

**GOVERNMENT OF INDIA  
MINISTRY OF DEFENCE  
RESEARCH AND DEVELOPMENT ORGANISATION  
DIRECTORATE OF AERONAUTICS(R&D)**

**TYPE APPROVAL No. : 643**

ISSUED TO : M/s HINDUSTAN AERONAUTICS LIMITED  
BALANAGAR, HYDERABAD-500 042


FOR : TRANSPONDER IFF-405A, TYPE N 142190

CO-ORDINATED BY : RCMA (HYDERABAD)

This is to certify that the subject item designed and developed by M/s Hindustan Aeronautics Limited, Hyderabad has been tested according to the Specification V142190TS and tests stipulated by the Directorate of Aeronautics and referred to in enclosed Type Record (vide No. CRE (HD)/764 dated 28th September, 1991), and meets the requirements of the Specifications/tests subject to limitations detailed in Type Record:-

2. The approval Sl. No. quoted above must be reflected on all relevant drawings, contracts and release notes.
3. This approval is contingent upon the quality control aspects of bulk production being cleared by DTD&P (Air), Ministry of Defence, New Delhi.
4. Prior agreement of Directorate of Aeronautics will have to be obtained if this approval is to be transferred to any other agency or if changes within the Type Record enclosed are effected.
5. This approval is further contingent upon the requirement of repeat type tests, if warranted by change of materials/components, design/production standard and change of environmental/ functional specifications.

Encl : Type Record  
No. : AERO/RD-128/100/18/2  
Date : 14th Nov. 1991

  
(K. SRINIVASA)  
Director of Aeronautics