

CHAP	2	SP 102	SERVICING PROCEDURES				AP 101B-1000-5A3 F (Section 1 (1st Edition))						
TRADE	AIR RADAR			LIGHTNING									
SHEET	1	OF	7	SHEET/S		3		5	6	AL NO	19	DATE	
TITLE	VIS Recorder Installation.						SERVICING RECORD - RAF F.2988B AC NO DATE						
Safety and Servicing Notes are to be complied with throughout the work detailed on this Card.						(1)	(2)	(3)	(4)	(5)	TIME		
Special Tools and Equipment Trolley Air cooling MK 2A. Sighting Unit Camera. Meter Unit monitoring Type 16325.						MAN HOURS	TRADESMEN INIT	BRIEF DETAILS OF OR SUSPECTED DEFECT	F. 720B NO	N.C.O. INITIALS	EST		
WEAPONS											ASSOCIATED PROCEDURE CARDS		
NB1: Item 1 is applicable when LIVE MISSILES are fitted. NB2: Item 2 is applicable when GUNS are loaded.													
1. <u>Safety Preparation</u>													
▶ 1.1 LIVE MISSILES. Off-load. (LP 27B)													
1.2 Slippers. Fit.													
2. <u>Safety Preparation</u>													
▶ 2.1 30mm ADEN GUNS. Disarm ventral gun pack. (LP 28B).													
AIR RADAR											ASSOCIATED TRADES		
3. <u>Preparation</u>													
3.1 Weapons. Check with armament NCO that items 1 and 2 have been complied with as applicable before proceeding.													
3.2 15 KVA Power unit.) Connect to aircraft and switch on.													
3.3 Cooling trolley)													
▶ 3.4 Radar Test Harness. (i) Attach to port cockpit sill.													
(a) Suspension strap and clip. (ii) Ensure Protective rubber pad on junction box rests against aircraft skin.													
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LP 27B, 28B (5A6 2nd Edition).

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SHEET	2	AL 19		SERVICING RECORD				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.				(1)	(2)	(3)	(4)	(5)
AIR RADAR								
3.	<u>Preparation (Contd)</u>							
3.4	Radar test harness. (Contd)							
	(b) Cable forms.	Connect to forward equipment compartment test socket and main equipment compartment test socket.						
3.5	Meter Unit Monitoring.	Place on MBEU seat and connect to cable form.						
3.6	Switches.							
	(a) Inst Master Switch.	Set to ON.						
	(b) MRG ON/OFF switch.	(i) Set to ON. (ii) Ensure MRG run up cycle starts.						
	(c) AI change-over switch. (If fitted)	Set to 'PUPIL'.						
	(d) Ground Test/Normal switch.	Set to outboard position.						
	(e) AI ON/OFF switch.	Set to ON.						
	(f) Master Armament switch.	Set to GW.						
3.7	Visual Recorder							
	(a) Cover.	Remove.						
	(b) Magazine.	Remove.						
	(c) Sighting unit.	Fit.						
4.	<u>Displays</u>							
4.1	Ground Arming Link.	Fit.						
4.2	Safety Break.	Remove.						
4.3	Engine Master.	Ensure set to OFF. (Down position).						
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CHAP	2	AIR RADAR	SERVICING PROCEDURES LIGHTNING	AP101B-1000-5A3F Section 1 (1st Edition)				
SP NO	102	CONTINUED		AC NO DATE				
SHEET	3	AL 7		SERVICING RECORD				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.			(1)	(2)	(3)	(4)	(5)	
AIR RADAR								
4. <u>Displays</u> (Contd)								
4.4 ARM/SAFE Switch. Select ARM.								
4.5 LFS/CRT Switch. Select LFS.								
4.6 (a) Visual Recorder.								
(i) Check lamps LPI and LP2 light when trigger is pressed.								
(ii) Check lamp 2 lights when GS Cage button is pressed.								
(b) Indicator/s Az Range.								
(i) Check lamps E and I light when the trigger is pressed.								
(ii) Check lamp I lights when GS Cage button is pressed.								
4.7 ARM/SAFE switch. Set to SAFE.								
4.8 Safety break. Fit.								
4.9 Ground Arming Link. Remove.								
5. <u>Recorder Display</u>								
5.1 CU 16016.								
(a) Phase change trigger. Select search phase.								
(b) Range selector button. Select 40nm range.								
(c) Gain control. Ensure set to optimum ie RX noise is just visible on indicator.								
SMS/82/37/4			Continued					

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CHAP	2	AIR RADAR	SERVICING PROCEDURES LIGHTNING	AP101B-1000-5A3 F Section 1 (1st Edition)				
SP NO	102	CONTINUED		AC NO DATE				
SHEET	4	AL 7		SERVICING RECORD				

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

AIR RADAR			(1)	(2)	(3)	(4)	(5)
5.	<u>Recorder Display</u> (Contd)						
5.2	Visual Recorder.						
	(a) Display.	(i) Check bright, clearly defined display visible through sighting head.					
		(ii) Check display limits coincide with edges of CRT mask.					
		(iii) Check lamp LP3 only illuminated.					
5.3	CU 16016.						
	(a) Range control.	Adjust to set acquisition marker to 10nms on Indicator.					
	(b) Range selector button.	Select 10nms range.					
5.4	Visual Recorder.						
	(a) Event lamps.	Check only LP4 is illuminated.					
	(b) Display.	Check acquisition marker is at 10nms.					
5.5	MUM Port/Starboard Weapons Switch.	Set to 'PORT AND STBD' weapon in turn and check LP5 and LP6 illuminates.					
5.6	CU 16016.						
	(a) Additional facilities switch.	Select on.					
	(b) Reject Lever.	Reject inwards (Rear) and release.					
5.7	Indicator Az and Range.	Ensure that an enlarged time circle with no gap is present.					
5.8	CU 16016.						
	Reject Lever.	Reject outwards (Forward) and hold.					

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CHAP	2	AIR RADAR	SERVICING PROCEDURES LIGHTNING	AP101B-1000-5A3 F Section (1st Edition)				
SP NO	102	CONTINUED		AC NO DATE				
SHEET	5	AL 7		SERVICING RECORD				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.				(1)	(2)	(3)	(4)	(5)
AIR RADAR								
5. <u>Recorder Display</u> (Contd)								
5.9	Visual Recorder Display.	Check Lamp 7 illuminated.						
5.10	CU 16016.							
	(a) Reject Lever.	Release.						
	(b) Additional facilities switch.	Select off.						
6. <u>Recorder Displays</u>								
6.1	CU 16016 range selector button.	Select 40nm range.						
6.2	Ext RX Control Unit.							
	(a) Selector switch.	Set to ON.						
	(b) Gain control.	Set to MAX gain.						
6.3	Visual Recorder display.	Check that signals are inhibited for approx 7nms of display and ensure noise spectrum is displayed in this area.						
6.4	Ext RX Control Unit.							
	(a) Gain control.	Adjust for approx 2nms of noise on indicator.						
	(b) Selector Switch.	Set to 'PROP NAV'.						
6.5	Visual Recorder display.	Ensure 'Homer' marker is displayed and event Lamp LP8 is illuminated.						
6.6	Ext Rec Control Unit.	Set to 'OFF'.						
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CHAP	2	AIR RADAR	SERVICING PROCEDURES LIGHTNING	AP101B-1000-5A3F Section (1st Edition)				
SP NO	102	CONTINUED		AC NO DATE				
SHEET	6	AL 19		SERVICING RECORD				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.				(1)	(2)	(3)	(4)	(5)
AIR RADAR								
7. <u>Camera Function</u>								
7.1 Visual Recorder Set to ON. ON/OFF switch.								
Note. Sub-item 7.2 is applicable to MK3 and MK6 aircraft only.								
7.2 Visual Recorder Depress to Test Camera Test Position. button. (Fitted on Voltage Regulator in Spine compartment								
7.3 Visual Recorder Aurally ensure film camera. advance mechanism operates as each alternate timebase in display reaches upper limit.								
7.4 CU 16016 Select 'Acquisiton' Phase change and 'Track' phases in turn switch.								
7.5 Visual Recorder. (a) Film Ensure operating at approx advance 2 frames/sec in both Mechanism. Acquisition and Track phases in turn. (b) Camera Ensure aperture is reduced Iris. on selection of 'Acquisition' and remains so on 'Track'.								
8. <u>General</u>								
8.1 CU 16016. (a) Ground Set to inboard position. Test warm up switch. (b) Main ON/OFF Set to OFF. switch.								
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CHAP	2	A. RADAR	SERVICING PROCEDURES LIGHTNING	AP101B-1000-543 F Section 7 (1st Edition)				
SP NO	102	CONTINUED		AC NO DATE				
SECT	7	AL 19		SERVICING RECORD				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.			(1)	(2)	(3)	(4)	(5)	
AIR RADAR								
8. <u>General</u> (Contd)								
8.2 Master Armament switch. Set to OFF.								
8.3 MRG ON/OFF switch. Set to OFF.								
8.4 Instrument master switch. Set to OFF.								
8.5 Visual Recorder.								
(a) Camera. Remove sighting unit and fit loaded magazine.								
(b) Camera Test button. Operate and ensure test lamp lights intermittently as film feeds.								
(c) Magazine Cover. Refit.								
8.6 (a) 15KVA Power Unit. (i) Switch OFF.								
(b) Cooling trolley. (ii) Disconnect from aircraft.								
8.7 Radar Test Harness. Disconnect and Remove.								
8.8 Meter Unit Monitoring. Disconnect and Remove.								
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