

GCAA
ADVISORY CIRCULAR

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AIRWORTHINESS
AC NO: GCAA AC/AIR-004-R1

**SUBJECT:** 

# INITIAL ISSUE OF AIRCRAFT CERTIFICATE OF AIRWORTHINESS

DATE REVISED: REVISED BY: 24-08-2016 Director Aviation Safety Regulation

#### 1. PURPOSE

- a. This Advisory Circular (AC) provides information and guidance concerning an acceptable means of compliance with Regulation 9 of the Guyana Civil Aviation (Air Navigation) Regulations for the issuance of a Certificate of Airworthiness (C of A) for an aircraft registered in Guyana. The required form(s) are obtainable from the Guyana Civil Aviation Authority (GCAA) head office at 73 High Street, Kingston, Georgetown, Guyana.
- b. Contained in this AC are criteria recommended by the Authority for the initial issue of an aircraft Certificate of Airworthiness. Thus, this document applies to the process by which a person or company shall apply for a Certificate of Airworthiness. A Certificate of Airworthiness cannot be issued to an aircraft until it has been registered and entered in the Guyana Aircraft Register.

#### 2. AUDIENCE

This AC affects owners and operators of Guyana registered aircraft who are seeking to have their aircraft issued with a Certificate of Airworthiness.

#### 3. CANCELLATION

As of its effective date this, AC cancels AC #: GCAA AC/AIR-004 dated 16<sup>th</sup> March, 2015.

## 4. EFFECTIVE DATE

This AC is effective 1<sup>st</sup> September, 2016.

#### 5. CHANGES

a. The reason of this change is to remove the requirement for an aircraft test flight as a prerequisite for issue of an aircraft airworthiness certificate.

#### 6. RELEVANT REFERENCES

- a. Guyana Civil Aviation (Air Navigation) Regulations [GCARs] Regulation 9.
- b. Guyana Aviation Requirements [GARs] Part 5.4.8.

#### 7. Contact Information

## **Director General of Civil Aviation**

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Director Aviation Safety Regulation

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## 8. FORM(S) TO BE USED

- a. Application for Airworthiness Certificate GCAA Form No. 011.
- b. Airworthiness Engineering Report GCAA Form No. AW020.

## 9. AIRWORTHINESS REQUIREMENTS

Prior to the grant of a Certificate of Airworthiness, the applicant is required to demonstrate to the satisfaction of the Director General of Civil Aviation that:

- 1) The aircraft is eligible for certification in accordance with a type certification basis acceptable to the Director General of Civil Aviation and that, in respect to construction, materials and equipment meets an acceptable standard of airworthiness.
- 2) All the requirements of this AC are satisfied, the required maintenance has been completed and the aircraft is in a fit state for safe operation.
- 3) In relation to the Category of the C of A requested, all the relevant equipment required by Regulations 18, 19 and 44 of the GCARs have been installed in a manner acceptable to the Director General of Civil Aviation.

## 10. ACCEPTABLE STANDARDS – AIRWORTHINES CODES

- a. Guyana is not a STATE of manufacture or design of aircraft or aeronautical products, consequently, it has adopted the following airworthiness codes:
  - 1) aircraft manufactured in the United States of America, the Federal Aviation Regulations (FARs) Design Codes;
  - 2) aircraft manufactured in Canada, Transport Canada Airworthiness Design Codes;
  - 3) aircraft manufactured in the European Union, European Aviation Safety Agency Design Codes; and
  - 4) aircraft manufactured in countries from a Contracting State other than in 1), 2) and 3) above, the Design Codes of the State's Civil Aviation Authority.
- b. Aircraft certificated by the US (FAA), UK (CAA), European Union (EASA) or Transport Canada (DOT) in accordance with their respective detailed and comprehensive airworthiness codes are acceptable as basis for certification in Guyana. Notwithstanding the above, consideration may be given to aircraft certificated by other Airworthiness Authorities on a case by case basis. Particular acceptance of specific requirements must be determined in each case and any variation in observance of the requirements permitted by the Airworthiness Authority of the State of design or of the State of Manufacture or Special Conditions imposed by the Airworthiness Authority of an exporting state must be acceptable to the GCAA.

#### 11. PROCEDURE

- a. An applicant for the grant of a Certificate of Airworthiness shall submit a completed Application for Airworthiness Certificate Form No. 011, accompanied by the appropriate fees. It is particularly important to declare the category of the C of A being applied for since the applicant is required to demonstrate that the aircraft satisfies the relevant airworthiness/operational equipment requirements, and that the aircraft satisfies the category of airworthiness for the intended operation as attested by the Type Certificate Data Sheet issued by the aviation authority of the State of Design.
- b. Evidence that the aircraft is in compliance with the type certification basis of the State of Design will be required in the form of an Export Certificate of Airworthiness, issued no earlier than sixty (60) days before the import of the aircraft into Guyana (due allowance will be made if the aircraft has been imported by sea).
- c. In the case of those States that do not issue Certificates of Airworthiness for Export, other evidence of compliance will be required by the Director General of Civil Aviation. As an example, a valid domestic C of A issued by the State concerned would be acceptable, subject to declaration by the National Airworthiness Authority that they know of no objection to the issue of the C of A.
- d. For aircraft which have already been entered on the Guyana Register and which are to be delivered to Guyana for completion of the formalities associated with the issue of the C of A, the Director General of Civil Aviation will consider the grant of a short term C of A to facilitate the delivery flight.
- e. The aircraft will be required to be made available for survey (inspection) by the Authority at suitable times and for periods considered necessary. The Owner/Operator shall prepare the aircraft to permit access as necessary and shall perform any checks and tests that may be requested.

#### 12. INSPECTION

- a. The applicant will be required to make the aircraft available for inspection by the GCAA. The level of inspection access required by the Authority will be dependent on the age of the aircraft concerned.
- b. The aircraft shall be prepared for inspection by an appropriately Licensed Aircraft Maintenance Engineer (LAME) or an Approved Maintenance Organisation (AMO) and the following documents made available:
  - 1) The aircraft, engine and propeller log books and details of any work completed in association with the application for a C of A.
  - A record of the applicable mandatory modifications and inspections in respect of aircraft, engines, propellers and equipment and a certification that all relevant mandatory items are complied with.
  - 3) Details of the aircraft mass and balance records.
  - 4) The aircraft flight manual for review and approval by the Director General of Civil Aviation.
  - 5) A certification that the aircraft has been found to be in compliance with the Type Certificate Data Sheet (or equivalent document) and that all the required placards are installed.

- 6) Evidence that all maintenance required in the approved maintenance programme has been completed. In the case of aircraft which have been maintained to another maintenance programme, the necessary bridging check for integration into the approved maintenance programme shall be established and approved by the Authority.
- 7) Evidence that the aircraft is equipped to meet the mandatory equipment requirements of GCARs Regulations 18, 19 and 44 and any other pertinent regulations, including any necessary tests to establish the functioning of the equipment concerned have been completed.
- 8) Other considerations of maintenance and operations prior to transfer of aircraft to Guyana will be reviewed as per the requirements contained in "*Appendix A*" to this AC.
- 9) The clearance and issue of a noise certificate or equivalent document.
- 10) The radio installation is operational and there is a valid radio station licence or certificate.

#### 13. TECHNICAL DOCUMENTS

In the event that the C of A being applied for is for a type of aircraft or a significant variant which has not previously been registered in Guyana, the applicant is required to provide copies of the following documents to the GCAA for its retention, together with an on-going revision service:

- 1) One set of aircraft, engine and propeller technical manuals, such as, maintenance/service manual, Illustrated Parts Catalogue, Components Manuals, etc.
- 2) One copy each of the aircraft structural repair manual and component repair manual.
- 3) One copy of the aircraft flight manual.
- 4) One set of applicable service bulletins.
- 5) One copy of the manufacturer's Maintenance Planning Document (MPD) or the Maintenance Review Board Report (MRBR).
- 6) Any type certification data which may be requested by the Director General of Civil Aviation or supplemental type certificates (STCs) issued in respect of the aircraft subsequently for any modification or changes to the aircraft design configuration from its initial design.
- 7) Such other technical documentation as the Director General of Civil Aviation may specify in a particular case.

#### 14. OTHER REQUIREMENTS

- a. Export C of A for the aircraft and it must be endorsed with:
  - 1) The national requirements with which the aircraft complies giving the title, issue number and effective date.
  - 2) Such deviations from the national requirements as may have been authorised in writing by the National Airworthiness Authority that issued the Export C of A.
  - 3) Such additional special conditions that was required before the issue of the Export C of A.
- b. Confirmation of de-registration of aircraft (if applicable).

- c. A list of applicable Airworthiness Directives (ADs) together with:
  - 1) A declaration of the ADs that have been complied with. Where alternate means of compliance were offered, the means chosen shall be stated.
  - 2) Identification of ADs that require repetitive compliance. Information as to when the next compliance is due must also be provided.
- d. A list of Service Bulletins (SBs), including Alert SBs, complied with on the engines, propellers and equipment (as applicable).
- e. Statement of modification status which must include:
  - 1) Customer options incorporated.
  - 2) Equipment incorporated.
- f. Statement of compliance with mandatory equipment and radio apparatus requirements in Regulations 18 Equipment of Aircraft, and Regulations 19 Radio Equipment of Aircraft.
- g. A list of defects, if any, that is to be rectified by the applicant at the time of issue of the Export C of A.
- h. Equipment list and time/life limitations of equipment.
- Weighing report and mass and balance (centre-of-gravity) schedule, completed within the last five (5) years.
- j. Records of compass swing completed within the last year.
- k. Noise Certificate.

#### 15. FIRST-OF-TYPE AIRCRAFT

- a. For those aircraft types which have not previously been certificated in Guyana, the Director General of Civil Aviation requires the applicant to provide type training for at least two staff of the Authority and accept responsibility for payment of the training and any associated travel and subsistence costs in accordance with the appropriate scale of fees of the Authority.
- b. In addition to the requirements in *Paragraphs 13 and 14* of this AC, the following are also required for a First-of-Type aircraft imported into Guyana, unless otherwise notified:
  - 1) Statement of build standard which shall include the aircraft specification.
  - 2) A copy of the aircraft and engine(s) type certificates and applicable supplemental type certificates.
  - 3) Type certificate data sheets or specifications for aircraft, engine(s) and propeller(s), including any supplemental type specifications.
  - 4) Wiring diagrams.
  - 5) Electrical load analysis.
  - 6) Maintenance Review Board Report, where applicable.
  - 7) Maintenance Planning Data (which should include corrosion prevention and control programme, and structural integrity programme, where applicable).
  - 8) Current Master Minimum Equipment List and Minimum Equipment List.

- 9) One copy each (as applicable) of the following manuals are required by the Authority for retention:
  - i. Flight Manual or Pilot Operating Handbook.
  - ii. Wiring Diagram manual.
  - iii. Aircraft Maintenance Manual.
  - iv. Engine Maintenance Manual.
  - v. Propeller Maintenance Manual.
  - vi. APU Maintenance Manual.
  - vii. Illustrated Parts Catalogue.
  - viii. Standard Practices Manual.
  - ix. Structural Repair Manual.
  - x. Structurally Significant Items.
  - xi. Maintenance Programme.
  - xii. Loading Procedures Manual.
  - xiii. Mass and Balance Manual.
  - xiv. Non-destructing Testing Manual.
  - xv. Complete sets of Service Bulletins for aircraft, engine, propeller and Auxiliary Power Unit. Amendment service for the above documents must be provided to the GCAA.

### 16. USED AIRCRAFT

- a. In addition to the requirements in *Paragraphs 13, 14 and 15* of this AC, the following are also required for Used Aircraft:
  - 1) A complete history of past operational uses of the aircraft.
  - 2) A complete history of the aircraft, engines, propellers, components and equipment including:
    - i. The number of landings and pressurisation cycles.
    - ii. The maintenance schedule to which the aircraft has previously been maintained, including previous check cycle and future check cycle.
- b. The time in service since new (TSN) of the components of the aircraft, engines, propellers or equipment which are subject to mandatory life limitations.

## 17. VALIDITY OF A CERTIFICATE OF AIRWORTHINESS

- a. A Certificate of Airworthiness issued by the GCAA is valid for a period of one year (12 calendar months) from the date of issue or subsequent renewal or such lesser period as the Director General of Civil Aviation may decide in a particular case.
- b. A C of A may be renewed for another 12 calendar months upon request by the owner or operator
  of a Guyana registered aircraft after satisfying the requirements for the C of A renewal. (Refer to
  Issue 2, AC #: GCAA AC/AIR-005 Renewal of Aircraft Certificate of Airworthiness).

- c. In accordance with GCARs Regulation 9 (10), the issue of a C of A is dependent on the Director General of Civil Aviation being satisfied that the aircraft is fit to fly and the Director General reserves the right to refuse the issue of a C of A until he is so satisfied. Nothing in this AC may be construed to mean that an applicant is entitled to the grant of a C of A on the sole basis of a documentary submission that the aircraft is in conformity with the airworthiness requirements.
- d. Any deviation from the above must first be approved by the Director General of Civil Aviation.
- e. Any further information or clarification required can be obtained from the Authority at the address, telephone and email listed in *Paragraph 7 Contact Information*.

Approved by:

Lt. Col (Ret'd.) Egbert Field

Director General of Civil Aviation Guyana Civil Aviation Authority

## APENDIX: A MAINTENANCE ISSUES ON AIRCRAFT TRANSFER

#### A1 INTRODUCTION

- a. Aircraft imported into Guyana, either on lease or purchase, present issues associated with differing standards in airworthiness, operations, aircraft build, and individual histories of non-standard application of those standards to the aircraft.
- b. The material contained in this *Appendix A* is intended to assist the applicant to plan the transfer having due regards to the requirements which have to be met on matters of previous maintenance, and operational standards. These requirements are the minimum; other requirements additional to those stated here may be demanded by the buyer or the lessor.
- c. Used aircraft intended to be transferred to the Guyana Register will be subject to document and records review. This will be followed by an aircraft survey.

## **A2 DOCUMENTATION**

- a. Documentation shall be provided to establish the national regulations which governed the maintenance and operation of the aircraft. If exemptions and deviations were granted against the regulations, these must be made known to the GCAA.
- b. The maintenance programme shall be identified for the following:
  - Approval by the National Airworthiness Authority of the State of Design, Manufacture or Registry; and the controlling Authority's approval and surveillance system determined to ensure that aircraft was under continued airworthiness control.
  - Traceability of the maintenance programme to its minimum requirement standards, for example, the Maintenance Review Board Report or the Maintenance Planning Document.
  - 3) Documentation of the maintenance schedule shall be made available for identification of all tasks and corresponding work cards.

#### A3 RECORDS

- a. Records as listed hereunder will be best presented in a file format before the inspectors of the Authority make the displacement to the applicant. A consistent format of presenting the records will assist the record review process.
- b. A statement in the form of a **Status Summary (Engineer's Report GCAA Form #: 020)** shall be supplied by the applicant to the Authority.
- c. The applicant shall facilitate the review process of the C of A with the following detailed information regarding the airworthiness certificate basis and status:
  - 1) All major repairs that were accomplished on the aircraft, and the approved data for such repairs.
  - 2) Last major inspection stating date, station, total airframe hours, and cycles for airframe, engines, APU, and propellers.
  - 3) Engine and propeller status listing serial numbers, make, model and total remaining hours and cycles for each, and cycles and time on life-limited parts for the engine.

- 4) Status of components on hard times, on-condition, and of life limits components.
- 5) Current inspection status at time of transfer:
  - i. Aircraft total time.
  - ii. Aircraft total cycles or landings.
  - iii. Time and landings since last major inspection.
  - iv. Scheduled major inspection intervals and time remaining to next inspection.
  - v. Position and serial numbers of engines and propellers showing time since new, cycles and time or cycles to next life-limited parts removal for each.
- 6) Current life-limited parts status (a list of the airframe and engine life-limited components/ parts installed on aircraft and the list shall give details as follows):
  - i. Name of component and serial number.
  - ii. Installed location or position of the component.
  - iii. Retirement time of the component/part in calendar period cycles.
  - iv. Total accumulated time or cycles.
  - v. Time or cycles remaining before retirement time or cycle.
- 7) Current status of Airworthiness Directives (ADs):
  - Listing of all AD's applicable to aircraft, engines, components and equipment with AD number and revision date.
  - ii. Concise description of the required action, and method of compliance.
  - iii. Compliance dates, and state if recurrent actions required on the AD with due time or cycles for the action.
- 8) Statement of intent for change of Maintenance Programme:
  - i. Any bridging inspection plan required at change of ownership or for the transfer.
  - ii. Proration of inspection items if required when Schedule changes will be brought.

## A4 OTHER REQUIREMENTS

#### A4.1 Aircraft Lease Agreement

A copy of the lease or sale agreement shall be submitted to the GCAA. However, it is not necessary to show the economic portions of the agreement.

## A4.2 Export Certificate of Airworthiness

The Export Certificate of Airworthiness shall be submitted to the Authority before the initial Certificate of Airworthiness can be issued.

#### A4.3 Minimum Airworthiness Standards for Leasing Agreements

The lease agreement shall ensure that the following are clearly defined in the agreement:

- 1) Lessor and lessee are identified.
- 2) Lease agreement clearly defines the aircraft subject to the lease by aircraft make, model, serial number and registration number.
- The date when lease takes effect.
- 4) The person having operational control of the aircraft is identified.
- 5) The state of registry and the airworthiness code under which the aircraft will be maintained are identified.
- 6) The responsibilities for the accomplishment of maintenance in accordance with the designated airworthiness code are specifically identified.
- 7) The Maintenance/Inspection Schedule that will be utilized is specifically identified.

#### A4.4 Transfer of Records

- a. Records of the aircraft, engine, propeller or equipment shall accompany the aircraft transfer. Such records shall include the current status of maintenance, airworthiness directives and life-limited parts and shall identify the person responsible for the data in the report and the date associated with the reports.
- b. The associated records of the aircraft, engine, propeller or equipment shall accompany the aircraft even for a lease and shall be so treated as if it were a lease.
- c. Service Bulletins incorporated shall be listed with dates of accomplishment. If options are available, the option complied with shall also be indicated. For service bulletins with recurring actions, the time and dates, as applicable, of the last action and the next action shall be provided.
- d. Modifications/alterations performed since the original aircraft delivery should have been carried out in accordance with the requirements of the airworthiness authority of the state of registry at the time of incorporation. A list of such modifications/alterations shall be provided and supported by appropriate documentation. Major modification shall include as a minimum:
  - 1) The document defining the modification/alteration.
  - 2) The certification basis.
  - 3) The approval of the relevant authority.
- e. Repairs performed on aircraft since original delivery shall be listed and demonstrated to be in compliance with the National Airworthiness Authority of the State of Registry at the time of incorporation. If additional action is required, for example, recurring inspection, this shall be indicated to the applicant.

