



GOVERNMENT OF INDIA  
**OFFICE OF DIRECTOR GENERAL OF CIVIL AVIATION**  
TECHNICAL CENTRE, OPP SAFDARJANG AIRPORT, NEW DELHI

**CIVIL AVIATION REQUIREMENTS**  
**SECTION 9 – AIR SPACE AND**  
**AIR TRAFFIC MANAGEMENT**  
**SERIES 'D', PART I**  
**ISSUE II, 8<sup>th</sup> January 2010**

**EFFECTIVE: FORTHWITH**

**F. No. 9/38/2009-IR**

Subject: Requirements of Maintenance/ inspection of Communication, Navigation, Landing and other equipment installed at Airports and en-route.

1. **APPLICABILITY:**

This part of the Civil Aviation Requirements lays down the requirements of maintenance, inspection or Communications, Navigation, Landing and other equipment installed at airports and enroute and used for aircraft operations. These equipment may be owned and operated by Airports Authority of India, Meteorological Department or any other agency.

This CAR is issued under Section 5A of the Aircraft Act 1934 and Rule 133A of the Aircraft Rules 1937 for compliance by all concerned agencies.

This CAR is issued in supersession of CAR Section 4 Series X Part I, Issue I dated 4<sup>th</sup> February 1994.

2. **SCOPE:**

The requirements stipulated in this Civil Aviation Requirement will apply to all Communication, Navigation and landing facilities including the following:

1. Visual Landing Aids-VASI/PAPI etc.,
2. Approach lighting
3. Non-Directional Beacon

4. VHF Direction Finding System
  5. Locator Beacon
  6. Instrument landing System
  7. Microwave landing System
  8. VOR/ T-VOR Doppler VOR
  9. Distance Measuring System
  10. Communication Facilities like VHF and HF Radio Telephone, AFTN, Satellite based Voice and Data Communication System, Direct Speech Circuits, VHF Data Links etc.
  11. Airport Surveillance Radar
  12. Air Route Surveillance Radar
  13. SSR and MSSR
  14. Airport Surface Detection Equipment
  15. Computer based ATC - ADS etc
  16. Airport Recorder and Replay System
  17. Differential GPS system and connected equipment
  18. RVR Measuring equipment
  19. Meteorological equipment
3. **MAINTENANCE:**
- 3.1 Maintenance Schedule
- The operator shall prepare maintenance schedules for periodic preventive maintenance, including testing, functional checks and serviceability of the equipment. These maintenance schedules shall be prepared in accordance with the guidelines provided by the manufacturers of the equipment. The schedules should also indicate the level of officer who can carry out the check/ inspection and the periodicity of the schedules A copy each of these schedules should be submitted to the DGCA. DGCA may introduce additional checks if required.
- 3.2 Test Equipment
- The operator shall ensure that all tools/ test equipment are available for carrying out the maintenance/checks of the facility and also adequate spares to ensure continued serviceability of the facility.
- 3.3 Calibration of Test Equipment
- The operator shall ensure that all the test equipment used for maintenance and periodical checks of the facilities are kept properly calibrated and certified by recognized standards institutions
- 3.4 Maintenance Records

All records of daily and periodical maintenance schedules (preventive as well as corrective) shall be preserved for a period of not less than two years. However, DGCA may direct preservation of such schedules for longer periods, if required.

3.5 Defect and Rectification Register:

The operator shall maintain a Register giving details of all the defects and rectification actions taken, duly signed by the officer in charge of the facility.

3.6 Maintenance Personnel:

All personnel entrusted with the maintenance/checks of a facility should have undergone necessary training. They should undergo periodical on-the-job checks at least once in a year and refresher course at least once in three years.

3.7 Responsibility of Officer in Charge.

The officer in charge of the facility shall be responsible for continued, maintenance and safe operation of facility.

4. **STATUS OF EQUIPMENT AFTER AN ACCIDENT/INCIDENT:**

In case an aircraft is involved In an accident while making use of a facility, the concerned unit of the facility shall be withdrawn and flight inspected immediately. The unit shall not be declared operational till checked and tested thoroughly and its performance IS found satisfactory. The standby unit of the facility shall be utilized during this period In case of an incident, DGCA may require the concerned unit of the facility to be withdrawn for checking.

4.1 In respect of a facility that is or might have been involved in an air accident/ incident, operational status data shall be recorded for both main and standby equipment of the facility.

4.2 In order to ensure that operational data of a facility is not misinterpreted the operator shall ensure that the data entries are complete, clear, concise, accurate and correctly timed.

5. **SELF INSPECTION:**

The operator shall draw a programme for periodically inspecting and checking the functioning of the facility. The operator shall ensure that the functional and calibration checks of the facility required as per the ICAO

norms are carried out and proper records of the same are maintained The operator, should ensure that the facility IS used for operations only when It is fit for operation

**6. INSPECTION BY DGCA:**

Any officer designated/nominated by the Director General of Civil Aviation shall be empowered to inspect at any time any facility to check. The serviceability and maintenance records and procedures

**7. CERTIFICATION:**


Any new equipment or system procured and installed, by the operator for providing facility as listed above, shall be declared operational only after it is found fit for operation on satisfactory completion of the necessary inspection/checks and calibration from air and ground as required and after obtaining concurrence of the DGCA for the same.

**8. LOGISTIC SUPPORT:**

In order to ensure that the maintenance of a facility is not delayed for lack of spares. The stock of spare units, modules, PCBs and components etc. shall be maintained at the site of facility or at a place from where the required spares can be transported to the site without any avoidable delay. The storage facility shall be subject to inspection at any time by an officer designated by DGCA for this purpose,

**9. MONITORING OF SERVICEABILITY STATUS:**

The performance of the equipment should be monitored regularly. The operator shall prepare a quarterly report on Mean Time Between Failures (MTBF) of a facility and the same shall be made available to DGCA. If an equipment becomes unserviceable for more than one week, the same should be reported to DGCA along with the details of the defect and proposed rectification action.

  
(Dr. Nasim Zaidi)  
Director General of Civil Aviation