EVALUATION AND APPROVAL OF FLIGHT INSPECTION OF RADIO NAVIGATIONAL AIDS

1.0 PURPOSE

This Order is issued to provide guidance and information to CNS Inspectors to evaluate and verify whether Flight Inspection of Radio Navigation Aids meet the Air Navigation Regulations requirements.

2.0 REFERENCES

2.1 Regulations 35 of ANS Regulations

2.2 Advisory Circular No…. CAA-AC-CNS, Flight inspection of Radio Navigation Aids

3.0 GUIDANCE AND PROCEDURES

3.1 Introduction

Flight Inspection of Radio Navigation aids involves flight evaluation and certification of the signal-in-space. The evaluation process utilizes specially equipped instrumented aircraft, which carries out specific flight maneuvers. Data acquired thus on the quality of signal in space, is analyzed to arrive at the specific performance Parameters. These parameters, in turn, determine the certification of facility status. Flight inspection is mandatory as per ANS Regulations and ICAO Doc 8071.

3.2 Evaluation procedures

3.2.1 CNS inspector shall evaluate procedures and approve flight inspection of the air navigation aids to verify whether applicant conform to the guidance given in advisory circular no… and in ICAO Doc 8071, Manual on Testing of Radio Navigation Aids.

3.2.2 Evaluation procedures include:

(a) Checking of flight inspection plan

(b) evidence that the flight calibration airborne equipment can measure the parameters required for the navigation aid being inspected
(c) Checking of Pre-Flight Inspection Preparations to ensure that the flight inspection will be efficiently conducted as stated below:
   i  ground calibration parameters
   ii Reliability of ground equipment (NAVAIDS)
   iii Availability of dedicated transport for test equipment and personnel
   iv special tools and instruments
   v  Availability of last flight inspection report.

(d) Checking frequency of periodic flight inspections
   i  schedule for flight inspection

(e) Adherence to the Flight inspections classification and ensure that they are carried out accordingly

(f) Ensuring that the competent maintenance personnel is available and appropriate for the flight inspection of the facility

(g) Checking that the Aircraft used for the purpose of the flight inspection is:
   i  Capable of safely flying the flight calibration profile
   ii Operated under a certificate acceptable to the Authority
   iii Compatible with calibration equipment and
   iv  Adequately crewed (both flight crew and equipment engineer/operator) to conduct the inspection safely.

3.2.3 Results. Upon completion of the review, analyse the results and determine whether the flight inspection of the navaids meet all requirements. If problems exist, discuss the discrepancies with the ANS provider and advise them as to what areas need corrective action. This should be followed by a written notification.

Civil Aviation Authority