Maintenance Repair Overhaul: An Insight of the Law

Introduction

The Indian aviation industry is one of the most dynamic industries that has witnessed an exponential growth over the last two decades. The key to this growth has been the liberalization of the Indian economy that led to the open skies policy. This policy brought about many private airlines competing for a market share, which until then was the exclusive domain of the national carriers. With increasing air traffic and airports, the Maintenance Repair Overhaul (**"MRO"**) became essential. There is huge demand to cater to the untapped MRO industry in India. In order to address and tap this lucrative opportunity, many foreign companies such as Boeing, Airbus, and Malaysian Airlines etc are some of the companies which have either set up an MRO facility or are in the process of identifying a local partner for the same. Additionally, various domestic companies are also forming joint ventures with the foreign companies to set up MRO facilities. For instance, MAS-GMR Aerospace Engineering Company Limited, a joint venture between Malaysian Aerospace Engineering and GMR Hyderabad to set up MRO facility at Hyderabad.

MRO is all set to develop as a mini-industry within the burgeoning aviation sector in India. This bulletin gives an insight about the primary regulatory procedures to be followed by Indian or foreign entity to establish MRO business in India.

1. Regulatory regime for MRO activities in India

The Directorate General of Civil Aviation (**"DGCA"**) is the nodal agency for MROs that has been formulated by the Government of India for civil aviation and it is responsible for regulation air transport services to and from India. The Civil Aviation Requirement (**"CAR"**) issued by the DGCA stipulates the general requirements, procedures and practices to be adhered to by an entity seeking DGCA approval for manufacture, maintenance, modification, repair, inspection, processing, testing, storage and distribution of civil aircraft, aircraft components, items of equipment, aircraft goods and training school.[1] The CAR has classified various heads for procurement of license. For the purpose of seeking approval the license categories are divided into various categories such as **(a)** Category A-for manufacture of aircraft/aircraft components; **(b)** Category B-for workshop process and inspection; **(c)** Category D- test laboratories; **(d)** Category E- fuel lubricants and special products; **(e)** Category F- stores and distribution; and **(f)** Category G- training schools. The Categories D and F have been deleted by the DGCA from the license category.

2. Procedure to be followed by entities seeking to engage in MRO activities

Any entity engaged or seeking to engage in the manufacture, maintenance, modification, repair, inspection, processing etc of aircraft and aircraft components has to

[1] CAR, Section 2-Airworthiness, Series E, Part I, Issue III issued by the DGCA on April 24th 1992

obtain a certificate of approval from DGCA. In order to obtain certificate of approval from DGCA, entity has to follow the following procedure:

2.1 Application and certificate of approval

An entity located within India has to submit Form CA-182 A to the concerned regional airworthiness office of the DGCA along with requisite fees and a statement of accountable manager (**"SAM"**)[2] signed by the Accountable Manager (**"AM"**), appointed by the entity, confirming that all the manuals prepared by such entity are in compliance with the DGCA regulations. An entity located outside India has to submit Form CA-182 C with the requisite fees and SAM signed by AM with the DGCA headquarters. Such entity located outside India needs to provide the details of approval obtained from its local airworthiness authorities along with their audit report and steps taken by them.

The entity seeking certificate of approval has to submit the engineering organization manual,[3] quality control cum assurance manual[4] and maintenance system manual[5] (**"Manuals"**) in triplicate with the form to DGCA. These Manuals should be in loose leaf bearing the page number, number of parts, and number of chapters or sections along with the date of issue. The Manuals should also provide a method for identifying the revisions/amendments done from the date of their issue. In case of any revisions/amendments in the Manuals, entities must submit an application along with copies of the revised manual to the DGCA.

Upon, the receipt of application form by the DGCA, such entity should make arrangement for DGCA representative to inspect their facility at all reasonable time. The inspection carried out by the DGCA would determine the adequacy of such facility, inspection of the records and the ability of entity to comply with the regulations. Once, the inspection has been done, and if any discrepancy has been noted by the DGCA, it shall be notified in writing to such entity. Upon the satisfactory inspection report of the DGCA, entities will be provided with the certificate of approval. The certificate of approval issued to the entities will specify the scope of approval.

2.2 Renewal of certificate of approval

The certificate of approval issued by the DGCA is valid for a year (up to December 31st of the year) in which it is issued. An Indian entity has to file Form CA 182B within thirty

[2] Appendix C of the CAR Series 'E', Part I, Issue III dated April 24, 1992 provides the draft of the statement which has to be signed by the AM

[3] This manual is not required to be approved by the DGCA but its content may influence the DGCA's decision concerning grant of approval. Clause 4.4.1(a) of the CAR Series 'E', Part I, Issue III dated April 24, 1992 mentions the content which has to be incorporated while preparing such manual

[4] This manual is required to be approved by the DGCA. Clause 4.4.1(b) of the CAR Series 'E', Part I, Issue III dated April 24, 1992 provides with the information that has to be mentioned while preparing such manual. However, the Quality Assurance Manual need not be approved by DGCA but the content of this manual shall be in accordance with the Appendix G of the CAR Series 'E', Part I, Issue III dated April 24, 1992

[5] This manual has to be approved by the Regional Airworthiness office in consultation with DGCA headquarters. Clause 4.4.1(c) of the CAR Series 'E', Part I, Issue III dated April 24, 1992 provides the information which needs to be mentioned for preparing such manual

(30) days prior to the date of the expiry of the certificate of approval to the regional airworthiness office of the DGCA along with the fee and statement signed by AM confirming that the entity has complied with these regulations. A foreign entity has to file Form CA 182D within thirty (30) days prior to the date of expiry of the approval with the DGCA headquarters. The Form CA 182D shall be submitted with the SAM signed by AM confirming that the entity has complied with these regulations and the last internal audit report prepared by their local airworthiness authorities.

In the event an entity wish to expand scope of its existing approval, it should make a fresh application to the concerned regional airworthiness office of the DGCA who on being satisfied that the extension applied for can be carried out in accordance with these regulations may extend the scope of approval.

2.3 Facility requirements

The DGCA has also prescribed the general facility requirements which the entities must comply in order to operate MRO activities. Some of the general facility requirements which the entities must adhere to are as follows: **(a)** There must be appropriate facility for carrying out the work and there should be no contamination of the work area; **(b)** There must be adequate office accommodation for the quality control department, inspection of office and technical records section; **(c)** There must be adequate office accommodation for the manufacture/maintenance facility for carrying out the activity in an effective manner; and **(d)** There must be adequate storage facility for storing equipment and material.

2.4 Personnel requirements

The CAR guideline also stipulates that the entity should also nominate an AM who shall have the necessary financial authority to ensure compliance of safety requirements.[6] It is expected that the AM appointed by the entity shall be vested with powers which he must undertake diligently.[7] The CAR guidelines also recommend that the entity must also appoint qualified personnel to act as Quality Control Manager (**"QCM"**) who shall be approved by the DGCA. The QCM shall ensure that the entity is in compliance with the CAR requirements and will be directly responsible to the AM. The certificate of approval of an entity will depend upon its capacity to undertake the job, availability of equipment and will commensurate with the qualification of QCM employed by such entity. The CAR stipulates that the qualification and experience of QCM will be examined by the DGCA. DGCA will satisfy itself about the suitability of QCM subjecting him to such examination as considered necessary.[8]

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[6] The AM appointed by the entities can be a Chief Executive/Managing Director/President/Vice President or any other person acceptable to the DGCA

[7] Clause 4.3.1 of the CAR Series 'E', Part I, Issue III dated April 24, 1992

[8] It is pertinent to note that the CAR guidelines are silent on the procedure for appointment of QCM.

2.5 Quality system

Once the certificate of approval has been granted by the DGCA, the approved entities must establish quality system to ensure good maintenance practices and compliance with the requirements specified in these guidelines. The approved entity must formulate a quality control cell and quality assurance mechanism to monitor the quality standards and good maintenance practice. The primary object of quality control cell is to monitor the product standards and to comply with the procedures, rules and instructions issued by DGCA from time to time to maintain good and efficient maintenance standards. The quality assurance unit shall be an independent body who shall have an overall authority for the supervision of quality standards. The quality assurance department shall have an internal audit system to monitor adherence to the maintenance program. Monitoring of maintenance programme can be done through spot checks and internal audit by the quality assurance team. The approved entities in addition to monitoring maintenance activities on a day to day basis shall also carry out in-house audit atleast twice a year within a minimum gap of four (4) months between each audit, covering the entire scope of approval granted by DGCA. A copy of the safety audit report along with remedial action taken by the QCM shall be reported to Regional/sub-regional offices at the earliest.

Conclusion

The advent of low-cost airlines, increase in the air traffic and fleet expansion in the Indian aviation sector has opened up a whole new business avenue for global as well as domestic aircraft companies in MRO. There has been a constant effort by the DGCA to amend the regulations and make them in consonance with the International regulatory regime which has led to a positive impact on developing India as the lucrative destination for MRO activities.

It is imperative that in order to sustain and facilitate the development of India as a MRO hub, the government shall strive to take various measures to increase and sustain the growth by: **(a)** providing tax breaks and incentives to the MRO companies; **(b)** reviewing the land policy and recommend a stipulation that airport planning must include some percentage of land allocation for carrying out MRO activities; and **(c)** continuously building training facilities to provide trained workforce for carrying out MRO activities.

Authored by:
Kartikay Sharma