

NEPALESE CIVIL AIRWORTHINESS REQUIREMENTS

SECTION C

MAINTENANCE REQUIREMENTS

CHAPTER C.13

ISSUE 1
FEBRUARY 1983

RADIO STATIONS

1. GENERAL

- 1.1 An airborne radio station comprises all airborne equipment for communication of navigation carried on the aircraft and includes radio and radar equipments, associated permanent wiring, fuses, circuit breakers, connectors and aerials.
- 1.2 This chapter prescribes minimum standards for the installation, inspection, testing and repair of airborne radio station.
- 1.3 The items of an airborne radio station comprise aircraft components as defined in these Requirements and are therefore subject to all requirements pertaining to the maintenance of components. The maintenance of radio equipment and systems shall be specified in the approved Maintenance Schedule for the aircraft and all minor maintenance performed on the radio station shall be recorded and certified in the aircraft logbook or Technical (Flight) Log.

2. INSTALLATION REQUIREMENT

- 2.1 Airborne radio station equipments and systems which are listed in the Type Certificate Data Sheets are automatically approved by the issue of a Nepalese Type Certificate. Any subsequent alternations, such as the deletion or addition of particular equipments or systems comprise modifications and are subject to the requirements of chapter C.5.
- 2.2 Any radio equipment installed additional to, or in lieu of, the radio equipment listed in the Type Certificate Data Sheet must conform to approved design requirements. The following requirements are hereby approved by the Director General:
 - a) Section R, Sub section R.3 or British Civil Airworthiness Requirements.
 - b) Part 37, "Technical Standard Order Authorizations", of the Federal Aviation Regulations of the United States of America.
 - c) "Minimum Operational Characteristics" of the Radio Technical Commission for Aeronautics, United States of America.
 - d) Air Navigation Order 103.21 "Equipment Standards Radio Communication and Navigation Equipment", Department of Transport, Australia.

- 2.3 The Director General may approve radio equipment designed to standards other than these listed in 2.2. An applicant for approval of such equipment must submit a detailed design specification with his application.
- 2.4 Any additional radio equipment installed in an aircraft must be installed in accordance with Chapters R4-2, R4-3, R4-4, and R4-5 of British Civil Airworthiness Requirements or other equivalent requirements approved by the Director General.
- 2.5 Each airborne radio station is required to be licensed. The Ministry of Communication approves the frequencies at which the station may operate and the Department of Civil Aviation issue the licence. As required by the Convention and by Chapter E.1 of these Requirements, the Mobile Radio Station Licence as given in Form C.13.1 of Appendix-1 of this Chapter must be carried on the aircraft.

3. RADIO MAINTENANCE REQUIREMENTS

- 3.1 The Maintenance Schedule for the aircraft in which the radio station is installed shall specify for each radio equipment or system the periodic maintenance to be performed. If the equipment or system is to be maintained "On Condition" the Maintenance Schedule shall specify the intervals between the tests required to establish the condition, and the type of tests to be made. The maintenance circumstance in which components should be overhauled or bench tested.
- 3.2 Minor maintenance included in the Maintenance Schedule should normally include the following:
 - a) Communication transceivers, including associated wiring, fuses, circuit breakers, connectors and aerials:

Inspect for security and satisfactory operation, including AGC (automatic gain control), squelch, modulation and VSWR (voltage standing wave ratio) prior to renewal of Certificate of Airworthiness i.e. every 12 months.
 - b) Radio navigation systems, including radio and radar equipment, associated wiring, fuses, circuit breakers, connectors and aerials:

Inspect for security and satisfactory operation (using appropriate test equipment) at intervals not exceeding 100 hours time in service or 3 months, whichever is the lesser.
 - c) Automatic direction finding (ADF) installations requiring periodic swings:

Check swing whenever the loop aerial is changed, whenever the magnetic compass receives a non routine swing (after a lightning strike, engine change, etc.) and prior to renewal of the Certificate of Airworthiness.

- 3.3 Major maintenance included in the Maintenance Schedules should normally include the following:

Removal of all mandatory equipments every 2 years unless otherwise specified by the manufacturer for bench testing and rectification of any measured degradation of performance.

- 3.4 Every airborne radio station shall be maintained in such a manner that no harmful interference is caused to other systems of the aircraft or to any other radio station. In this context harmful interference means any emission, radiation or induction which degrades, obstructs or repeatedly interrupts a radio-communication or radio navigation service.

4. **RECORDING AND CERTIFICATION**

- 4.1 The removal or installation of any radio or radar equipment shall be recorded and certified in the aircraft logbook.
- 4.2 Minor maintenance of radio stations may be recorded and certified in either the Technical (Flight) Log or the aircraft Logbook as prescribed in Chapters E.6 and E.7.
- 4.3 Major maintenance of radio or radar equipments may be recorded in the aircraft logbook if the equipments are to be replaced in the same aircraft, otherwise it shall be recorded on appropriate work sheets and a label identifying the relevant work sheets be attached to each equipment.

Civil Aviation Authority of Nepal.

File No.		Serial No.			
<p>CIVIL AVIATION AUTHORITY OF NEPAL</p> <p>MOBILE RADIO STATION LICENCE</p>					
<p>This Licence has been issued to operate Mobile Radio Station on board Nepalese registered aircraft according to aeronautical usages. Any change in equipment should immediately be notified to this office.</p>					
<p>..... Date of issue</p>		<p>..... For the Director General</p>			
RENEWAL & EXTENSIONS					
From	To	Signature	From	To	Signature

