

IFF INTERROGATOR:

1. **Nomenclature/ Part No/ GIG Number:**

- (a) Nomenclature- IFF Interrogator
- (b) Part No- 1110D/MPR 62202074AA
- (c) GIG- 1507250

2. **Year of Procurement/ Source:**

- (a) Year of Procurement- 2014-15
- (b) Source- M/s ELTA, Israel

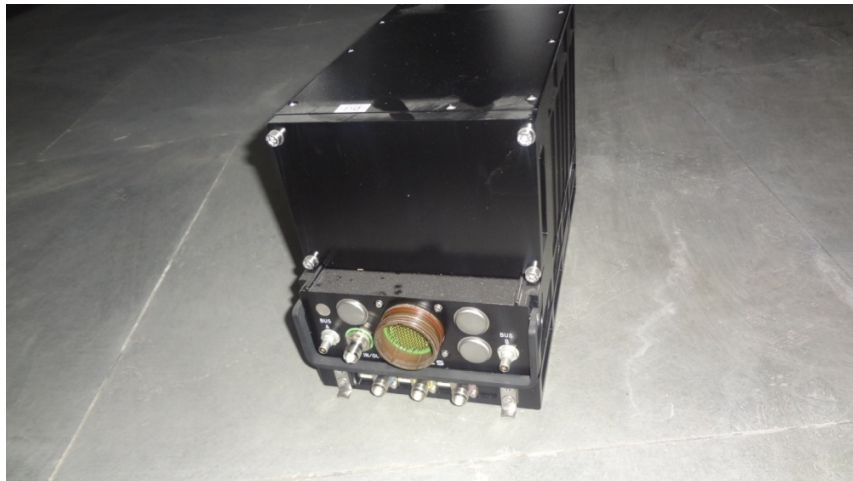
3. **Fleet/ Sub System/ Wpn System:** Medium Power Radar (MPR) / IFF

4. **Technical Applicability/ Broad Purpose:** IFF interrogator forms and transmits IFF interrogation signals through the IFF antenna according to operator's commands arriving through the IFF Controller server.

5. **Technical Specifications** (attach as separate sheets): Attached as annexure-1

6. **Publication Details** (attach as separate sheets): Updated O&I Level Maintenance Manual MPR(13280E) (can't be attached as confidential document)

7. **Photograph of Equipment:**



8. **Brief Description:**IFF Interrogator is a part of MPR. IFF interrogator forms and transmits IFF interrogation signals through the IFF antenna according to operator's commands arriving through the IFF Controller server.

9. **Classification of Equipment-** LRU/Testers/ Ground Equipment/ Role Equipment (Electrical, Electronics, Mechanical, Software based etc.): LRU

10. **Previous Repair History:** Presently dependent on foreign OEM M/s ELTA, Israel
11. **Criticality (Priority I, II or III):** Priority I
12. **Requirement:** Indigenisation
13. **Quantity Required (One time/ Annual):**3 per year
14. **Sample Availability:** Available
15. **Scale/ Deficiency:** Scale
16. **If deficient –** N/A
17. **SPOC details item/ fleet wise:** SPE (ISC) 13 BRD, AF
18. **Draft QTS:** yet to be prepared
19. **Any Other Relevant Information:** Nil

TECHNICAL SPECIFICATION

1. Sec Ref No : 1110D/ MPR
2. Part No. : 62202074AA
3. GIG No of Original Item : 1507250
4. Item Nomenclature : IFF INTERROGATOR
5. Major Assembly : IFF
6. Sub Assembly : Existing IFF Interrogator (Model TSA2545)
Manufactured by M/s THALES, France consists of following sub assemblies:
(a) Interface Source Driver and Amplifier (ISDA2)
(b) Dual Interrogator Receiver (DIR-HF)
(c) IFF and AOA interrogator Processing (IAIP2)
(d) Processor Bus Interface (PBI3)
(e) Power Supply Unit (PSU 5V)
(f) Power Supply Unit (PSU 50V)
7. **Technical Specification:**
Mode of operation: Mode 1, 2, 3/A, C, 4 & Mode 5 (level 1) Mode S Inter mode/All call
Interface : Ethernet, RS422/232 discrete interfaces^{SA}
Carrier frequency: 1030 MHz
Input power supply: 28V DC MIL STD-704A
Power consumption: 130 W max
Duty cycle : 1%
Transmission Power: 500W max
Max altitude : 50000 ft
8. **Environment Specification:-**
(a) Operating Temperature, humidity and altitude limits. : -40° to +70°C
(b) Humidity : < 90 %
9. **Test Schedule for FT and Product Acceptance:**
(a) Functional Testing : MPR Lab, Radar PW, 13BRD
(b) Field trial and endurance Test : MPR Unit
10. **Application Standards / Product Specifications:** MIL-STD 810E MIL STD-461/462 for Environment & BIT/BITE support
11. **Documentation:-**
(a) Circuit Diagram: N/A


- (b) Technical Description & illustrations: Attached
- (c) Layout Diagram: Attached
- (d) User Manual: N/A
- (e) Maintenance Manual: N/A
- (f) Parts Catalogue, etc: Attached

* **Note:** Due to limited technical details provided by OEM , indigenised module to be developed on black box concept as per sample provided and all the technical details needs to be verified from the original sample.

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