

**RADAR TYPE 955**

955

**SUMMARY OF DATA**

**PURPOSE**

I.F.F. Mark 10 transponder for small craft and submarines.

**BRIEF DESCRIPTION**

Type 955 is the I.F.F. Mark 10 transponder fitted in small craft and submarines. The main unit is the Air Ministry Transmitter-Receiver TR 6061, this being controlled by Admiralty Pattern 71395 Control Unit Design 142 Transponder.

The interrogations are received as pulse pairs on a frequency of 1030 MHz. These are converted to video signals in the receiver, which generates a single pulse for each appropriate interrogation. This pulse is fed to the modulator which in turn excites the transmitter, the output of which is fed to the aerial and radiated on 1090 MHz as a reply to the interrogation.

**FREQUENCY**

1030 MHz Reception.  
1090 MHz Transmission.

**POWER OUTPUT**

500 watts peak.

**PULSE REPETITION FREQUENCY**

Up to 2500 pulses per second (depending on interrogation).  
interrogation).

**PULSE LENGTH**

0.5 microsecond.

**RECEIVER BANDWIDTH**

10-12 MHz at 6 dB below maximum.

**MAJOR UNITS**

TR 6061 Transmitter-Receiver  
AP 71395 Control Unit Design 142 Transponder.

**PHYSICAL DATA**

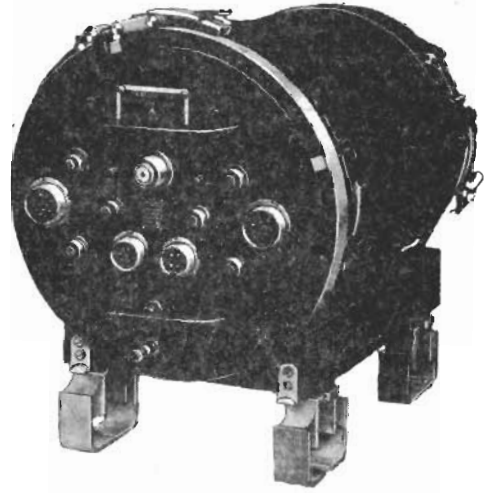
	Height	Width	Depth	Depth
TR 6061	9½ in	9½ in	14 in	30 in
Control Unit	6½ in	4 in	4½ in	1 in

**ASSOCIATED AERIAL OUTFIT**

AMA in surface craft  
AMJ in submarines

**POWER REQUIREMENTS**

115 v, 320-2600 Hz single phase a.c. 350 watts  
24 v d.c. 150 watts. (This allows for additional equipment to be added later.)



TR 6061

**RESTRICTED**

BR 333(1)  
Original

**HEAT DISSIPATION**

110 watts. (Without additional equipment.)

**HANDBOOK**

BR 2188 (AP 2887N Volume 1)

**ESTABLISHMENT LIST**

E 1214

**INSTALLATION SPECIFICATION**

B858

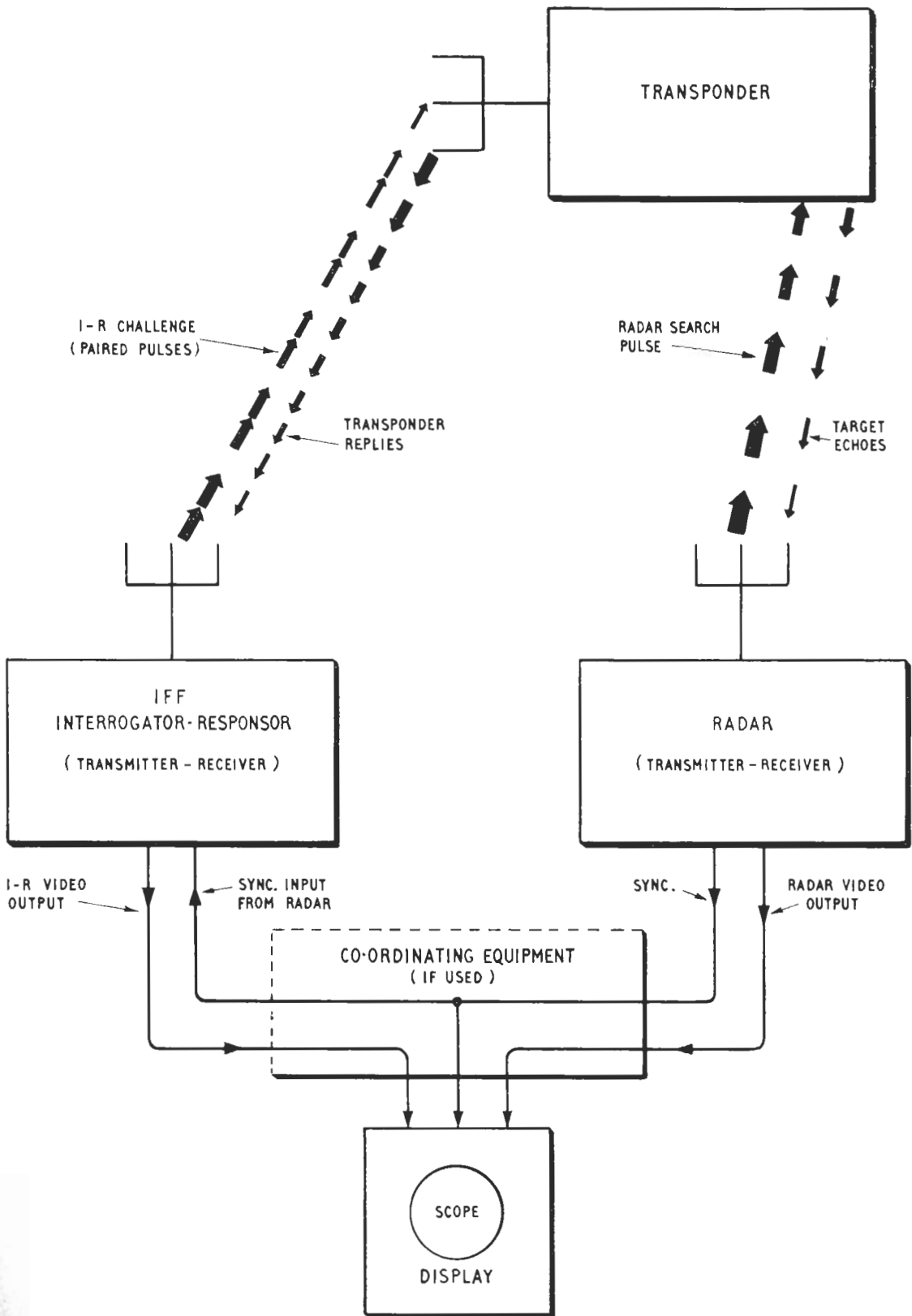
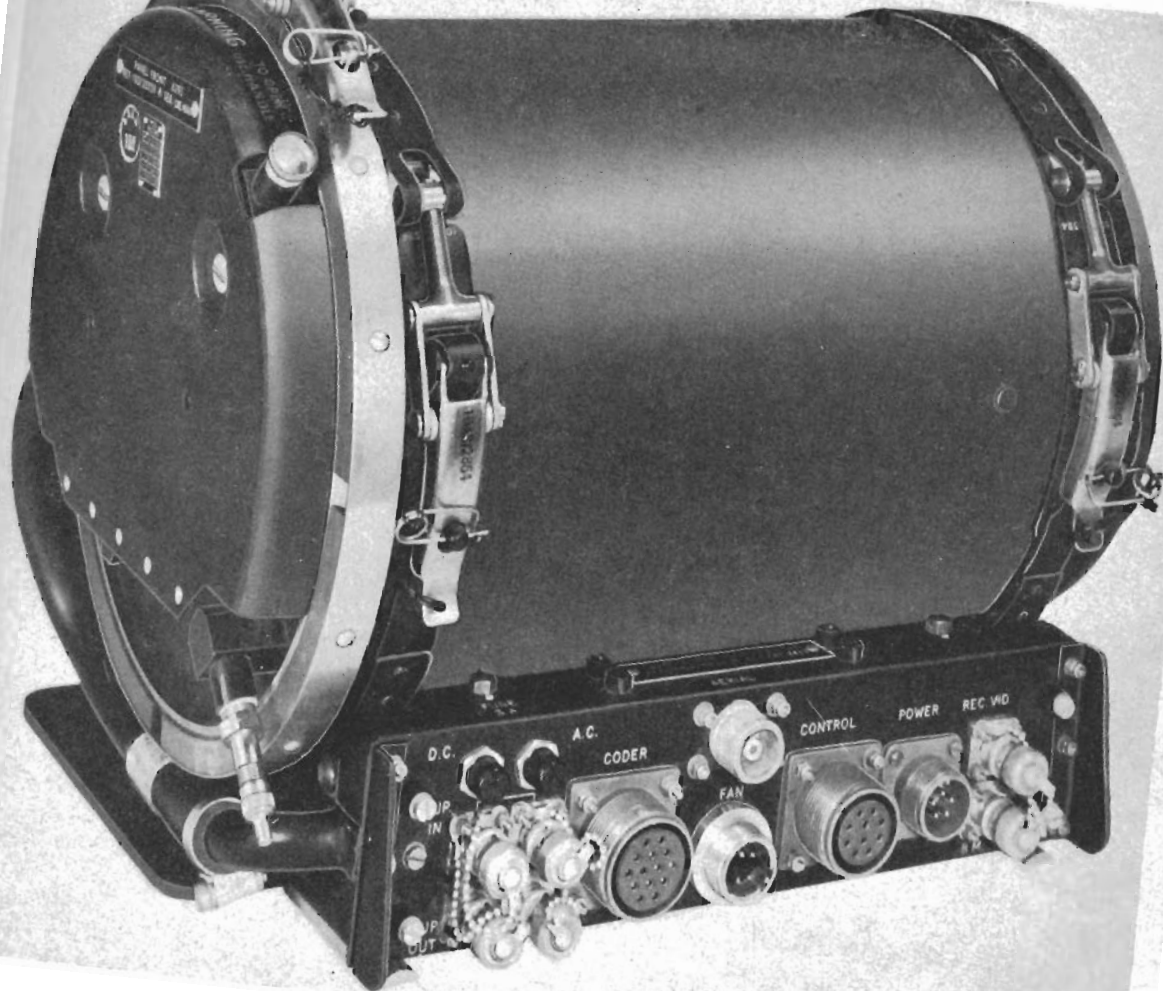


Fig. 1. IFF system: block diagram



**Fig. 1. TR.4585: general view**

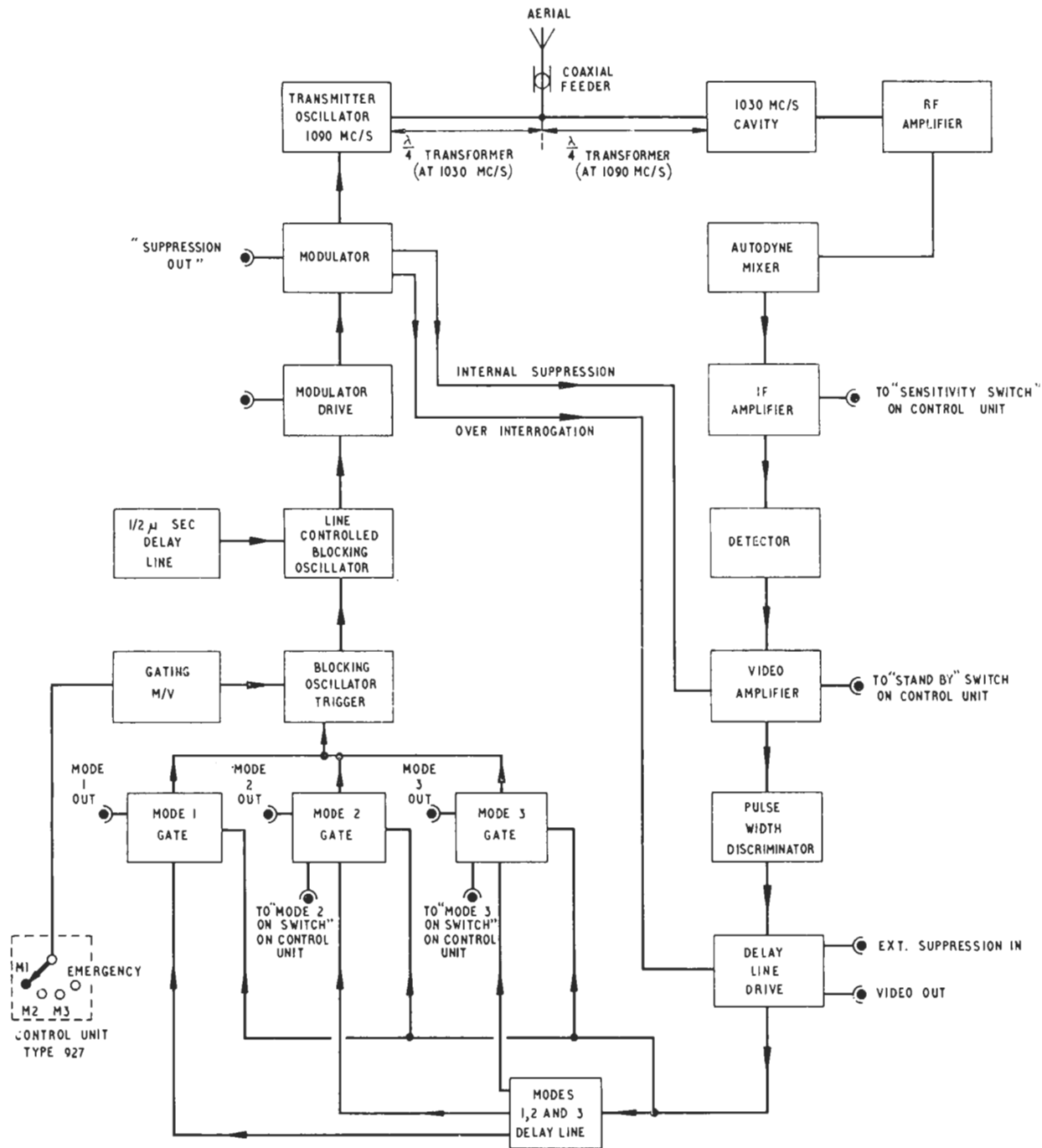


Fig. 4. TR.4585: block diagram

TRANSMITTER RECEIVER

6061



BM

AC  
3A

AERIAL

DC  
3A

REC.VID.

CODER

CONTROL

SUPP  
OUT

W.C.  
RECORD  
RECORDING  
RECORDING  
RECORDING  
RECORDING  
RECORDING  
RECORDING

SUPP  
IN

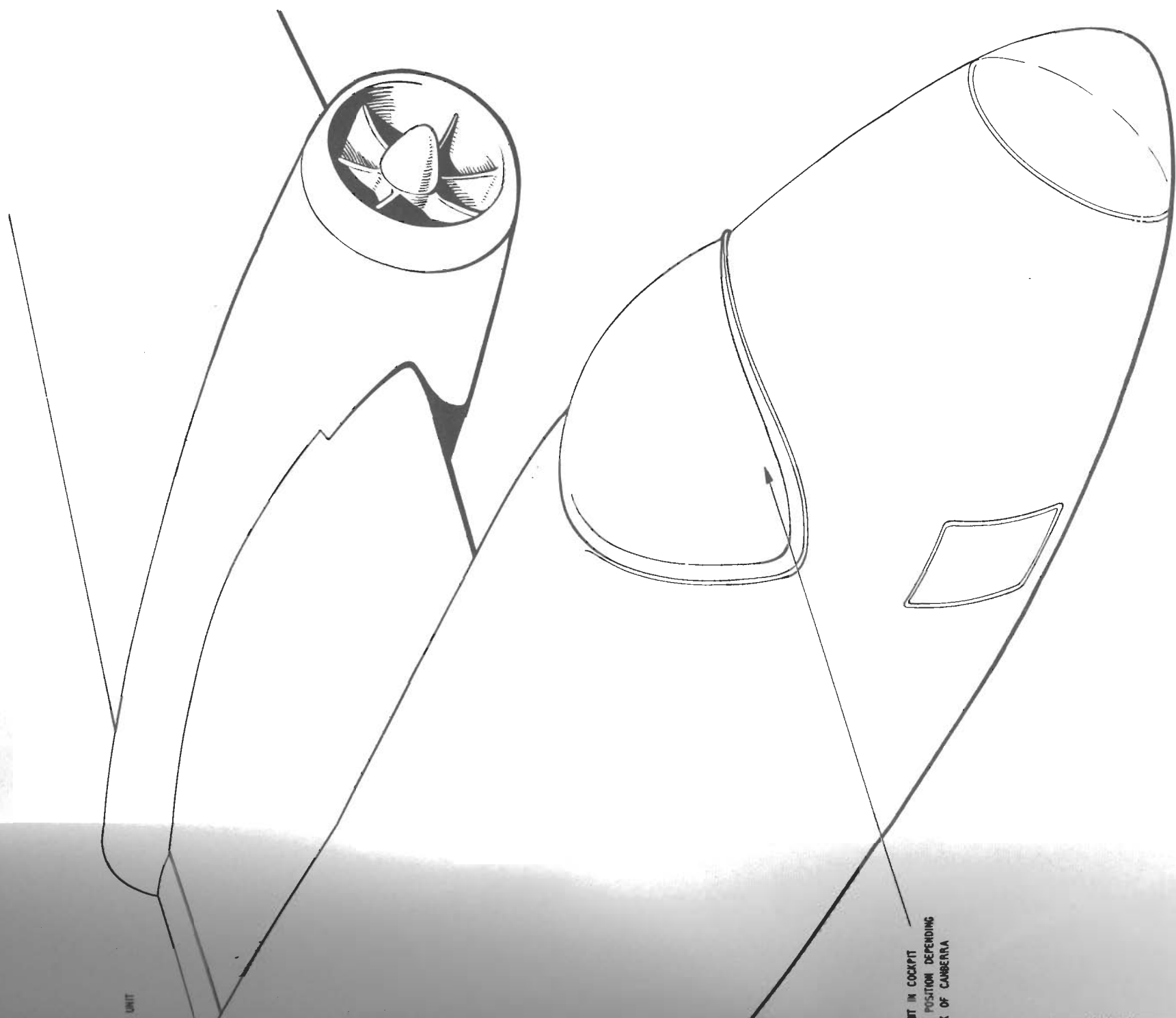
SUPP. OUT

POWER

FAN

SUPP. IN





UNIT

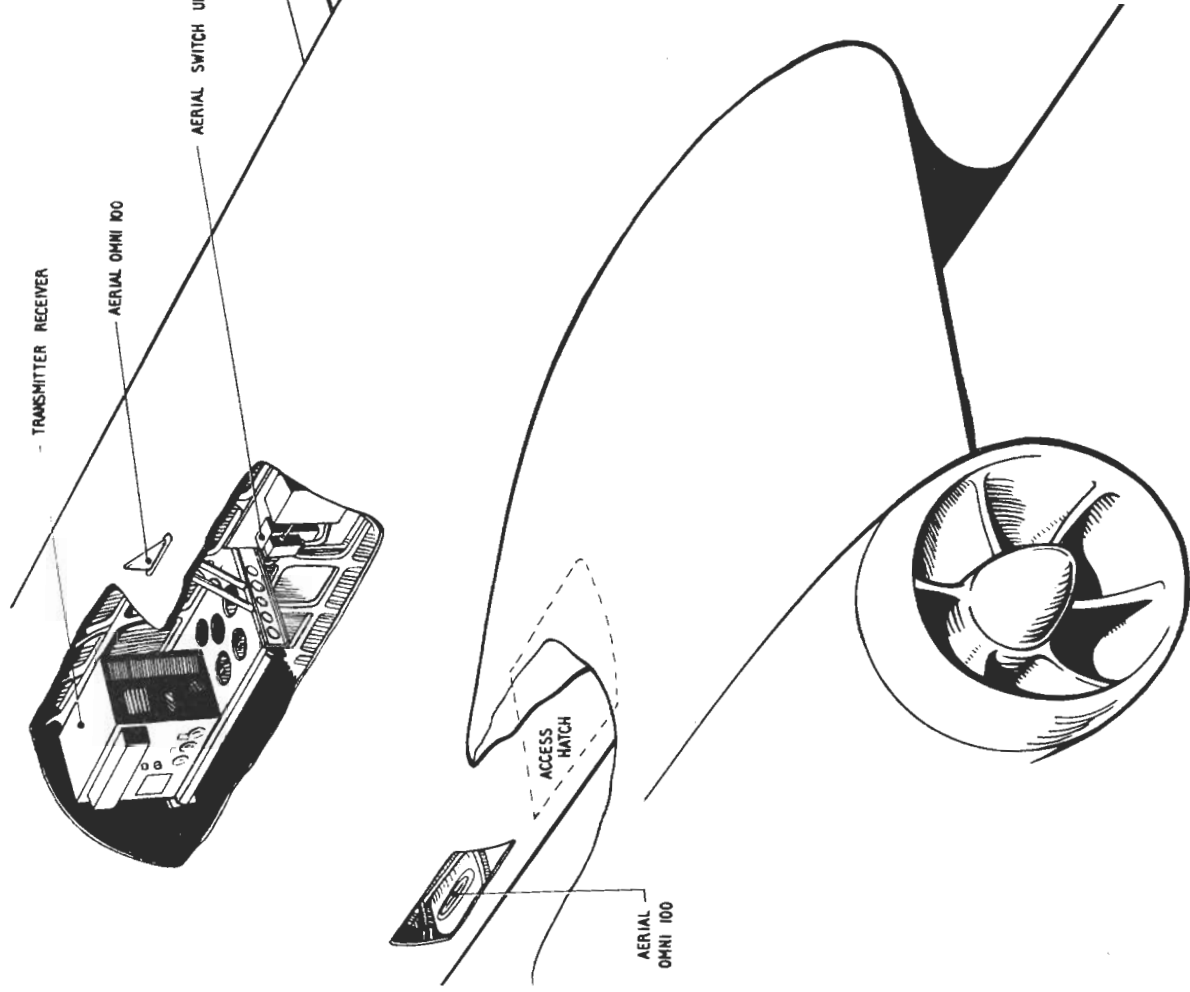
UNIT IN COCKPIT  
POSITION DEPENDING  
ON POSITION OF CANBERRA

Installation in Canberra.

Fig. 3

(A.L. 6 March 57)

RESTRICTED



CONTROL UNIT  
THE EXACT P  
ON THE MK

Fig. 3

IFF 10 :