CIVIL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENTS

PART C - CERTIFICATE OF APPROVAL - ORGANISATIONS AND INDIVIDUALS

CHAPTER C.1	CERTIFICATE OF APPROVAL - GENERAL

1. GENERAL

1.1 This Order prescribes the general conditions applicable for grant of Certificate of Approval to a person or organisation as provided under the Rule 190 of the Civil Aviation Rules 1984.

2. DEFINITIONS

2.1 For the purpose of this Order, the definitions as mentioned under the Rule 2, 183 and 234 of the Civil Aviation Rules, 1984 shall apply. Where a particular definition is not given under the rules, the under mentioned definitions shall apply:

(a) **"Organisation Exposition''** means a document endorsed by the head of the Organisation which details the parent company's brief description, structure, information on paid-up capital, name of the Chief Executive of the Organisation and Directors/ Senior Executives of the Organisation including their responsibilities (i.e. Administrative, Financial, Engineering etc.).

(b) "**Maintenance"** means the performance of tasks required to ensure the continuing airworthiness of an aircraft or components, including any one or combination of overhaul, inspection, replacement, defect rectification and the embodiment of a modification or repair.

(c) "**Maintenance procedures manual (MPM)"** means a document endorsed by the head of the maintenance Organisation which details the maintenance Organisation's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems.

3. REQUIREMENTS

3.1 The Chairman may grant a Certificate of Approval to an organisation or where applicable to person(s) for the purpose of Maintenance of aircraft and /or components, Training of aircraft maintenance personnel, Processing of aeronautical products, Non-destructive testing, Storing and distribution of aircraft spares and for Welding of parts meant for installation on aircraft, provided that the Civil Aviation Rules 1984 or these Air Navigation Orders:

(a) Require approval for the particular purpose; and

(b) Provide for a particular privilege to be granted by way of approval.

3.2 The Chairman may issue a Certificate of Approval to an individual if he is satisfied that the person can provide a level of work and quality control equivalent to that of an approved organisation; i.e., all requirements that apply to an approved organisation shall also apply to an individual.

3.3 A Certificate of Approval shall remain valid until it is surrendered, suspended, or cancelled.

3.4 The holder of a Certificate of Approval that is suspended or cancelled shall forward it to the Chairman, CAAB immediately upon such notification.

4. APPLICATION FOR APPROVAL

4.1 Application for issue of a Certificate of Approval shall be made to the Chairman and shall be accompanied with the prescribed fees.

4.2 Along with the application, the applicant shall submit 1 (one) draft copy of the Organisation Exposition.

4.3 Additionally, the applicant shall submit 1 (one) draft copy of the appropriate Maintenance Procedures Manual (MPM) applicable for the specific Organisation i.e. Maintenance Organisation, Training Organisation, Supply and Stores Organisation etc. and will arrange for inspections or interviews required to verify the applicants ability to comply with the applicable requirements and competency to perform the tasks for which approval is requested.

4.4 Detailed contents of the MPM for an aircraft maintenance organisation is laid down in the ANO (AW) C.2 and for other Organisations in the applicable ANOs in the Part C titled **Certificate of Approval – Organisations and individuals.**

5. CONTENTS OF THE ORGANISATION EXPOSITION

5.1 The following information shall be included in the Organisation Exposition, which may be prepared as a separate manual or may be part of the Maintenance Procedures Manual:

(a) Name of the parent company/business group.

(b) Address of the parent company.

(c) Brief description of the company (Joint stock company or Multi/Single person owned company etc.).

(d) Paid-up capital/Capital.

(e) Name of the Directors of the parent company (Group of companies) or the Owner(s) as applicable.

(f) Chief Executive of the Organisation (for which approval of the Chairman is sought) nominated by the Board of Directors.

(g) Name of the senior member of the Organisation nominated by the Board of Directors, who shall be responsible for liaison with the CAAB (AELD).

(h) Name and duties of the executives of the Organisation (for which approval of the Chairman is sought) other than the Technical executives i.e. Administrative, Financial, Registrar, Controller of examination etc.

6. PRESENTATION OF ORGANISATION EXPOSITION

6.1 The Organisation Exposition shall be submitted in 3 (three) rings binder (height of the binder not exceeding 12.25 inch and of appropriate thickness).

6.2 Title of the document (e.g. Organisation Exposition) and Name of the Operator (e.g. XYZ Airlines as appropriate) shall be mentioned on the front face and the Spine side of Organisation Exposition.

6.3 Pages of the Organisation Exposition should be printed on thick paper, preferably having thickness of 100 GSM or above to reduce possibility of tearing from the binder during frequent reference and handling.

6.4 Divider pages in between each Chapters or Sections are to be placed.

7. CONDITIONS FOR APPROVAL

7.1 The Chief Executive (CEO) of the organisation shall be nominated by the Board of Directors or the Owner(s).

7.2 A senior member of the organisation shall be nominated by the Board of Directors/Owner(s) or by the CEO, who shall be responsible for the control of all airworthiness matters, co-ordination within the organisation and for liaison with the CAAB.

7.3 Except where the person nominated in compliance with paragraph 7.2 of this Order is the Chief Executive, that person shall be directly responsible to the Chief Executive for all airworthiness matters, and for ensuring compliance with relevant Civil Aviation Rules and these Orders, the terms and conditions of the Certificate of Approval, and the policies and procedures approved in the applicable Organisation Exposition (s).

7.4 There shall be a sufficient number of appropriately qualified staff to undertake the volume and scope of work proposed, and the applicant shall have determined the competence of such staff on the basis of academic qualifications, licences, Certificates and approvals held, employment records, and/or written, oral or practical examinations.

7.5 The Organisation Exposition submitted in compliance with this Order shall be issued under the signature of the Chief Executive and shall provide an identification of amendments or listing of effective pages. The compliance check list as shown in the Appendix - 1 of this Order shall be submitted along with the copy of the Exposition.

7.6 The approved Organisation Exposition shall clearly define the responsibilities of key personnel and divisions, and specify the provisions for back up personnel in the event of key personnel being unavailable, or, if provision for the latter is not made, the approved manual shall specify all functions which cease in that person's absence.

7.7 The company shall possess current copies of the Civil Aviation Rules and Air Navigation Orders, and subscribe to the amendment service for Air Navigation Orders.

7.8 The Chairman may vary the conditions for approval contained in this Section or in other Orders in this Chapter if he considers that an equivalent level of airworthiness control is provided by alternative means.

8. GRANT OF APPROVAL

8.1 Approval will be granted when the Chairman is satisfied that:

(a) The applicant can satisfactorily perform the activities to which the application relates.

(b) The conditions for approval contained in this and other applicable Orders are complied with.

(c) The submitted Organisation Exposition complies with all applicable requirements and provides for adequate control of airworthiness related activities.

8.2 Approval will be granted by issue of a Certificate of Approval and a Schedule of Conditions, which together will comprise the Certificate of Approval referred to in Rule 190 of CAR 1984.

8.3 The Certificate of Approval will specify the purpose or purposes for which approval is granted, and the Schedule of Conditions will prescribe the scope and limitations and other information relating to the approval.

8.4 The Certificate of Approval shall be displayed in a prominent position at the engineering headquarters of the approved company.

8.5 The Schedule of Conditions need not be displayed, but shall be a part of the approved manual.

9. NOTIFICATION OF CHANGES

9.1 The Chairman shall be notified of any proposed changes which would affect the Certificate of Approval, Schedule of Conditions, or premises or persons nominated in the manual.

9.2 Changes such as those detailed in paragraph 9.1 of this Order shall not be made until the amended Certificate or Schedule has been issued, or, in the case of changes to premises or nominated persons, the Chairman has notified the company that the changes are acceptable, and until the approved manual has been amended accordingly.

9.3 In the event of a company ceasing to perform the type of work for which it is approved, the Chairman shall be informed, and the Certificate of Approval and Schedule of Conditions shall be returned to the Chairman for cancellation.

9.4 The Chairman shall approve each amendment to an approved Organisation Exposition before it comes into effect.

9.5 An approved company shall make such amendments to approved Organisation Exposition as the Chairman may require.

10. CONTINUATION OF APPROVAL

10.1 An approved company shall comply with the limitations and conditions of its Certificate of Approval and associated Schedule of Conditions.

10.2 An approved company shall be maintained at the standard necessary to undertake the work for which it is approved.

10.3 Current copies of the approved Organisation Exposition and Schedule of Conditions shall be made available to all staff concerned for their implementation.

10.4 An approved company shall, at all reasonable times, permit all premises, products and records relevant to airworthiness to be inspected by an authorised representative of the Chairman to determine whether the limitations, conditions and requirements relating to the grant or continuance of approval are being complied with.

The ANO is issued in pursuance of the Rules 4 and 190 of the Civil Aviations Rules 1984, is a complete re-issue and supersedes the issue 1, dated 1 August 1990.

Air Cdre Sakeb Iqbal Khan Majlis, ndu, psc
Chairman
Civil Aviation Authority, Bangladesh

COMPLIANCE CHECK LIST

CONTENTS OF THE ORGANISATION EXPOSITION

Note: (1) Column no. 3 shall be filled in by the Head of the Quality Assurance /Control department of the Operator/Organisation and shall be forwarded along with forwarding letter and draft copy of the Organisation Exposition.

(2) Column no. 4 is for use by the assessing officer of the CAAB.

(1) Sl. No.	(2) Description	(3) Related section and page no. of the Exposition	(4) Remarks
The following information shall be included in the Organisation Exposition, which may be prepared as a separate manual or may be part of the Maintenance Procedures Manual:			
1.	Name of the parent company/business group.		
2.	Address of the parent company.		
3.	Brief description of the company (Joint stock company or Multi/Single person owned company etc.).		
4.	Paid-up capital/Capital.		
5.	Name of the Directors of the parent company (Group of companies) or the Owner(s) as applicable.		
6.	Chief Executive of the Organisation (for which approval of the Chairman is sought) nominated by the Board of Directors.		
7.	Name of the senior member of the Organisation nominated by the Board of Directors, who shall be responsible for liaison with the CAAB (AELD).		
8.	Name and duties of the executives of the Organisation (for which approval of the Chairman is sought) other than the Technical executives i.e. Administrative, Financial, Registrar, Controller of examination etc.		

CIVIL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENTS

PART C – CERTIFICATE OF APPROVAL – ORGANISATIONS AND INDIVIDUALS

CHAPTER C.2	AIRCRAFT MAINTENANCE ORGANISATIONS

1. GENERAL

1.1 This Order specifies the requirements that an applicant have to comply with in order to qualify for issue of a Certificate of Approval by the Chairman for the purpose of maintenance of aircraft, aircraft components or aircraft materials.

1.2 The Rule 196 of the Civil Aviation Rules 1984 mandates that any maintenance of a Bangladesh registered aircraft shall be carried out by an “appropriate person”.

1.3 Further, the Rule 190 of the Civil Aviation Rules 1984 provides that any Bangladesh based person or organisation engaged in, or intending to be engaged in maintenance of aircraft, aircraft component or materials may apply to the Chairman for a Certificate of Approval and the Chairman on being satisfied regarding competency of the applicant may grant or renew a Certificate of Approval.

1.4 The holder of a Certificate of Approval is authorised under the Rule 192 of the CARs, 1984, ANO (AW) B.3 and B.3A to issue appropriate certifications in respect of the works accomplished.

2. DEFINITIONS

2.1 For the purpose of this Order, the definitions as mentioned under the Rule 2, 183 and 234 of the Civil Aviation Rules, 1984 shall apply. Where a particular definition is not given under the rules, the under mentioned definitions shall apply:

(a) "Acceptable level of safety" means a reference expressed by a number of safety indicators and safety targets against which the authority can measure safety performance. It is the minimum degree of safety that must be assured by a system in actual practice.

(b) "Accountable Executive" means the person who directs and controls the organisation at the highest level and who is ultimately accountable for safety in the organisation.

(c) "Appropriate person (s)" means the person(s) as defined in Rule 196(6) of the CARs, 1984, who may be authorised by the Owner, Operator or Pilot-in-command to carry out maintenance on a Bangladesh aircraft.

(d) "Hazard" means a condition, object or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function. A hazard is defined as a potential source of threat to safety, resulting in a reduction of safety margin.

(e) "Incident" means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation. A serious incident is an incident involving circumstances indicating that an accident nearly occurred.

(f) "Level of safety" means an emerging property of the system, which represents the quality of the system, safety-wise. It is the degree of safety of a system expressed through safety indicators.

(g) "Operational base" in respect of an operator holding the AOC issued by the Chairman means, the base within Bangladesh, from where the flights normally originates, to which the aircraft returns after completing the flights and where the aircraft(s) are normally available for inspection by CAAB.

(h) "Oversight" means a mechanism to ensure that both Operators and Owners of aircraft maintain an acceptable level of safety in their operations.

(i) "Proactive" means the adoption of an approach, which emphasizes prevention through the identification of hazards, and the introduction of risk mitigation measures before the risk-bearing event occurs and adversely affects safety performance.

(j) "Quality" of a product or service means, the degree to which it meets the requirements of the customer, including the relevant airworthiness requirements.

(k) "Quality control " means a management system for programming and coordinating the ongoing quality and improvement efforts of the various groups in an organisation to permit the completion of aircraft maintenance in accordance with the requirements of the airworthiness authority and any specific requirements of the organisation or customer.

(l) "Quality assurance" means the overall authority for the supervision of quality standards, enabling the standards set by the system of quality control to be enforced.

(m) "Risk" means the chance of a loss or injury, measured in terms of severity and probability. The chance that something is going to happen and the consequences if it does or the probable rate of occurrence of a hazard causing harm and the degree of severity of the harm.

(n) "Safety" means a condition in which the risk of harm or damage is limited to an acceptable level.

(o) "Safety assessment" means a post-implementation monitoring to verify that the defined level of safety continues to be met.

(p) "Safety audit" means a process to ensure that risks are identified and the potential for causing or contributing to an incident are recognized.

(q) "Safety manager" means a managerial function where the organisational responsibility and maintenance of an SMS is placed.

(r) "Safety Management System (SMS)" means an organized approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures.

(s) "Safety performance indicators" mean a measure of the safety performance of an aviation organisation or a sector of the industry.

(t) "Safety performance targets" (sometimes referred to as goals or objectives) mean what safety performance levels are desirable and realistic for each Operator/ Owner of aircraft.

(u) "Safety policy" means the methods and processes that the organisation will use to achieve desired safety outcomes, and it serves as a reminder as to "how we do business here".

(v) "Safety requirements" means the operational procedures, technology, systems and programmes to which measures of reliability, availability, performance and/or accuracy can be specified.

(w) "Safety survey" means to systematically examine particular organisational elements or the processes used to perform a specific operation — either generally or from a particular safety perspective.

(x) "Safety programme" means an integrated set of regulations and activities aimed at improving safety.

3. SCOPE OF APPROVAL

3.1 The scope of approval (i.e. Maintenance and/or Overhaul) by specific type/make/model in respect of an approved maintenance organisation shall be defined by grant of one or more of the ratings and associated limitations as mentioned below:

Rating	Limitations
Airframe (Aircraft)	(a) Class 1: Composite construction of small aircraft. (b) Class 2: Composite construction of large aircraft. (c) Class 3: All-metal construction of small aircraft. (d) Class 4: All-metal construction of large aircraft.
Power plant	(a) Class 1 : Reciprocating engines of 400 horsepower or less. (b) Class 2 : Reciprocating engines of more than 400 horsepower. (c) Class 3 : Turbine engines.
Propeller	(a) Class 1: All fixed pitch and ground adjustable propellers of wood, metal or composite construction. (b) Class 2: All other propellers, by make by specific types.
Avionic ratings	(a) Class 1:Communication equipment: Any radio transmitting equipment or receiving equipment or both, used in aircraft to send or receive communications in flight, regardless of carrier frequency or type modulation used, including auxiliary and related aircraft interphone systems, amplifier systems, electrical or electronic inter-crew signaling devices, and similar equipment, but not including equipment used for navigation, equipment for measuring altitude or terrain clearance, other measuring equipment operated on radio or radar principles, or mechanical, electrical, gyroscopic or electronic instruments that are a part of communications avionic equipment. (b) Class 2:Navigation equipment: Any avionic system used in aircraft for en-route or approach navigation, except equipment operated on radar or pulsed radio frequency principles but not including equipment for measuring altitude or terrain clearance or other distance equipment operated on radar or pulse radio frequency principles. (c) Class 3:Radar equipment: Any aircraft electronic system operated on radar or pulsed radio frequency principles.

Rating	Limitations
Instrument ratings	(a) Class 1:Mechanical: Any diaphragm, bourdon tube, aneroid, optical, or mechanically driven centrifugal instruments that are used on aircraft or to operate aircraft, including tachometers, airspeed indicators, pressure gauges, drift sights, magnetic compasses, altimeters or similar mechanical instruments. (b) Class 2:Electrical: Any Self-synchronous and electrical indicating instruments and systems, including remote indication instruments, cylinder head temperature gauges or similar electrical instruments. (c) Class 3:Gyroscopic: Any instruments or system using gyroscopic principles and motivated by air pressure or electric energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts and flux gate gyrosyn compasses. (d) Class 4:Electronic: Any instruments whose operation depends on electron tubes, transistors, integrated circuits (IC) or similar devices including capacitance type quantity gauges, system amplifiers, and engine analyzers.
Accessories	(a) Class1: Mechanical: The accessories which depend on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation, including aircraft wheel brakes, mechanically driven pumps, carburetors, aircraft wheel assemblies, shock absorber struts and hydraulic servo units. (b) Class2: Electrical: The accessories which depend on electric energy for their operation, and generators including starters, voltage regulators, electric motors, electrically driven fuel pumps, magnetos or similar electrical accessories. (c) Class3: Electronic: The accessories which depend on the use of an electron tube, cathode ray tube transistor, integrated circuits (IC) or a similar device, including supercharger, temperature control, air conditioning controls or similar electronic controls.

3.2 An organisation approved for the purpose of maintenance may, in the course of its own maintenance work, perform specialized processes; each such process shall require approval in accordance with ANO (AW) C.5 titled Certificate of Approval-Processing Organisations , and shall be prescribed in the company Maintenance Procedures Manual .

3.3 An organisation approved for the purpose of overhaul may fabricate replacement and modification parts for maintenance work which it performs, when the scope of approval and the MPM provide for such fabrication.

4. ORGANISATION EXPOSITION MANUAL

4.1 The maintenance organisation shall prepare an Organisation Exposition Manual as required under the ANO (AW) C.1 and submit the manual for approval of the Chairman.

5. MAINTENANCE PROCEDURES MANUAL

5.1 The maintenance organisation shall provide for the use and guidance of maintenance personnel concerned, a Maintenance Procedures Manual (MPM).

5.2 The purpose of the procedures manual for an approved maintenance organisation are:

(a) To state the policies and objectives of the organisation;

(b) To provide to the personnel the necessary information and guidance to enable them to fulfill their various roles in complying with the terms and conditions of the approval and the relevant airworthiness requirements;

(c) To provide airworthiness management for the maintenance activities undertaken by the organisation; and

(d) To substantiate to the Chairman how the activities included in the approval and the relevant airworthiness requirements will be satisfied.

5.3 The Maintenance Procedures Manual may be issued in separate parts but shall contain the following information:

(a) A general description of the scope of work authorised under the organisation's terms of approval;

(b) A description of the organisation's procedures and quality or inspection system in accordance with section 10 of this order;

(c) A general description of the organisation's facilities;

(d) Names with designations and duties of the person or persons required in accordance with the ANO (AW) B.7;

(e) A description of the procedures used to establish the competence of maintenance personnel in accordance with the ANO (AW) C.8;

(f) A description of the method used for the completion and retention of the maintenance records required by ANO (AW) B.3, B.3A, B.4 and B.16;

(g) A description of the procedures for preparing the maintenance release and the circumstances under which the release is to be signed;

(h) Names of the personnel authorised to sign the maintenance release and the scope of their authorisation;

(i) A description, when applicable, of the additional procedures for complying with an operator's maintenance procedures and requirements;

(j) A description of the procedures for complying with requirements of the ANO (AW) B.5, B.18 and B.19; and

(k) A description of the procedure for receiving, assessing, amending and distributing within the maintenance organisation, all necessary airworthiness data from the type certificate holder or type design organisation.

5.4 The detailed contents of the Maintenance Procedures Manual (MPM) are outlined in Appendix- 1 of this Order.

5.5 If the maintenance organisation is also the operator, then the Maintenance Procedures Manual (MPM) and the Maintenance Control Manual (MCM) of the organisation/operator may be combined and titled as Maintenance Control and Procedures Manual (MCPM) .

6. PRESENTATION OF MPM

6.1 The MPM shall be submitted in 3 (three) rings binder (height of the binder not exceeding 12.25 inch and of appropriate thickness).

6.2 Title of the document (e.g. MPM) and Name of the Operator (e.g. XYZ Airlines as appropriate) shall be mentioned on the front face and the Spine side of MPM.

6.3 Pages of the MPM should be printed on thick paper, preferably having thickness of 100 GSM or above to reduce possibility of tearing from the binder during frequent reference and handling.

6.4 Divider pages in between each Chapters or Sections shall be provided.

7. PERSONNEL AND TRAINING

7.1 Engineering Executives: The maintenance organisation shall nominate a person or a group of persons who are responsible to ensure that the maintenance organisation is in compliance with the requirements applicable for an approved maintenance organisation. The ANO (AW) B.7 prescribes the requirements for the appointment and approval of engineering executives, including their respective responsibilities for maintenance, engineering, quality control and quality assurance within approved operator and maintenance organisations, and the minimum qualifications and technical/ engineering experience required for such personnel.

7.1.1 Where an engineering executive has management responsibilities other than management of the department for which he is the chief administrator, the applicant shall satisfy the Chairman that these responsibilities in no way conflict with his primary role.

7.2 Other engineering personnel: The maintenance organisation shall employ other necessary personnel to plan, perform, supervise, inspect and issue appropriate certification for the work accomplished.

7.2.1 An adequate number of type rated aircraft maintenance engineers, personnel holding Inspection Authorisation, skilled personnel and other personnel shall be employed for accomplishment and certification of all work within the company's' scope of approval and in compliance with the Civil Aviation Rules 1984. Unless otherwise provided for in the MPM, these persons shall be permanent employees of the organisation.

7.2.2 The applicant shall satisfy the Chairman that the ratio of supervisors to the number of personnel under supervision is adequate, taking into account the competence of staff and the type of work on which they are employed.

7.3 Training: The maintenance organisation must have an approved training programme to ensure that:

(a) All maintenance personnel are adequately trained to perform the duties required of them;

(b) Personnel required to issue Maintenance Release receive familiarisation training on the aircraft type and instructions to comply with the Operator's airworthiness control procedures to enable them to perform these tasks on the type of aircraft for which support is being provided; and

(c) Personnel engaged in maintenance-related tasks receive refresher training at regular intervals covering any changes to the aircraft and its maintenance, taking into account the results of in-service experience gained by the Operator and that published by the manufacturer of aircraft, engine and equipment. Attention should also be paid to changes in company procedures, the ANOs and CAAB requirements.

7.3.1 Records should be maintained of all training undertaken by personnel including any results of assessments or examinations. Training must include formal instruction and practical experience.

7.3.2 Management, Quality Assurance and other relevant personnel should be trained in the techniques of maintenance management and the achievement procedure of airworthiness standards appropriate to the posts held.

7.3.3 The number of maintenance personnel, including engineering executives, supervisors, quality audit staffs and mechanics to be trained before the introduction into service of a new type of aircraft should be agreed with the CAAB. Numbers should take into account the complexity of the aircraft and its systems, the fleet size, the anticipated pattern of aircraft utilisation and the organisation's previous experience of similar aircraft.

7.3.4 Appropriate persons should be provided with copies of their authorisation, preferably in card or booklet form, recording the following details:

(a) Name of organisation;

(b) Holder's name and signature;

(c) The CAAB Approval reference number of the organisation and the holder's individual authorisation number;

(d) Details of the aircraft, engines, systems, equipment and maintenance tasks for which authorisation have been granted, the scope of each authorisation and the date of issue of the authorisation; and

(e) A statement of any conditions of issue, including a statement to the effect that such authorisation is valid only so long as the holder is in the organisation's employment.

7.3.5 Records of the delegated appropriate persons and authorised signatories should be kept clearly indicating the basis upon which authorisation have been granted. The records should also include details of any Aircraft Maintenance Engineers' Licence held, training satisfactorily completed and the result of any written or oral assessment by the person responsible for granting the authorisation.

8. FACILITIES - PREMISES AND EQUIPMENT

8.1 The maintenance organisation shall provide and ensure that:

(a) Adequate aircraft hangar(s) is both available and large enough to accommodate aircraft on planned maintenance for accomplishing Base Maintenance (“A” checks and higher) and un-scheduled maintenance of aircraft.

(b) Adequate covered enclosed space is available to house equipment and store supplies and to provide an environment controlled storage area and ergonomically designed working environment for all personnel.

(c) For component maintenance, component workshops large enough to accommodate components on planned maintenance.

(d) Suitable areas where drawings, publications and maintenance documents may be prepared, studied and stored.

(e) Adequate area lighting and local lighting (on work bench), electric power supplies, compressed air and vacuum supplies where necessary.

(f) Environmental control of work areas where this is necessary for the effective performance of maintenance operations such as fabric work, gluing, painting, reinforced plastic work, or to prevent the deterioration of materials or components.

(g) Appropriately clean and dust-free areas for the performance of maintenance on components such as instruments, fuel control, hydraulic, pneumatic and oxygen units.

(h) Quarantine stores for materials and parts pending identification, determination of conformity, condition check and stores for unserviceable items.

(i) Bonded stores, which shall be separated from the quarantine stores, for materials and parts which have been identified and have been determined to conform to type design or specification and to be in a satisfactory condition.

(j) Both the Quarantine and the Bonded store shall meet the requirements of the ANO (AW) C.4 and the environmental requirements as stated in the UK CAP 562 Leaflet No. 1-8 titled "Storage conditions of Aeronautical Supplies " and special requirements if there is any from the manufacturer.

(k) Sufficient work benches, suitable trays, bin, and stand for segregation and storage of components during routine maintenance, assembly and disassembly, and where required, cover to protect components.

(l) An appropriate range of hand and machine tools, test equipment and standard manuals.

(m) Aircraft and aircraft components are maintained within the scope of the approval.

(n) Special equipment such as tools, jigs, and test equipments recommended by the manufacturer, or approved alternatives acceptable to the Chairman.

(o) Maintenance data such as maintenance, overhaul, repair and parts manuals, service bulletins and where necessary, drawings.

(p) Equipment for the accomplishment of special processes including non destructive testing required for the performance of maintenance, unless the MPM provides for such work to be contracted out.

8.2 Work areas shall be segregated to prevent movement of possible contamination from one work area to another.

9. MAINTENANCE OF RECORDS AND MAINTENANCE RELEASE

9.1 The maintenance organisation shall retain detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.

9.2 A maintenance release shall be completed and signed to certify that the maintenance work performed has been accomplished satisfactorily and in accordance with approved data and the procedures described in the maintenance organisation's procedures manual.

9.3 A maintenance release shall contain a certification including:

(a) Basic details of the maintenance carried out including detailed reference of the approved data used;

(b) The date on which such maintenance was completed;

(c) When applicable, the identity of the approved maintenance organisation; and

(d) The identity of the person or persons signing the release.

9.4 The system for (i) maintenance certification, (ii) maintaining log books and related records and (iii) reporting, investigating and rectification of defects shall meet the requirements of the ANO (AW) B.3, B.3A, B.4 and B.5 respectively.

10. QUALITY CONTROL/ASSURANCE SYSTEM-INSPECTION ORGANISATION

10.1 General

10.1.1 Aircraft cannot be released to service following scheduled or unscheduled maintenance unless certifications are made by appropriately licensed and approved personnel and that the tasks have been completed satisfactorily and in accordance with the procedures described in the maintenance procedures manual of the organisation. There are three generally accepted methods of meeting this requirement:

(a) Licensed personnel either shall complete the task, or are responsible for its completion, and issue the necessary certification;

(b) The staff of a production department shall complete the task, with a separate inspection department responsible for the necessary certification; or

(c) The staff of the production department shall complete the task to approved quality control standards and also issues the necessary certification, while a separate quality assurance department performs sample audits to determine that the approved procedures are being adhered to and that the final product is satisfactory and desire standard of airworthiness is being achieved and initiate corrective action when deficiencies become apparent.

10.1.2 It is not uncommon to find various combinations of (a), (b) and (c) in organisations. Of the three methods described above, (c) is considered to be the optimum for the present generation of large transport aircraft.

10.1.3 The maintenance organisation shall ensure good maintenance practices and compliance with requirements of Maintenance Procedures Manual approved by the Chairman and compliance with CAR '84 and this order, either establishing an independent quality assurance system to monitor compliance with and adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance are properly performed.

10.1.4 In recognition of the key importance of this activity in continuing airworthiness, it is essential that the organisation shall appoint in accordance with the ANO (AW) B.7, a qualified person as the manager (head) of the quality department, who shall have direct access to the CEO of the organisation on all issues related to quality control and assurance.

10.1.5 The maintenance organisation's systems for quality control and assurance should take into account all of the facilities and procedures utilized to ensure continuing airworthiness, where activities take place affecting the airworthiness of the aircraft and product quality for subjects not directly related to airworthiness. Quality control should therefore be effective throughout the maintenance of aircraft and quality auditing should ensure that control is being properly applied and achieving satisfactory results.

10.2 Procedures and personnel qualifications

10.2.1 The quality control policies, structure and systems should be described in the manual, together with the quality assurance audit programme in respect of product, facility, procedures and authority of the Quality Control/Assurance department. Staff assigned to quality control and assurance duties should be:

(a) Aircraft Maintenance Engineers holding appropriate company approval and who are trained on the particular types of aircraft or components to which the approval relates shall be included in the inspection staff.

(b) Sufficiently experienced in the company systems and procedures and technically knowledgeable of the aircraft being maintained so as to enable them to perform their duties satisfactorily;

(c) Experienced in the techniques of quality control and assurance or receive suitable training before taking up their duties; and

(d) Given clearly defined terms of reference and responsibility within the organization and reporting lines to senior management.

Note: This is particularly important where quality assurance personnel are also expected to perform other duties in the organization, e.g. to issue maintenance releases after the completion of base maintenance.

10.2.2 The department responsible for quality control and assurance should arrange for independent quality audit checks to be carried out in accordance with the audit programme. Emphasis should be placed on the company systems employed to achieve and ensure airworthiness, their suitability and effectiveness.

10.2.3 All quality checks should be recorded and assessed and any criticisms forwarded to the person responsible for the particular facility or procedure for corrective action. There should be a feedback system for confirming to the quality assurance staff that corrective action has been taken and to ensure that persons concerned with any audit deficiency are made aware of both the adverse report and the outcome.

10.2.4 No system of quality management is complete without an element of quality assurance. This provides, through an independent audit system, the necessary feedback to the management of the approved organisation to ensure that:

(a) Through product sampling, the requirements of the customer, including those related to airworthiness, are being satisfied;

(b) The procedures of the organisation are being complied with and that they remain appropriate for the undertakings of the organisation; and

(c) The organisation remains in compliance with the requirements and conditions of the approval granted by the Chairman.

10.2.5 The contents of Quality Control and Assurance System (QCAS) Manual of an approved maintenance organisations are outlined in the Appendix- 2 to this Order.

10.3 An organisation, who does not elect to establish an independent quality assurance system, shall show that she has made provision for all work to be inspected and certified by persons holding appropriately rated Aircraft Maintenance Engineer Licenses and an appropriate company approval.

11. SAFETY MANAGEMENT SYSTEM AND ACCOUNTABLE MANAGER

11.1 A maintenance organisation engaged in maintenance of large aircraft and/or an operator holding Category "A" Air Operator Certificate (AOC) for Schedule, non-schedule, passenger & cargo operations in both international and domestic sectors, shall have in place a Safety Management System (SMS) that is acceptable to the Chairman and shall appoint an Accountable Manager for promoting Safety Policy through implementing Safety Management Systems (SMS). A safety management system shall clearly define lines of safety accountability throughout a maintenance organisation, including a direct accountability for safety on the part of senior management.

11.2 The maintenance organisation shall prepare a Safety Management Manual (SMM) and implement requirements to establish and achieve an acceptable level of safety in the maintenance of aircraft. Guidelines on safety programme are contained in the ICAO Doc. 9859 titled Safety Management Manual (SMM). The SMM may be a stand alone manual, having reference in the MPM of the maintenance organisation or may be a part of the MPM itself.

11.3 The basic 4 (four) components and 14 (fourteen) elements for the implementation and maintenance of a Safety Management System (SMS) by an Approved Maintenance Organisation (AMO). The basic 4 (four) components are mentioned below, while the brief description of each 14 (fourteen) elements of the framework are contained in the Appendix-5 of this Order:

(a) Safety policy and objectives

(b) Safety risk management

(c) Safety assurance

(d) Safety promotion

12. IMPLEMENTATION OF THE SMS

12.1 Applicability and Acceptance: Effective from 18th August 2011, a new applicant for AMO shall have in place, a Safety Management System (SMS) that is acceptable to the Chairman, prior to issue of the Certificate of Approval as an AMO.

12.2 This Order proposes, but does not mandate, a phased implementation of SMS by an existing AMO, which encompasses 4 (four) phases as described in this Order, but in any case has to be complied with by 18th August 2014.

13. SMS IMPLEMENTATION PLAN

13.1 The implementation of SMS involves a progressive development. CAA Bangladesh is taking a phased-in approach to implementation. The four phases extend over 3 (three) years with the target accomplishment date of 18th August 2014 by the AMOs.

ANO In force Date	+ 90 Days Initial Certification	± 1 Year 1 Year Follow up	± 2 Years 2 Yrs. Follow up	± 3 Years 3 Years Follow up
18th August 2011	30th September 2011	18th August 2012	18th August 2013	Completion date 18th August 2014.

13.2 Phase 1 - Initial Certification Plan: Within 3 (three) months of the publication of the SMS regulation, initial certification requires that applicants provide to the Chairman:

(a) The name of the accountable executive;

(b) The name of the person responsible for implementing the SMS;

(c) A statement of commitment to the implementation of SMS (signed by the accountable executive);

(d) Documentation of a gap analysis between the organisation's existing system and the SMS regulatory requirements; and

(e) The organisation's implementation project plan, based on the requirements of the exemption and the AOC holder's internal gap analysis.

13.3 Phase 2 - One-Year Follow-up: At 1 (one) year, the holder of Certificate of Approval as an AMO will demonstrate that their system includes the following components:

(a) Documented safety management plan;

(b) Documented policies and procedures relating to the required SMS components; and

(c) A process for occurrence reporting, including voluntary reporting, which shall be non-punitive, (with the associated supportive elements such as training, a method of collecting, storing and distributing data, and a risk management process.

13.4 Phase 3 - Two-Years Follow-up: 2 (two) years after initial certification, the holder of Certificate of Approval as an AMO will demonstrate that, in addition to the components already demonstrated during Phase 2, they also have a process for the proactive identification of hazards and associated methods of collecting, storing and distributing data and a risk management process, having the following required components:

(a) Documented safety management plan;

(b) Documented policies and procedures;

(c) Process for reactive occurrence reporting and training; and

13.5 **Phase 4: Three-Years Follow-up:** 1 (one) year following phase 3, the holder of Certificate of approval as an AMO will demonstrate that, in addition to the components already demonstrated during phases two and three, they have also addressed:

(a) Training;

(b) Quality Assurance;

(c) Emergency preparedness:

(d) Mandatory safety occurrence reporting procedures; and

(e) Voluntary safety occurrence reporting procedures.

14. CHECKS ON SMS SYSTEM

14.1 Q.A system to monitor compliance with adequacy of maintenance procedures and implementation of SMS system on large aircraft and/or an operator holding Category "A" Air Operator Certificate (AOC) for Schedule, non-schedule, passenger & cargo operations in both international and domestic sectors.

15. ISSUE OF INSPECTION AUTHORISATION

15.1 The grant of "Inspection Authorisation" will be strictly regulated to meet only the requirements of the qualified operators and in accordance with the procedures laid down in the ANO (AW) C.8.

16. APPLICATION FOR APPROVAL AS AMO

16.1 Application for initial grant of Certificate of Approval to an Aircraft Maintenance Organisation shall be submitted on Form CA-182B enclosing:

(a) Original copy of the bank deposit slips for payment of appropriate fee;

(b) Draft copy of the MCM/MPM; and

(c) MPM Compliance check list (**Appendix-3**) duly filled in.

16.2 The CAAB will need at least 30 (thirty) days to review the MCM/MPM and carry out inspection of the organisation. The operator shall be required to take corrective actions in respect of the findings (if any) due to review of the MCM/MPM and inspection of the facilities of the proposed organisation.

The ANO is issued in pursuance of the Rules 4 and 190 of the Civil Aviation Rules 1984, is a complete re-issue and supersedes the issue 3, dated 15 June 2011.

Air Cdre Mahmud Hussain, ndc, psc
Chairman
Civil Aviation Authority of Bangladesh

CONTENTS OF MAINTENANCE PROCEDURES MANUAL (MPM)

Compliance with the ANO (AW) C.1 is pre-requisite. The following lists are not exhaustive, but guidelines, which are intended to cover a range of sizes of organisations and types and sizes of aircraft. The wording for each MPM will require appropriate interpretation, depending on the type and size of operation.

SECTION 1 - TABLE OF CONTENTS

1.1 A concise breakdown of the contents of each section shall be provided, including:

(a) Foreword by CEO;
(b) Title of each Section and sub-section;
(b) Appendices and their contents; and
(c) List of effective pages.

SECTION 2 – INTRODUCTION

2.1 This section shall include statements relating to:

(a) Amendment procedures for the manual.

(b) Copy of the Certificate of Approval issued by the CAAB.

(c) A general description of the scope of work authorised under the organisation's terms of approval.

(d) Location of maintenance base(s) mentioning specific type of Checks and/or maintenance carried at each base(s).

SECTION 3 - STRUCTURE OF THE ORGANISATION

3.1 A statement signed by the CEO confirming that the manual defines the organisation's procedures and associated personnel responsibilities and will be complied with at all times.

3.2 A brief description shall be given of the Organisational structure, including a management organisation chart depicting the lines of responsibility. The names and terms of reference of the Engineering Executives and the supervisory engineering personnel including the nominated senior person(s) responsible for ensuring compliance with the requirements of this order shall also be provided.

3.3 Notification procedures to the Chairman regarding changes to the organisation's activities/approval/location/personnel.

3.4 Liaison or contractual arrangements with other organisations which provide services associated with the approval.

SECTION 4 – PERSONNEL AND TRAINING

4.1 Personnel: The total number of engineering staff for each separate facility shall be specified, including Maintenance (production), Central Engineering (engineering development), Technical Library, Quality Assurance/Control, Engineering Planning & Records, Overhaul Shops, Workshops & Support Shops and Stores etc.

4.2 Training: Details of all training provided by the organisation to the staffs after initial induction including recurrent training to ensure the continued competence of maintenance personnel, particularly to account for any changes in equipment, maintenance techniques and procedures shall be specified.

4.2.1 A description of the procedures used to establish the competence of maintenance personnel to the level acceptable to the Chairman for granting Inspection Authorisation as per the ANO (AW) C.8 shall be mentioned.

SECTION 5 - ACCOMMODATION AND FACILITIES

5.1 A general description of the organisation's facilities, such as:

5.1.1 Hangars: The following information shall be given:

(a) The dimensions of hangars.

(b) Details of types of heating, electrical power supply, compressed air supply and concentrated lighting.

(c) A list of special hangar equipment available for aircraft maintenance, including giraffes, test equipment, endoscopes, fuel flow rigs, rostrums and docks.

(d) Details of ground support equipment, including ground power units and deicer units.

(e) Limitations for performing maintenance in the open.

(f) Cleanliness standards of maintenance facilities.

5.2 Maintenance Workshop and Equipment: The available maintenance support workshops, such as wheel and brake shop, electrical, instrument, radio, power plants shops etc. shall be included. A brief description of each, including dimensions and provision for environmental control, shall be provided. The capability of each shop and available facilities, including special tools and equipment shall be clearly stated.

SECTION 6 - MAINTENANCE & ENGINEERING CONTROL AND SUPPORT

6.1 Control and Support Procedures- A description of the organisation's procedures such as those given below shall be included:

(a) Completion of worksheets, including the transfer of defects to additional worksheets, the control of additional worksheets, the final collection of the worksheet package, its return to the records section and action to be taken in respect of carry forward items not completed during the particular inspection, check or other maintenance task.

(b) Procedures to be adopted during shift changeover to ensure continuity of inspection.

(c) Labeling procedures, including the use of serviceable, unserviceable and repairable labels, and their certification and final disposal after installation. Also, labeling procedures for components which are serviceable but have "Part Life" only.

(d) Clearance of defects in aircraft maintenance logs (AML), certification, recording of batch numbers of the items replaced and for which worksheets are raised, cross referencing with AML entries to the worksheet, and procedures for transferring a component from one aircraft to another.

(e) Guidance relating to the procedure for carrying forward of reported defects under the approved MEL and their subsequent clearance, including notification of aircraft serviceability status from line stations to main base (where applicable).

(f) Availability of manufacturers' service bulletins and service letters to staff including updating procedure.

(g) Repair procedure.

(h) Procedures for compliance with an operator's aircraft maintenance programme/ schedule.

(i) A description of the procedure for preparing the maintenance release and the circumstances under which the release is to be signed.

(j) Airworthiness directives compliance procedure.

(k) Optional modification procedure.

(l) Maintenance documentation in use and completion of the same.

(m) The system used for highlighting repetitive defects and the system for mandatory occurrence/defects reporting.

(n) Procedures for granting engineering concession and exemption.

(o) Precautions to ensure that all aircraft are checked on completion of any work or maintenance checks for loose tools, miscellaneous items such as split pins, rivets, nuts, bolts, and foreign objects in general.

(p) Details of any special engineering support such as welding, non-destructive testing, weighing, avionics certification etc.

(q) Acceptance of tools and equipment.

(r) Calibration of tools and equipment.

(s) Use of tooling and equipment by staff (including alternate tools).

(t) Return of defective aircraft components to store.

(u) Reference to specific maintenance procedures such as:

(i) engine running procedures;

(ii) aircraft pressurization checks procedures;

(iii) aircraft towing procedures;

(iv) aircraft taxing procedures.

(v) Sub-contract procedures for maintenance works.

SECTION 7 - TECHNICAL RECORDS

7.1 Procedures for the followings shall be included:

(a) A description of the method used for the completion, retention and control of the maintenance/technical records.

(b) The records shall show that all requirements for signing of the maintenance release required under the ANO (AW) B.3/B.3A have been met.

(c) Compliance with the requirements of the approved Maintenance Schedule, e.g. maintenance check periods, component overhaul life control, calibration checks and record of landings.

(d) Ensuring that only Work Cards or equivalent systems reflecting the latest amendment standard are issued. (If necessary, an explanation of the Work Cards system or equivalent system in use should be included. Where Continuation Sheets are used as an extension of Work Cards, an explanation of that system shall be provided).

(e) The compilation of Technical Log pages and the necessary action to be taken in respect of defect pages and carry forward sheets.

(f) Maintaining current entries in log books.

(g) Control and calling up of Airworthiness Directives, Mandatory Modifications and Inspections.

(h) Records for the operator (if the organisation is not an operator itself).

(i) Procedures for handling of defects arising during maintenance.

(j) Control of computerised maintenance record systems.

(k) Housekeeping of records for the minimum period as required under the ANO (AW) B.4.

SECTION 8 - TECHNICAL PUBLICATIONS

8.1 The persons responsible for the general administration and periodic supervision of technical publications shall be specified and named.

8.2 The system for maintaining a register of the required or otherwise important manuals within the organisation, their locations and current amendment status shall be described.

8.3 The system for notification of the receipt, and for the dissemination of information contained in service bulletins, technical bulletins etc. within the concerned department/section of the Operator/AMO shall be described with particular reference to route stations.

8.4 A description of the procedure for receiving, amending and distributing within the maintenance organisation, all necessary airworthiness data from the type certificate holder or type design organisation as required under the ANO (AW) A.1.

SECTION 9 – STORAGE PROCEDURES

9.1 The responsibility for running stores on a day-to-day basis shall be described, including provision for periodic supervisory checks on storage conditions and procedures.

9.2 Supplier evaluation procedure.

9.3 Stores procedures shall be described and shall include:

(a) The procedures for checking incoming components, materials and items for conformity with the Purchase Order, release documentation and to ensure that the shipments are received from approved outside source/contractors.

(b) Storage, labeling/tagging and release of aircraft components and material for aircraft maintenance.

(c) The batching of goods and identification of raw materials. The acceptance of spares having limited allowable shelf life including materials and consumable products must be identified and controlled.

(d) The internal release procedure to be used when components are to be forwarded to other locations within the organisation.

(e) The procedure to be adopted for the release of goods or overhauled items to other organisations, which shall also include items being sent to other local or foreign organisations for rectification or calibration.

(f) The procedure for requisitioning tools and the system for ensuring that the location of tools is known at all times.

(g) Control of defective components sent to outside contractors for overhaul etc.

SECTION 10 - MANDATORY OCCURRENCE REPORTING

10.1 A description of the procedures in respect of aircraft of over 5700 kg maximum certificated take-off mass (MCTM), whereby information on faults, malfunctions, defects and other occurrences which cause or might cause adverse effects on the continuing airworthiness of the aircraft is transmitted to the organisation responsible for the type design of that aircraft and to the operator's airworthiness authority as required under the ANO (AW) B.5 shall be described.

SECTION 11 - AUTHORISED MAINTENANCE SIGNATORIES

11.1 This section shall contain a list of the authorised signatories for each of the followings:

(a) Maintenance Release.

(b) Certificate of Fitness for Flight.

(c) Release Note.

(d) Application for issue of C of R and C of A.

(e) Application for renewal C of A.

(f) Application for engineering dispensation / concession.

(g) Approval of aircraft weighing report and weight & balance schedule.

(h) Any other subjects as may be necessary.

11.2 The procedures whereby a signatory gains access to maintenance records, technical logs and, if applicable, the aircraft, shall also be detailed.

SECTION 12 - OPERATIONAL BASES AND ROUTE STATIONS

12.1 In respect of the operational base and each route stations, the following details shall be provided:

(a) Name and address of operational base, which must be in Bangladesh and where the aircraft will generally be available for inspection by CAAB.

(b) Name and address of each route stations.

(c) Name of Aircraft Maintenance Engineers, listing endorsements by category, type rating or other approval, posted in the Operational base and route stations.

(d) Name of personnel holding Inspection Authorisation who are authorised to perform or certify engineering functions on airframe, engine, electrical, instrument, or avionics systems, listing specific authorisation by type.

(e) Name of other engineering personnel.

(f) List of facilities available such as stores, workshops, offices and hangars.

(g) A list of test equipment, special tools and equipment by aircraft type.

(h) A list of manuals and technical information available by aircraft type and regulatory documents.

(i) The scale of spares and aircraft ground servicing equipment available at each location.

(j) The identity of the department or person responsible for making periodic checks from the main base to ensure that requirements for the operational base or route station are maintained.

(k) Details of procedures for the line stations (if applicable) for guidance of the technical personnel and compliance with airworthiness requirements in respect of the followings:

(i) control of aircraft components, tools, equipment, etc.

(ii) procedures related to servicing/ fuelling/de-icing etc.

(iii) control of defects and repetitive defects.

(iv) procedures for pooled parts and loan parts.

(v) procedures for return of defective parts removed from aircraft.

(vi) procedures for the care and maintenance of cargo containers

SECTION 13 – APPENDICES TO THE MANUAL

13.1 The following shall be included as an Appendix to the Manual:

(a) A list of senior engineering personnel and specialists, and their qualifications.

(b) A list of Aircraft Maintenance Engineers, including details of their endorsements in respect of the aircraft type(s) included in the company approval.

(c) A list of special tools and test equipment appropriate to each aircraft type, including engines and propellers.

(d) A list of aircraft manuals and other significant technical data appropriate to each aircraft type.

(e) Specimens of maintenance documentation including, but not limited to the followings:

(i) Work Order including content list;

(ii) Routine task card;

(iii) Non-routine card (NRC);

(iv) Supplementary (Continuation) work sheet;

(v) Serviceable Tag;

(vi) Un-Serviceable Tag;

(vii) Component Hold Tag;

(viii) AD Evaluation form;

(ix) SB Evaluation form;

(x) Inspection Order;

(xi) Modification Order;

(xii) Repair Order;

(xiii) Aircraft Maintenance Log page;

(xiv) Acceptable Deferred Defect Page;

(xv) Quality Surveillance report;

(xvi) Technical Delay report (Scheduled operator only);

(xvii) Quality control audit check lists (various);

(xviii) Component History Card;

(xix) Scheduled Maintenance Check (Inspection) control card;

(xx) AD Compliance control card;

(xxi) Index for all control cards;

(xxii) Bonded store receipt register;

(xxiii) Calibration sticker;

(xxiv) Calibration control card;

(xxv) Maintenance task(s) feasibility assessment report; and

(xxvi) Any other forms as may be applicable.

SECTION 14 - QUALITY CONTROL AND ASSURANCE SYSTEMS

14.1 The quality control and assurance systems of the Organisation shall be described in accordance with the guidelines given in the Appendix-2 of this Order.

CONTENTS OF

QUALITY CONTROL AND ASSURANCE SYSTEM (QCAS) MANUAL

The following lists are not exhaustive, but guidelines, which are intended to cover a range of sizes of organisations and types and sizes of aircraft. The wording for each QCAS Manual will require appropriate interpretation, depending on the type and size of operation:

1. Organisation of the Quality Control and Assurance Department.

2. Terms of reference and responsibility of the QC & QA staffs.

3. Quality audit procedures of the organisation.

4. Qualification requirements and training procedures of personnel of the AMO including the QA Personnel.

5. Qualification requirements and training procedures of specialised personnel (i.e. NDT specialist, Welders etc.)

6. Records of the delegated appropriate person(s) and Authorised Signatories which includes:

   (a) Quality audit personnel.

   (b) Type rated AME license holders.

   (c) Inspection Authorisation holders including Specialised personnel (i.e. NDT specialist, Welders etc.).

   (d) Other personnel.

7. Aircraft or aircraft component maintenance tasks exemption process control.

8. Concession control for deviation from organisations' procedures.

9. Quality audit remedial action procedures.

10. Audit procedures.

Note: This summary of quality assurance audits is not exhaustive but is intended to provide an indication of the range of checks necessary. Additional or different checks may be needed in respect of particular support arrangements. Quality Assurance procedures should ensure that audit checks are carried out as follows:

10.1 Checks on aircraft, while undergoing scheduled maintenance, for:

10.1.1 Compliance with maintenance programme and mandatory continuing airworthiness requirements and ensuring that only work instructions reflecting the latest amendment standards are used;

10.1.2 Completion of work instructions including the transfer of defects to additional worksheets, their control, and final collation. Action taken in respect of tasks carried forward and not completed during the particular inspection or maintenance task;

10.1.3 Compliance with manufacturers' and the organisation's standard specifications and procedures;

10.1.4 Standards of inspection and workmanship;

10.1.5 Condition of corrosion prevention and control treatments and other protective processes;

10.1.6 Aircraft maintenance which is not limited to the normal working day; procedures adopted during shift changeover of personnel to ensure continuity of inspection and responses; and

10.1.7 Precautions taken to ensure that, on completion of any work or maintenance, all aircraft are checked for loose tools and miscellaneous small items such as split pins, wire, rivets, nuts, bolts and other debris and for general cleanliness and housekeeping.

10.2 Checks on airworthiness data for:

10.2.1 Adequacy of aircraft manuals and other technical information appropriate to each aircraft type, including engines, propellers and other equipment, and the continuing receipt of revisions and amendments. Availability of continuing airworthiness data, e.g. airworthiness directives, life limits etc;

10.2.2 Assessment of manufacturer's service information, determining its application to aircraft types maintained and the recording of compliance or embodiment;

10.2.3 Maintenance of a register of manuals and technical literature held within the organisation, their locations and current amendment status; and

10.2.4 Assurance that all the organisation's manuals and documents, both technical and procedural, are kept up to date.

10.3 Checks on stores and storage procedures for:

10.3.1 The adequacy of stores and storage conditions for rotatable components, small parts, perishable items, flammable fluids, engines and bulky assemblies in accordance with the specifications adopted by the organisation;

10.3.2 The procedure for examining incoming components, materials and items for conformity with purchase/work order, release documentation and procurement from sources approved by the organisation;

10.3.3 The "batch recording" of goods received and identification of raw materials, the acceptance of "Part Life items into stores, requisition procedures for issue of items from stores;

10.3.4 Labeling procedures, including the use of serviceable/ unserviceable/repairable labels and their certification and final disposal after installation, and labeling procedures for components which are serviceable but "Part Life" only;

10.3.5 The internal release procedure to be used when components are to be forwarded to other locations within the organisation;

10.3.6 The procedure to be adopted for the release of goods or overhauled items to other organisations (this procedure should also cover items being sent away for rectification or calibration);

10.3.7 The procedure for the requisitioning of tools together with the system for ensuring that the location of tools, and their calibration and maintenance status, is known at all times;

10.3.8 Control of shelf life and storage conditions in the stores; and

10.3.9 Control of the dispensing of standard parts, identification and segregation.

10.4 Checks on maintenance facilities for:

10.4.1 Cleanliness, state of repair and correct functioning of hangars, hangar facilities and special equipment and the maintenance of mobile equipment;

10.4.2 Adequacy and functioning of special services and techniques including welding, non-destructive inspection (NDI), weighing, painting etc.;

10.4.3 Viewer/printer equipment provided for use with microfiche, microfilm, compact disk and DVD for various manuals and publications, ensuring that regular maintenance takes place and an acceptable standard of screen reproduction and printed copy is achieved;

10.4.4 The adequacy of special tools and equipment appropriate to each type of aircraft, including engines, propellers and other equipment;

10.4.5 The calibration and maintenance of tools and measuring equipment; and

10.4.6 Environmental controls and ergonomics aspect of the required shops, stores and facilities.

10.5 Checks on the organisation's general airworthiness control procedures for:

10.5.1 Implementing the requirements of airworthiness directives, modifications and inspections and special aircraft fleet checks instituted in response to service difficulties, occurrences etc.;

10.5.2 Monitoring the practices of the organisation in respect of scheduling or pre-planning maintenance tasks to be carried out in the open air and adequacy of the facilities provided;

10.5.3 Operation of the system for service difficulty reporting required by the Chairman ;

10.5.4 Authorisation of personnel to issue maintenance releases in respect of inspections and maintenance tasks; the effectiveness and adequacy of training, including continuation training and the recording of personnel experience, training and qualifications for grant of authorisation;

10.5.5 The effectiveness of technical instructions issued to maintenance personnel;

10.5.6 The adequacy of personnel in terms of qualifications, numbers and ability in all areas required to support the activities included in the approval granted by the airworthiness authority;

10.5.7 The efficacy and completeness of the quality audit programme;

10.5.8 Maintaining log books and other required records and ensuring that these documents are assessed and preserved in accordance with the requirements of the Chairman;

10.5.9 Ensuring that major and minor repairs are only carried out in accordance with approved repair schemes and practices;

10.5.10 Compliance with the requirements of the approved maintenance schedule and maintenance programme, including maintenance /inspection periods, component overhaul/test/calibration control, records of cycle/landings etc. and for granting concession and exemption

10.5.11 Control of sub-contractors; and

10.5.12 Control of activities sub-contracted to it, such as management of the operator's maintenance programme.

10.6 Checks on SMS system

11.6.1 QA system to monitor compliance with adequacy of maintenance procedures and implementation of SMS.

COMPLIANCE CHECK LIST - MPM

Note: (1) Compliance with the ANO (AW) C.1 is pre-requisite. Column no. 3 shall be filled in by the Head of the Quality Assurance/Control department of the Operator/Organisation and shall be forwarded along with forwarding letter and draft copy of the MPM.

(2) Column no. 4 is for use by the assessing officer of the CAAB.

Sl. No.	Description	Related section and page no. of the MCM	Remarks
(1)	(2)	(3)	(4)
Section 1 - Table of Contents			
1	A concise breakdown of the contents of each section shall be provided, including: (a) Foreword by CEO; (b) Title of each Section and sub-section; (c) Appendices and their contents; and (d) List of effective pages.		
Section 2 – Introduction			
2	(a) Amendment procedures for the manual. (b) Copy of the Certificate of Approval issued by the CAAB. (c) A general description of the scope of work authorised under the organisation's terms of approval. (d) Location of maintenance base(s) mentioning specific type of Checks and/or maintenance carried at each base(s).		
Section 3 – Structure of the Organisation			
3.1	A statement signed by the CEO confirming that the manual defines the organisation's procedures and associated personnel responsibilities and will be complied with at all times.		
3.2	A brief description shall be given of the Organisational structure, including a management organisation chart depicting the lines of responsibility. The names and terms of reference of the Engineering Executives and the supervisory engineering personnel including the nominated senior person(s) responsible for ensuring compliance with the requirements of this order.		
3.3	Notification procedures to the Chairman regarding changes to the organisation's activities / approval / location / personnel.		
3.4	Liaison or contractual arrangements with other organisations which provide services associated with the approval.		

Sl. No.	Description	Related section and page no. of the MCM	Remark
Section 4 – Personnel And Training			
4.1	Personnel: The total number of engineering staff for each separate facility shall be provided, including Maintenance (production), Central Engineering (engineering development), Technical Library, Quality Assurance/Control, Engineering Planning & Records, Overhaul Shops, Workshops & Support Shops and Stores etc.		
4.2	Training: Details of training provided by the organisation to the staffs after initial induction including recurrent training to ensure the continued competence of maintenance personnel, particularly to account for any changes in equipment, maintenance techniques and procedures.		
4.2.1	A description of the procedures used to establish the competence of maintenance personnel to the level acceptable to the Chairman for granting Inspection Authorisation under the ANO (AW) C.8.		
Section 5 - Accommodation And Facilities			
5.1	A general description and information of the organisation's facilities, such as:		
5.1.1	Hangars: (a) The dimensions of hangars. (b) Details of types of heating, electrical power supply, compressed air supply and concentrated lighting. (c) A list of special hangar equipment available for aircraft maintenance, including giraffes, test equipment, endoscopes, fuel flow rigs, rostrums and docks. (d) Details of ground support equipment, including ground power units and deicer units. (e) Limitations for performing maintenance in the open. (f) Cleanliness standards of maintenance facilities.		
5.2	Maintenance Workshop and Equipment: The available maintenance support workshops, such as wheel and brake shop, electrical, instrument, radio, power plants shops etc. shall be included. A brief description of each, including dimensions and provision for environmental control shall be provided. The capability of each shop and available facilities, including special tools and equipment shall be clearly stated.		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
SECTION 6 - MAINTENANCE & ENGINEERING CONTROL AND SUPPORT			
6.1	Control and Support Procedures- A description of the organisation's procedures such as those given below shall be included:		
(a)	Completion of worksheets, including the transfer of defects to additional worksheets, the control of additional worksheets, the final collection of the worksheet package, its return to the records section and action to be taken in respect of carry forward tasks not completed during the particular inspection, check or other maintenance task.		
(b)	Procedures to be adopted during shift changeover to ensure continuity of inspection.		
(c)	Labeling procedures, including the use of serviceable, unserviceable and repairable labels, and their certification and final disposal after installation. Also, labeling procedures for components which are serviceable but have "Part Life" only.		
(d)	Clearance of defects in aircraft maintenance logs (AML), certification, recording of batch numbers of the items replaced and for which worksheets are raised, cross referencing to AML entries to the worksheet, and procedures for transferring a component from one aircraft to another.		
(e)	Guidance relating to the procedure for carrying forward of reported defects under the approved MEL and their subsequent clearance, including notification of aircraft serviceability status from line stations to main base (where applicable).		
(f)	Availability of manufacturers' service bulletins and service letters to staff including updating procedures.		
(g)	Repair procedure.		
(h)	Procedures for compliance with an operator's aircraft maintenance programme/schedule.		
(i)	A description of the procedure for preparing the maintenance release and the circumstances under which the release is to be signed.		
(j)	Airworthiness directives compliance procedure.		
(k)	Optional modification procedure.		
(l)	Maintenance documentation in use and completion of the same.		
(m)	The system used for highlighting repetitive defects and the system for mandatory occurrence/defects reporting.		
(n)	Procedures for granting engineering concession and exemption.		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
(o)	Precautions to ensure that all aircraft are checked on completion of any work or maintenance checks for loose tools, miscellaneous items such as split pins, rivets, nuts, bolts, and foreign objects in general.		
(p)	Details of any special engineering support such as welding, non-destructive testing, weighing, avionics certification etc.		
(q)	Acceptance of tools and equipment.		
(r)	Calibration of tools and equipment		
(s)	Use of tooling and equipment by staff (including alternate tools).		
(t)	Return of defective aircraft components to store.		
(u)	Reference to specific maintenance procedures such as: (i) Engine running procedures; (ii) Aircraft pressurization checks procedures; (iii) Aircraft towing procedures; (iv) Aircraft taxing procedures.		
(v)	Sub-contract procedures.		
SECTION 7 - TECHNICAL RECORDS			
7.1	Procedures for the following shall be described:		
(a)	A description of the method used for the completion, retention and control of the maintenance/ technical records.		
(b)	The records shall show that all requirements for signing of the maintenance release required under the ANO (AW) B.3/B.3A have been met.		
(c)	Compliance with the requirements of the approved Maintenance Schedule, e.g. maintenance check periods, component overhaul life control, calibration checks and record of landings.		
(d)	Ensuring that only Work Cards or equivalent systems reflecting the latest amendment standard are issued. (If necessary, an explanation of the Work Cards system or equivalent system in use should be included. Where Continuation Sheets are used as an extension of Work Cards, an explanation of that system shall be provided).		
(e)	The compilation of Technical Log pages and the necessary action to be taken in respect of defect pages and carry forward sheets.		
(f)	Maintaining current entries in log books.		
(g)	Control and calling up of Airworthiness Directives, Mandatory Modifications and Inspections.		
(h)	Records for the operator (if the organisation is not an operator itself).		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
(i)	Procedures for handling of defects arising during maintenance.		
(j)	Control of computerized maintenance record systems		
(k)	Housekeeping of records for the minimum period as required under the ANO (AW) B.4.		
SECTION 8 - TECHNICAL PUBLICATIONS			
8.1	The person(s) responsible for the general administration and periodic supervision of technical publications shall be specified and named.		
8.2	The system for maintaining a register of the required or otherwise important manuals within the organisation, their locations and current amendment status shall be described.		
8.3	The system for notification of the receipt, and for the dissemination of information contained in service bulletins, technical bulletins etc. within the concerned department/section of the Operator /AMO shall be described with particular reference to route stations.		
8.4	A description of the procedure for receiving, amending and distributing within the maintenance organisation, all necessary airworthiness data from the type certificate holder or type design organisation as required under the ANO (AW) A.1.		
SECTION 9 – STORAGE PROCEDURES			
9.1	The responsibility for running stores on a day-to-day basis shall be described, including provision for periodic supervisory checks on storage conditions and procedures.		
9.2	Supplier evaluation procedure		
9.3	Stores procedures shall be described and shall include:		
(a)	The procedures for checking incoming components, materials and items for conformity with the Purchase Order, release documentation and to ensure that the shipments are received from approved outside source/contractors.		
(b)	Storage, labeling/tagging and release of aircraft components and material for aircraft maintenance.		
(c)	The batching of goods and identification of raw materials. The acceptance of spares having limited allowable shelf life including materials and consumable products must be identified and controlled.		
(d)	The internal release procedure to be used when components are to be forwarded to other locations within the organisation.		
(e)	The procedure to be adopted for the release of goods or overhauled items to other organisations, which shall also include items being sent to other local or foreign organisations for rectification or calibration.		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
(f)	The procedure for requisitioning tools and the system for ensuring that the location of tools is known at all times.		
(g)	Control of defective components sent to outside contractors for overhaul etc.		
Section 10-Mandatory Occurrence Reporting			
10.1	A description of the procedures in respect of aircraft of over 5700 kg maximum certificated take-off mass (MCTM), whereby information on faults, malfunctions, defects and other occurrences which cause or might cause adverse effects on the continuing airworthiness of the aircraft is transmitted to the organisation responsible for the type design of that aircraft and to the operator's airworthiness authority as required under the ANO (AW) B.5 shall be described.		
Section 11 - Authorised Maintenance Signatories			
11.1	This section shall contain a list of the authorised signatories for each of the followings: (a) Maintenance Release. (b) Certificate of Fitness for Flight. (c) Release Note. (d) Application for issue of C of R and C of A. (e) Application for renewal C of A. (f) Application for engineering dispensation/ concession. (g) Approval of aircraft weighing report and weight & balance schedule. (h) Any other subjects as may be necessary.		
11.2	The procedures whereby a signatory gains access to maintenance records, technical logs and, if applicable, the aircraft, shall also be detailed.		
Section 12 - Operational Bases And Route Stations			
12.1 (contd.)	In respect of the operational base and each route stations, the following details shall be provided: (a) Name and address of operational base, which must be in Bangladesh and where the aircraft will generally be available for inspection by CAAB. (b) Name and address of each route stations. (c) Name of Aircraft Maintenance Engineers, li endorsements by category, type rating or other approval, posted in the Operational base and route stations.		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
	(d) Name of personnel holding Inspection Authorisation who are authorised to perform or certify engineering functions on airframe, engine, electrical, instrument, or avionics systems, listing specific authorisation by type. (e) Name of other engineering personnel. (f) List of facilities available such as stores, workshops, offices and hangars. (g) A list of test equipment, special tools and equipment by aircraft type. (h) A list of manuals and technical information available by aircraft type and regulatory documents. (i) The scale of spares and aircraft ground servicing equipment available at each location. (j) The identity of the department or person responsible for making periodic checks from the main base to ensure that requirements for the operational base or route station are maintained. (k) Details of procedures for the line stations (if applicable) for guidance of the technical personnel and compliance with airworthiness requirements in respect of the followings: (i) Control of aircraft components, tools, equipment, etc. (ii) Procedures related to servicing/ fuelling/de-icing etc. (iii) Control of defects and repetitive defects. (iv) Procedures for pooled parts and loan parts. (v) Procedures for return of defective parts removed from aircraft. (vi) Procedures for the care and maintenance of cargo containers.		
Section 13 - Appendices to the Manual			
13.1 (contd.)	The following shall be included as an Appendix to the Manual: (a) A list of senior engineering personnel and specialists, and their qualifications.		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
	(b) A list of Aircraft Maintenance Engineers, including details of their endorsements in respect of the aircraft type(s) included in the company approval. (c) A list of special tools and test equipment appropriate to each aircraft type, including engines and propellers. (d) A list of aircraft manuals and other significant technical data appropriate to each aircraft type. (e) Specimens of maintenance documentation including, but not limited to the followings. (i) Work Order including content list; (ii) Routine task card; (iii) Non-routine card (NRC); (iv) Supplementary (Continuation) work sheet; (v) Serviceable Tag; (vi) Un-Serviceable Tag; (vii) Component Hold Tag; (viii) AD Evaluation form; (ix) SB Evaluation form; (x) Inspection Order; (xi) Modification Order; (xii) Repair Order; (xiii) Aircraft Maintenance Log page; (xiv) Acceptable Deferred Defect Page; (xv) Quality Surveillance report; (xvi) Technical Delay report (Scheduled operator only); (xvii) Quality control audit check lists (various); (xviii) Component History Card; (xix) Scheduled Maintenance Check (Inspection) control card;		

Sl. No.	Description	Related section and page no. of the MCM	Remarks
	(xx) AD Compliance control card; (xxi) Index for all control cards; (xxii) Bonded store receipt register; (xxiii) Calibration sticker; (xxiv) Calibration control card; (xxv) Task feasibility assessment report; and (xxvi) Any other forms as may be applicable.		
Section 14 – Quality Control and Assurance Systems			
14.1	The quality control and assurance systems of the Organisation shall be described in accordance with the guidelines given in the Appendix-2 of this Order.		

COMPLIANCE CHECK LIST - QCAS MANUAL

Note: (1) Column no. 3 shall be filled in by the Head of the Quality Assurance /Control department of the Operator/Organisation and shall be forwarded along with forwarding letter and draft copy of the Quality Control and Assurance System (QCAS) Manual.

(2) Column no. 4 is for use by the assessing officer of the CAAB.

(1) Sl. No.	(2) Description	(3) Related section and page no. of the QCAS	(4) Remarks
1.	Organisation of the Quality Control and Assurance Department.		
2.	Terms of reference and responsibility of the QC & QA Staffs.		
3.	Quality audit procedures of the organisation.		
4.	Qualification requirements and training procedures of personnel of the AMO including the QA personnel.		
5.	Qualification requirements and training procedure for specialised activities such as NDT, welding etc.		
6.	Records of the delegated appropriate person(s) and Authorised Signatories which includes:		
(a)	Quality audit personnel.		
(b)	Type rated AME license holders		
(c)	Inspection Authorisation holders including Specialised personnel (i.e. NDT specialist, Welders etc.)		
(d)	Other personnel		
7.	Aircraft or aircraft component maintenance tasks exemption process control.		
8.	Concession control for deviation from organisations' procedures.		
9.	Quality audit remedial action procedure.		
10.	AUDIT PROCEDURES		
10.1	Checks on aircraft, while undergoing scheduled maintenance, for:		
10.1.1	Compliance with maintenance programme and mandatory continuing airworthiness requirements and ensuring that only work instructions reflecting the latest amendment standards are used;		
10.1.2	Completion of work instructions including the transfer of defects to additional worksheets, their control and final collation. Action taken in respect of tasks carried forward and not completed during the particular inspection or maintenance task;		

(1) Sl. No.	(2) Description	(3) Related section and page no. of the QCAS	(4) Remarks
10.1.3	Compliance with manufacturers' and the Organisation's standard specifications and procedures;		
10.1.4	Standards of inspection and workmanship;		
10.1.5	Condition of corrosion prevention and control treatments and other protective processes;		
10.1.6	Aircraft maintenance which is not limited to the normal working day; procedures adopted during shift changeover of personnel to ensure continuity of inspection and responses; and		
10.1.7	Precautions taken to ensure that, on completion of any work or maintenance, all aircraft are checked for loose tools and miscellaneous small items such as split pins, wire, rivets, nuts, bolts and other debris and for general cleanliness and housekeeping.		
10.2	Checks on airworthiness data for :		
10.2.1	Adequacy of aircraft manuals and other technical information appropriate to each aircraft type, including engines, propellers and other equipment, and the continuing receipt of revisions and amendments. Availability of continuing airworthiness data, e.g. airworthiness directives, life limits etc;		
10.2.2	Assessment of manufacturer's service information, determining its application to aircraft types maintained and the recording of compliance or embodiment;		
10.2.3	Maintenance of a register of manuals and technical literature held within the organisation, their locations and current amendment status; and		
10.2.4	Assurance that all the organisation's manuals and documents, both technical and procedural, are kept up to date		
10.3	Checks on stores and storage procedures for :		
10.3.1	The adequacy of stores and storage conditions for rotatable components, small parts, perishable items, flammable fluids, engines and bulky assemblies in accordance with the specifications adopted by the organisation;		
10.3.2	The procedure for examining incoming components, materials and items for conformity with purchase/ work order, release documentation and procurement from sources approved by the organisation;		
10.3.3	The "batch recording" of goods received and identification of raw materials, the acceptance of "Part Life" items into stores, requisition procedures for issue of items from stores;		

(1) Sl. No.	(2) Description	(3) Related section and page no. of the QCAS	(4) Remarks
10.3.4	Labeling procedures, including the use of serviceable/ unserviceable/repairable labels and their certification and final disposal after installation, and labeling procedures for components which are serviceable but "Part Life" only;		
10.3.5	The internal release procedure to be used when components are to be forwarded to other locations within the organisation;		
10.3.6	The procedure to be adopted for the release of goods or overhauled items to other organisations (this procedure should also cover items being sent away for rectification or calibration);		
10.3.7	The procedure for the requisitioning of tools together with the system for ensuring that the location of tools, and their calibration and maintenance status, is known at all times;		
10.3.8	Control of shelf life and storage conditions in the stores; and		
10.3.9	Control of the dispensing of standard parts, identification and segregation		
10.4	Checks on maintenance facilities for:		
10.4.1	Cleanliness, state of repair and correct functioning of hangars, hangar facilities and special equipment and the maintenance of mobile equipment;		
10.4.2	Adequacy and functioning of special services and techniques including welding, non-destructive inspection (NDI), weighing, painting etc.		
10.4.3	Viewer/printer equipment provided for use with microfiche, microfilm, compact disk and DVD for various manuals and publications, ensuring that regular maintenance takes place and an acceptable standard of screen reproduction and printed copy is achieved;		
10.4.4	The adequacy of special tools and equipment appropriate to each type of aircraft, including engines, propellers and other equipment;		
10.4.5	The calibration and maintenance of tools and measuring equipment; and		
10.4.6	Environmental controls and Ergonomics aspects of the shops, stores and other facilities.		
10.5	Checks on the organisation's general airworthiness control procedures for:		
10.5.1	Implementing the requirements of airworthiness directives, modifications and inspections and special aircraft fleet checks instituted in response to service difficulties, occurrences etc.;		

(1) Sl. No.	(2) Description	(3) Related section and page no. of the QCAS	(4) Remarks
10.5.2	Monitoring the practices of the organisation in respect of scheduling or pre-planning maintenance tasks to be carried out in the open air and adequacy of the facilities provided;		
10.5.3	Operation of the system for service difficulty reporting required by the Chairman;		
10.5.4	Authorisation of personnel to issue maintenance releases in respect of inspections and maintenance tasks; the effectiveness and adequacy of training, including continuation training and the recording of personnel experience, training and qualifications for grant of authorisation;		
10.5.5	The effectiveness of technical instructions issued to maintenance personnel;		
10.5.6	The adequacy of personnel in terms of qualifications, numbers and ability in all areas required to support the activities included in the approval granted by the Chairman;		
10.5.7	The efficacy and completeness of the quality audit programme;		
10.5.8	Maintaining logbooks and other required records and ensuring that these documents are assessed and preserved in accordance with the requirements of the Chairman;		
10.5.9	Ensuring that major and minor repairs are only carried out in accordance with approved repair schemes and practices;		
10.5.10	Compliance with the requirements of the approved Maintenance Schedule/ Programme, including maintenance / inspection periods, component overhaul/ test/ calibration control, records of cycles/ landings etc. and for granting concession and exemption.		
10.5.11	Control of sub-contractors; and		
10.5.12	Control of activities sub-contracted to it, such as management of the operator's maintenance programme.		
10.6	Checks on SMS system		
10.6.1	QA system to monitor compliance with adequacy of maintenance procedures and implementation of SMS.		

BRIEF DESCRIPTION OF THE ELEMENTS OF SAFETY MANAGEMENT SYSTEM

Note: For detailed guidelines on safety programme, refer to the ICAO Doc. 9859 titled Safety Management Manua l for detailed guidelines.

1. SAFETY POLICY AND OBJECTIVES

1.1 Management commitment and responsibility: The operator/approved maintenance organisation shall define the organisation's safety policy which shall be in accordance with international and national requirements, and which shall be signed by the accountable executive of the organisation. The safety policy shall reflect organisational commitments regarding safety; include a clear statement about the provision of the necessary human and financial resources for its implementation; and shall be communicated, with visible endorsement, throughout the organisation. The safety policy shall be periodically reviewed to ensure it remains relevant and appropriate to the organisation.

1.2 Safety accountabilities of managers: The operator/approved maintenance organisation shall identify the accountable executive who, irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of the operator/approved maintenance organisation, for the implementation and maintenance of the SMS. The operator/approved maintenance organisation shall also identify the safety accountabilities of all members of senior management, irrespective of other functions. Safety accountabilities and authorities shall be documented and communicated throughout the organisation.

1.3 Appointment of key safety personnel: The operator/approved maintenance organisation shall identify a safety manager to be the responsible individual and focal point for the implementation and maintenance of an effective SMS.

1.4 SMS implementation plan: The operator/approved maintenance organisation shall develop and maintain an SMS implementation plan that defines the organisation's approach to manage safety in a manner that meets the organisation's safety needs. The SMS implementation plan of the operator/approved maintenance organisation shall explicitly address the coordination between the SMS of the operator/approved maintenance organisation and the SMS of other organisations the operator/approved maintenance organisation must interface with during the provision of services. The SMS implementation plan shall be endorsed by senior management of the organisation.

1.5 Coordination of emergency response planning: The operator/approved maintenance organisation shall develop, coordinate and maintain an emergency response plan that ensures orderly and efficient transition from normal to emergency operations, and return to normal operations.

1.6 Documentation: The operator/approved maintenance organisation shall develop and maintain SMS documentation to describe the safety policy and objectives, the SMS requirements, the SMS procedures and processes, the accountabilities, responsibilities and authorities for procedures and processes and the SMS outputs. As part of the SMS documentation, the operator/approved maintenance organisation shall develop and maintain a Safety Management Manual (SMM) to communicate its approach to safety throughout the organisation.

2. SAFETY RISK MANAGEMENT

2.1 Hazard identification process: The operator/approved maintenance organisation shall develop and maintain a formal process for effectively collecting, recording, acting on and generating feedback about hazards in operations, based on a combination of reactive, proactive and predictive methods of safety data collection.

2.2 Voluntary safety occurrence reporting: The operator/approved maintenance organisation shall also develop and implement a voluntary safety occurrence reporting system by the employees to the Safety Manager of the Organisation, which shall be non-punitive.

2.3 Risk assessment and mitigation process: The operator/approved maintenance organisation shall develop and maintain a formal risk management process that ensures analysis (in terms of probability and severity of occurrence), assessment (in terms of tolerability) and control (in terms of mitigation) of risks to an acceptable level. The operator/approved maintenance organisation shall also define those levels of management with authority to make decisions regarding safety risks tolerability.

3. SAFETY ASSURANCE

3.1 Safety performance monitoring and measurement: The operator/approved maintenance organisation shall develop and maintain the means to verify the safety performance of the organisation compared to the safety policy and objectives, and to validate the effectiveness of safety risks controls. The safety reporting procedures related to safety performance monitoring shall clearly indicate which types of operational behaviour are acceptable or unacceptable, and shall include the conditions under which immunity from disciplinary action would be considered.

3.2 The management of change: The operator/approved maintenance organisation shall develop and maintain a formal process to identify changes within the organisation which may affect established processes and services; to describe the arrangements to ensure safety performance before implementing changes; and to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.

3.3 Continuous improvement of the SMS: The operator/approved maintenance organisation shall develop and maintain a formal process to identify the causes of sub-standard performance of the SMS, determine the implications of sub-standard performance in operations, and eliminate such causes.

4. SAFETY PROMOTION

4.1 Training and education: The operator/approved maintenance organisation shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform the SMS duties. The scope of the safety training shall be appropriate to each individual's involvement in the SMS.

4.2 Safety communication: The operator/approved maintenance organisation shall develop and maintain formal means for safety communication that ensures that all personnel are fully aware of the SMS; conveys safety critical information; and explains why particular safety actions are taken and why safety procedures are introduced or changed.

Civil Aviation Authority of Bangladesh

Headquarter, Kurmitola, Dhaka

Web: www.caab.gov.bd

No. CAA/5504/48/AELD/647 Dated: 14 -07-2019

Civil Aviation Circular (CAC-AIR) 01/2019

This authority is hereby declaring the ANO (AW) chapter C.3 concerning "Certificate of Approval Training Organization and Engineering Instructors" is superseded by ANO (AW) Part-147 requirements concerning "Approved Maintenance Training Organization" with effect from 01-07-2019.

(1) as soon as may be after the commencement of this Circular from dated 01.07.2019, the ANO (AW) chapter C.3 concerning "Certificate of Approval Training Organization and Engineering Instructors" shall stand repealed.

(2) Despite such repeal under sub-paragraph (1),

(a) any act done, measures taken, any order, circular, or notice issued, certificate, license or permit given or any agreement entered into or document signed under the said circular shall be deemed to have done, taken, entered, issued, given, made or signed under this circular;

(b) any proceeding, going on or pending, shall, in so far as possible, be disposed of under this circular; and

(c) any suit and other legal proceedings instituted before any court shall, if pending, be disposed of in such way as if the said circular had not been repealed.

Air Vice Marshal M Mafidur Rahman
BSP. BUP, ndu, afwc,psc
Chairman
Civil Aviation Authority of Bangladesh
Headquarters, Kurmitola, Dhaka.

CIVTL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENT

PART C - CERTIFICATE OF APPROVAL ORGANISATIONS AND INDIVIDUALS

CHAPTER C.4	**CERTIFICATE OF APPROVAL STORES AND DISTRIBUTION ORGANIZATIONS**

SECTIONS

1. GENERAL

1.1 In addition to the general requirements of Chapter C.I of these Orders, this Order prescribes the particular conditions applicable for granting of a Certificate of Approval to an organization for the purpose of storing and distribution of aircraft spares.

2. DEFINITIONS

2.1 For the purpose of this Order, the definitions as mentioned under the Rules 2 and 183 of the Civil Aviation Rules, 1984 shall apply. Where a particular definition is not given under the Rule, the under mentioned definitions shall apply:

(a) **"Aircraft materials"** means a raw product, which has under gone a quality program to ensure that it conforms to aeronautical standard, and is traceable, to the source of supply.

(b) **"Aircraft part"** means a sub assembly of an aircraft component and standard items including fasteners, rivets, nuts, bolts, rigging cables and electric wires.

(c) **"Aircraft spares"** means, engine, propeller, component, parts and materials meant for use on aircraft.

(d) **"Bonded Stores"** means stores where airworthy and serviceable material, awaiting evidence of having been received from approved sources, are stocked.

(e) **"Distributor"** means an organization approved to engage itself in the sale of aircraft components, spares, materials or goods which have been obtained in bulk, from the manufacturers or suppliers approved in the country of manufacture, under incoming Release Notes or equivalent certification documents.

(f) **"Fluid"** means liquids, oil, gases and greases approved for use on aircraft, engine, aircraft component and aircraft part.

(g) **"Quality"** means the totality of features and characteristics of a product that meets the requirements of the customer. With manufactured products quality is a combination of quality of design, quality of manufacture, quality of storage and quality of performance.

(h) **"Quality control"** means a management system for programming and coordinating the quality and improvement efforts of the various groups in an approved Organization, so as to permit compliance with CAAB's applicable requirements, and any specific customer requirements affecting airworthiness.

(i) **"Quality assurance"** means overall planned and systematic actions necessary to provide adequate confidence that a product designed, manufactured, maintained and stored for aeronautical purpose, will satisfy given requirements for quality.

(j) **"Quarantine stores"** means stores where airworthy and serviceable material, awaiting evidence of having been received from approved sources, are stocked.

(k) **"Release notes"** means the document defined as such in the ANO (Airworthiness) Chapter B.3. It may be known by various other names in other Contracting States as stated in the Chapter B.14 of this Order.

3. SCOPE OF APPROVAL

3.1.1 The Stores and Distributions Organization is only approved to certify that CAAB requirements have been complied with in respect of incoming materials(s) which have been obtained in bulk, from the manufacturer(s) or supplier(s) appointed/ approved, by the manufacturer(s), under incoming Release Notes or equivalent certification documents acceptable to the Chairman as mentioned in the Chapter B.14 of this Order.

3.2 The approval only authorizes approved Distributor(s) to receive and store aeronautical products in the same condition as certified by the manufacturer (except that raw material may be cut to length) and to release them to the same specification. The approval does not authorize the holder (distributors) to carry out testing nor, under any circumstances, to make changes to the specification. Such Organisation may neither carry out nor sub-contract any form of rework or material conversion; these activities are outside the scope of CAAB's approval.

Note: Each Release Notes issued by the Distributor and Supply must be accompanied by a copy of the Approved Certificate/Airworthiness Approval Tag (or equivalent document known by other name) with which the item was received from the manufacturer or supplier approved in the country of manufacture.

4. APPROVAL RATINGS

4.1 The scope of approval shall be defined by grant of one or more of the following ratings:

(a) Aircraft components

(b) Aircraft parts

(c) Aircraft materials

(d) Fluids

4.2 Each of the ratings provided for in paragraph 4.1 of this Order shall be appropriately limited to components, parts, materials or fluids of a particular type, make or specification meant for use on aircraft or aeronautical purposes.

4.3 An organization approved for the purpose of supply may, in the course of its own acceptance procedures shall carry out inspection of the incoming items for release in to the bonded store.

5. FACILITIES

5.1 Storage facilities shall be provided which adequately protect products from contamination and deterioration.

5.2 Physical separation shall be maintained between incoming products and other products for which acceptance procedures have been completed.

5.3 The storage facilities shall provide for any special storage condition specified by the product manufacturer or as otherwise specified in the approved company Quality Procedures Manual.

5.4 Adequate Quarantine and Bonded stores shall be provided for satisfactory storage.

6. QUALITY PROCEDURES MANUAL

6.1 Unless otherwise incorporated in another CAAB approved document, such as General Engineering Manual (Company Exposition), an applicant seeking approval as a supply organization shall submit for approval by the Chairman, a General Engineering Manual and Quality Procedures Manual (QPM) in line with the guidelines stated in the ANO (Airworthiness) Chapter B.2 of this Orders. The manual shall contain, as applicable:

(a) The terms and limitations of the approval, which may be a copy of the schedule of conditions;

(b) The location and layout of each of the organizations premises, and the work to be performed at each location and area within the premises;

(c) nomination of the Chief Executive, who shall be the person having overall responsibility for airworthiness and authorized signatories for Release Notes, and other key personnel the Quality Control Manager and Chief Store Officer;

(d) A statement of responsibilities for all key personnel;

(e) stores procedures, including procedures for ensuring that products subject to damage and deterioration are suitable stored and adequately protected, incoming goods inspection procedures, life control procedures, rejection procedures for defective items, notification procedures to CAAB for the defective items and traceability of certifications (cross-reference between incoming certificate and Release Notes issued by the Distributor);

(f) Acceptance procedures, including as appropriate:

(i) Procedures for the identification of components and the acceptance of documentary evidence of conformity;

(ii) Stock register; and

(iii) Inspection procedures; and

(g) Procedures for the issue of Release Notes, and specimen signatures of the authorized persons (approved signatory);

(h) Procedures for the disposal of damaged and rejected aeronautical products; (i) procedures for the compilation and retention of store records;

(j) identification of, or specimens of, Release Notes and documents used for recording work done; and

(k) Procedures for the maintenance and retention for at least five years of records relating to:

(i) Incoming Release Notes or equivalent as are necessary to establish the Source of supply and airworthiness of components used; and

(ii) Inspections performed/actions taken.

7. REQUIREMENTS FOR THE MAINTENANCE OF APPROVAL

7.1 The Organization shall be maintained at the standard necessary to undertake the work for which it is approved and the CAAB shall, at all reasonable times have access to the Organization for the purpose of assessing the standard in use.

7.2 A proposed change of the Chief Executive shall be notified to the Chairman in writing. The Chairman may require the Organization to supply further information in order to satisfy itself of the suitability of the official concerned in so far as it may affect the CAAB's approval of the Organization.

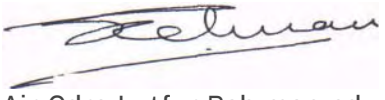
7.3 Changes in the persons nominated in accordance with 6.1 shall be notified to the Chairman in writing for acceptance.

7.4 The Company Exposition and the Quality Procedures Manual required by 6.1 shall be reviewed periodically by the Organization and any necessary amendments promulgated.

7.5 The Organization shall consult the CAAB in case of any doubt or difficulty about the interpretation of the requirements, associated procedures, or on any airworthiness matter, which in their opinion involves new problems or techniques.

7.6 An Official authorized by the Chairman shall have the right to carry out tests or inspections in any way associated with establishing airworthiness of an aircraft component, aircraft materials, aircraft part or fluids meant for use on aircraft, engine or component.

7.7 The Chairman may revoke, suspend or vary the terms of approval if the conditions required for approval are not maintained.
This Order is issued in pursuance of the Rules 4 and 190 of the Civil Aviation Rules 1984. The ANO is a complete re-issue and supersedes the issue 2, dated March 20, 2001



Air Cdre Lutfur Rah man ndu, psc
Chairman
Civil Aviation Authority of Bangladesh

CIVIL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENTS

PART C - CERTIFICATE OF APPROVAL ORGANISATIONS AND INDIVIDUALS

CHAPTER C.5	**CERTIFICATE OF APPROVAL PROCESSING ORGANISATIONS**

SECTIONS

1. GENERAL

1.1 In addition to Chapter C.1 of these Orders, this Order prescribes the particular conditions that apply for the granting of a Certificate of Approval for the purpose of the processing of aeronautical products.

2. DEFINITION

2.1 For the purpose of this Order, "process" shall be defined as an operation performed in the course of manufacture, maintenance or supply which may affect the airworthiness of an aircraft, and which includes heat treatment, welding, electroplating, machining, casting and tire retreading.

3. LIMITATIONS OF APPROVAL

3.1 Certificates of approval for the purpose of processing shall be issued only to enable an approved organisation to issue release notes which certify that aeronautical products have been processed and inspected in accordance with approved standards and specifications.

3.2 The Chairman may require an organisation approved for the purpose of processing to comply with relevant requirements applicable to organisations approved for the purpose of maintenance.

4. SCOPE OF APPROVAL

4.1 The scope of approval shall be defined by a rating and associated limitations.

4.2 The rating shall be a statement of the particular process which is the subject of the approval.

4.3 The limitations shall include a statement of the process specification(s) to be used.

4.4 An organisation approved for the purpose of processing may issue release notes for work performed within the scope of its approval.

5. ENGINEERING PROCEDURES MANUAL

5.1 An Engineering Procedures Manual (EPM) for a processing firm shall contain, as applicable:

(a) The scope of approval, along with a statement of the terms and limitations of the scope of approval.

(b) A floor plan or general description, showing the location and type of work performed in each of the organisations premises.

(c) An organisation chart, and a list by name of key personnel including the chief executive, who shall be the person having overall responsibility for all airworthiness matters, the Chief Inspector, and authorised signatories for release notes.

(d) The responsibilities of all key personnel.

(e) Criteria to be used to establish the initial and continued competence of staff performing specialist functions.

(f) Procedures for achieving and determining the satisfactory performance of the process.

(g) Identification of, or specimens of, work sheets, inspection stamps, release notes, and other forms used for recording, identification, and certification of work done.

(h) Procedures for the issue of release notes, including specimen signatures of authorised signatories.

(i) Procedures for the maintenance and retention of records.

6. PERSONNEL

6.1 The applicant shall nominate one or more persons as authorised signatories for release notes.

6.2 In respect of paragraph 6.1 of this Order, the Chairman shall be satisfied that each proposed authorised signatory is capable of determining that the process has been satisfactorily performed, and that the signatory is conversant with the EPM and such CAAB Rules and subordinate requirements and standards as relate to his responsibilities.

6.3 Welders within the organisation shall hold appropriate certificates of competency issued by the company in accordance with procedures prescribed in the EPM and the requirement of Chapter C.7 of these Orders.

6.4 Where airworthiness is dependent on the skill of the operator and cannot readily be determined by inspection, the company shall satisfy the Chairman that the operators have an adequate level of competence, and hold appropriate certificates issued by the company in accordance with procedures prescribed in the approved EPM.

Issued in pursuance of the Civil Aviation Rules 1984, Rule 4 and Rule 190.

CIVIL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENTS

PART C – CERTIFICATE OF APPROVAL – ORGANISATIONS AND INDIVIDUALS

CHAPTER C.6	**CERTIFICATE OF APPROVAL-NON-DESTRUCTIVE TESTING ORGANISATIONS**

1. GENERAL

1.1 This Order Prescribes the conditions under which organisations and individuals employed by organisations may be approved to perform and certify compliance of non-destructive testing (NDT) during the maintenance, overhaul or manufacture of aircraft or aircraft components.

2. DEFINITIONS

2.1 For the purpose of this Order, “required inspection” is defined as any inspection required by an airworthiness directive, or by an approved maintenance manual, maintenance schedule or maintenance programme.

3. SCOPE OF APPROVAL

3.1 Organisations engaged in the non-destructive testing of aircraft or aircraft parts during maintenance, overhaul or manufacture may, subject to the procedures and requirements of this Order, be authorised to:

(a) Provide reports and certify compliance in respect of such work when performed on aircraft structures, structural components and welded structural components.

(b) Approve personnel to perform NDT and provide related reports to the authorised organisation.

4. COMPANY REQUIREMENTS

4.1 Except for the application of non fluorescent liquid penetrants by aerosol can, no organisation shall perform required NDT inspections of aircraft or aircraft components, including fluorescent penetrant, magnetic particle, eddy current, ultrasonic or radiographic methods unless each NDT facility within that organisation has been specifically approved by the Chairman for each method of NDT performed.

4.2 Required inspections involving NDT shall be made in accordance with the techniques approved by the product manufacturer or by an appropriately approved organisation unless an alternative technique has been approved by the Chairman.

5. PERSONNEL REQUIREMENTS

5.1 No organisation authorised in accordance with Section 3 of this Order shall approve a person to perform required inspections of aircraft or aircraft components by any of the methods detailed un paragraph 4.1 of this Order unless that person :

(a) Is at least twenty one years of age.

(b) Has passed Higher Secondary Certificate Examination in Science group or has obtained at least an equivalent diploma.

5.2 No organisation authorised in accordance with Section 3 of this Order shall approve a person to perform required inspections of aircraft or aircraft components by any of the methods detailed un paragraph 4.1 of this Order unless that person, in respect of each particular method of NDT which it is intended to perform :

(a) Holds a relevant certificate issued by an organisation appropriately approved for the purpose of providing training in NDT techniques by the Civil Aviation Authority of a contracting country in which the organisation is located.

(b) Has a minimum of one year practical experience.

(c) Passes an oral examination to be conducted by representatives of the Civil Aviation Authority of Bangladesh, or their representative(s).

6. APPLICATION OF APPROVAL

6.1 Organisations seeking approval to perform NDT work, or an extension to an existing approval, shall make written application to the CAAB, and the application shall include:

(a) Data relating to the number of qualified staff available to discharge the responsibilities of the approval, including certified copies of such certificate as were issued in accordance with the requirements of paragraph 5.1 of this Order, and a summary of the experience of each qualified person as related to the types of NDT that he will be authorised to perform and certify.

(b) Data relating to each type of the non-destructive testing equipment available to perform the intended work, including a report of the serviceability and calibration status of each item, where applicable.

6.2 Two copies of the proposed amendment to the Maintenance Control Manual (MCM) to include procedures for the new or extended NDT facility shall accompany the application.

6.3 Upon being satisfied that all requirements have been met, the Chairman will approve the amendment to the MCM.

Issued in pursuance of the Civil Aviation Regulations 1984, Rule 4 and Rule 190.

CIVIL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENTS

PART C - CERTIFICATE OF APPROVAL - ORGANISATIONS AND INDIVIDUALS

CHAPTER C.7 - APPROVAL OF WELDERS

SECTIONS

1. GENERAL

1.1 This Order Prescribes the requirements for issue and renewal of approvals to welders engaged in the welding of parts essential to the airworthiness of aircraft.

2. DEFINITION

2.1 For the purpose of this Order, "primary structure" is defined as a structure which is designed to carry significant flight, ground or pressurization loads, the failure of which could seriously endanger the safety of the aircraft.

3. SCOPE OF APPROVAL

3.1 Approval of welders may be granted in any one or more of the following groups:
(a) Group 1 - Aluminum alloys.
(b) Group 2 - Magnesium alloys.
(c) Group 3 - Carbon steels.
(d) Group 4 - Corrosion and heat resisting steels.
(e) Group 5 - Nickel alloys.
(f) Group 6 - Copper base alloys.
(g) 'Group 7 - Titanium alloys.

3.2 Inquiries relating to materials not detailed above may be made to the Chairman.

4. ELIGIBILITY FOR GRANT OF APPROVAL

4.1 A candidate seeking approval as a welder shall:

(a) Be at least 21 years of age.

(b) Have passed Higher Secondary Certificate Examination in Science group or have obtained an equivalent diploma.

(c) Have graduated from an appropriate welders course acceptable to the CAAB, and have acquired a minimum of two years general welding experience, six months of which shall have been in the particular group for which approval is requested.

(d) Pass an oral examination to be given by officials of ttie Civil Aviation Authority. Bangladesh, relating to the group(s) for which approval is requested.

5. APPLICATION FOR GRANT AND RENEWAL OF APPROVAL

5.1 Application for issue or renewal of a welders approval shall be submitted to the Chairman, by the applicant Or through the sponsoring organization, using form AWS-9.

5.2 Upon receipt of the application, dates when the oral examination can be held and the test samples fabricated shall be established, and the candidate notified.

6. PROCEDURE FOR GRANT OF APPROVAL

6.1 Where the welder is employed by an approved organization, and that approval includes the control of welders, the organization shall, in consultation with the Civil Aviation Authority, be responsible for grant of welders approval, whereas welders not employed by such organizations shall, if qualified, be granted approval by the Chairman.

6.2 The following shall apply to approval of welders employed by approved organizations:

(a) The approved organization shall arrange for the welder to prepare and weld a set of test samples.

(b) The approved organization shall submit the samples, together with particulars relating to the welder concerned, the material used and the identification marks of the test samples for examination at a test facility acceptable to the Chairman.

(c) Upon the Chairmans acceptance of the application and a satisfactory test report from the testing facility, the organization may issue an approval document to the welder, in a form acceptable to the Chairman, for the material and method of welding used.

(d) The organisation shall be responsible for maintaining a register of welding approvals issued, and the register shall be made available to officials of the Civil Aviation Authority at any reasonable time.

(e) The cost of the examination at the test facility shall be the responsibility of the welder or the sponsoring organization.

6.3 The following shall apply to the approval of welders not employed by an approved organization:

(a) Welders not employed by an approved organization shall fabricate the test samples under the supervision of a representative of the Civil Aviation Authority.

(b) The test samples, suitably marked, together with completed form AWS-9 shall be sent to a test facility acceptable to the Chairman for examination.

(c) Upon the Chairmans acceptance of the application, and a satisfactory test report from the testing facility, the Chairman will issue an approval certificate.

(d) The cost of the examination at the test facility shall be the responsibility of the welder or the sponsoring organization.

7. REQUIREMENTS FOR MAINTAINING APPROVAL

7.1 To maintain the validity of the approval for a welder employed with an approved organization, the following shall apply:

(a) The approved organization shall arrange for periodic testing of the welders competence and the maximum period between such tests shall be 12 months.

(c) To ensure continuity of approval, if the test is unsatisfactory, the organisation shall arrange for the check to be repeated immediately and the new samples sent to the test facility for examination.

(d) During the period between any test which proved unsatisfactory, and the result of the next test, the welder shall not weld any parts which are essential to the airworthiness of aircraft.

(e) If the test results are again unsatisfactory, the welders approval shall be suspended until adequate training and experience has been acquired, and a further test has been satisfactorily completed.

7.2 To maintain the approval validity for a welder not employed with an approved organization, the following shall apply:

(a) Check examinations shall be arranged within periods not to exceed twelve months, and in consultation with a representative of the Civil Aviation Authority.

(b) If the test results are unsatisfactory, the applicant shall arrange for the check examination to be repeated immediately, and the new test samples shall be sent to' the test facility for examination.

(c) During the period that any check test proves unsatisfactory, the welder shall notify the Civil Aviation Authority and approval shall be suspended from the date of the first unsatisfactory examination and remain so until adequate training and experience has been acquired, and a further test has been satisfactorily completed.

8. TEST SAMPLES AND MECHANICAL TESTING

8.1 All test samples and mechanical testing shall be done in accordance with the requirements to the Supplement to Chapter A8-10 of the British Civil Airworthiness Requirements (BCAR).

8.2. For the purpose of this Order, where the Supplement to Chapter A8-10 of the BCAR refers to the CAA, it shall be interpreted to mean the Civil Aviation Authority of Bangladesh, and where the supplement refers to an approved Test House it shall be interpreted to mean a test facility acceptable" to the Chairman.

Issued in pursuance of the Civil Aviation Rules, 1984, Rule 4 and Rule 190.

CIVIL AVIATION AUTHORITY OF BANGLADESH
AIR NAVIGATION ORDERS

AIRWORTHINESS REQUIREMENTS

PART C – CERTIFICATE OF APPROVAL – ORGANISATIONS AND INDIVIDUALS

CHAPTER C.8	**ISSUE OF COMPANY AUTHORIZATION**

1. GENERAL

This Order pertains to and prescribes requirements regarding issue of "Company Authorization" for maintenance of aircraft & component and other activities.The Rule 196 of the Civil AviationRules 1984 regarding maintenance of aircraft within Bangladesh requires that the owner,operator or pilot-in-command of a Bangladesh registered aircraft shall not authorize orpermit any maintenance to be carried out on the aircraft except by an appropriate person.

2. DEFINITIONS

2.1 For the purpose of this Order, the definitions as mentioned under the Rule 2, 183 and 234 ofthe Civil Aviation Rules, 1984 shall apply.

3. ELIGIBILITY OF THE ORGANISATION

3.1 Organizationcertified under ANO (AW)C.2 or ANO (AW) Part-145 or Part-M may be approved by the Chairman for issue of Company Authorization.

3.2 Detailed requirements and procedures i.e. qualifications, training and practical experiencerequirements, examination etc. for issue, certification privileges (scope), suspension andcancellation of Company Authorization including specimen copy of an Company Authorization shall be mentioned in the MPM/MCM/MOE/MOM/CAME of the organization.

4. QUALIFICATIONS

4.1 For grant of Company Authorization in aircraft maintenance categoryfor the issue of Certificate to Release to Service or Maintenance Release, the person must be a holder of either Type Rating Licencein theappropriate category issued/validated by CAAB or ANO(AW) Part-66 Category A licence with appropriate task training.

4.2 For grant of Company Authorization in Pre-flight inspection, the person must be a:
(a) Holder of Basic Licence issued by CAAB; or
(b) Holder of CPL/ATPL Licence on the type of aircraft issued/validated by CAAB;

4.3 For grant of Company Authorization in component maintenance or other activities, theperson must be:
(a) Higher Secondary Certificate in science group; or
(b) Diploma in aircraft maintenance engineering in related category; or
(c) Diploma from polytechnic institute in related category.

5. TRAINING REQUIREMENTS

5.1 The applicant for Company Authorization must have completed:
(a) Relevant training courses as applicable for the Company Authorization to be issued such as Task training, Type Course, NDT course, welding course,Vendor course, Basic Quality Course, audit technique course, Store inspection course as applicable;
(b) Regulation and/or Company Procedure training;
(c) Safety Management System;
(d) Human Performance Limitations Course;
(e) Continuation training as mentioned in the company manual.

6. PRACTICAL EXPERIENCE

6.1 The applicant shall have completed minimum practical experience as mentioned below:

Category	**Period of experience**
Aircraft Maintenance (Line & Base)	As specified in the company manual depending upon the individual qualification and the scope of authorization to be granted.
Pre-Flight Inspection	On the job training for a period determined by the AOC holder ;
Component Maintenance	Minimum of 12 months experience in component shops including 3 months of current experience on specific component(s) after successful completion of applicable course and/or OJT on the type of equipment/component ;
Non Destructive Testing/Welding	Minimum of 2 years' experienceof NDT/Weldingexperience including 6 (six) months current experience on the specific type of work.
Stores Inspectors	Minimum of 6 (six) months practical experience including 2 (two) to 4 (four) weeks of OJT.
Quality Auditors	(a) Have at least 2 (two) years of experience in an approved Training/maintenance organization/operator or an airworthiness inspection organization; (b) Relevant experience on audit or on the job training for 30 (thirty) hours;

7. EXAMINATIONS

The procedures for examination, selecting examiners and composition of the examination board shall be laid down in the MPM/MCM/MOE/MOM of the organization. Minimumpassing marks for examination shall be 75% (seventy five percent).

8. CONDITIONS

Company Authorization shall not be issued/renewed to person(s) in the event of:

(a) Recency of experience 6 months within last 2 years;

(b) Incident of Inspection failures recorded during the last 3 (three) months or in case of any ongoing/pending investigation against him;

9. VALIDITY

Company Authorizationmay be issued for a period determined by the approved organization and shall remain valid unless cancelled or suspended or licence/validation issued by CAAB expires. Theorganization shall ensure that appropriate continuation training is imparted at period notexceeding 2 (two) years to the holders of Company Authorization.

10. SUSPENSION AND CANCELLATION

10.1 The Chairman may direct for suspension or cancellation of any Company Authorization on specific ground(s), which shall be complied with by the organization.

This is a complete re-issued and supersedes the ANO (AW) C.8, Issue-2, 18 May 2010.

Air Vice Marshal EhsanulGaniChoudhury
GUP, ndc, psc
Chairman
Civil Aviation Authority, Bangladesh