# MEMORANDUM OF UNDERSTANDING ON **AIRWORTHINESS BETWEEN** DIRECTORATE GENERAL OF CIVIL AVIATION, INDIA AND AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL, BRAZIL FOR PROMOTION OF CIVIL AVIATION SAFETY

# MEMORANDUM OF UNDERSTANDING ON AIRWORTHINESS BETWEEN

# DIRECTORATE GENERAL OF CIVIL AVIATION, INDIA AND

# AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL, BRAZIL FOR PROMOTION OF AVIATION SAFETY

The Directorate General of Civil Aviation, India - DGCA, legally assigned as the Civil Aviation Authority in the Republic of India, and the Agência Nacional de Aviação Civil, Brazil - ANAC, legally assigned as the Civil Aviation Authority in the Federative Republic of Brazil, referred in this document, for convenience, as Authorities:

- considering the Annexes to the Convention on International Civil Aviation, as signed at Chicago on 7 December 1944, which has been signed by Federative Republic of Brazil and the Republic of India;
- desiring to promote aviation safety and environmental quality;
- noting common concerns for the safe operation of civil aircraft;
- recognizing the emerging trend toward multinational design, production, and interchange of aeronautical products;
- desiring to enhance cooperation and increase efficiency in matters relating to civil aviation safety;
- considering the possible reduction of the economic burden imposed on the aviation industry by redundant technical inspections, evaluations and testing; and
- recognizing the mutual benefit of improved procedures for the reciprocal acceptance of: airworthiness approvals, environmental testing or environmental approvals, flight simulator qualification evaluation, aircraft maintenance facilities, certification of maintenance personnel and crewmember and flight operations;

have reached the following understanding:





## ARTICLE I TERMS AND DEFINITIONS

The following definitions for terms are used in this Memorandum:

- "Airworthiness approval" means granting an airworthiness certificate, approval or acceptance, as appropriate, based on a finding that the design or change to a design of a aeronautical product meets requirements agreed between the Authorities or that a product conforms to a design that has been found to meet those requirements, and is in a condition for safe operation.
- 2. "Airworthiness requirements" means all the requirements governing the design, performance, materials, workmanship, manufacture or change of aeronautical products, as prescribed by the Importing Authority to enable it to find that the design, manufacture and conditions of these aeronautical product comply with its own laws, regulations and standards requirements of the Importing Authority concerning airworthiness. This includes airworthiness requirements, their interpretations and means of compliance.
- "Alterations and/or modifications" means making a change to the design, construction, configuration, performance, environmental characteristics, or operating limitations of the affected aeronautical product.
- 4. "Approval of flight operations" means the acceptance of an entity providing commercial air transportation of passengers or cargo by means of technical inspections and evaluations conducted by an Authority, using requirements agreed between the Authorities, or the finding that it complies with those requirements.
- 5. "Aeronautical product" means any civil aircraft, aircraft engine, propeller or appliance to be installed thereon, new or used.
- 6. "Appliance" means any instrument, equipment, mechanism, component, part, apparatus, appurtenance or accessory, including communications and avionics equipment that is used or intended to be used in operating or controlling an aircraft in flight and is installed in





or attached to the aircraft.

- "Crewmember" means a person assigned to perform duty in an aircraft during flight time.
- "Environmental approval" means a finding that an aeronautical product complies with requirements agreed between the Authorities concerning aircraft noise and/or exhaust emissions abatement of aircraft engine.
- 9. "Environmental testing" means a process by which an aeronautical product is evaluated for compliance with requirements applied by each Authority concerning aircraft noise and/or emissions abatement of aircraft engine, using procedures agreed between the Authorities.
- 10. "Environmental requirements" means all the requirements governing the design, performance, materials, workmanship, manufacture or change of aeronautical products, as prescribed by the Importing Authority to enable it to find that these aeronautical products comply with its own laws, regulations and standards requirements concerning aircraft noise and abatement of aircraft engine exhaust emissions. This includes environmental requirements, their interpretations and means of compliance.
- 11. "Exporting Authority" means the Authority of the State exporting an aeronautical product under the provisions of this Memorandum.
- 12. "Importing Authority" means the Authority of the State importing an aeronautical product under the provisions of this Memorandum.
- 13. "Flight simulator evaluations and qualification" means the process by which a flight simulator is assessed by comparison to the aircraft it simulates, in accordance with requirements agreed between the Authorities, or the finding that it complies with those requirements.
- 14. "Maintenance" means actions to ensure the airworthiness of an aeronautical product.
- 15. "Monitoring" means the periodic surveillance by an Authority to



determine continuing compliance with the appropriate requirements.

- 16. "Design" means the description of all characteristics of an aeronautical product, including its design, manufacture, airworthiness limitations and instructions for continued airworthiness, which determine its airworthiness and environmental characteristics. When the design is referred only to aircraft, aircraft engine or propeller, "Type Design" is used in place of "Design".
- 17. "Design approval" means the certification, approval or acceptance of the design of an aeronautical product, by or on behalf of an Authority. When the design approval is referred only to aircraft, aircraft engine or propeller, "Type design or Supplemental Type design approval" is used in place of "Design approval".

# ARTICLE II PURPOSE OF THIS MEMORANDUM

#### The Authorities agree:

- To facilitate acceptance by each Authority of the other Authority's airworthiness approvals and environmental testing and approval of aeronautical products for which the Exporting Authority is the authority of the organization responsible for the type design;
- To facilitate acceptance by each Authority of the other Authority's of the approvals and monitoring of:
  - a) Maintenance facilities and alteration and/or modification facilities;
  - b) Maintenance personnel;
  - c) Crewmember;
  - d) Flight operations;
  - e) Evaluation and qualification of flight simulators; and
  - f) Aviation training establishments;
- To provide for cooperation in sustaining an equivalent level of safety and environmental objectives with respect to aviation safety;
- To provide for cooperation and assistance on continuing airworthiness of in-service aeronautical products;



- To provide for cooperation, assistance and exchange of information regarding safety and environmental laws, regulations, standards requirements and certification systems; and
- To provide for cooperation in providing technical evaluations and assistance.

# ARTICLE III TECHNICAL ASSESSMENT AND COOPERATION

- The Authorities shall conduct technical assessments and work cooperatively to develop an understanding of each other's laws, regulations and standards requirements and systems in the following areas, but not restricted to:
  - a) Airworthiness approvals of aeronautical products;
  - b) Environmental approval and environmental testing;
  - Approval and monitoring of maintenance facilities and maintenance personnel and crewmember;
  - d) Evaluation and qualification of flight simulators; and
  - e) Approval and monitoring of aviation maintenance training establishments.
- When the Authorities in face of the laws, regulations, requirements, and systems of both Authorities, in one of the technical specialties listed in the first paragraph of this Article, have understood that they considered acceptable to permit the reciprocal recognition of compliance by one Authority by the other Authority to the agreed-upon requirements, the Authorities shall execute written Implementation Procedures describing the methods by which such reciprocal acceptance shall be made with respect to that technical specialty.
- 3. The Implementation Procedure will include at a minimum, as appropriate:
  - a) Definitions;
  - b) A description of the scope of the particular area of civil aviation to be addressed:
  - c) Provisions for reciprocal acceptance of the each Authority actions



such as test witnessing, inspections, qualifications, approvals, and certifications:

- d) Accountabilities;
- e) Provisions for mutual cooperation and technical assistance;
- f) Provisions for periodic evaluations of the working relationship between the Authorities; and
- g) Signature by representatives of both Authorities competent for the scope of the particular area of civil aviation to be addressed by the Implementation Procedure.

#### ARTICLE IV EXPENSE

According to each national legislation, government budget shall not be considered to cover any approval activities agreed upon this Memorandum by both Authorities. However, expenses to cover the approval process shall be borne by the applicant in accordance with the Authority's national legislation.

# ARTICLE V TECHNICAL INTERPRETATION

In the case of conflicting interpretations of the airworthiness or environmental requirements or design-related operational requirements prescribed by the Importing Authority, pertaining to certifications, approvals or acceptances under this Memorandum, and after having exhaustively discussed all technical subjects, the interpretation of the Importing Authority shall prevail.

#### ARTICLE VI LANGUAGE

Correspondence and documentation will be prepared and submitted in the English language unless otherwise specified by the Authorities by mutual agreement.



### ARTICLE VII DISPUTE RESOLUTION

Any disagreement regarding the interpretation or application of this Memorandum or of any of its Implementation Procedures will be resolved by consultation between the concerned Directors failing which the disagreement will be referred to the Director General of Civil Aviation/Director-President for final resolution.

## ARTICLE VIII IMPLEMENTATION

The Memorandum of Understanding shall be implemented in accordance with procedures and conditions agreed by the Authorities and set out by their respective branches in Implementation Procedures and/or specific Arrangements. The procedures and conditions shall be within the basis and scope of the Memorandum and according Article III of this document.

## ARTICLE IX AMENDMENT

This Memorandum of Understanding on Airworthiness may be amended through an exchange of official letters by Authorities.

## ARTICLE X ENTER IN FORCE

This Memorandum of Understanding on Airworthiness, or any amendment to its text, shall go into effect upon the date of signature by both Authorities and shall remain in force until revised by mutual agreement of the two Authorities or terminated by one of the Authority. Such termination shall be effected by sixty days written notification to the other Authority. Such termination will also act to terminate all existing Implementation Procedures and/or specific Arrangements executed in accordance with this Memorandum of Understanding.

However, each Authority shall continue to perform the obligations stated in the Implementation Procedures and/or specific Arrangements, concerning continued airworthiness, for as long as any aeronautical product imported



under this Memorandum is operated in the country of the Importing Authority.

The undersigned, being the National Civil Aviation Authorities of India and Brazil, have signed the present Memorandum, done in duplicate in English and Portuguese. In case of divergence of interpretation the English version shall prevail.

FOR DIRECTORATE GENERAL OF CIVIL AVIATION INDIA

FOR AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL BRAZIL

Original Signed by

Original Signed by

E. K. Bharat Bhushan Director General of Civil Aviation C. E. Magalhães da S. Pellegrino Director-President, Interim

Date of signature: 13 6 2011

Date of signature: 23/04/ 2011