

SECTION 1
GENERAL INFORMATION

RESTRICTED

Chapter 1

INTRODUCTION AND TEST EQUIPMENT

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Introduction

1. This publication provides the information necessary to perform the third line repair and testing of the u.h.f. transmitter-receiver ARC52 and derivatives of that equipment. Throughout this publication brief details of each module is given but no description of the circuits involved have been

included. Circuit descriptions will be found in the relevant Chapters of the publications mentioned below.

2. The various installations of the transmitter receiver ARC52 and derivatives, and the topic-1 publications associated with them are listed as follows:

<u>Installation</u>	<u>Transmitter-receiver Type</u>	<u>A.P. No.</u>
ARI.18124	AN/ARC52	A.P.116D-0105-1
ARI.23143	PTR175	A.P.116D-0116-1
ARI.23141	TR 11672 and PTR 177	A.P.116D-0134-1
ARI.23199	PTR374	A.P.116D-0129-1

3. The above publications contain general and technical information on the particular transmitter-receiver. Detailed information on the modules comprising the transmitter-receivers is contained in A.P.116D-0133-1. In this publication, one Chapter has been devoted to each module, where a full technical description is given.

Circuit diagrams

4. The circuit diagrams for the installation are contained in the servicing diagrams manual, A.P.116D-0133-10. Circuit diagrams which are already included in this publication and which may be out of date, will be withdrawn by the issue of amendment lists in due course.

Test equipment

5. In addition to standard test equipment,

special to type test equipment and tools are required to perform third line tests on the various major units, sub-assemblies and modules of the various Airborne Radio Installations. Complete lists of the standard and special to type test equipment and tools are given in Tables 1 to 6 inclusive. Wherever further information on an item is available elsewhere, this is quoted. In this respect, it should be noted that the special-to-type test equipment required for third line servicing is described in the topic-6A to this publication. For information appertaining to items listed which also are used at second line, reference should be made to A.P.116D-0133-1B.

Items subject to third line repair

6. Complete lists of the items of the various Airborne Radio Installations which are subject to third line repair are given in Tables 7 to 10 inclusive.

TABLE 1

Approved list of test equipment and tools provisioned for third line servicing common to ARC52 and derivatives

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
A1	5G/152	Tester insulation resistance Type C	2 yrs.	Evershed and Vignoles Wee megger (AP4343S)
A2	66-25-99-105 7049	Test set multi-range No. 1	1 yr.	Avo model 9SX
		or		
	5QP/17447	Multimeter CT498	1 yr.	Avo model 9S (117G-0502-1)
A3	5G/2282	Bridge megger Type C	2 yrs.	Evershed and Vignoles (AP43435)
A4	6625-99-900-8337	Signal generator CT452A (set)	1 yr.	Marconi TF144H/6S (AP4837Q)
		or		
	10S/16822	Signal generator Type 56A	1 yr.	Marconi TP144G (AP-2879D)
A5	6625-99-913-8618	Oscilloscope CT436 (set)	1 yr.	Solartron CD1017 (AP-2563EP)
A6	6625-99-104-7574	Signal generator (set)	1 yr.	Marconi TP1370A (AP-117E-0101-1)
		or		
	6625-99-944-9754	Audio and video signal generator	1 yr.	Marconi TF1370 (AP-117-0101-1)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
		or		
	6625-99-932-4976	Signal generator Type 65B	1 yr.	Marconi TF885A/1 (AP-2536C)
A7	6625-99-104-8464	Leak locator CT105	1 yr.	Service design (AP2563-BZ)
A8	6625-99-946-8729	Leak detector CT106	1 yr.	Service design (AP2563-BZ)
A9	6625-99-943-5568	Wattmeter CT419	1 yr.	Marconi TF1152A/1 (AP117B-0403-1)
A10	6625-99-106-1189	Signal generator CT394B	1 yr.	Marconi TF/801D/9S
		or		
	-	Signal generator CT394	1 yr.	-
		or		
	6625-99-901-9983	Signal generator CT394A	1 yr.	Marconi TF801D/2S (AP2531HA)
A11	10HS/1061189	Lead, test	-	For use with Item A10
A12	6625-99-914-9811	Wattmeter absorption a.f.	1 yr.	Marconi TF893A (AP-4837AC)
A13	6625-99-955-6255	Multimeter electronic CT471C	1 yr.	Bradley 113/S (AP117G-0603-1)
		or		
	6625-99-943-8384	Multimeter valve CT429	1 yr.	Marconi TF1041B (AP-4837H)
A14	6625-99-999-3591	Wattmeter absorption CT443	1 yr.	Burndep BE281 (AP-117B-0401-1)
A15	6625-99-955-3163	Bridge set universal CT530	1 yr.	Wayne Kerr B221S (AP-4837W)
		or		
	6625-99-943-2442	Bridge universal CT375	1 yr.	Wayne Kerr B521 (AP-2563EL)
A16	6625-99-001-2681	Indicator distortion	1 yr.	-
		or		
	6625-99-944-7661	Indicator distortion	1 yr.	Marconi TF142F (AP-4837R)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
A17	6625-99-106-5334	Valve voltmeter	1 yr.	Marconi TF2600
		or		
	6625-99-970-1908	Valve voltmeter CT527	1 yr.	Furzehill laboratories Wideband sensitive valve voltmeter Type V V200A (AP4739EH)
B1	6625-99-943-4149	Test set UHF Type 15056	1 yr.	Plessey CP193480 (AP-117M-0101-1)
B2	6625-99-943-7032	Test kit (bench connector set)		Plessey 197384 (AP-116D-0133-1B)
B3a	6625-99-943-6879	Monitor radio	1 yr.	Plessey CP195202 (AP116D-0133-1B)
B3b	6625-99-943-6882	Pedestal power amplifier test	-	Plessey CP197295 (AP116D-0133-1B)
B3c	6625-99-943-6880	Pedestal intermediate frequency test		Plessey CP197297 (AP116D-0133-1B)
B3d	6625-99-943-6883	Pedestal receiver test	-	Plessey CP197297 (AP116D-0133-1B)
B3e	6625-99-943-6881	Pedestal oscillator test	-	Plessey CP197298 (AP116D-0133-1B)
B3f	6625-99-943-6884	Pedestal spectrum generator test	-	Plessey CP197299
B3g	6625-99-943-1512	Maintenance kit electronic (Qty. 6 required)	-	Plessey CP190960 (AP116D-0133-1B)
B3h	5995-99-932-1905	Connector (Qty. 6 required)	-	Plessey CP193900 (AP116D-0133-1B)
B3i	5935-99-932-2381	Socket	-	Plessey CP197399 Set comprises 8 pieces (AP116D-0133-1B)
B3j	5995-99-932-1902	Connector	-	Plessey CP197390 (AP116D-0133-1B)
B3k	5995-99-932-2129	Connector	-	Plessey CP193000/6 (AP116D-0133-1B)
B3l	5995-99-932-1910	Connector	-	Plessey CP197391 Set comprises 4 pieces (AP116D-0133-1B)
B3m	5995-99-932-1803	Connector	-	Plessey CP197394 (AP116D-0133-1B)
B3n	5995-99-932-1903	Connector	-	Plessey CP197392 (AP116D-0133-1B)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
B3o	5995-99-932-1799	Connector	-	Plessey CP197393 (AP116D-0133-1B)
B3p	5995-99-932-4021	Connector	-	Plessey CP193900/2 (AP116D-0133-1B)
B3q	5995-99-932-1907	Connector	-	Plessey CP193900/4 (AP116D-0133-1B)
B3r	5935-99-932-1911	Socket	-	Plessey CP197437 (AP116D-0133-1B)
B3s	5995-99-932-2130	Connector	-	Plessey CP193900/7 Set consists of 4 pieces (AP116D-0133-1B)
B3t	5935-99-932-1912	Socket	-	Plessey CP197436 (AP116D-0133-1B)
B3u	5995-99-932-1909	Connector	-	Plessey CP193900/1 (AP116D-0133-1B)
B3v	5995-99-932-1908	Connector	-	Plessey CP197395 (AP116D-0133-1B)
B3w	5810-99-932-4985	Maintenance kit electronic	-	Plessey CP194052 (AP116D-0133-1B)
B3x	-	Cable assembly r.f. (set)	-	Plessey 608/4/03482 (AP116D-0133-1B)
B3y	-	Cable assembly r.f. (set)	-	Plessey 705/8/02911 (AP116D-0133-1B)
B3z	-	Cable assembly power electrical	-	Plessey 705/8/02912 (AP116D-0133-1B)
B4	6625-99-943-6544	Test set audio	-	Plessey 608/1/03633 (AP116D-0133-6B Chapter 6)
B5	6625-99-943-6547	Test set oscillator	-	Plessey CP242360 (AP116D-0133-6B, Chapter 15)
B6	6625-99-107-7012	Panel test tuning unit	-	Service design
B7	6625-99-943-6906	Test set tuning unit	-	Plessey CP242320 (AP116D-0133-6B, Chapter 13)
B8	6625-99-943-6537	Test set amplifier, 20/30 MHz, i.f.	1 yr.	Plessey CP242226 (AP116D-0133-6B, Chapter 4)
B9	6625-99-943-6536	Test set amplifier, 1.8/1.85 MHz i.f.	1 yr.	Plessey CP242490 (AP116D-0133-6B, Chapter 5)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
B10	6625-99-943-6546	Test set amplifier (modulator)	1 yr.	Plessey CP242321 (AP116D-0133-6B, Chapter 9)
B11	6625-99-933-4157	Panel test mechanical tuning unit		Service designed
B12	6625-99-914-0152	Test set oscillator (Spectrum generator)	1 yr.	Plessey CP243051 (AP116D-0133-6B, Chapter 7)
B13	6625-99-999-7814	Test set amplifier (Power amplifier)	1 yr.	Plessey CP241641 (AP116D-0133-6B, Chapter 8)
B14	6625-99-999-7815	Test set amplifier (MR/PA)	1 yr.	Plessey CP241800 (AP116D-0133-6B, Chapter 3)
B15	6625-99-932-1916	Cover test side (Spectrum)	-	Plessey CP194004 (AP116D-0133-6A, Part 2, Sect.2, Chap.6)
B16	6130-99-932-2942	Power supply 425V	-	Plessey CP194096 (AP116D-0133-1B)
B17	6130-99-999-7812	Power supply 130V	-	Plessey CP197385 (AP116D-0133-6B, Chapter 2)
B18	6625-99-946-9490	Test set electronic circuit plug in unit	-	Plessey. Part of test set electronic circuit plug in unit 6625-99-999-7959 (AP116D-0133-6B Chap. 14)
B20	6625-99-946-8897	Indicator fault locating	-	Remarks as for item B18 (AP116D-0133-6B Chap. 14)
B21	6625-99-955-6832	Test set radio (Chassis)	-	Plessey 608/1/11521 (AP116D-0133-6B, Chap. 19)
B22	10ZZ/203141	Fixture chassis	-	Plessey 608/1/11509 (AP116D-0133-6B Chap. 19)
B24	10S/9450061	Microphone simulator (EM and carbon)	2 yrs.	Hercules C Mk 1
B25	10S/9992642	Calibrator frequency	1 yr.	Plessey CP197384 (AP116B-0133-1B)
B26	10HS/9459896	Cable assembly power electrical	-	For use with item B18

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
B27	6625-99-22 -5796	Panel test, continuity and insulation	-	Service design
B28	10S/NIV1080	Panel test, control, receiver muting	-	Service design
B29	10S/NIV249	Panel test a.c. power unit	-	Service design
B30	10S/NIV212	Panel test, chassis	-	Service design
B31	10S/NIV211	Panel test, d.c. power unit	-	Service design
B32	10S/NIV633	Panel test, dynamotor	-	Service design
B33	-	Jig connector blower	-	Service design
B34	-	Multi-valve voltmeter	-	Service design
B35	10S/1959435	Test jig dynamotor	-	Service design
B36	-	Automatic circuit tester consisting of:	-	Elliott 71D3200
	-	Switching box	-	Elliott 71D32009
	-	Control box	-	Elliott 71D320
C1	10HS/9992783	Connector 12 way	-	Plessey CP195196
C2	10HS/9992782	Connector 8 way	-	Plessey CP195197
C3	10HA/14840	Connector Type 10113/1	-	For use with item D3
D1	4G/1047435	Pumps pressurizing	-	AFDSEC Scale 1143
D2	4G/2595	Gauge pressure 2 - 20 lbs	1 yr.	AFDSEC Scale 1063
D3	10AH/1075192	Headset		Jetlite Type J231
		or		
	10AH/14	Headset Type 9	-	-
		and		
	10A/14381	Microphone assembly Type 48	-	-
D4	1B/1300177	Iron soldering miniature 230/240V, 18w	-	-
		or		
	1B/5151	Iron soldering	-	-

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
D5	10AG/9556223	Alignment tool (6 required)	-	Plessey 558/4/98001
D6	10AG/1200369	Wrench socket	-	Plessey P197435
D7	1B/1205713	Pliers retaining ring	-	-
D8	1B/5793	Pliers	-	Anderton Type A0
D9	10AG/9437473	Applicator ring retaining	-	-
D10	1C/9105864	Screwdriver	-	Phillips No. 1
D11	1C/9105865	Screwdriver	-	Phillips No. 2
D12	10AG/9437755	Thumbscrew (Qty. 18)	-	Plessey P197397 (AP116D-0133-6B, Chapter 3)
D13	5P/3145	Transformer variac	-	-
D14	1A/3690	Gauge surface universal	-	-
D15	1B/1200301	Plate surface 16 in. x 12 in.	-	-
D16	1B/1200302	Plate surface	-	(AP116D-0133-6A, Pt. 2, Sect.2, Chap. 3)
D17	1B/5286	Gauge dial	-	(AP116D-0133-6A, Pt. 2, Sect.2, Chap. 3)
D18	10AG/950	Spanner special (MTU)	-	Plessey T133912 for use with item D20
D19	10AG/949	Clutch spring assembly tool (MTU)	-	Plessey T133913 (AP116D-0133-6B, Chapter 13)
D20	10AG/951	Assembly fixture (Clutch drum shaft) (MTU)	-	Plessey T132407 (AP116D-0133-6B, Chapter 13)
D21	10AG/948	Torque test and running in fixture (MTU)	-	Plessey T134425
D22	10AG/947	Torque gauge (MTU)	-	Plessey G119472
D23	10AG/946	Torque wrench setting and checking adaptor	-	Plessey T360489
D24	10AG/945	1/16 in. diameter roll pin indicator	-	Plessey T134433 (AP116D-0133-6A, Pt.2, Sect.3, Chapter 2)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
D25	10AG/952	Drill and ream jig (MTU)	-	Plessey T132400 (AP116D-0133-6B, Chapter 13)
D26	10AG/954	Checking fixture (MTU)	-	Plessey T134415 (AP116D-0133-6B, Chapter 13)
D27	10AG/962	Cam setting plate (MTU)	-	Plessey T1322399 (AP116D-0133-1B)
D28	10AG/953	Cam alignment gauge (MTU)	-	Plessey G119414 (AP116D-0133-6B, Chapter 13)
D29	10AG/938	Torque test fixture (MTU)	-	Plessey T134414 (AP116D-0133-6B, Chapter 13)
D30	10AG/944	Drill and ream jig (RFPA)	-	Plessey T134426 (AP116D-0133-6B) Chapter 8)
D31	10AG/943	Checking fixture (RFPA)	-	Plessey T134428 (AP116D-0133-6B, Chapter 8)
D32	10AG/957	Drill and ream jig (20/30 i.f.)	-	Plessey T133122 (AP116D-0133-6B, Chapter 4)
D33	10AG/958	Checking fixture (20/30 i.f.)	-	Plessey T134411 (AP116D-0133-6B, Chapter 4)
D34	10AR/4892	Setting plate (20/30 i.f.)	-	Plessey T133121
D35	10AG/956	0.1 MHz cam alignment fixture (20/30 i.f.)	-	Plessey T360481
D36	10AR/4891	Coupler setting fixture (gear plate)	-	Plessey T132403
D37	10AG/963	Checking fixture (gear plate)	-	Plessey T134420
D38	10AG/964	Drill and ream jig (A and B oscillator)	-	Plessey T133914 (AP116D-0133-6B, Chapter 15)
D39	10AG/965	Assembly fixture (A and B oscillator)	-	Plessey T1333910 used with item D38 (AP116D-0133-6B, Chapter 15)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
D40	10AG/967	Switch setting plate (A and B oscillator)	-	Plessey T133909 (AP116D-0133-6B, Chapter 15)
D41	1B/5287	Iron soldering 2.5/6.3V	-	Superspeed
D42	1B/5288	Transformer	-	For use with item D41
D43	1H/57	Gauge tension	-	(AP116D-0133-6A, Pt. 2, Sect. 3, Chapter 1)
D44	1AG/968	Drill and ream jig (Spec. gen)	-	Plessey T133400 (AP116D-0133-6B, Chapter 7)
D45	10AG/969	Checking fixture (Spec. gen)	-	Plessey T133400 (AP116D-0133-B, Chapter 7)
D46	10AG/970	3/32 in. Diameter roll pin applicator	-	Plessey T135318 (AP116D-0133-6A, Pt. 2, Sect. 3, Chapter 1)
D47	10AG/971	Assembly base (MOD)	-	Plessey T360978 (AP116D-0133-6B, Chapter 9)
D48	10AG/955	0.07/0.08 Height gauge (Qty.5)	-	Plessey G34673 (AP116D-0133-6B, Chapter 13)
D49	10AG/966	Gauge, coupler position (A and B oscillator)	-	Plessey G119494 (AP116D-0133-6B, Chapter 16)
D50	10AG/9439196	Tester torque wrench and tensionmeter	-	Plessey P200718
D51	10AG/959	Height gauge plate (20/30 i.f.)	-	Plessey G119450
D52	10AG/960	Height gauge plate (A and B oscillator)	-	Plessey G119454 (AP116D-0133-6B, Chapter 16)
D53	10AG/961	Depth gauge (20/30 i.f.)	-	Plessey G119455 (AP116D-0133-6B, Chapter 4)
D54	10AG/942	Gear plate checking gauge (RFPA)	-	Plessey G119458 (AP116D-0133-6B, Chapter 14)
D55	6B/9101001	Watches stop GS	1 yr.	-

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
D56	5P/2341	Fans electric 230V a.c. Type H	-	For cooling transmitter receiver
D57	1L/202	Spanner torque	-	Acrotorque Model A
D58	10AG/9485198	Pre-load tool (gear plate)	-	-
D59	5821-99-943-7136	Power unit a.c. ground	-	A.P.116E-0102-1B6
D60	5P/2491	Transformer regulating manually operated, input 240V, output 0-270V	-	For use with item D59
D61	10AG/974	Adjuster Type 106	-	Plessey T364392
D62	10AG/1200367	Alignment tool, electronic equipment	-	Plessey T364262 (AP116D-0133-6A, Pt. 2, Sect.2, Chapter 2)
D63	10AD/9401652	Adaptor, electrical plug to socket	-	Plessey P194043
D64	10AG/934	Acceptance gauge (Chassis)	-	Plessey G34622 (AP116D-0133-6B, Chapter 14)
D65	10AG/933	Plug gauge (Chassis)	-	Plessey 434682 (AP116D-0133-6B, Chapter 14)
D66	1B/1206934	Nippers diagonal cutting 4 in. Min.	-	-
D67	1B/5284	Pliers, chain, polished.	-	-
D68	6E/948	Magnifer illuminated	-	-
D69	1C/6524	Wrench torque 1 to 25 lbs/in. (Qty. 2)	-	(AP116D-0133-6B, Chapter 14)
D70	10AG/973	Extension taper reamer	-	Plessey T360753 (AP116D-0133-6B, Chapter 13)
D71	1B/5494	Support dial gauge turning	-	(AP116D-0133-6A, Pt. 2, Sect. 2, Chapter 3)
D72	1C/7085	Spanner, torque, test 4 to 36 lbs./in.	-	-
D73	4A/1202590	Tester torque wrench	-	-
D74	10AD/3565	Adaptor Type 374 (Gear plate)	-	Plessey 365596 (AP116-0133-6B, Chapter 14)

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration periodicity	Commercial title and remarks
D75	10AG/940	Drill and ream jig (MRPA)	-	-
D76	10AG/937	Checking fixture (MRPA)	-	-
D77	10H/9524381	Fuse unit concentric	-	-
D78	10H/9993402	Fuse link	-	For use in item D77
D79	10AG/9705265	Drill and ream jig (Gear plate)	-	Plessey T132401
D80	10AG/9705266	Drill and ream jig (gear plate)	-	Plessey T132402
D81	1C/7633	Jig coupler alignment (Gear plate)	-	Manufactured under MC/17876/1615/Eng.5 dated 29th Nov. 1963. (AP116D-0133-6B, Chapter 14)
D82	10AG/1200370	Wrench socket	-	Plessey CP197398
D83	10AG/9439324	Screwdriver tester	-	Plessey CP197383
D85	10AG/NIV738	Tool kit special, shaft shaft support	-	Service design
D86	10AG/1955493	Bearing extractor	-	Service design
E1	10L/9433247	Control receiver muting	-	Bench slave
E2	10D/9428549	Tuning unit mechanical	-	Bench slave

TABLE 2

ARC52: Additional approved list of test equipment and tools provisioned for third line servicing

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
BB1	6625-99-943-6886	Test set radio (Guard)	1 yr.	Plessey CP242152 (AP116D-0133-6B Chapter 10)
BB2	5821-99-932-2388	Cover test side (Guard)	-	Plessey CP194000 (AP116D-0133-6B Chapter 10)
BB3	6625-99-943-6538	Test set relay oscillator		Plessey CP242290 (AP116D-0133-6B Chapter 11)

TABLE 2 (Cont'd)

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
BB4	5820-99-946-9849	Interconnecting box	-	Part of 6625-99-999-7959 test set electronic plug in unit. (AP116D-0133-6B Chapter 14)
BB5	10D/9331246	Panel test relay	-	Service design
BB6	6625-99-999-0201	Test set electrical power d.c.	-	Plessey CP241639 (AP116D-0133-6B Chapter 17)
BB7	6625-99-943-6905	Test set control unit	-	Plessey CP242245 (AP116D-0133-6B, Chapter 16)
BB8	10S/9334098	Panel test dynamotor	-	Service design
BB9	10L/9334099	Panel test control dynamotor	-	Service design
BB10	10D/9334156	Panel test blower motor	-	Service design
BB11	6625-99-999-7813	Test set electrical power a.c.	1 yr.	Plessey CP241640 (AP116D-0133-6B Chapter 12)
BB12	10S/194031	Test jig connector blower motor	-	Service design
BB13	-	Shorting plug (P1401)	-	Service design
BE1	10L/9438543	Control unit Type 1607	-	-
CA	10S/9331822	Counter electronic frequency	1 yr.	Marconi TF1417
CA2	10D/1033677	Converter frequency 10-110 MHz	-	Marconi TF2400

TABLE 3

PTR175: Additional approved list of test equipment and tools provisioned for third line servicing

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
CB1	5821-99-955-6583	Test set relay oscillator	-	Plessey 608/1/03633 (AP116D-0133-6B Chap. 18)

TABLE 3 (Cont'd)

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
CB2	6625-99-956-8854	Test set radio	-	Plessey 608/1/11569 (AP116D-0133-1B)
CB3	10AD/1951953	Interconnecting box and cable assembly	-	Plessey 705/1/03327 (AP116D-0133-6B Chap. 14)
CB4	6625-99-943-6886	Test set radio (Guard)	-	Plessey CP242152 (AP116D-0133-6B Chapter 10)
CB5	5821-99-932-2388	Cover test side (Guard)	-	Plessey CP194000 (AP116D-0133-6B Chapter 10)
CB6	6625-99-999-0201	Test set electrical power d.c.	-	Plessey CP242245 (AP116D-0133-6B Chapter 17)
CB7	6625-99-943-6905	Test set control unit	-	Plessey (AP116D-0133-6B Chapter 16)
CB8	10S/9334098	Panel test dynamotor	-	Service design
CB9	10L/9334099	Control dynamotor test panel	-	Service design
CB10	10D/9334156	Panel test blower motor	-	Service design
CB11	10S/9997813	Test set electrical power	1 yr.	Service design
CB12	10AD/1947418	Interconnecting box	-	Service design
CB13	10S/1945031	Test jig connector blower motor	-	Service design
CB14	10S/1945031	Shorting plug P1401	-	Service design
CD1	10AG/9568905	Coupler setting jig	-	Plessey G146694
CD2	-	Taper pin fitting tool	-	Plessey T382727 (AP116D-0133-6A, Pt. 2, Sect.2, Chapter 2A)
CD3	-	Alignment tool (v.h.f.)	-	Plessey T161167 (AP116D-0133-6A Pt. 2, Sect. 2, Chapter 2A)
CD4	-	Alignment tool (u.h.f.)	-	Plessey T161166 (AP116D-0133-6A, Pt. 2, Sect. 2, Chapter 2A)

TABLE 3 (Cont'd)

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
CD5	10HS/2223410	Wiring harness	-	-
CE1	5821-99-945-5739	Control unit Type 1607/4	-	Bench slave

TABLE 4

TR11672: Additional approved list of test equipment
and tools provisioned for third line servicing

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
DA1	10S/1036633	Signal generator set CT402	1 yr.	Marconi TF995A/3S (BR1771(42))
DB1	6625-99-195-5999	Interconnecting box	-	Plessey 705/8/03810 (AP116D-0133-6B, Chapter 14)
DB2	5821-99-955-6583	Test set relay oscillator	-	Plessey 608/1/03633 (AP116D-0133-6B, Chapter 18)
DB3	6625-99-195-5998	Test set demodulator	-	Plessey 608/1/036639 (AP116D-0133-6B, Chapter 21).
DB4	10AD/9556715	Adaptor, electrical	-	Plessey 608/1/03657. For use with item DB2 (AP116D-0133-6B, Chapter 18)
DB5	6625-99-999-0201	Test set electrical power d.c.	-	Plessey CP241639 (AP116D-0133-6B, Chapter 17)
DB6	6625-99-943-6905	Test set control unit	-	Plessey CP242245 (AP116D-0133-6B, Chapter 16)
DB7	10S/9334098	Panel test dynamotor	-	Service design
DB8	10L/9334099	Control dynamotor test panel	-	Service design
DB9	10D/9334156	Panel test blower motor	-	Service design
DB10	6625-99-999-7813	Test set electrical power a.c.	-	Plessey CP241690 (AP116D-0133-6B, Chapter 12)

TABLE 4 (Cont'd)

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
DB11	10S/1945031	Test jig connector blower motor	-	Service design
DB12	-	Shorting plug (P1401)	-	Service design
DE1	5831-99-945-5739	Control unit Type 1607/4	-	Bench slave

TABLE 5

PTR177: Additional approved list of test equipment and tools provisioned for third line servicing

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
EA1	10S/9331822	Counter electronic frequency	1 yr.	Marconi TF1417/2
EA2	10D/1033677	Converter frequency 10-110 MHz	1 yr.	For use with item A1
EA3	10S/1036633	Signal generator set CT402	1 yr.	(BRI771(42))
EB1	6625-99-956-8854	Test set radio	-	Plessey 608/1/11569 (AP116D-0133-1B)
EB2	6625-99-955-6583	Test set relay oscillator	-	Plessey 608/1/03633 (AP116D-0133-6B, Chapter 18)
EB3	6625-99-195-5998	Test set demodulator	-	Plessey 608/1/03639 (AP116D-0133-6B, Chapter 21)
EB4	6625-99-107-5484	Interconnecting box	-	Plessey 705/8/03823 (AP116D-0133-6B Chapter 14)
EB5	6625-99-999-0201	Test set electrical power d.c.	-	Plessey CP241639 (AP116D-0133-6B Chapter 17)
EB6	6625-99-943-6905	Test set control unit	-	Plessey CP242245 (AP116D-0133-6B Chapter 16)
EB7	10S/9334098	Panel test dynamotor	-	Service design
EB8	10L/9334099	Control dynamotor test panel	-	Service design

TABLE 1 (Cont'd)

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
EB9	10D/9334156	Panel test blower motor	-	Service design
EB10	6625-99-999-7813	Test set electrical power a.c.		Plessey CP241690 (AP116D-0133-6B Chapter 12)
EB11	10S/NIV1309	Adaptor	-	Service design
EB12	10S/1945031	Test jig connector blower motor	-	Service design
EB13	10AD/1947418	Interconnecting box	-	Service design
ED1	10AG/9568905	Coupler setting jig	-	Plessey G146694
ED2	10AG/1942601	Gauge connector setting (relay oscillator unit)	-	Plessey T163705
EE1	5821-99-945-5739	Control unit Type 1607/4	-	Bench slave

TABLE 6

PTR.374: Additional approved list of test equipment and tools provisioned for third line servicing

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
FA1	10S/9331822	Counter electronic frequency	1 yr.	Marconi TF1417/2
FA2	10D/1033677	Converter frequency 10-110 MHz	-	Marconi TF2400
FB1	10AD/1076455	Interconnecting box	-	Plessey 608/1/11721
FB2	10S/9556483	Test set relay oscillator unit	-	Plessey 608/1/03633
FB3	10S/9568854	Test set radio	-	Plessey 608/1/03633
FB4	10AD/1947418	Interconnecting box	-	Service design
FC1	10HS/1944254	Wiring harness	-	For use with 10AD/1076455 interconnecting box
FC2	10HS/1944255	Wiring harness	-	As above
FC3	10HS/1944256	Wiring harness	-	As above

TABLE 6 (Cont'd)

Item	Service reference No.	Service title	Calibration period	Commercial title and remarks
FC4	10HS/1944257	Wiring harness	-	As above
FD1	10AG/9568905	Coupler setting jig	-	Plessey C146694
FD2	-	Taper pin fitting tool	-	Plessey T382727
FD3	-	Alignment tool VHF	-	Plessey T161167
FD4	-	Alignment tool UHF	-	Plessey T161166
FE1	5821-99-954-8143	Control unit PTR374	-	Bench slave
HA1	10S/9701194	Multimeter valve	1 yr.	Marconi TF1041C
		or		
	10S/9438384	Multimeter valve CT429	1 yr.	Marconi TF1041B (A.P.4837H)
HA2	10S/1942667	Valve voltmeter phase sensitive	1 yr.	-
		or		
	10S/9565027	Valve voltmeter CT429	1 yr.	-

TABLE 7

ARI.18124 (ARC52): List of major units, sub-assemblies and modules serviced at third line

Item	Service reference No.	Service description	Common title
1	5821-99-942-8543	Control unit, transmitter-receiver, radio	Control unit Type C1607/ARC52
2	5821-99-932-2267	Control unit, transmitter-receiver, radio	Control unit Type C1607/1/ARC52
3	5821-99-932-6361	Interconnecting box	Interconnecting box
4	5821-99-943-3247	Control, receiver muting	Receiver muting control
5	5821-99-942-8545	Relay unit	Relay unit
6	5821-99-942-8546	Power unit a.c.	Power unit a.c.
7	5821-99-942-8548	Modulator, radio transmitter	Modulator
8	5821-99-942-8549	Tuning unit, radio frequency	Tuning unit mechanical
9	5821-99-942-8552	Spectrum generator unit	Spectrum generator unit

TABLE 7 (Cont'd)

Item	Service reference No.	Service description	Common title
10	5821-99-942-8551	Rectifier unit	Rectifier unit
11	5821-99-942-8533	Oscillator unit	Oscillator unit
12	5821-99-942-8544	Amplifier, radio frequency	Amplifier M.R.P.A.
13	5821-99-942-8555	Amplifier, audio frequency	Amplifier A.F.
14	5821-99-942-8556	Amplifier, intermediate frequency	I.F. unit 1.85 MHz
15	5821-99-942-8557	Amplifier, intermediate frequency	I.F. unit 20-30 MHz
16	5821-99-942-8558	Receiver unit	Guard receiver
17	5821-99-942-8559	Amplifier radio frequency	Amplifier R.F.
18	5821-99-942-8561	Transmitter-receiver sub-assembly	Chassis assembly TR4
19	5821-99-942-8562	Transmitter-receiver sub-assembly	Chassis assembly TR5
20	5821-99-942-8547	Power unit, direct current	Power unit D.C.
21	5821-99-999-0389	Control radio, set	Control unit C1607/2/ARC52
22	5985-99-911-8266	Aerial, aircraft	Aerial U.H.F.
23	5821-99-946-0773	Control, radio set	Control unit Type C1607/5/ARC52
24	10K/9432428	Blower motor	Blower motor
25	10K/9432030	Dynamotor	P.U.D.C.
26	10K/9432427	Blower motor	Blower motor
27	10K/9532429	Blower motor	Blower motor
28	5821-99-945-5739	Control, radio set	Control unit Type C1607/4/ARC52

TABLE 8

ARI.23143 (PTR175): List of major units,
sub-assemblies and modules serviced at third line

Item	Service reference No.	Service description	Common title
1	5821-99-971-1779	Transmitter-receiver sub-assembly	Chassis assembly PTR175

TABLE 8 (Cont'd)

Item	Service reference No.	Service description	Common title
2	5821-99-971-1780	Transmitter-receiver sub-assembly	Chassis assembly PTR175A
3	5821-99-971-1782	Amplifier, oscillator, relay assembly	Amplifier oscillator relay
4	5821-99-971-1783	Amplifier, intermediate frequency	Amplifier I.F. (first)
5	5821-99-971-1784	Amplifier, intermediate frequency	Amplifier I.F. 1825/500 KHz
6	5821-99-971-1785	Amplifier, radio frequency	Amplifier VHF/UHF

TABLE 9

ARI.23141 (TR11672 and PTR177): list of major units, sub-assemblies and modules serviced at third line

Item	Service reference No.	Service description	Common title
1	5821-99-913-4670	Amplifier, intermediate frequency	I.E. unit 1.85 MHz
2	5821-99-913-4671	Amplifier, oscillator, relay assembly	Relay unit
3	5821-99-913-4672	Power supply	Power unit D.C.
4	5821-99-913-4673	Transmitter-receiver sub-assembly	Chassis assembly TR11672
5	5821-99-948-8104	Demodulator, radio frequency	Demodulator
6	5821-99-952-8867	Transmitter-receiver sub-assembly	Chassis assembly PTR177

TABLE 10

ARI.23199 (PTR374): List of major units, sub-assemblies and modules serviced at third line

Item	Service reference No.	Service description	Common title
1	5821-99-956-8143	Control radio, set	Control unit PTR374A
2	5821-99-107-5551	Amplifier, oscillator relay assembly	Relay unit

TABLE 10 (Cont'd)

Item	Service reference No.	Service description	Common title
3	10D/NIV	Chassis assembly group comprising:	Chassis PTR374
	5821-99-195-5987	Transmitter-receiver, sub-assembly	-
	5821-99-194-6543	Cover access	-
	5821-99-195-5988	Cover, transmitter- receiver	-
	5821-99-194-6458	Gasket	-

