PART 5—AIRWORTHINESS

INTRODUCTION

Nigeria does not presently have the capabilities or demand to issue its own original type certification and will therefore not be the State of Design or State of Manufacture. Part 5 of the Regulations presents regulatory requirements forthe continuing airworthiness of aircraft expected to operate in Nigeria consistent with the standards andrecommended practices (SARPs) in ICAO Annexes 6 and 8. Part 5 is designed to address the complex situationfaced by most countries today respecting the airworthiness of aircraft operating within the country and in internationalaviation. In most such cases, there are aircraft registered in Nigeria that were designed and manufactured in another Contracting State, and aircraft registered in Nigeria that were designed in one Contracting State and manufactured inanother Contracting State. In addition, Nigeria may have AOC holders who operate aircraft registered in another Contracting State, with different States of design and manufacture. Additionally, Nigeria may have AOC holders who are part of a regional consortium, with maintenance facilities in a neighboring State. Proper airworthiness of aircraft registered in Nigeria is the result of communication. The Regulations require all persons operating Nigerian registered aircraft to notify the Authority when certain events occur. The Authority is required to open lines of communication with the State of Design and/or the State of Manufacture, so that the Authority can receive all safety bulletins and airworthiness directives for each type of aircraft operating in Nigeria.

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PART 5—AIRWORTHINESS

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5.1 GENERAL

Applicability.

5.1.11.—(*a*) This regulation prescribes the requirements for—

(1) Original certification of aircraft and aeronautical products
(2) Supplemental type certificates ;
(3) Issuance of a Certificate of Airworthiness ;
(4) Continued airworthiness of aircraft and aeronautical components ;
(5) Aircraft maintenance and inspection requirements ; and
(6) Maintenance records and entries.

Definition.

5.1.1.2.—(*a*) For the purpose of Part 5, the following definitions shall apply—

(1) *Aeronautical product*—Any aircraft, aircraft engine, propeller,or subassembly, appliance, material, part or component to be installed thereon.

(2) *Airworthiness Approval Tag*—(NCAA form). A tag (NCAA Form One) that may be attached to a part. The tag must include the part number, serial number, and current life status of the part. Each time the part is removed from a type certificated product, a new tag must be created or the existing tag must be updated with the current life status. NCAA Form One has two distinct purposes – (1) is as a certification of release to service of a part, component or assembly after maintenance, preventive maintenance, overhaul or rebuilding, and (2) the other is as shipping of a newly manufacturered part.

(3) *Airworthiness Directive*— Continuing airworthiness information that applies to the following products: aircraft, aircraft engines, propellers, and appliances. An airworthiness directive is mandatory if issued by the State of Design.

(4) *Alteration.*—The alteration of an aircraft/aeronautical product in conformity with an approved standard.

(5) *Appropriate airworthiness requirements*—The comprehensive and detailed airworthiness codes established, adopted or accepted by a Contracting State for the class of aircraft, engine or propeller under consideration.

(6) *LifeLimited Part*—Any part for which a mandatory replacement limit is specified in the type design, the Instructions for Continued Airworthiness, or the maintenance manual.

(7) *Maintenance*—. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a alteration or repair.

(8) *Major Alteration*—Major alteration means an alteration not listed in the aircraft, aircraft engine, or propeller specifications – (1) that might appreciably affect weight, balance, structural strength, performance, powerplant, operations, flight characteristics, or other qualities affecting airworthiness; or (2) that cannot be done by elementary operations. Described in IS: 5.1.1.2(*a*)(8).

(9) *Major Repair*— Major repair means a repair: (1) that if improperly done might appreciably affect weight, balance, structural strength, performance, powerplant, operations, flight characteristics, or other qualities affecting airworthiness; or (2) that is not done according to accepted practices or cannot be done by elementary operations. Described in IS: 5.1.1.2(*a*)(9).

(10) *Overhaul*—The restoration of an aircraft/aeronautical product using methods, techniques, and practices acceptable to the Authority, including disassembly, cleaning, and inspection as permitted, repair as necessary, and reassembly; and tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Authority, which have been developed and documented by the State of Design, holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under a Technical Standard Order (TSO).

(11) *Preventive maintenance*.—Simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations. Described in IS: 5.1.1.2(*a*)(11).

(12) *Rebuild*—The restoration of an aircraft/aeronautical product by using methods, techniques, and practices acceptable to the Authority, when it has been disassembled, cleaned, inspected as permitted, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item, using either new parts or used parts that conform to new part tolerances and limits.

(13) *Repair*—(1) The restoration of an aeronautical product to an airworthy condition as defined by the appropriate airworthiness requirements. (ICAO Annex 8 definition)**;** (2) The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the type certificate for the respective aircraft type, after it has been damaged or subjected to wear. (ICAO Annex 6 definition).

(14) *Required Inspection Items*— Maintenance items and/or alterations that must be inspected by a qualified and authorised person other than the one performing the work, and include at least those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not properly performed or if improper parts or materials are used.

(15) *State of Design*—The State having jurisdiction over the organisation responsible for the type design.

(16) *State of Manufacture*—The State having jurisdiction over the organisation responsible for the final assembly of the aircraft.

(17) *State of Registry*—The State on whose register the aircraft is entered.

(18) *Type Certificate*—A document issued by a Contracting State to define the design of an aircraft type and to certify that this design meets the appropriate airworthiness requirements of that State.

(19) *Validation of a Certificate of Airworthiness*—The action taken by a Contracting State, as an alternative to issuing its own Certificate of Airworthiness, in accepting a Certificate of Airworthiness issued by any other Contracting State as the equivalent of its own Certificate of Airworthiness.

5.1.13.—(*a*) The following acronyms are used in Part 5 : Abbreviations.

(1) AOC – Air Operator Certificate
(2) AMO – Approved Maintenance Organisation
(3) AME – Aviation Maintenance Engineer
(4) IA – Inspection Authorisation
(5) MEL – Minimum Equipment List
(6) PIC – Pilot in command
(7) STC – Supplemental type Certificate
(8) TSO – Technical Standard Order

5.2 ORIGINAL CERTIFICATION OF AIRCRAFT AND AERONAUTICAL PRODUCTS

5.2.1.1—(1) This Subpart describes the procedures and designation of applicable rules for original type certification of aircraft and related aeronautical products.(2) This Subpart is reserved. Applicability.

5.3 TYPE CERTIFICATES AND SUPPLEMENTAL TYPE CERTIFICATES

5.3.1.1. —(*a*) This Subpart prescribes procedural requirements for the acceptance of a type certificate and the issue of supplemental type certificates. Applicability.

5.3.1.2. —(*a*) The Authority may accept a type certificate or equivalent document issued by a state of design in respect of an aircraft or aircraft component if : Acceptance of a Type Certificate.

(1) The type certificate or equivalent document was issued based on an airworthinesscode recognized by the Authority ; or

(2) The design, materials, construction equipment, performance and maintenance of aircraft or aircraft component technical evaluation against a recognized airworthiness code has been carried out by the Authority and has been found to :

(*i*) Meet the required standards of the recognized airworthiness code ; or

(*ii*) Has compiled with any recommendations required by the Authority.

(*b*) Upon acceptance of the type certificate by the Authority, the Authority may, prior to issue of standard or special certificate of airworthiness, require the applicant to comply with any additional requirements as prescribed by the Authority.

(c) In this regulation, recognised airworthiness code means standards relating to the design, materials, construction equipment, performance and maintenance of aircraft or aircraft component issued by the States of design are in compliance with Annex 8 to the Chicago Convention.

5.3.1.3. —(*a*) Any person who proposes to alter a product by introducing a major change in type design,not great enough to require a new application for a type certificate, shall apply for a Supplemental Type Certificate to the regulatory agency of the State of Design that approved the type certificate for that product, or to the State of Registry of the aircraft provided that the State of Registry has the technical expertise to evaluate the proposed change in accordance with the type design. The applicant shall apply in accordance with the procedures prescribed by that State. Issuance of a supplemental type certificate.

(b) The Authority, upon receiving a request for a supplemental type certificate for an aircraft registered in Nigeria shall forward the request to the State of Design.

5.4 ISSUANCE OF CERTIFICATES OF AIRWORTHINESS

Applicability.

5.4.1.1.—(*a*) This Subpart prescribes procedures required for the issueof airworthiness certificates and other certifications for aeronautical products registered in Nigeria.

(*b*) The Authority shall issue a certificate of airworthiness for aircraft registered in Nigeria based on satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements (type certificate) and is in a condition for safe operation.

Eligibility.

5.4.1.2.—(*a*) Any registered owner of Nigerian registered aircraft, or agent of the owner, may apply for an airworthiness certificate for that aircraft.

(*b*) Each applicant for an airworthiness certificate shall apply in a form and manner acceptable to the Authority.

Aircraft Identification.

5.4.1.3.—(*a*) Each applicant for a Certificate of Airworthiness shall show that the aircraft has the proper identification plates.

Classifications of Airworthiness Certificates.

5.4.1.4.—(*a*) A standard Certificate of Airworthiness will be issued for aircraft in the specific category and model designated by the State of Design in the type certificate. The types of standard certificates of airworthiness include ——

(1) Normal ;
(2) Utility ;
(3) Acrobatic ;
(4) Transport ;
(5) Commuter ;
(6) Balloon ;
(7) Other.

(*b*) A Special Airworthiness Certificate will be issued for aircraft that do not meet therequirements of the State of Design for a standard airworthiness certificate. The types of special airworthiness certificates include—

(1) Primary;
(2) Restricted;
(3) Limited;
(4) Provisional
(5) Experimental
(6) Special flight permits;
(7) Other.

Issuance or Validation of a Standard Airpworthiness Certificate.

5.4.1.5.—(*a*) The Authority will issue a standard certificate of airworthiness if—

(1) The applicant presents evidence to the Authority that the aircraft conforms to a type design approved under a type certificate or a supplemental type certificate and to theapplicable Airworthiness Directives of the State of Manufacture ;

(2) The aircraft has been inspected in accordance with the performance rules of section 5.6 of this regulation for inspections and found airworthy by persons authorised by the Authority to make such determinations within the last 30 calendar days; and

(3) The Authority finds after an inspection that the aircraft conforms to type design and is in condition for safe operation.

(*b*) The Authority may validate a certificate of airworthiness issued by another Contracting State upon registration of the aircraft in Nigeria for the period specified in that validation certificate. The validation certificate shall be carried with the Certificate of Airworthiness and, together, shall be considered as the equivalent of a Certificate of Airworthiness issued by the Authority. The validity of the validation certificate shall not extend beyond the period of validity of the Certificate of Airworthiness or one year, whichever is less.

(*c*) The Standard Airworthiness Certificate shall contain the information in IS: 5.4.1.5

(*d*) The Standard Airworthiness Certificate or validation certificate shall be issued in the English language.

Issuance of special Airworthiness Aertificates.

5.4.1.6.—(*a*) The Authority may issue a Special Airworthiness Certificate to the aircraft that does not qualify for a Standard Certificate of Airworthiness.

(*b*) Aircraft holding Special Airworthiness Certificates shall be subject to operating limitations within Nigeria and may not make international flights. The Authority shall issue specific operating limitations for each Special Airworthiness Certificate.

Issuance of Special Flight Permits.

5.4.1.7.—(*a*) The Authority may issue a Special Flight Permit to an aircraft that is capable of safe flight, but unable to meet applicable airworthiness requirements, for the purpose of—

(1) Flying to a base where repairs, alterations, maintenance, or inspections are to be performed, or to a point of storage ;

(2) Testing after repairs, alterations, or maintenance have been performed ;

(3) Delivering or exporting the aircraft ;

(4) Evacuating aircraft from areas of impending danger; and

(5) Operating at weight in excess of the aircraft's maximum Certified Takeoff Weight for flight beyond normal range over water or land areas where adequate landing facilities or appropriate fuel is not available. The excess weight is limited to additional fuel,fuel-carrying facilities, and navigation equipment necessary for the flight.

(*b*) The Authority may issue a special flight permit with continuing authorisation issued to an aircraft that may not meet applicable airworthiness requirements but are capable of safe flight, for the purpose of flying aircraft to a base where maintenance or alterations are to be performed. The permit issued under this paragraph is an authorisation, including conditionsand limitations for flight, which

is set forth in the AOC Holder's specific operating provisions. This permit under this paragraph may be issued to an AOC Holder certificated under Part 9.

(*c*) In the case of Special Flight Permits, the Authority shall require a properly executed maintenance endorsement in the aircraft permanent record by a person or organisation, authorised in accordance to Part 5, stating that the subject aircraft has been inspected and found to be safe for the intended flight.

(*d*) The operator shall obtain all required overflight authorisations from countries to be overflownon flights outside Nigeria.

Duration of Certificates of Airworthiness.

5.4.1.8.—(*a*) A certificate of airworthiness or special airworthiness certificate is effective as follows unless sooner surrendered, suspended or revoked, or a special termination date is otherwise established by the Authority—

(1) A Transport Certificate of Airworthiness shall be valid for a period not to exceed eighteen months, as determined by the Authority. All other standard Certificates of Airworthiness shall be valid for a period not to exceed twelve months, as determined by the Authority.

(2) The validity of a validation certificate issued by Nigeria shall not extend beyond the period of validity of the Certificate of Airworthiness on which the Nigerian validation certificate is based, or twelve months, whichever is less.

(3) A special airworthiness certificate, such as a special flight permit, is valid for the period of time specified in the permit, which in any case shall not exceed twelve months.

(*b*) The continuing airworthiness of the aircraft shall be determined by a periodical inspection at appropriate intervals having regard to lapse of time and type of service.

(*c*) Failure to maintain an aircraft in an airworthy condition as defined by the appropriate airworthiness requirements of the State of Registry shall render the aircraft ineligible for operations until the aircraft is restored to an airworthy condition.

Cooperation among States for Continuing Airworthiness information, including Airworthiness directives.

5.4.1.9.—(*a*) Upon registration of an aircraft in Nigeria, the Authority will notify the State of Design of the aircraft of the registration in Nigeria, and request that the Authority receives any and all airworthiness directives addressing that aircraft, airframe, aircraft engine, propeller, appliance, or component part and any requirements for the establishment of specific continuing airworthiness programs.

(*b*) Whenever the State of Design considers that a condition in an aircraft, airframe, aircraft engine, propeller, appliance, or component part is unsafe as shown by the issuance of an airworthiness directive by that State, the Authority will make the requirements of such directives apply to Nigerian registered civil aircraft of the type identified in that airworthiness directive.

(*c*) The Authority may identify manufacturer's service bulletins and other sources of data, or develop and prescribe inspections, procedures and limitations, for mandatory compliance pertaining to affected aircraft in Nigeria.

(*d*) No person may operate any Nigerian registered civil aircraft to which the measures of this subsection apply, except in accordance with the applicable airworthiness directives and service bulletins.

Amendment of Airworthiness Certificate.

5.4.1.10.—(*a*) The Authority may amend or modify a Certificate of Airworthiness or a special airworthiness certificate—

(1) Upon application from an owner or operator; or

(2) On its own initiative.

(b) Amendment may be made under the following conditions:

(1) Alteration (STC or amended TC) ;

(2) A change to the authority and basis for issue ;

(3) A change in the aircraft model ; or

(4) A change in the operating limitations for an aircraft with a special airworthiness certificate.

Transfer or Surrender of a Certificate of Airworthiness.

5.4.1.11.—(*a*) An owner shall transfer a certificate of airworthiness—

(1) To the lessee upon lease of an aircraft within or outside Nigeria.

(2) To the buyer upon sale of the aircraft within Nigeria.

(*b*) An owner shall surrender the certificate of airworthiness for the aircraft to the issuing Authority upon sale of that aircraft outside of Nigeria that results in the removal of the aircraft from the Nigerian registry.

Commercial Air Transport.

5.4.1.12.—(*a*) The Authority will consider an airworthiness certificate valid for commercial air transport only when accompanied by operations specifications issued by the Authority which identifies the specific types of commercial air transport authorised.

5.5 CONTINUED AIRWORTHINESS OF AIRCRAFT AND COMPONENTS

Applicability.

5.5.1.1.—(*a*) This Subpart prescribes rules governing the continued airworthiness of civil aircraft registered in Nigeria whether operating inside or outside the borders of Nigeria.

Responsibiluty.

5.5.1.2.—(*a*) The registered owner or operator of an aircraft or, in the case of a leased aircraft, the lessee shall be responsible for maintaining the aircraft in an airworthy condition by ensuring that—

(1) All maintenance, overhaul, alterations and repairs which affect airworthiness are performed as prescribed by the State of Registry ;

(2) Maintenance personnel make appropriate entries in the aircraft maintenance recordscertifying that the aircraft is airworthy ;

(3) The approval for return to service (maintenance release) is completed to the effect that the maintenance work performed has been completed satisfactorily and in accordance with the prescribed methods ; and

(4) In the event there are open discrepancies, the maintenance release includes a list of the uncorrected maintenance items for which temporary relief is provided in the MEL and these items are made a part of the aircraft permanent record.

General.

5.5.1.3.—(*a*) No person may perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in this regulation.

(*b*) No person may operate an aircraft for which a manufacturer's maintenance manual or instructions for continued airworthiness has been issued that contains an airworthiness limitation section unless the mandatory replacement times, inspection intervals, and related procedures specified in that section or alternative inspection intervals and related procedures set forth in the operations specifications approved under Part 9 of these Regulations, or in accordance with the inspection program approved under Part 8 have been complied with.

(*c*) No person may operate an aircraft, aeronautical product, or accessory to which an Airworthiness Directive applies, issued either by the State of Design, or State of Manufacture and adopted for Nigerian-registered aircraft by the Authority, or by the State of Registry for aircraft operated within Nigeria, except in accordance with the requirements of that Airworthiness Directive.

(*d*) When the Authority determines that an airframe or aeronautical product has exhibited an unsafe condition and that condition is likely to exist or to develop in other products of the same type design, the Authority may issue an Airworthiness Directive prescribing inspections and the conditions and limitations, if any, under which those products may continue to be operated.

(*e*) The Authority shall report any airworthiness directives or continuing additional airworthiness requirements that it issues or any malfunction or defect reports to the State of Design.

Reporting of Failures, Malfunctions, and Defects.

5.5.1.4.—(*a*) Owners or operators of aircraft over 5,700 kg maximum take-off weight or of any aircraft used in a commercial operation shall report to the Authority any failures, malfunctions, or defects that result in at least the following—

(1) Fires during flight and whether the related fire-warning system properly operated ;

(2) Fires during flight not protected by a related fire-warning system ;

(3) False fire warning during flight ;

(4) An engine exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components ;

(5) An aircraft component that causes accumulation or circulation of smoke, vapour, or toxic or noxious fumes in the crew compartment or passenger cabin during flight ;

(6) Engine shutdown during flight because of flameout ;

(7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs ;

(8) Engine shutdown during flight due to foreign object ingestion or icing ;

(9) Shutdown during flight of more than one engine ;

(10) A propeller feathering malfunction or inability of the system to control overspeed during flight ;

(11) A fuel or fuel-dumping system failure that affects fuel flow or causes hazardous leakage during flight ;

(12) An unintended landing gear extension or retraction, or opening or closing of landing gear doors during flight ;

(13) Brake system components failure that result in loss of brake actuating force when the aircraft is in motion on the ground ;

(14) Aircraft structure that requires major repair ;

(15) Cracks, permanent deformation, or corrosion of aircraft structure, if more than the maximum acceptable to the manufacturer or the Authority ;

(16) Aircraft components or systems malfunctions that result in taking emergency actions during flight (except action to shut down an engine) ;

(17) Each interruption to a flight, unscheduled change of aircraft en route, or unscheduled stop or diversion from a route, caused by known or suspected technical difficulties or malfunctions ;

(18) Any abnormal vibration or buffeting caused by a structural or system malfunction, defect, or failure ; and

(19) A failure or malfunction of more than one attitude, airspeed, or altitude instrument during a given operation of the aircraft.

(*b*) Owners or operators of aircraft over 5,700 kg maximum take-off weight or of any aircraft used in a commercial operation shall report to the Authority—

(1) The number of engines removed prematurely because of malfunction, failure or defect, listed by make and model and the aircraft type in which it was installed; and

(2) The number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed.

(*c*) Each report required by this Subsection shall—

(1) Be made within 3 days after determining that the failure, malfunction, or defect required to be reported has occurred ; and

(2) Include as much of the following information as is available and applicable—

(*i*) Aircraft serial number ;

(*ii*) When the failure, malfunction, or defect is associated with an article approved under a TSO authorisation, the article serial number and model designation, as appropriate ;

(*iii*) When the failure, malfunction or defect is associated with an engine or propeller, the engine or propeller serial number, as appropriate ;

(*iv*) Product model ;

(*v*) Identification of the part, component, or system involved, including the part number ; and

(*vi*) Nature of the failure, malfunction, or defect.

(*d*) The Authority, if it is the Authority of the State of Registry of the aircraft, will submit all such reports upon receipt to the State of Design.

(*e*) The Authority, if it is not the Authority of the State of Registry of the aircraft, will submit all such reports upon receipt to the State of Registry.

5.6 Aircraft Maintenance and Inspection Requirements

Applicability.

5.6.1.1.—(*a*) This Subpart prescribes rules governing the maintenance and inspection of any aircraft having a Certificate of Airworthiness issued by Nigeria or associated aeronautical products.

General Requirements for Maintenance and Inspections.

5.6.1.2.—(*a*) No person may operate an aircraft unless the aircraft and its components are maintained in accordance with a maintenance program and the aircraft is inspected according to an inspection program approved by the Authority.

(*b*) The maintenance program shall include a description of the aircraft and components and recommended methods for the accomplishment of maintenance tasks. Such information shall include guidance on defect diagnosis.

(*c*) The maintenance program shall include the maintenance tasks and the recommended intervals at which these tasks are to be performed.

(*d*) Maintenance tasks and frequencies that have been specified as mandatory by the State of Design in approval of the type design shall be identified in the maintenance program.

(*e*) The maintenance program shall have a maintenance release process, including signed documentation, in a manner satisfactory to the Authority, indicating that the maintenance performed has been completed satisfactorily. A maintenance release shall contain a certification including—

(1) Basic details of the maintenance carried out ;

(2) Date such maintenance was completed ;

(3) When applicable, the identity of the approved maintenance organisation, AME, or AOC holder ; and

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

(*f*) The owner or operator shall use one of the following inspection programs as appropriate for the aircraft and the type operation.

(1) Annual inspection,

(2) Annual/100 hour inspections,

(3) Progressive, or

(4) Continuous airworthiness maintenance program.

Persons Authorised to Perform Maintenance, Preventive Maintenance, and Alterations.

5.6.1.3.—(*a*) No person may perform any task defined as maintenance on an aircraft or aeronautical products, except as provided in the following—

(1) A pilot licensed by the Authority may perform preventive maintenance on any aircraft owned or operated by that pilot so long as the aircraft is not listed for use by an AOC holder.

(2) A person working under the supervision of an aircraft maintenance engineer, may perform the maintenance, preventive maintenance, and alterations that the supervisory aircraft maintenance engineer is authorised to perform—

(*i*) If the supervisor personally observes the work being done to the extent necessary to ensure that it is being done properly, and

(*ii*) If the supervisor is readily available, in person, for consultation.

(3) A licensed aircraft maintenance engineer may perform or supervise the maintenance or alteration of an aircraft or aeronautical product for which he or she is rated subject to the limitation of Part 2 of these regulations.

(4) An AMO may perform aircraft maintenance within the limits specified by the Authority.

(5) The AOC holder may perform aircraft maintenance as specified by the Authority.

(6) A manufacturer holding an AMO may—

(*i*) Rebuild or alter any aeronautical product manufactured by that manufacturerunder a type or production certificate ;

(*ii*) Rebuild or alter any aeronautical product manufactured by that manufacturer under a TSO Authorisation, a Parts Manufacturer Approval by the State of Design, or Product and Process Specification issued by the State of Design ; and

(*iii*) Perform any inspection required by Part 8 of these Regulations on aircraft it manufacturers, while currently operating under a production certificate or under a currently approved production inspection system for such aircraft.

Authorised Personnel to Approve for Return to Service.

5.6.1.4.—(*a*) No person or entity, other than the Authority, may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service after it has undergone maintenance, preventive maintenance, rebuilding, or alteration, except as provided in thefollowing :

(1) A pilot licensed by the Authority may return his or her aircraft to service after performing authorised preventive maintenance.

(2) A licensed aircraft maintenance engineer may approve aircraft and aeronautical products for return to service after he or she has performed, supervised, or inspected its maintenance subject to the limitation of Section 2.4.4 of this Part.

(3) An AMO may approve aircraft and aeronautical products for return to service as provided in the operations specifications approved by the Authority.

(4) An AOC holder may approve aircraft and aeronautical products for return to service as specified by the Authority.

Persons Authorised to Perform Inspections.

5.6.1.5.—(*a*) No person, other than the Authority, may perform the inspections required by 8.2.1.7 for aircraft and aeronautical products prior to or after it has undergone maintenance, preventive maintenance, rebuilding, or alteration, except as provided in the following :

(1) An aircraft maintenance engineer may conduct the required inspections of aircraft and aeronautical products for which he or she is rated and current.

(2) An AMO may perform the required inspections of aircraft and aeronautical products as provided in the operations specifications approved by the Authority.

(3) An AOC holder may perform the required inspections of aircraft and aeronautical products in accordance with specifications issued by the Authority.

Performance Rules : Maintenance, Preventive Maintenance, or Alteration.

5.6.1.6.—(*a*) Each person performing maintenance, preventive maintenance, or alteration on an aeronautical product shall use the methods, techniques, and practices prescribed in—

(1) The current manufacturer's maintenance manual or instructions for Continued Airworthiness prepared by its manufacturer and approved by the State of Design and/or State of Manufacture; and

(2) Additional methods, techniques and practices required by the Authority; or methods, techniques and practices designated by the Authority where the manufacturer's documents were not available.

(*b*) Each person shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If the manufacturer involved recommends special equipment or test apparatus, the person performing maintenance shall use that equipment or apparatus or its equivalent acceptable to the Authority.

(*c*) Each person performing maintenance, preventive maintenance, or alteration on an aeronautical product shall do that work in such a manner, and use materials of such aquality, that the condition of the aeronautical product worked on will be at least equal to its original or properly altered condition with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness.

(*d*) The methods, techniques, and practices contained in an AOC holder's maintenance control manual and continuous maintenance program, as approved by the Authority, will constitute an acceptable means of compliance with the requirements of this subsection.

Performance Rules : Inspections.

5.6.1.7.—(*a*) General. Each person performing an inspection required by the Authority shall perform the inspection so as to determine whether the aircraft, or portion(s) thereof under inspection, meets all applicable airworthiness requirements; and

(*b*) Rotorcraft. Each person performing an inspection required on a rotorcraft shall inspect the following systems in accordance with the maintenance manual or Instructions for Continued Airworthiness of the manufacturer concerned—

(1) The drive shafts or similar systems,

(2) The main rotor transmission gear box for obvious defects,

(3) The main rotor and centre section (or the equivalent area), and

(4) The auxiliary rotor on helicopters.

(*c*) Annual and 100-hour inspections.

(1) Each person performing an annual or 100-hour inspection shall use a checklist while performing the inspection. The checklist may be of the person's own design, one provided by the manufacturer of the equipment being inspected, or one obtained from another source. This checklist shall include the scope and detail of the itemsprescribed by the Authority. See IS: 5.6.1.7 for components to be included in an

annual or 100-hour inspection.

(2) Each person approving a piston-engined aircraft for return to service after an annual or 100-hour inspection shall, before that approval, run the aircraft engine or engines to determine satisfactory performance in accordance with the current manufacturer's recommendations of—

(*i*) Power output (static and idle rpm) ;

(*ii*) Magnetos ;

(*iii*) Fuel and oil pressure ; and

(*iv*) Cylinder and oil temperature.

(3) Each person approving a turbine-engined aircraft for return to service after an annual or 100-hour inspection shall, before that approval, run the aircraft engine or engines to determine satisfactory performance in accordance with the current manufacturer's recommendations.

(*d*) Progressive inspections.

(1) Each person performing a progressive inspection shall, at the start of a progressive inspection system, inspect the aircraft completely. After this initial inspection, routine and detailed inspections must be conducted as prescribed in the progressive inspection schedule. Routine inspections consist of visual examination or check of the appliances the aircraft and its components and systems, insofar as practicable without disassembly. Detailed inspections consist of a thorough examination of the appliances, the aircraft, and its components and systems, with such disassembly as is necessary. For the purposes of this subparagraph, the overhaul of a component or system is considered to be a detailed inspection.

(2) If the aircraft is away from the station where inspections are normally conducted, an appropriately rated AME, an AMO or the manufacturer of the aircraft may perform inspections in accordance with the procedures and using the forms of the person who would otherwise perform the inspection.

(*e*) Continuous airworthiness maintenance program inspections.

(1) Each person performing the inspection program required for an AOC holder's aircraft or aircraft maintained under a continuous airworthiness maintenance program, shall perform the inspection in accordance with the instructions and procedures set forth in the inspection program.

Performance Rules : Airworthiness Limitations.

5.6.1.8.—(*a*) Each person performing an inspection or other maintenance specified in an airworthiness limitations section of a current manufacturer's maintenance manual, or Instructions for Continued Airworthiness, shall perform the inspection or other maintenance in accordance with that section, or in accordance with specifications approved by the Authority.

5.7 MAINTENANCE AND INSPECTION RECORDS AND ENTRIES

Content, Form, and Disposition of Records for Maintenance, Preventive Maintenance, Rebuilding, and Alteration of Aircraft and Life Limited Parts.

5.7.1.1.—(*a*) Each person who maintains, performs preventive maintenance, rebuilds, or alters an aircraft or life limited parts shall, when the work is performed satisfactorily, make an entry in the maintenance record of that equipment as follows—

(1) A description (or reference to data acceptable to the Authority) of work performed, including-

(*i*)The total time in services (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components ;

(*ii*) The current status of compliance with all mandatory continuing airworthiness information;

(*iii*) Appropriate details of alterations and repairs ;

(*iv*) Time in service (hours, calendar time and cycles, as appropriate) since last overhaul of the aircraft or its components subject to a mandatory overhaul life ;

(*v*) The current status of the aircraft's compliance with the maintenance program; and the detailed maintenance records to show that all requirements for signing of a maintenance release have been met.

(2) Completion date of the work performed ;

(3) Name, signature, certificate number, and kind of license held by the person approving the work. The signature constitutes the approval for return to service only for the work performed.

(*b*) In addition to the entry required by paragraph (a), major repairs and alterations shall be entered on a form, and the form disposed of, in the manner prescribed in IS: 5.7.1.1, by the person performing the work.

Content, Form and Disposition of Records for Maintenance, Preventive Maintenance, Overhaul and Rebuilding of a Product.

5.7.1.2.—(*a*) No person shall approve for return to service any aeronautical product that has undergone maintenance, preventive maintenance, overhaul or rebuilding of a product unless—

(1) The appropriate maintenance record entry has been made ;

(2) The repair or alteration form authorised by or furnished by the Authority has been executed in a manner prescribed by the Authority ;

(3) If a repair or alteration results in any change in the aircraft operating limitations or flight data contained in the approved aircraft flight manual, those operating limitations or flight data are appropriately revised and set forth as prescribed.

(*b*) Additional entries for overhaul and rebuilding.

(1) No person shall describe in any required maintenance entry or form, an aeronautical product as being overhauled or rebuilt unless—

(*i*) It has been disassembled, cleaned, inspected as permitted, repaired asnecessary, and reassembled using methods, techniques, and practices acceptable to the Authority ; and

(ii) It has been tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Authority, which have been developed and documented by the holder of the type

certificate, supplemental type certificate, or a material, part, process, or appliance manufacturing approval.

(2) No person shall describe in any required maintenance entry or form an aircraft or other aeronautical product as being rebuilt unless it has been disassembled, cleaned, inspected as permitted, repaired as necessary, reassembled, and tested to the sametolerances and limits as a new item, using either new parts or used parts that conform to new part tolerances and limits.

(*c*) If the maintenance, preventive maintenance, overhaul or rebuilding of a product is performed by an AMO, the AMO shall complete an airworthiness approval tag (NCAA formone) as prescribed in Part 6 of these Regulations.

Content, Form, and Disposition of Records of Inspections for Return to Service.

5.7.1.3.—(*a*) Inspection record entries. The person approving or disapproving the return to service of an aeronautical product after any inspection performed in accordance with Part 8 of these Regulations, shall make an entry in the maintenance record of that equipment containing the following information—

(1) Type of inspection and a brief description of the extent of the inspection ;

(2) Date of the inspection and aircraft or component total time in service ;

(3) Signature, the license number, and kind of license held by the person approving ordisapproving for return to service the aeronautical product ;

(4) If the aircraft or component is found to be airworthy and approved for return toservice, the following or a similarly worded statement— "*I certify that this aircraft/component has been inspected in accordance with (insert type) inspection and was determined to be in airworthy condition";*

(5) If the aircraft or component is not approved for return to service because of needed maintenance, non-compliance with the applicable specifications, airworthiness directives, or other approved data, the following or a similarly worded statement—*I certify that this aircraft/component has been inspected in accordance with (insert type) inspection and a list of discrepancies and unairworthy items dated (date) has been provided for the aircraft owner or operator;* and

(6) If an inspection is conducted under an inspection program provided for in Part 8 of these Regulations, the person performing the inspection shall make an entry identifying the inspection program accomplished, and containing a statement that the inspection was performed in accordance with the inspections and procedures for that particular program.

(*b*) Listing of discrepancies. The person performing any inspection required in Part 8 of these Regulations who finds that the aircraft is not airworthy or does not meet the applicable type certificate data sheet, airworthiness directives or other approved data upon which its airworthiness depends, shall give the owner/operator a signed and dated list of those discrepancies.

PART 5—IMPLEMENTING STANDARDS

IS: 5.1.1.2 DEFINITION

Major Alterations.

IS: 5.1.1.2(A)(8) (*a*) *Airframe Major Alterations*—Major alterations include alterations to the listed aircraft parts, or the listed types of alterations (when not included in the applicable aircraft specifications)—

(1) Wings.

2) Tail surfaces.

(3) Fuselage.

(4) Engine mounts.

(5) Control system.

(6) Landing gear.

(7) Hull or floats

(8) Elements of an airframe including spars, ribs, fittings, shock absorbers, bracing, cowlings, fairings, and balance weights.

(9) Hydraulic and electrical actuating system of components.

(10) Rotor blades.

(11) Changes to the empty weight or empty balance which result in an increase in the maximum Certified weight or centre of gravity limits of the aircraft.

(12) Changes to the basic design of the fuel, oil, cooling, heating, cabin pressurisation, electrical, hydraulic, de-icing, or exhaust systems.

(13) Changes to the wing or to fixed or movable control surfaces which affect flutter and vibration characteristics.

(*b*) *Powerplant Major Alterations*— Major powerplant alterations, even when not listed in the applicable engine specifications, include—

(1) Conversion of an aircraft engine from one approved model to another, involving any changes in compression ratio, propeller reduction gear, impeller gear ratios or the substitution of major engine parts which requires extensive rework and testing of the engine.

(2) Changes to the engine by replacing aircraft engine structural parts with parts not supplied by the original manufacturer or parts not specifically approved by the Authority.

(3) Installation of an accessory which is not approved for the engine.

(4) Removal of accessories that are listed as required equipment on the aircraft or engine specification.

(5) Installation of structural parts other than the type of parts approved for the installation.

(6) Conversions of any sort for the purpose of using fuel of a rating or grade other than that listed in the engine specifications.

(*c*) *Propeller Major Alterations*—Major propeller alterations, when not authorised in the applicable propeller specifications, include—

(1) Changes in blade design.

(2) Changes in hub design.

(3) Changes in the governor or control design.

(4) Installation of a propeller governor or feathering system.

(5) Installation of propeller de-icing system.

(6) Installation of parts not approved for the propeller.

(*d*) *Appliance Major Alterations*—Alterations of the basic design not made in accordance with recommendations of the appliance manufacturer or in accordance with applicable Airworthiness Directives are appliance major alterations. In addition, changes in the basic design of radio communication and navigation equipment approved under type certification or other authorisation that have an effect on frequency stability, noise level, sensitivity, selectivity, distortion, spurious radiation, automatic volume control (AVC) characteristics, or ability to meet environmental test conditions and other changes that have an effect on the performance of the equipment are also major alterations.

IS: 5.1.1.2(A)(9) MAJOR REPAIRS (DEFINITION)

(*a*) *Airframe Major Repairs*—Repairs to the following parts of an airframe and repairs of the following types, involving the strengthening, reinforcing, splicing, and manufacturing of primary structural members or their replacement, when replacement is by fabrication such as riveting or welding, are airframe major repairs.

(1) Box beams.

(2) Monocoque or semimonocoque wings or control surfaces

3) Wing stringers or chord members.

(4) Spars.

(5) Spar flanges.

(6) Members of truss-type beams.

(7) Thin sheet webs of beams.

(8) Keel and chine members of boat hulls or floats.

(9) Corrugated sheet compression members which act as flange material of wings or tail surfaces.

(10) Wing main ribs and compression members.

(11) Wing or tail surface brace struts.

(12) Engine mounts.

(13) Fuselage longerons.

(14) Members of the side truss, horizontal truss, or bulkheads.

(15) Main seat support braces and brackets.

(16) Landing gear brace struts.

(17) Axles.

(18) Wheels.

(19) Parts of the control system such as control columns, pedals, shafts, brackets, or horns.

(20) Repairs involving the substitution of material.

(21) The repair of damaged areas in metal or plywood stressed covering exceeding six inches in any direction.

(22) The repair of portions of skin sheets by making additional seams.

(23) The splicing of skin sheets

(24) The repair of three or more adjacent wing or control surface ribs or the leading edge of wings and control surfaces, between such adjacent ribs.

(25) Repair of fabric covering involving an area greater than that required to repair two adjacent ribs.

(26) Replacement of fabric on fabric covered parts such as wings, fuselages, stabilisers, and control surfaces.

(27) Repairing, including rebottoming, of removable or integral fuel tanks and oil tanks.

(*b*) *Powerplant Major Repairs*—Repairs of the following parts of an engine and repairs of the following types, are powerplant major repairs—

(1) Separation or disassembly of a crankcase or crankshaft of a piston engine equipped with an integral supercharger.

(2) Separation or disassembly of a crankcase or crankshaft of a piston engine equipped with other than spur-type propeller reduction gearing.

(3) Special repairs to structural engine parts by welding, plating, metalising, or other methods.

(*c*) *Propeller Major Repairs*—Repairs of the following types to a propeller are propeller major repairs—

(1) Any repairs to or straightening of steel blades.

(2) Repairing or machining of steel hubs.

(3) Shortening of blades.

(4) Retipping of wood propellers.

(5) Replacement of outer laminations on fixed pitch wood propellers.

(6) Repairing elongated bolt holes in the hub of fixed pitch wood propellers.

(7) Inlay work on wood blades.

(8) Repairs to composition blades.

(9) Replacement of tip fabric.

(10) Replacement of plastic covering.

(11) Repair of propeller governors.

(12) Overhaul of controllable pitch propellers.

(13) Repairs to deep dents, cuts, scars, nicks, etc., and straightening of aluminium blades.

(14) The repair or replacement of internal elements of blades.

(*d*) *Appliance Major Repairs*—Repairs of the following types to appliances are appliance major repairs—

(1) Calibration and repair of instruments.

(2) Calibration of avionics or computer equipment.

(3) Rewinding the field coil of an electrical accessory.

(4) Complete disassembly of complex hydraulic power valves.

(5) Overhaul of pressure type carburetors, and pressure type fuel, oil, and hydraulic pumps.

IS: 5.1.1.2(A)(11) PREVENTIVE MAINTENANCE (DEFINITION)

(*a*) *Preventive Maintenance*—Preventive maintenance is limited to the following work, provided it does not involve complex assembly operations.

(1) Removal, installation and repair of landing gear tires.

(2) Replacing elastic shock absorber cords on landing gear.

(3) Servicing landing gear shock struts by adding oil, air, or both.

(4) Servicing landing gear wheel bearings, such as cleaning and greasing.

(5) Replacing defective safety wiring or cotter keys.

(6) Lubrication not requiring disassembly other than removal of non-structural items such as cover plates, cowlings, and fairings.

(7) Making simple fabric patches not requiring rib stitching or the removal of structural parts or control surfaces.

(8) Replenishing hydraulic fluid in the hydraulic reservoir.

(9) Refinishing decorative coating of fuselage, wings, tail group surfaces (excluding balanced control surfaces), fairings, cowling, landing gear, cabin, or cockpit interior when removal or disassembly of any primary structure or operating system is not required.

(10) Applying preservative or protective material to components where no disassembly of any primary structure or operating system is involved and where such coating is not prohibited or is not contrary to good practices.

(11) Repairing upholstery and decorative furnishings of the cabin or cockpit when the repairing does not require disassembly of any primary structure or operating system or interfere with an operating system or affect primary structure of the aircraft.

(12) Making small simple repairs to fairings, non-structural cover plates, cowlings, and small patches and reinforcements not changing the contour so as to interfere with proper airflow.

(13) Replacing side windows where that work does not interfere with the structure of any operating system such as controls, electrical equipment, etc.

(14) Replacing safety belts.

(15) Replacing seats or seat parts with replacement parts approved for the aircraft, not involving disassembly of any primary structure or operating system.

(16) Troubleshooting and repairing broken circuits in landing light wiring circuits.

(17) Replacing bulbs, reflectors, and lenses of position and landing lights.

(18) Replacing wheels and skis where no weight and balance computation is involved.

(19) Replacing any cowling not requiring removal of the propeller or disconnection of flight
controls.

(20) Replacing or cleaning spark plugs and setting of spark plug gap clearance.

(21) Replacing any hose connection except hydraulic connections.

(22) Replacing prefabricated fuel lines.

(23) Cleaning fuel and oil strainers.

(24) Replacing and servicing batteries.

(25) Replacement or adjustment of non-structural fasteners incidental to operations.

(26) The installation of anti-misfueling devices to reduce the diameter of fuel tank filler openings provided the specific device has been made a part of the aircraft type certificate data by the aircraft manufacturer, the manufacturer has provided appropriately approved instructions acceptable to the Authority for the installation of the specific device, and installation does not involve the disassembly of the existing filler opening.

Issuance or Validation of a Standard Certificate of Airworthiness

IS: 5.4.1.5 (*a*) The standard Certificate of Airworthiness issued by the Authority shall be as follows.

NIGERIAN CIVIL AVIATION AUTHORITY

CERTIFICATE OF AIRWORTHINESS
NO._____

Nationality and Registration Marks	*Manufacturer and Manufacturer's Designation of Aircraft*	*Aircraft Serial No.*
		Date of Manufacture

CATEGORY :

This Certificate of Airworthiness is issued pursuant to the Convention on International Civil viation dated 7th December, 1944 and the Civil Aviation Act, 2006 and the Order and Regulations issued thereunder, in respect of the above-mentioned aircraft, which is considered to be airworthy when equipped, maintained and operated in accordance with the foregoing and the pertinent operating limitations. A Flight Manual forms part of this Certificate.

Designation: *Signature :* _____
for the Nigerian Civil Aviation Authority

_____

Date of First Issue: _____

This certificate is valid for the period(s) indicated below	*Signature, Official Stamp and Date*
From to	

NOTES **:**

1. No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for the purpose.

2. If this Certificate is lost, the issuing authority should be informed at once, the Certificate Number being quoted.

3. Any person finding this certificate should forward it immediately to the issuing authority.

4. This Certificate must be displayed aboard the aircraft.

(*a*) Each person performing an annual or 100-hour inspection shall, before that inspection, thoroughly clean the aircraft and aircraft engine and remove or open all necessary inspection plates, access doors, fairings, and cowlings.

(*b*) Each person performing an annual or 100-hour inspection shall inspect, where applicable,the following components—

(1) Fuselage and hull group—

(*i*) Fabric and skin - for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings.

(*ii*) Systems and components - for improper installation, apparent defects, and unsatisfactory operation.

(*iii*) The cabin and cockpit group.

(*iv*) Generally - for uncleanness and loose equipment that might foul the controls.

(*v*) Seats and safety belts - for poor condition and apparent defects.

(*vi*) Windows and windshields - for deterioration and breakage.

(*vii*) Instruments - for poor condition, mounting, marking, and (where practicable) for improper operation.

(*viii*) Flight and engine controls - for improper installation and improper operation.

(*ix*) Batteries - for improper installation and improper charge.

(*x*) All systems - for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.

(2) Engine and nacelle group—

(*i*) Engine section - for visual evidence of excessive oil, fuel, or hydraulic leaks,and sources of such leaks.

(*ii*) Studs and nuts - for improper torquing and obvious defects.

(*iii*) Internal engine - for cylinder compression and for metal particles or foreignmatter on screens and sump drain plugs. If there is weak cylinder compression, for improper internal condition and improper internal tolerances.

(*iv*) Engine mount - for cracks, looseness of mounting, and looseness of engine to mount.

(*v*) Flexible vibration dampeners - for poor condition and deterioration.

(*vi*) Engine controls - for defects, improper travel, and improper safetying.

(*vii*) Lines, hoses, and clamps - for leaks, improper condition, and looseness.

(*viii*) Exhaust stacks - for cracks, defects, and improper attachment.

(*ix*) Accessories - for apparent defects in security of mounting.

(*x*) All systems - for improper installation, poor general condition, defects, and insecure attachment.

(*xi*) Cowling - for cracks and defects.

(3) Landing gear group—

(*i*) All units - for poor condition and insecurity of attachment.

(*ii*) Shock absorbing devices - for improper oleo fluid level.

(*iii*) Linkage, trusses, and members - for undue or excessive wear, fatigue, and distortion.

(*iv*) Retracting and locking mechanism - for improper operation.

(*v*) Hydraulic lines - for leakage.

(*vi*) Electrical system - for chafing and improper operation of switches.

(*vii*) Wheels - for cracks, defects, and condition of bearings.

(*viii*) Tires - for wear and cuts.

(*ix*) Brakes - for improper adjustment.

(*x*) Floats and skis - for insecure attachment and obvious or apparent defects.

(4) Wing and centre section assembly for—

Recording of Major Repairs and Alterations.

(*i*) Poor general condition,

(*ii*) Fabric or skin deterioration,

(*iii*) Distortion,

(*iv*) Evidence of failure, and

(*v*) Insecurity of attachment.

(5) Complete empennage assembly for—

(*i*) Poor general condition,

(*ii*) Fabric or skin deterioration,

(*iii*) Distortion,

(*iv*) Evidence of failure,

(*v*) Insecure attachment,

(*vi*) Improper component installation, and

(*vii*) Improper component operation.

(6) Propeller group—

(*i*) Propeller assembly - for cracks, nicks, binds, and oil leakage,

(*ii*) Bolts - for improper torquing and lack of safety,

(*iii*) Anti-icing devices - for improper operations and obvious defects, and

(*iv*) Control mechanisms - for improper operation, insecure mounting, and restricted travel.

(7) Avionics/instrument group—

(*i*) Avionics/instruments equipment - for improper installation and insecure mounting.

(*ii*) Wiring and conduits - for improper routing, insecure mounting, and obvious defects.

(*iii*) Bonding and shielding - for improper installation and poor condition.

(*iv*) Antenna including trailing antenna - for poor condition, insecure mounting, and improper operation.

(8) Electronic/electrical group—

(*i*) Wiring and conduits - for improper routing, insecure mounting, and obvious defects.

(*ii*) Bonding and shielding - for improper installation and poor condition.

(*iii*) Each installed miscellaneous item that is not otherwise covered by this listing and/or has instructions for continued airworthiness - for improper installationand improper operation.

IS: 5.7.1.1 CONTENT, FORM AND DISPOSITION OF RECORDS FOR MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING AND ALTERATION OF AIRCRAFT AND LIFE LIMITED PARTS

IS: 5.7.1.1(B)(*a*) Each person performing a major repair or major alteration shall—

(1) Execute the appropriate form prescribed by the Authority at least in duplicate;

(2) Give a signed copy of that form to the aircraft owner/operator; and

(3) Forward a copy of that form to the Authority, in accordance with Authority instructions, within 48 hours after the aeronautical product is approved for return to service.

(*b*) In place of the requirements of paragraph (a), major repairs made in accordance with a manual or specifications acceptable to the Authority, an AMO may—

(1) Use the customer's work order upon which the repair is recorded ;

(2) Give the aircraft owner a signed copy of the work order and retain a duplicate copy for at least one year from the date of approval for return to service of the aeronautical product ;

(3) Give the aircraft owner a maintenance release signed by an authorised representative of the AMO and incorporating the following information—

(*i*) Identity of the aeronautical product ;

(*ii*) If an aircraft, the make, model, serial number, nationality and registrationmarks, and location of the repaired area ;

(*iii*) If an aeronautical product, give the manufacturer's name, name of the part, model, and serial numbers (if any) ; and

(4) Include the following or a similarly worded statement—

The aeronautical product identified above was repaired, overhauled and inspected in accordance with currently effective, applicable instructions of the State of Design and regulatory requirements of the Authority, and is approved for return to service.

Pertinent details of the repair are on file at this maintenance organisation.

Order No._____ Date_____

Signed_____
(Signature of authorised representative)

_____
(Facility Name) (AMO Certificate Number)

_____
(Address)
_____

(*c*) The following sample form may be used to record major alterations and repairs.

MAJOR REPAIR AND ALTERATION **(Airframe, Powerplant, Propeller, or Appliance)**	Nigeria For CAA Use Only Office Identification

INSTRUCTIONS: Print or type all entries. See Regulation Part 5, 5.7.1.1(*b*) and IS: 5.7.1.1 for instructions and disposition of this form.

1. Aircraft	Make	Model
	Serial Number	Nationality and Registration Mark
2. Owner	Name (As shown on certificate of registration)	Address (As shown on registration certificate)

3. For Authority Use Only

4. Unit Identification				**5. Type**	
Unit	Make	Model	Serial Number	Repair	Alteration
Airframe	.....(As described in item 1 above).....				
Powerplant					
Propeller					
Appliance	Type Manufacture				

6. Conformity Statement

A. Organisation Name and Address	B. Kind of Licence/Organisation	C. Certificate/Licence Number
	☐ Licensed (AMT) ☐ A ☐ P ☐ or A/P ☐ Approved Maintenance Organisation ☐ Manufacturer AMO	(For an AMO include the appropriate ratings issued for the major repair or alteration)

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 5 of the Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorised Individual

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit(s) identified in item 4 was inspected in the manner prescribed by the Director of the Civil Aviation Authority and is ☐ APPROVED ☐ REJECTED

BY	☐ CAA Inspector	☐ Inspection Authorisation		Other (Specify)
	☐ Maintenance Organisation	☐ Other		

Date of Approval or Rejection	Certificate or Designation Number	Signature or Authorised Individual

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(*If more space is required, attach additional sheets. Identify each page with aircraft nationality and registration mark and date work completed.*)

INSTRUCTIONS FOR COMPLETION OF MAJOR REPAIR AND ALTERATION FORM

Item 1 – Aircraft. Information to complete the "make," "model," and "serial number" blocks will be found on the aircraft manufacturer's identification plate. The "Nationality and Registration Mark" is the same as shown on Certificate of Aircraft Registration.

Item 2 – Owner. Enter the aircraft owner's complete name and address as show on the Certificate of Aircraft Registration.

Note : When a major repair or alteration is made to a spare part or appliance, items 1 and 2 will be left blank, and the original and duplicate copy of the from will remain with the part until such time as it is installed on an aircraft. The person installing the part shall then enter the required information in blocks 1 and 2, give the original of the form to the aircraft owner/operator, and forward the duplicate copy to the Authority within 48 hours after the work is inspected.

Item 3 – For Authority use only. Approval may be indicated in Item 3 when the Authority determines that data to be used in performing a major alteration or a major repair complies with accepted industry practices and all applicable Nigeria regulations. Approval is indicated in one of the following methods :

(1) Approval by examination of data only – one aircraft only: "The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorised in as prescribed in Regulation 5.6.1.4.

(2) Approval by physical inspection, demonstration, testing, etc. of the data and aircraft— one aircraft only" "The alteration or repair identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspections by a person in as prescribed in Regulation5.6.1.4."

(3) Approval by examination of data only – duplication on identical aircraft. "The alteration identified herein complies with the applicable airworthiness requirements and is approved for duplication on identical aircraft make, model, and altered configuration by the original modifier."

A signature in item 3, "For Authority Use Only," indicates approval of the data described in that section for use in accomplishing the work described under item 8, "Description of the Work Accomplished." This signature does not indicate CAA approval of the work described under item 8 for return to service.

Item 4 – Unit identification. The information blocks under item 4 are used to identify the airframe, powerplant, propeller, or appliance repaired or altered. It is only necessary to complete the blocks for the unit repaired or altered.

Item 5 – Type. Enter a checkmark in the appropriate column to indicate if the unit was repaired or altered.

Item 6 – Conformity Statement.

"A" – Agency's name and address. Enter name of the AME, AMO or manufacturer accomplishing the repair or alteration. AME s shall enter their name and permanent mailing address. Manufacturers and AMOs shall enter the name and address under which they do business.

"B" – Kind of Licence/Organisation. Check the appropriate box to indicate the type of person or organisation who performed the work.

"C" – Certificate/licence number. AME s shall enter their AME licence number in this block. AMO's shall enter their AMO certificate number and the rating or ratings under which the work was performed. Manufacturers shall enter their type production or Supplemental Type Certificate (STC) number. Manufacturers of Technical Standard Orders (TSO) appliances altering these appliances shall enter the TSO number of the appliance altered.

"D" – Compliance Statement. This space is used to certify that the repair or alteration was made in accordance with Part 5 of the Regulations. For work performed or supervised by a licensed AMT not employed by a manufacturer or AMO, the AME shall enter the date the repair or alteration was completed and sign the record with the AME's full name. AMOs are permitted to authorise persons in their employ to date and sign this conformity Statement.

A signature in item 6, "Conformity Statement," is a certification by the person performing the work that it was accomplished in accordance with applicable CAA and CAA-approved data. The certification is only applicable to that work described under item 8, "Description of Work Accomplished." This signature does not indicate CAA approval of the work described under item 8 for return to service.

Item 7 – Approval for Return to Service. Part 5 of the Regulations establishes the conditions under which major repairs and alterations to airframes, powerplants, propellers, and/or appliances may be approved for return to service. This portion of the form is used to indicate approval or rejection of the repair or alteration of theunit involved and to identify the person or agency making the airworthiness inspection. Check the "approved" or "rejected" box to indicate the finding. Additionally, check the appropriate box to indicate who made the finding. Use the box labeled "other" to indicate a finding by a person other than those listed. Enter the date the finding was made. The authorised person who made the finding shall sign the form and enter the appropriate certificate or designation number.

(1) Previously Approved Data. The forms will be completed as instructed ensuring that Item 7 is completed as noted above.

(2) Non-previously Approved Data. The form will be completed as instructed, leaving item 7, "Approval for Return to Service" blank and both copies of the form will be sent to the Authority with supporting data. When the CAA determines that the major repair or alteration data complies with the applicable regulations and is in conformity with accepted industry practices, data approval will be recorded by entering an appropriate statement in item 3, "for CAA use only." Both forms and supporting data will be returned to the applicant who will complete item 7 "Approval for Return to Service." The applicant will give the original of the form, with its supporting data to

the aircraft owner or operator and return the duplicate copy to the Authority for inclusion in the aircraft records at its Aircraft Registry.

(3) A signature in item 7, "Approval for Return to Service," does not signify NCAA approval unless the box to the left of "NCAA Inspector" has been checked. The other persons listed in item 7 are authorised to "approve for return to service" if the repair or alteration is accomplished using NCAA-approved data, performed in accordance with Part 5 of the Regulations, and found to conform.

Item 8 – Description of Work Accomplished. A clear, concise, and legible statement describing the work accomplished should be entered in the item 8 on the reverse side of the form. It is important that the location of the repair or alteration, relative to the aircraft or component, be described. The approved data used as the basis for approving the major repair or alteration for the return to service should be identified and described in this area. (1) For example, if a repair was made to a buckled spar, the description and entered in this part might begin by stating, "Removed wing from aircraft and removed skin from outer 6 feet. Repaired buckled spar 49 inches from the tip in accordance with . . . . " and continue with a description of the repair. The description should refer to applicable regulations and approved data used to substantiate the airworthiness of the repair or alteration. If the repair or alteration is subject to being covered by skin or other structures, statement should be made certifying that a precover inspection was made and that covered areas were found satisfactory.

(2) Data used as a basis for the approving major repairs or alterations for return to service shall be approved prior to its use for that purpose and includes: Airworthiness Directives, Advisory Circulars under certain circumstances, TSO parts manufacturing approval, Approved Manufacturer's instructions, kits and service handbooks, type certificates data sheets, and aircraft specifications. Supporting data such as stress analyses, test reports, sketches or photographs shall be submitted on the form. These supporting data will be returned to the applicant by the Authority.

(3) If additional space is needed to describe the repair or alteration, attach sheets bearing the aircraft nationality and registration mark and the date work was completed.

(4) Showing weight and balance computations under this item is not required; however, it may be done. In all cases where weight and balance of the aircraft are affected, the changes shall be entered in the aircraft weight and balance records with the date, signature, and reference to the work performed that required the changes.

Note: NCAA MR&A Form is not authorised for use on other than Nigerian-registered aircraft. If a foreign civil aviation authority requests the form, as a record of work performed, it may be provided