TYPE 1011 1011

SUMMARY OF DATA

PURPOSE

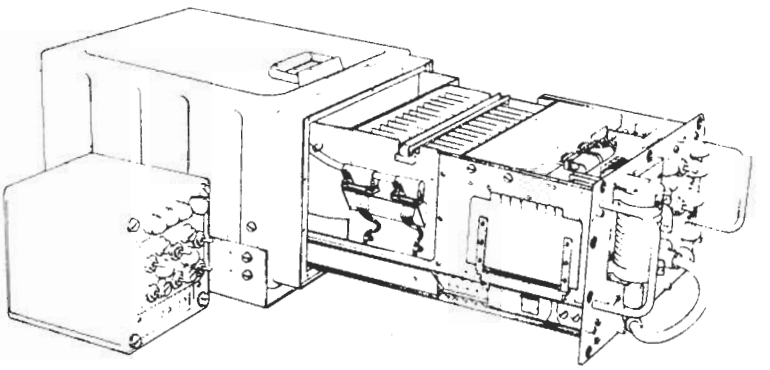
IFF Mark 10 Transponder with Selective Identification Feature (SIF) and interrogator Side Lobe Suppression (ISLS) facility.

BRIEF DESCRIPTION

The transponder can be set to respond to any one of interrogation Modes 1, 2 and 3, either separately or together. Video from the receiver is processed by Pulse Selection circuits which determine whether the received challenge is a valid main lobe interrogation. The mode of validated interrogation is decoded by logic circuits which, after a mode has been decoded, trigger the reply encoding which generates an SIF coded pulse train in accordance with manually set code switches. The reply code pulses modulate the transmitter.

FREQUENCY

1030 MHz Reception
1090 MHz Transmission



POWER OUTPUT

23 dBW to 26 dBW

PULSE REPETITION FREQUENCY

Depends upon the number of interrogations received. The reply rate can be set to a maximum of between 500 and 2000 replies per second; a reply can include from 2 to 14 pulses. The number of pulses transmitted is limited to 1% of the duty cycle.

PULSE DURATION

0.5 ± 0.05 μs

INTERMEDIATE FREQUENCY

60 MHz

RECEIVER BANDWIDTH

9 MHz

RECEIVER SENSITIVITY

76 dBm ± 4 dBm (1 mW ≡ 0 dBm)

ASSOCIATED AERIAL OUTFIT

Outfits AMA or AMK

POWER REQUIREMENTS

115 V 60 Hz single phase equipment supply, 70 W
115 V 60 Hz single phase ACH supply, 12 W
24 V dc illumination supply, 2½ W

MAJOR ASSEMBLIES

(a) 5895-99-525-0134 Transponder
(b) 5895-99-525-0135 Control Transponder (VCS 326)

PHYSICAL DATA

	Height	Width	Depth	Weight
(a) Transponder including mountings	30.8 cm (12.1 in.)	31.6 cm (12.44 in.)	46.1 cm (18.2 in.)	11.95 Kg (26.34 lb)
(b) Control Transponder	15.25 cm (6 in.)	15.25 cm (6 in.)	15.25 cm (6 in.)	1.6 Kg (3.5 lb)

HANDBOOKS

BR 4212 Handbook for Radar Type 1011
BR 4210 IFF systems using Types 1010 and 1011

ESTABLISHMENT LIST

S1673

INSTALLATION SPECIFICATION

B1192