A 032 - Cancellation of EMERs
- Gen A 041 - Filing of EMERs
- Gen A 045 - Procedure for commenting on EMERs
- Gen A 052 - Distribution of EMERs
- Gen A 060 - Distribution of EMER binders

Index

5. The Part Structure is shown in Table 1 giving the breakdown of the lettered sections.
6. Table 3 shows the equipment of which EMERs have been published in the Telecommunications Part.
7. Tels A 001 is a detailed statement of all EMERs current in the Part, giving details of pages issued and issue numbers. Additions are notified periodically in Accession Lists (ALs) so that users can check holdings and receipts.
8. Detailed indexes of modification and miscellaneous instructions are, when necessary, published as the first pages in the appropriate category of the technical handbook. These must be kept up to date by manuscript amendments as each new modification or miscellaneous instruction is received, using the sub-title as a short description.
9. Local instructions on equipments may also be published by theatres and commands as Local Electrical and Mechanical Engineering Instructions (local EMEIs).
10. Relevant equipment publications other than EMERs will, when possible, be detailed in the XYO regulation of the appropriate technical handbook.

Filing

11. EMERs will be filed in alphabetical and numerical order as shown in the Tels A 001. Local EMEIs will be filed immediately after the EMER bearing the corresponding letter and number.
12. a. The number of equipments covered by the three figure numbering, except for Telecommunications, Section A (General), is limited to 99 equipments, the third digit indicating the category.
 - b. Information on a group of equipments is sometimes published by sub-numbering, eg K 260/1, K 260/2 etc, the sub-number after the oblique indicates equipment similarities to that shown by the first three figures (K 260), see Gen A 003.
 - c. The filing of sub-numbered EMERs will be in numerical order after the main equipment EMERs, the following are examples of filing sequences:-

K 260-9, K 260-9/1, K 260-9/2 or for a
non-consecutive series

K 260, K 263, K 264, K 262/1, K 263/1, K 260/2,
K 264/4 etc

the order of filing may also be obtained from Tels A 001

13. Binders should not be overfilled and space should be allowed for expansion. Manilla covers having an EMER electric shock warning printed on the back of the front marker, or having a manilla cover as identification for a manufacturer's handbook, must be retained in the EMER binder.

14. Superseded and cancelled EMERs will be removed as directed in the amending regulation. The binding edge of unwanted EMERs may be used to strengthen or repair current EMERs, a one inch strip cut off the old binding edge may be pasted on as a reinforcement strip without obscuring any text.

Supplementary demands

15. EMERs are issued automatically to units, but supplementary demands to replace unserviceable pages or to provide extra copies may be made. Supplementary demands must be in the form shown in Gen A 052, detail to complete the demand can be copied from the Tels A 001.

EMER identification and location

16. a. Gen A 004 gives in broad outline of the Part in which the required information will probably be found.

b. The Structure and Index of the Part concerned should be consulted to find the EMER reference number.

c. If the required EMER is not held, the relevant A 001 should be checked to confirm that the EMER is still current. Any demand for the EMER should be in accordance with para 15.

Reporting of technical errors and omissions

17. When new equipments are developed every effort is made to distribute concurrently the appropriate EMERs.

18. Field experience may reveal errors and omissions and improved repair techniques which were not obvious when the EMERs were written. Recipients should forward their comments in accordance with Gen A 045.

Table 1 - Structure of Telecommunications Part

Section	Subjects covered by section
A	General
B	Miscellaneous electronic equipment
C	Miscellaneous electro-acoustic equipment
D	Radio transmitters
E	Radio receivers
F	Radio stations
G	Radio stations
H	Radio stations
I	Radio stations
J	Telecommunications components and sub-assemblies
K	Power supply units for telecommunications equipments
L	Radio and line accessory equipment
M	Tools and miscellaneous telecommunication engineering equipment
N	Spare
O	Spare section
P	Spare section
Q	Trunk ancillaries
R	Multi-channel line equipment
S	D.C. telegraph machines
T	Spare section (permanently)
U	Telephones, telephone lines, switchboards and exchanges
V	Radiac equipment
W	*Electrical and electronic test equipment
X	*Electrical and electronic test equipment
Y	*Electrical and electronic test equipment
Z	Spare

* See also the Test and Measurement EMER part for general purpose test equipment

Table 2 - EMER categories

All EMERs published in Section A contain general information common to Telecommunications. Where an EMER relates to a specific equipment the last digit of the three figure number indicates the following function:-

Numbers ending in 0	indicate Data Summary
Numbers ending in 1	indicate Operator's Instructions
Numbers ending in 2	indicate Technical Description
Numbers ending in 3	indicate Unit Repairs
Numbers ending in 4	indicate Field and Base Repairs
Numbers ending in 5	indicate Waterproofing and other special instructions
Numbers ending in 6	indicate Repair Schedules and Centrem Lists
Numbers ending in 7	indicate Modification Instructions
Numbers ending in 8	indicate Inspection Standards
Numbers ending in 9	indicate Miscellaneous Instructions

Table 3 - Telecommunications Part - Index and general index

EMER	Subject
	<u>General to Part</u>
A 000	Telecommunications Part - Introduction and index
A 001	Detailed index to the structure and index - Telecommunications Part
A 001/1	Index of local instructions
A 002	Redesignation of EMERs to form the Radar and FCE Part
A 003	Introduction to the Communications Installations Part
A 004	Revision of the Telecommunications Part of EMERs
●A 005	Redesignation of EMERs to form Medical and Dental Part
●A 006	Centremes
●A 007	Redesignation of EMERs to form Test and Measurement Part
	<u>Tels engineering principles</u>
A 011	Waveguides - outline of principles
A 013	Frequency modulation
A 014	Piston attenuators - general principles
A 015	Pulse-width modulation
A 016	Single sideband radio systems
A 017	Frequency shift signalling
A 018	Semi-conductor devices
A 020	Pulse code modulation
A 021	Delta pulse modulation
A 151	Carrier telephony
A 170	D.C. telegraphy
A 171	Voice frequency telegraphy - general principles
A 172	The operation of single - and multi-channel teleprinter systems over radio links
●A 173	Telephone automatic exchange principles
A 200	The application of multi-channel telephony equipment to radio links
	<u>Tels engineering data</u>
A 300	Colour coding - resistors and capacitors
A 302	Miniature electric cables
A 303	Lubricants, paints, preservatives, adhesives and similar materials used in conjunction with telecommunications equipment
A 304	Equipment wire for use in field and base workshops
A 315	Identification and use of crystal valves
A 316	CV register of electronic valves
A 317	Schedule of Army electronic and associated test equipment
A 339	Semi-conductor circuits
A 340	Hard valve trigger circuits
A 341	Attenuation-pads - design data
A 342	Fuse ratings
A 345	Standard frequency transmission
A 346	Rhombic aerials - design information
	<u>Tels repair techniques</u>
A 410	Sealing of iron-dust cores and trimmers
A 411	Soldering technique using electric irons

Table 3 - (cont)

EMER	Subject
A 412	Servicing semi-conductor equipments
●A 414	Printed circuit wiring repair techniques
A 420	Protection and tropic proofing of telecommunication equipment
A 504	Replacement of capacitors in Army electronic equipment
A 522	Miniature repair techniques
	<u>Tels publications</u>
A 530	Index to Parts and Identification lists for Telecommunication, test and associated equipments
A 640	Classifications of radio frequencies
	<u>General instructions</u>
A 760	Repainting of electronic equipment
A 761	Identification of electrical leads and cables in telecommunications and radar equipments
A 762	Mk 4 plugs and sockets
A 763	UK/AN electrical connectors
A 770	Lettering of telecommunications equipment and components
A 779	General standard for the overhaul of electronic equipment
A 780	Cables telephone, all types
A 800	Remagnetization of permanent magnets
A 801	Repair of filters
A 851	Recording of modifications of telecommunications equipment
	<u>MISCELLANEOUS ELECTRONIC EQUIPMENT</u>
	<u>General</u>
B 020-029	Surveying set, distance measuring, electronic (Tellurometer)
B 030-039	Transponder set M347(WD)
B 040-049	Sarbe beacon, Mk III
B 050-059	Survey set, distance measuring, electronic, MRA3
B 060-069	Beacon set radio, MR343
	<u>Training sets, telecommunications</u>
B 200-209	Training set, universal, wireless, No 1
	<u>Electromagnetic mine detectors</u>
B 310-319	Unit, test, search coil alignment, No 1
B 320-329	Unit, test, search coil alignment, No 2
B 350-359	Detector, mine, No 4C
B 380-389	Locators, mine, No 1 and Locator, bomb, No 1
B 390-399	Locating set, bomb, No 2
●B 400-409	Locator, bomb, Forster type 4015/2 and 4016/2
	<u>Anti-intrusion equipment</u>
●B 420-429	Alarm set, anti-intrusion, restricted area (Iris)
B 430-439	Detector, seismic, intrusion (Texas X150A)
B 440-449	Alarm set, anti-intrusion, restricted area (Elliott C 769)
	<u>Infra-red detectors</u>
●B 450-459	Infra-red, head-mounted, detector
B 460-469	Infra-red vehicle mounted detector

Table 3 - (cont)

EMER	Subject
	<u>SPECIAL RADIO EQUIPMENT</u>
●B 530-539	Station, radio, D16/D17
	<u>RE electrical equipment</u>
B 600-609	Exploder, dynamo, condenser, Mk 1
B 610-619	Exploder, dynamo, condenser, Mk 2 and 3
B 620-629	Exploder, lightweight
	<u>SR links</u>
B 820-829	Sound ranging set, radio link, No 2 Mk 1
B 850-859	Carrier link, SR
	<u>MISCELLANEOUS ELECTRO-ACOUSTIC EQUIPMENT</u>
	<u>Public address equipment</u>
C 003	Magnetic tape recorders
●C 004	Test tapes, for tape recorders
C 020-029	Telephone, loudspeaking, No 1 (YA 2796)
C 030-039	Telephone, loudspeaking, No 2 (YA 2803)
●C 040-049	Telephone loudspeaking LOU/1
C 110-119	Megaphones, 12V
	<u>ZB 15000/2</u>
C 210-219	Apparatus, loudspeaking, No 10
C 300-309	Apparatus, loudspeaking, No 21
C 310-319	Apparatus, loudspeaking, No 23
●C 320-329	Apparatus, loudspeaking, No 25
●C 330-339	Apparatus, loudspeaking, No 26
●C 340-349	Apparatus, loudspeaking, No 24
	<u>Miscellaneous l.f. amplifiers</u>
C 400-409	Amplifiers, a.f., 2W, sealed, No 1 12V and 24V
C 410-419	Junction box, 2-set, aircraft, 12 and 24V
C 420-429	Junction box, intercommunication
C 430-439	Intercom unit, 6-way (Intercom set)
	<u>Sound recording equipment</u>
●C 610-619	Recorder/reproducer, sound dual-track, type 731A
C 620-629	Equipment, recorder, sound ranging (long and short base), No 5, Mk 1
C 630-639	Test unit, lines, SR, Mk 1
C 650-659	Calibrator, paper speed, kit No 1
C 660-669	Recorder/reproducer REH 1
C 670-679	Recorder/reproducer, sound, REH 3 and 4
●C 680-689	Recorder/reproducer, sound, RE301
●C 690-699	Recorder/reproducer, set, sound Philips EL3302
C 700-709	Microphone assemblies

Table 3 - (cont)

EMER	Subject
	<u>Handsets, headsets, and loudspeakers</u>
C 710-719	Receiver assemblies
C 720-729	Microphone and receiver combined assemblies
●C 740-749	Clansman audio gear
	<u>Electrical stethoscopes</u>
C 850-859	Stethoscope, electrical, model 4B
C 860-869	Stethoscope, electronic
	<u>TRANSMITTERS, RADIO</u>
D 110-119	Transmitter, radio, C11 (SSB)
D 120-129	Transmitter, radio, C11
D 130-139	Transmitter, radio, D11
D 160-169	Transmitter, radio, D13
D 360-369	Radio set No 53
D 400-409	Radio sender C41
D 460-469	Transmitter, radio, 214E/F
D 740-749	Radio sender, Marconi, SWB8E, edition H (ZA 15513)
D 750-759	Radio sender, SWB11E
	<u>RECEIVERS, RADIO</u>
E 260-269	Reception set R209
E 270-279	Reception set R209, Mk 2
E 280-289	Reception set R210
E 320-329	Receiver, radio, R213
E 380-389	Reception set R216
E 500-509	Reception set R222
E 580-589	Receiver, radio, R230
E 610-619	Receiver, radio, R234
E 680-689	Receiver, radio, R301
E 720-729	Receivers, radio, Racal, type RA17
E 730-739	Receiver, radio, Telefunken, type PST 638
E 740-749	Reception set, Eddystone, 730/4 (Z4/ZA 51262)
●E 780-789	Station, radio, UK/TRR-328
●E 790-799	Receiver, radio, Racal RA329A
E 800-809	Receiver, radio, Racal, type RA117
	<u>STATIONS, RADIO A SERIES AND OLD NOMENCLATURE</u>
	<u>TRANSMITTER-RECEIVERS</u>
F 140-149	Station, radio, A13
F 160-169	Station, radio, A14
F 190-199	Station, radio, B.C.C. type HF 156
●F 200-209	Station, radio, UK/PRC 316
F 240-249	Station, radio, No 18, Mk 1, 2 and 3
F 360-369	Radio set No 31
F 380-389	Radio set No 31, Mk 2
F 410-419	Station, radio, No 38
F 430-439	Station, radio, No 38 AFV

Table 3 - (cont)

EMER	Subject
F 440-449	Station, radio, No 38 Mk 3
F 460-469	Station, radio, A40
F 480-489	Station, radio, A41, No 1 and 2
F 500-509	Station, radio, A42
F 530-539	Station, radio, A43R, Mk 2, manpack/ground
F 540-549	Radio set, CPRC-26
F 560-569	Station, radio, A510
●F 570-579	Station, radio, UK/PRC-350
●F 580-589	Station, radio, UK/PRC-351/352
●F 590-599	Station, radio, UK/PRC-320
F 640-649	Radio set No 62
F 710-719	Station, radio, 128B
F 730-739	Station, radio, 123 and Transistorized p.s.u. 123V
F 740-749	Station, radio, 128
F 750-759	Station, radio, 119B
F 760-769	Station, radio, Mk 121 and Mk 122
F 780-789	Radio set, Burndept, BE201
F 790-799	Transmitter-receiver LL 46U
●F 830-839	Station, radio, Pye U450L
●F 840-849	Station, radio, Pye, pocket phone 70PF2 FMB
●F 850-859	Station, radio, Pye Bantam HP1 AM
●F 860-869	Station, radio, Pye Bantam HP1 FM
●F 870-879	Station, radio, UK/PRC-398
●F 880-889	Station, radio, L470
	<u>STATIONS, RADIO B SERIES</u>
●G 300-309	Station, radio, AN/PRC-47
●G 340-349	Remote mounted, Pye Westminster radio series
●G 350-359	Station, radio, Pye Westminster W30AM
●G 360-369	Station, radio, Pye Westminster W15FM
●G 370-379	Station, radio, Pye FM 10P
G 380-389	Station, radio, AM10B (mobile)
G 390-399	Station, radio, FM10B (mobile)
G 400-409	Station, radio, Pye F10 FM (fixed)
G 410-419	Station, radio, Pye FB10 FM (fixed)
G 420-429	Radio station B43/R220, Mk 1/1 and 3/1
G 430-439	Radio stations B43/R220, Mk 1/1 and 3/1 and Radio stations R220/R220, Mk 2
G 440-449	Station, radio, B43/R220 Mk 4 (mobile)
G 470-479	Radio station B44, Mk 2
G 480-489	Radio Station B44, Mk 3
G 530-539	Station, radio, B47
G 550-559	Station, radio, B48
G 700-709	Station, radio, B70
	<u>STATIONS, RADIO C SERIES</u>
H 005	Stations, radio, C42 and C45 sub-unit identification
H 140-149	Station, radio, C12
H 160-169	Station, radio, C13 (TRC13, PSV No 16 and TRF No 11)
H 180-189	Station, radio, C14
H 200-209	Station, radio, C15 (VC 102)

Table 3 - (cont)

EMER	Subject
●H 360-369	Battalion master station TAVR
●H 370-379	Company master station TAVR
H 380-389	Station, radio, F60FM (Static)
H 390-399	Station, radio, F60AM (Static)
●H 400-409	Station, radio, Pye F100FM
H 420-429	Station, radio, C41/R222
H 430-439	Station, radio, C42, No 3
H 440-449	Station, radio, C42, No 1
H 450-459	Station, radio, C42, No 2
H 460-469	Station, radio, C43
H 480-489	Station, radio, C44, Mk 1
H 490-499	Station, radio, C44, Mk 2
H 510-519	Station, radio, C45, No 1
H 520-529	Station, radio, C45 No 2
H 530-539	Station, radio, C45 No 3
H 580-589	Station, radio, C50/R236
H 700-709	Station, radio, C70
●H 810-819	Radio, terminal set, UK/TSC500
	<u>STATIONS, RADIO D AND E SERIES</u>
I 040-049	Station, radio, D11/R230
I 050-059	Station, radio, D11/R234
I 060-069	Station, radio, D13/R234 (dual diversity)
I 540-549	Radio sender E10
I 590-599	Radio sender E11
I 610-619	Station, radio, E12
	<u>TELECOMMUNICATIONS COMPONENTS AND SUB-ASSEMBLIES</u>
J 030-039	Relays, type K3000
J 040-049	Relay, type K600
J 070-079	Telegraph relays 299AN and 320AN
J 080-089	Polarized relay, Carpenter, type 3E (YA 8225)
J 110-119	Relays, Siemens, high-speed type
J 120-129	Siemens miniature relay, high-speed type
J 150-159	GEC miniature relay, normal type
J 160-169	GEC miniature relay, low-loss low capacity
J 170-179	GEC miniature relay, heavy-duty type
J 200-209	Uniselectors
J 240-249	Special valves
J 260-269	Battle batteries
J 270-279	Quartz crystals
J 280-289	Metal rectifiers
J 300-309	Blocks, terminal
	<u>Electro-acoustic transducers</u>
J 350-359	Microphone elements
J 360-369	Microphone, hand, power, No 1
J 370-379	Receiver elements
J 380-389	Loudspeakers

Table 3 - (cont)

EMER	Subject
<u>POWER SUPPLY UNITS FOR TELECOMMUNICATIONS EQUIPMENT</u>	
<u>Generating units</u>	
●K 010-019	Clansmen battery charging equipment
●K 020-029	Sinewave static converter (Transipack 606/ST/600M Mk II
K 030-039	Power supply unit No 5, Mk 1 (ZA 17134), Mk 1/1 (ZA 24767) and T (ZA 25746)
K 040-049	Generating sets, a.c., 45W, 110V, hand/pedal driven, No 1, Mk 1 (and charging sets, rectifier type, single circuit 7A, 3 cells, No 1, Mk 1)
K 050-059	Charging sets, 60W, 15V, No 1, Mk 1 and No 2, Mk 1 (pedal-driven)
<u>Conversion units for d.c. input</u>	
●K 060-069	Inverter 200VA
●K 070-079	Sinewave static inverter (Transipack 606/ST/600M)
●K 080-089	Inverter, power, static 1250VA
K 090-099	Transformers, rotary, d.c./a.c., 200VA, No 1 and 1A
K 100-109	Supply unit, vibratory, No 12, 12V input
K 110-119	Supply unit, vibratory, No 2
K 120-129	Supply unit, vibratory, No 6
K 140-149	Supply unit, vibratory, No 12, 24V input (ZA 43207)
K 150-159	Supply unit, vibratory, No 12, Mk 2, 24V input (ZA 50544)
<u>Conversion units for a.c. input</u>	
K 160-169	Supply unit, rectifier
K 180-189	Supply unit, rectifier, No 4 (ZB 0012)
●K 220-229	Supply unit rectifier No 13
K 240-249	Supply unit, rectifier, No 19 (YA 8088)
<u>Conversion units for a.c. or d.c. input</u>	
●K 360-369	Power supply unit SK13684
K 450-459	Converter unit, d.c./a.c., No 8
K 470-479	Supply unit, rectifier, No 7
<u>Battery superseders</u>	
K 560-569	Power supply set, rectifier type, input 240/1/50, output 12/24V, 20/10A, No 2 Mk 1
K 590-599	Power supply set, rectifier type, input 240/1/50, output 24V, 3.3A, No 1, Mk 1, Westalite type 1091
K 700-709	Supply unit, transistorized, No 1, 24V
K 710-719	Power supply, rectifier, No 31 and 31A
●K 720-729	Power supply electronic 24V d.c.
<u>RADIO AND LINE ACCESSORY EQUIPMENT</u>	
<u>General</u>	
L 001	Summary of antenna tuning units

Table 3 - (cont)

EMER	Subject
	<u>Antennae, antenna tuning and coupling units</u>
●L 010-019	Mast, telescopic 12m, type 639
L 020-029	Antenna, discone, type L458
L 030-039	Elevated antenna, 23-38MHz kit No 1, Z1/ZA 53379 Elevated antenna, 36-60MHz, kit No 1, Z1/ZA 53380
L 040-049	Mast, telescopic, 27 ft, No 1
L 050-059	Mast, lightweight, C and S type SP48
L 060-069	Mast, lightweight, C and S type SPM45
●L 070-079	Mast, telescopic, pneumatic, 70ft
L 080-089	Mast, antenna, pneumatic, 40 ft
L 100-109	Rejector unit, B47 and B48
●L 110-119	Rejector unit, VHF No 3
L 140-149	Coupler, antenna, multi-channel
L 300/1-) 309/1)	Antenna tuning unit No 6 and 8
	<u>Miscellaneous</u>
L 360-369	Amplifier, r.f., No 9
L 390-399	Station kit, radio, amplifier, r.f., No 7
L 410-419	Drive and monitor unit, SSB, No 1
L 420-429	Drive and monitor unit, SSB, No 2
L 440-449	Keying unit, carrier frequency shift, No 1 with Reactance unit, carrier frequency shift, No 1
L 450-459	Keying unit, carrier frequency shift, No 2 (ZA 33600)
L 460-469	Modulator unit, No 20
●L 470-479	Frequency shift, keying adaptor (H5011)
●L 490-499	Facsimile set, Muirhead type D900/901
L 500-509	Oscillator rack (used with Radio sender E11)
L 510-519	Drive and monitor rack, F.S.K. (used with Radio send E11)
L 520-529	Drive and monitor equipment, i.s.b./d.s.b.
L 530-539	Tape maker 622 and power supply unit 863
L 550-559	Synthesizer, electrical frequency, set
●L 560-569	Facsimile set, Muirhead type D900/901-PD
●L 570-579	Radio, telegraph adaptor No 1 & 2
●L 580-589	Burst coder eqpt AN/GRA-71
	<u>Remote control units</u>
L 590-599	Control units, No 4, Mk 2, No 6, Mk 2, No 10 and wireless harness C
L 600-609	Remote control units, H, No 1 and 2
L 620-629	Remote control unit, N
L 630-639	Relay unit, No 12
L 670-679	System control box No 2 (for Radio set B70)
●L 690-699	VHF applique unit (Larkspur)
	<u>Radio control harnesses</u>
L 770-779	Radio control harness, type A
L 780-789	Radio control harness, type B
L 790-799	Abbot communications system harness
●L 800-809	Clansman radio control harness

Table 3 - (cont)

EMER	Subject
	<u>TOOLS AND MISCELLANEOUS TELECOMMUNICATIONS ENGINEERING EQUIPMENT</u>
M 020-029	Irons, soldering, electric, miniature <u>Ancillary test kits</u>
●M 140-149	Test kit Abbot comms system
M 150-159	Kits, testing, vehicle and manpack radio sets
M 160-169	Test rig, electrical, manpack radio, A40/41/42
●M 170-179	Test rig, electronic, vehicle radio, sub-units
M 180-189	Test kit, radio, SRA13
●M 190-199	Test kit radio, TRA43R Mk 2
M 200-209	Kit, testing, station, radio, C41/R222
M 210-219	Test kit, radio, SRD11, D13/R230, R234
●M 220-229	Test kit radio, SRC70
●M 230-239	Test kit radio, SRC50/R236/RFA 13
M 250-259	Kits, testing, radio installations, FT1
M 260-269	Test set, FT2
●M 280-289	Test kit, sound ranging No 2 Mk 1
M 290-299	Test kit, radio amplifier, r.f. No 7
●M 300-309	Test rig, electronic, SRA13 sub-units
●M 310-319	Test kit, electronic, SRA14 sub-units
M 320-329	Test kit, radio amplifier, r.f. No 12, Mk 12, Mk 1 and 2
●M 330-339	Test kit radio SRA14
●M 340-349	Test set, radio, type 678/P1
●M 350-359	Test set, radio, type 678Z/1
●M 360-369	Test kit, radio station, UK/PRC-316
●M 370-379	Adaptor, test set (CT579)
●M 380-389	Test rig electronic eqpt, test controller No 1 and 2
●M 400-409	Test kit, radio, SRC70 Base wksp ancillaries
●M 410-419	Adaptor test set
●M 420-429	Test kit, electronic, UK/PRC-316 sub-units
●M 430-439	Test set, telegraph adaptor
	<u>TRUNK ANCILLARIES</u>
	<u>Telephone repeaters and amplifiers</u>
Q 050-059	Repeater, stabilized, 2-wire, No 3 (YB 01034)
Q 060-069	Telephone set, F, HP
Q 070-079	Networks, balancing and testing, No 1 (YB 01558) and No 2 (YB 02477)
Q 090-099	Amplifier, field telephone, No 1T
Q 110-119	Repeater, field telephone, No 1, Mk 1 and 2
●Q 120-129	Digital repeater
	<u>Signalling equipment</u>
Q 200-209	Unit, signalling, v.f., No 3, Mk 2 (YB/YA 3814), Mk 3 (YB 02227)
Q 220-229	Vibrator, ringing, 12V or 24V
Q 230-239	Unit, signalling, v.f., 5-channel

Table 3 - (cont)

EMER	Subject
	<u>Multi-channel repeaters</u>
Q 330-339	Repeater, carrier telephone, No 2T and No 2
Q 340-349	Repeater, carrier telephone, No 3
Q 350-359	Repeater, carrier telephone, 1 + 1, No 1 (2-wire)
Q 370-379	Repeater, v.f., telegraph, No 1
	<u>Multi-channel ancillary equipment</u>
Q 450-459	Balance and by-pass filter unit No 1 (YB 1585) and 1T (YB 02664)
Q 460-469	Balance and by-pass filter units, 1 + 1
Q 470-479	Filter, balance and by-pass, No 2A/TE
Q 480-489	Filter, balance and by-pass, 1 + 1, No 2B
Q 490-499	Filters, line and directional, No 1
	<u>MULTI-CHANNEL LINE EQUIPMENT</u>
	<u>Carrier telephone terminals</u>
R 130-139	Apparatus, carrier telephone, (1 + 1), No 3
R 160-169	Apparatus, carrier telephone, 1 + 4, No 2 (Cable system)
R 170-179	Apparatus, carrier telephone, 12 channel (radio)
R 180-189	Apparatus, carrier telephone, 1 + 3, type CS3/CP
R 190-199	Carrier set, telephone, 1 + 4, No 3
	<u>V.F. telegraphic terminals</u>
R 270-279	Apparatus, v.f., telegraph, 3-channel, duplex, No 2
R 280-289	Apparatus, telegraph, 2-tone, No 4
R 300-309	Apparatus, v.f., telegraph, speech + duplex, No 1
R 310-319	Apparatus, v.f., telegraph, speech + duplex, No 2
R 320-329	Terminal, telegraph, v.f., 4/12 channel
R 330-339	12-channel, v.f., telegraph, terminal eqpt, type T12A
•R 340-349	Telegraph terminal v.f., type H5000/H5001
	<u>D.C. TELEGRAPH MACHINES</u>
S 019	Teleprinter systems - general principles
	<u>Teleprinters and associated equipment</u>
S 020-029	Teleprinter 7B (WD), Mk 1, 1/1 and 1/2
S 030-039	Teleprinter T 100R
•S 040-049	Teleprinter T100R Mk 2
S 110-119	Teleprinter terminal units, Mk 4 and 4/1, and 80 + 80V
S 120-129	Teleprinter terminal unit, Mk 3
S 130-139	Teleprinter terminal unit, Mk 4
S 140-149	Teleprinter terminal unit, 80 + 80V
S 160-169	Equipment table D.T.N. 2000
S 170-179	Monitor, telegraph distortion, 10-circuits, No 1
S 180-189	Convertor, teleprinter

Table 3 - (cont)

EMER	Subject
	<u>Perforators and reperforators</u>
S 220-229	Keyboard perforator (P.O. perforator No 44)
S 260-269	Keyboard reperforator 7P/N3
S 270-279	Printing reperforator, 50/75 bauds, type EPR 1/R
	<u>Auto-transmitters</u>
S 320-329	Teleprinter auto-transmitters
S 330-339	Tape reader, telegraph, group 2
	<u>High-speed morse</u>
S 420-429	High-speed telegraph equipment
S 450-459	Reperforator GNT Model 451
S 460-469	Morse page printer
S 490-499	Wheatstone transmitter
S 500-509	Undulator, U.G., 6A, No 3 (YB 02446)
S 510-519	Recording bridge, Marconi, RB150
S 520-529	Recording bridge, Marconi, RB150/2
S 530-539	Monitoring bridge type O.C. 12 (ZA 18495)
S 540-549	Puller, tape, No 3 (YB 03142)
S 550-559	Tape winder No 3
	<u>Telegraph repeaters</u>
●S 640-649	Multiplexer/demultiplexer error correcting HU121
S 780-789	Repeater, synchronous regenerative
	<u>Miscellaneous</u>
S 810-819	Transmitter set, automatic, telegraph tape (type TAA6)
	<u>TELEPHONES, TELEPHONE LINES, SWITCHBOARDS AND EXCHANGES</u>
●U 010-019	Dials, telephone automatic
	<u>Magneto switchboards</u>
U 020-029	Switchboards
U 040-049	Switchboard, magneto, 10-line (WD)
U 050-059	Equipment, telephone signalling, command posts, SAGW, No 1, Mk 1 and No 2, Mk 1
U 060-069	Switchboard, telephone, manual, 12-line, magneto
U 070-079	Switchboard, telephone, manual, 25-line, magneto
	<u>C.B. switchboards</u>
U 120-129	Switchboard, A.T., 3796, $\frac{10 + 50}{65}$ (YA 3778)
U 130-139	Switchboard, C.B., 873, $\frac{5 + 20}{25}$ (YA 6257)
U 140-149	Switchboard, C.B., 935, $\frac{1 + 3}{4}$
U 150-159	Switchboard, C.B., 935, $\frac{2 + 4}{6}$
U 160-169	Switchboard, C.B., 935, $\frac{3 + 7}{12}$
	and $\frac{3 + 9}{12}$ (YA 6147)

Table 3 - (cont)

EMER	Subject
U 190-199	Exchange, field, 40/160-line
U 210-219	Exchanges, telephone, central battery, CB20
U 220-229	Switchboard, telephone, manual, 5-exch, 4-mag, 16CB
U 230-239	Circuit distribution aids
U 240-249	Switchboard, telephone, manual, 3-exch, 9-extn lines
	<u>Universal switchboards</u>
U 270-279	Concentrator, C.D., 5-line (YA 2707)
U 280-289	Switchboard, command, 200-line (YA 2238)
U 300-309	Switchboards, F and F, Mk 1, 1/1 and 2
U 330-339	Telephone terminal equipment No 1
	<u>Teleprinter switchboards</u>
U 420-429	Switchboards, teleprinter, 15-line, Mk 1 (YB 02616) and 40-line, Mk 1 (YB 02617)
U 430-439	Switchboards, teleprinter, 15- and 40-line, Mk 2
U 440-449	Teleprinter monitor unit
U 450-459	Teleprinter conference unit
	<u>Ancillaries</u>
U 470-479	Frames, D and P, 10-wire, Mk 1/2 (YA 2728)
U 480-489	Test frames, 20-pair, Mk 2 and 40-pair, Mk 1
U 490-499	Boxes, terminal, signal office Mk 2
U 510-519	Telegraph relay station, torn tape, semi-automatic 22 (15) lines
U 520-529	Converter, signal data
	<u>Automatic exchanges</u>
U 570-579	Exchange, telephone, automatic 2-exch, 7-ext lines
U 600-609	Exchange, telephone, automatic, 20-line
U 610-619	Exchange, telephone, automatic 40-line
U 620-629	Exchange, telephone, automatic, 100/150 line (Corps HQ)
	<u>Telephone sets</u>
U 670-679	Field telephone sets
U 690-699	Telephone set F, Mk 1, 1/1 and 2
U 720-729	Telephone set J
U 730-739	Telephone set L (YA 3717)
U 740-749	Telephone 332 CB
U 780-789	Privacy equipment No 1, Mk 1, 1/1 and 2
U 790-799	Telephone set, linesman (BPO 250)
U 800-809	Telephone set, 706 BPO (MOD)
U 810-819	Telephone, set (Plan 8)
U 820-829	Telephone set, 3 telephones, 1 wall control unit
	<u>RADIAC EQUIPMENT</u>
V 001	General principles of radiac instruments
V 002	Construction and precautions in the use of radioactive calibration sources

Table 3 - (cont)

EMER	Subject
	<u>Dosimeters, tactical</u>
V 020-029	Dosimeters, tactical, quartz fibre, No 1, 2A and 3
V 030-039	Dosimeters, quartz fibre, No 4A, 4, Mk 3 and No 5
	<u>Charging units</u>
V 150-159	Charging unit No 1, dosimeter, quartz fibre
V 160-169	Charging unit No 2, dosimeter, quartz fibre
	<u>Meters, contamination</u>
V 200-209	Meter, contamination, No 1
	<u>Radiac survey meters</u>
V 300-309	Meter, dose rate, portable, trainer, No 1
V 310-319	Meter, survey, radiac, No 2
V 320-329	Meter, survey, radiac, No 3
V 340-349	Monitor, radiation, No 1, type 1257C
	<u>Calibration source and jig</u>
V 650-659	Calibration source and jig for Meters, water contamination, No 1
V 660-669	Calibration source and jig for Meter, survey, radiac, No 2
V 670-679	Calibration source and jig for Meter, contamination, No 1
	<u>Test equipment peculiar to radiac instruments</u>
V 750-759	Test set, current sensitivity, No 2
	<u>Radiac trainers</u>
V 800-809	Trainer, radiac, Canadian AN/TQD-T501
	<u>ELECTRICAL AND ELECTRONIC TEST EQUIPMENT</u>
●X 290-299	Group delay, line measuring set, Wandel and Goltermann LD-1
X 500-509	Simulator, transmitter-receiver, radio, (ZD 04642)
●Y 680-689	Probes measuring
●Y 690-699	Couplers directional (Rel 3R-255a and Rel 157-Z20)
●Y 700-709	Filter co-axial low-pass 0-1GHz (Rel 3F-67d)
Y 750-759	Test kit, Wireless set B70