

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

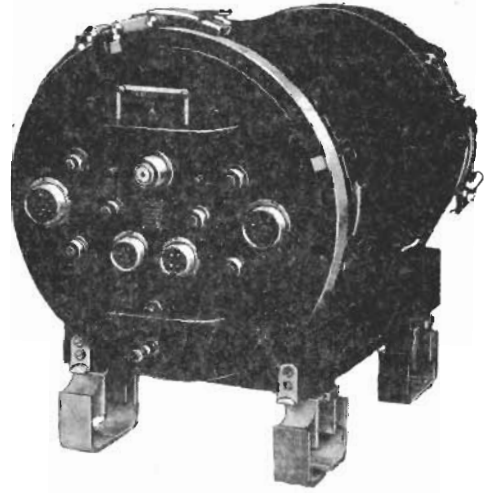
	Height	Width	Depth	Depth
TR 6061	9½ in	9½ in	14 in	30 in
Control Unit	6½ in	4 in	4½ in	1 in

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

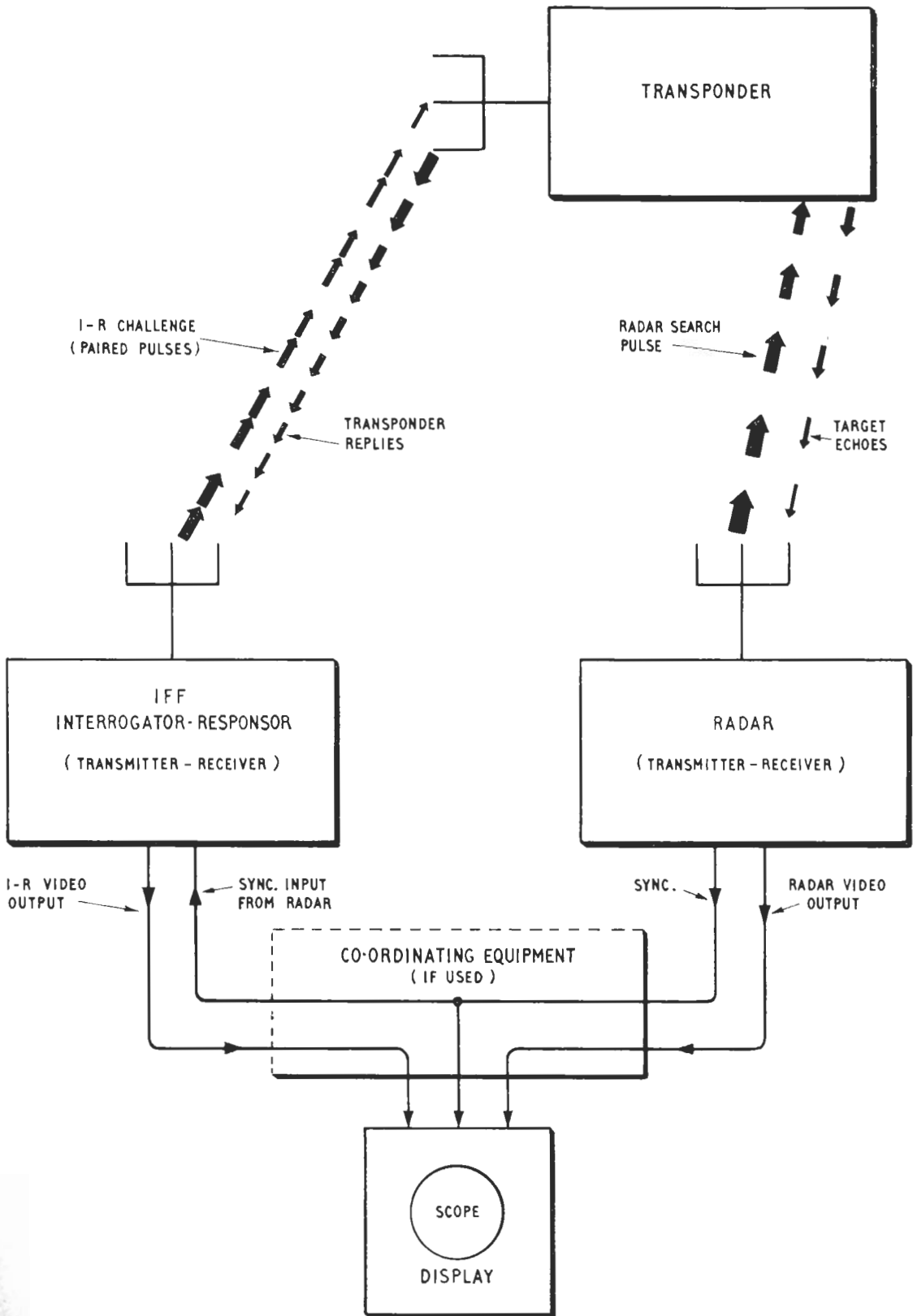


Fig. 1. IFF system: block diagram

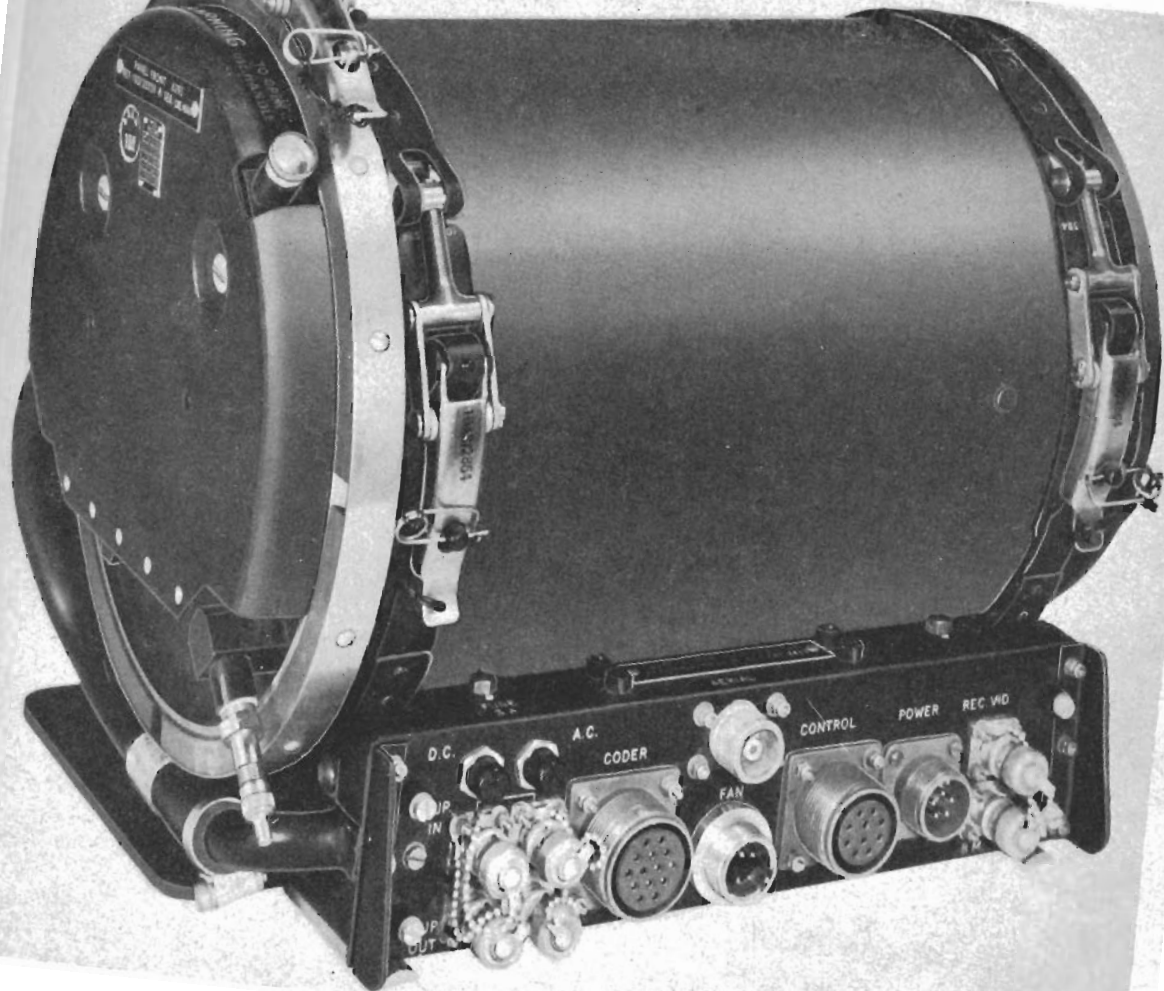


Fig. 1. TR.4585: general view

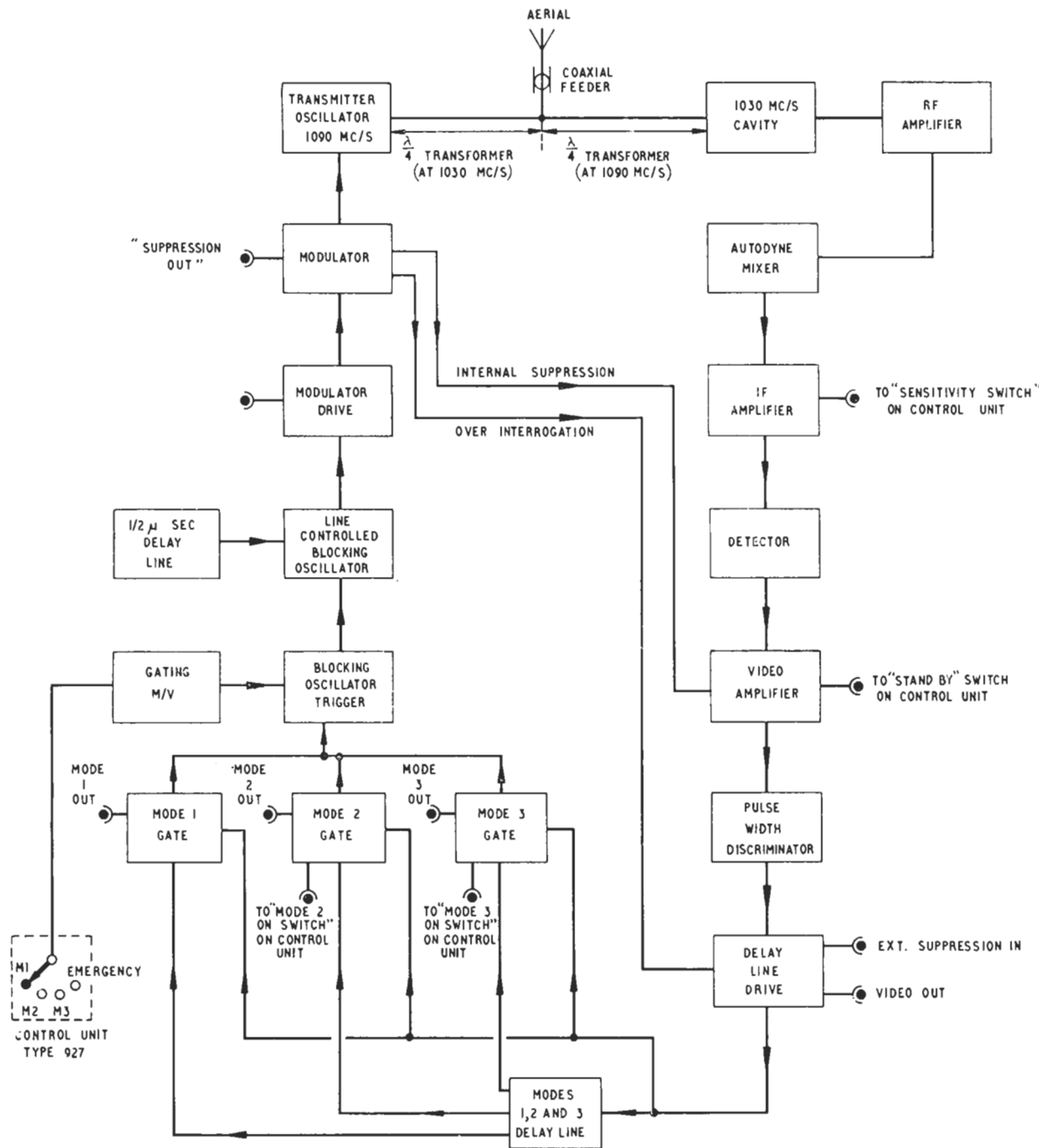


Fig. 4. TR.4585: block diagram

TRANSMITTER RECEIVER

6061



BM

AC
3A

AERIAL

DC
3A

REC.VID.

CODER

CONTROL

SUPP
OUT

W.C.
RECORD

SUPP
IN

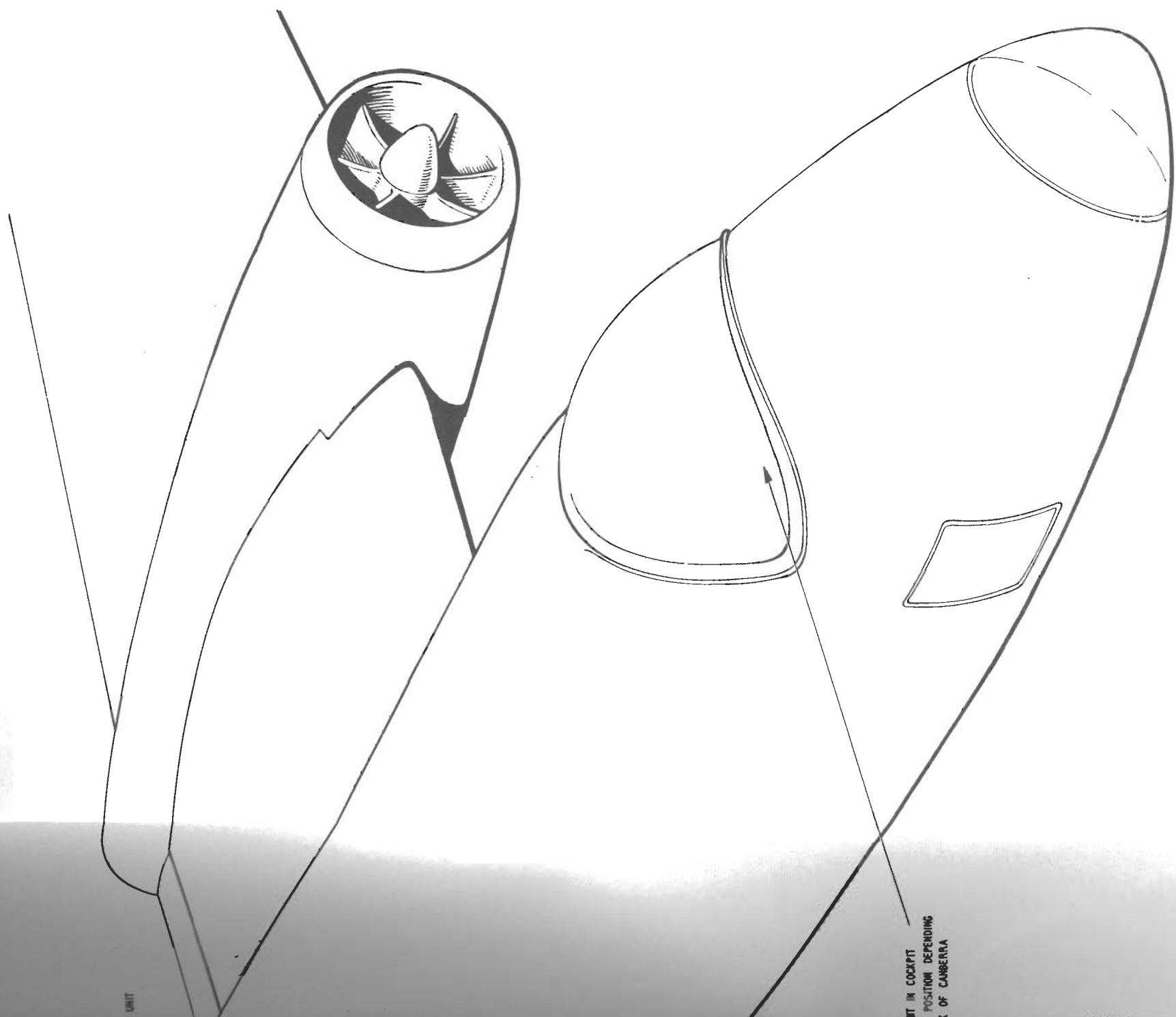
SUPP. OUT

POWER

FAN

SUPP. IN





UNIT

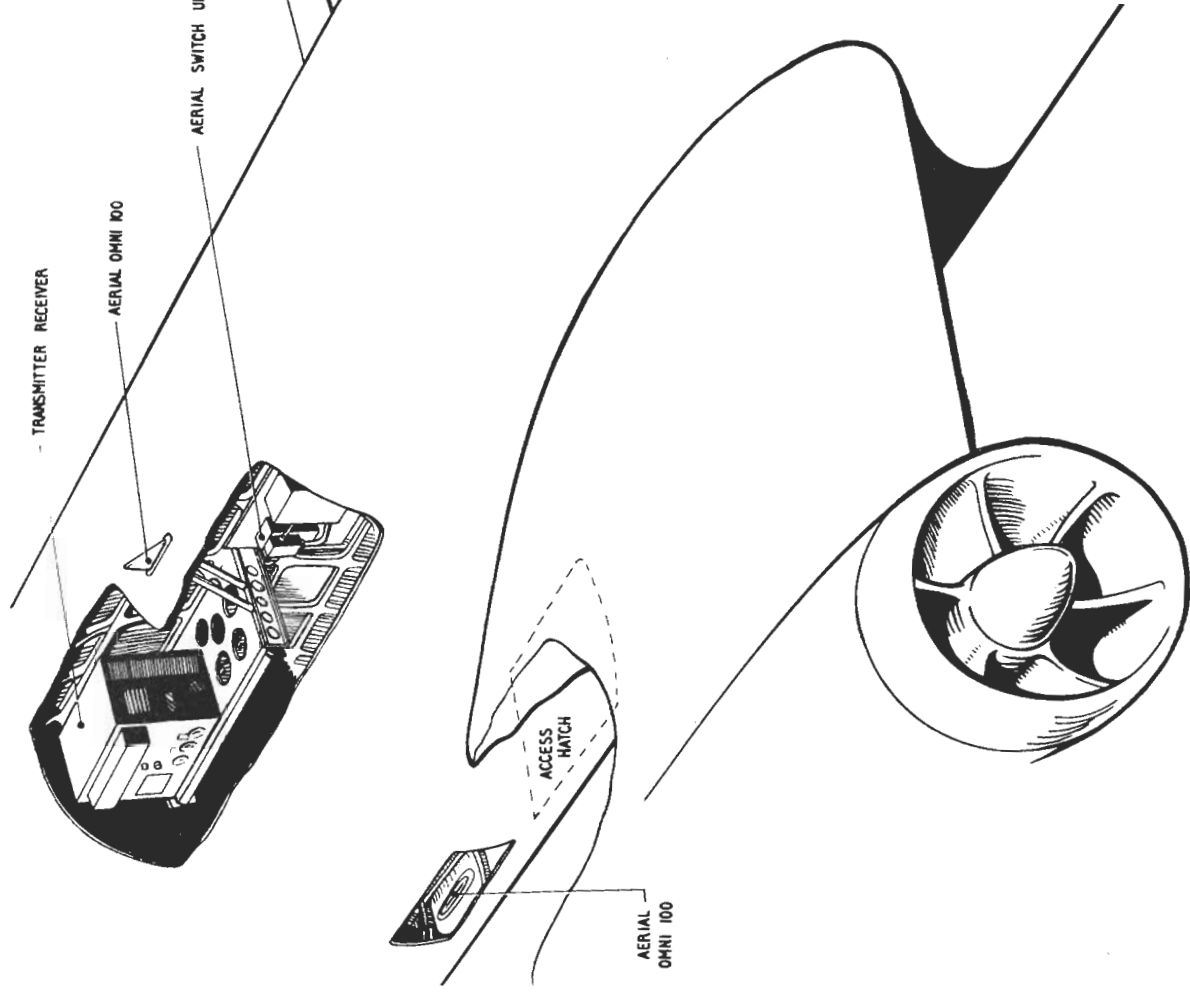
UNIT IN COCKPIT
POSITION DEPENDING
ON POSITION OF CANBERRA

Installation in Canberra.

Fig. 3

(A.L. 6 March 57)

RESTRICTED



CONTROL UNIT
THE EXACT P
ON THE MK

Fig. 3

IFF 10 :