



GOVERNMENT OF INDIA
OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION
TECHNICAL CENTRE, OPP. SAFDARJUNG AIRPORT, NEW DELHI -110 003

CIVIL AVIATION REQUIREMENTS
SECTION 2 - AIRWORTHINESS
SERIES 'M', PART I
01 SEPTEMBER 2009

EFFECTIVE: FORTHWITH

SUBJECT: AIRWORTHINESS DIRECTIVES.

1. APPLICABILITY

Aircraft Rule 49-D provides for incorporation of modification in aircraft and/or accessories for continued validity of Type Certificate. Rule 50A requires modifications/ inspections to be carried out in aircraft/accessories in the interest of safety as a condition of the Certificate of Airworthiness of Aircraft remaining in force. Rule 52 lays down the acceptable standard for modification/repair and form and manner of distribution of the compliance certificate for the same and preservation thereof. Modifications are usually issued in the form of Airworthiness Directives. This CAR prescribes the requirements for compliance with Airworthiness Directives.

2. DEFINITION

Airworthiness Directive: An airworthiness directive means a document issued or adopted by DGCA which mandates actions to be performed on an aircraft to restore it to an acceptable level of safety, when evidence shows that the safety level of this aircraft might otherwise be compromised.

The purpose of Airworthiness Directive is to notify aircraft owners/ operators of unsafe and other conditions affecting the airworthiness of their aircraft and/ or accessories. The instructions to comply with ADs prescribe the mandatory actions required for the continued safe operation of the aircraft.

3. REQUIREMENTS

3.1 Airworthiness Directives are promulgated by the regulatory authority of the State of Design/ Manufacture of an aircraft, aircraft component and item of equipment to maintain the continued airworthiness of the product. These are issued after some service defects are noticed and also after continued testing of the product which may reveal any deficiency. The concerned manufacturers bring the defects as well as the deficiencies in an aircraft, aircraft component or item of equipment to the notice of the regulatory authority. The regulatory authorities carry out an analysis of the defects and in turn issue the ADs, which are to be complied with within the stipulated period to maintain product in airworthy condition.

3.2 Documents relating to continued airworthiness of aircraft

3.2.1 Manufacturers of aeronautical products generally issue technical information on the proposed changes to their products in the form of Service Bulletins, Service Instructions, Service Letters or other literature to the operators. However, these Service Bulletins/Instructions do not automatically become mandatory. Each operator is expected to review all such information received from the manufacturers and based on airworthiness effects of such information on improving safety of operations, incorporate the same. These may be for better performance of the product, to prevent recurrence of minor defects, improvement in the material or life development etc.

3.2.2 It is imperative that all operators/ Aircraft Maintenance Organizations (AMO) are in possession of updated Service Bulletins, Service Instructions, Service Letters and any other document relating to continued airworthiness of aircraft. Operators/AMOs shall be on the mailing list for receipt of amendments to the above documents from the manufacturers.

3.3 Compliance of Airworthiness Directives - Operators Responsibility

3.3.1 At the time of issue of C of A to a new type of aircraft imported into the country, the operator shall ensure that all Airworthiness Directives issued by the regulatory authority of the State of Design are complied with. A statement in this regard shall be submitted to DGCA. All repeat inspections mentioned in the Airworthiness Directives may form part of the maintenance programme.

3.3.2 Where India is not a 'State of Design', DGCA will declare such Airworthiness Directives as mandatory which affect the safety of aircraft operation. These will be notified to the operator in the form of ADs. The operator shall comply with the ADs declared mandatory by DGCA within the period specified by DGCA failing which the C of A shall be deemed to be suspended. The operator shall also comply

- with any revisions issued by regulatory authority of the State of Design or manufacture to the AD which are declared mandatory by DGCA.
- 3.3.3 Upon receipt of ADs from the State of Design, DGCA will declare the same mandatory after an assessment of the information contained therein. Operators shall get copies of such Airworthiness Directives, from the manufacturers or through the foreign airworthiness authorities as these are normally available on the respective websites.
- 3.3.4 Where India is a 'State of Design' of an aeronautical product, DGCA will issue Airworthiness Directives in accordance with CAR 21.3B upon examination of Service Bulletins issued by TC holder/ manufacturer to correct an unsafe condition that has been determined by DGCA to exist in an aircraft, as a result of a deficiency in the aircraft, or an engine, propeller, part or appliances installed on this aircraft; and that condition is likely to exist or develop in other aircraft. The operator will comply with the Airworthiness Directives issued by DGCA (AED) within the stipulated time failing which the C of A shall be deemed to be suspended.
- 3.3.5 For aeronautical products designed/ manufactured in India, DGCA shall transmit information, which it finds necessary, relating to continuing airworthiness and safe operation of aircraft to every State which have advised DGCA that they have entered such aircraft on their register and to any other State upon request.
- 3.3.6 All operators are required to evolve and implement a foolproof and timely system to ensure that any modification carried out on their aircraft is duly intimated to the manufacturer. The MOE/QC Manual should include the procedure for intimating the compliance of modifications to the manufacturer/ State of design.
- 3.3.7 Operators are required to submit to the Regional Airworthiness office a list of Airworthiness Directives complied with during the preceding one year at the time of Annual Review of Airworthiness or C of A renewal. They are also required to submit a consolidated list of ADs/ inspections item wise indicating their compliance status. Airworthiness Officers may ask for evidence of compliance of any directive declared mandatory.
- 3.4 DGCA shall intimate the State of design any information relating to continuing airworthiness of aircraft or operation of aircraft which it originates, approves and declares mandatory.
- 3.5 The Certificate of Airworthiness will not be renewed if it is observed that any AD due on the aircraft, aircraft component or item of equipment installed on the aircraft has not been complied with. Incorporation of an unapproved

modification to a type certificated product will also render the C of A invalid.

- 3.6 Normally a type certified product should not be altered or modified by the operator unless prior approval is obtained from DGCA. However, products can be modified in accordance with the manufacturers Service Bulletins or Instructions, provided the recommended material, spare parts and procedure as suggested therein are used and incorporation of said SB/ Modification is certified by licensed/ approved person or organization.
- 3.7 Notwithstanding the above, the owners/ operators shall visit DGCA website and the respective websites of the Airworthiness authorities of the State of Design/ manufacturer of the aircraft/ engine/propeller/ accessories and comply with any applicable ADs issued by these authorities.
- 3.8 For the purpose of issuance and continued validity of the Air Operating Permit, the operator shall demonstrate a system of complying with this CAR, including the procedure of receiving/ downloading mandatory continuing airworthiness information, its analysis, planning for compliance and maintenance of compliance records.
- 3.9 Any deviation in compliance of from the above will require prior approval of DGCA. In case of experiencing any difficulty in complying with any AD, the operator may apply for a concession with proper justification to the Regional Airworthiness Office.

Sd/
(RP Sahi)
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