# 58<sup>th</sup> CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

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AGENDA ITEM 3: AVIATION SAFETY

# AIRWORTHINESS CONSIDERATIONS WHEN ACQUIRING IMPORTED USED AIRCRAFT

(Presented by Civil Aviation Authority of Malaysia)

#### **INFORMATION PAPER**

#### **SUMMARY**

This Information Paper presents pertinent airworthiness elements to be considered by prospective owner when acquiring imported used aircraft for Malaysian Certificate of Airworthiness.

# AIRWORTHINESS CONSIDERATIONS WHEN ACQUIRING IMPORTED USED AIRCRAFT

#### 1. INTRODUCTION

- 1.1 Typically, an aircraft manufacturer would configure new aircraft to meet State of Register's airworthiness and operational requirements in production prior to delivery. Used aircraft may have been embodied with modifications and repairs meeting the current State of Register's requirements, which may differ from the new State of Register.
- 1.2 In order to obtain the Certificate of Airworthiness (CofA) from the new State of Register, prospective owner would have to conduct comprehensive due diligence covering pertinent airworthiness aspect, such as type certificate (TC) and importing requirements established by the new State of Register, modifications and repairs, and maintenance programme to determine whether the current aircraft configuration meets the new State of Register's airworthiness requirements and identify all discrepancies before concluding transfer of ownership of the aircraft.
- 1.3 It is worth to note that the registration process is separate from the requirements to gain a CofA and an application for a CofA cannot usually be accepted without appropriate transfer documents. Registration does not guarantee that the aircraft will qualify for a CofA if the applicable requirements for qualifying for such certificate are not met and the new State of Register reserves the right to reject applications that do not meet the applicable requirements.

#### 2. DISCUSSION

- 2.1 This paper outlines three (3) pertinent airworthiness aspects to be considered for Malaysian CofA namely; (i) type certificate (TC) & importing requirements established by the Civil Aviation Authority of Malaysia (CAAM), (ii) modification & repairs, and (iii) maintenance programme.
- 2.2 The main reason that this paper outlines three pertinent airworthiness aspects to be considered for CofA is primarily due to the accessibility of the data to be reviewed, which:

#### Type Certificate and Import Requirements

2.3 CAAM does not issue its own TC but CAAM validates the State of Design TC through the issuance of letter of validation to the TC holder. The aircraft must be configured to a TC validated by CAAM and incorporate all import requirements as specified in the letter.

### Modifications and Repairs

- 2.4 All modifications and repairs embodied on the aircraft must be approved by CAAM.
- 2.5 For modifications embodied using supplemental type certificate (STC), the STC must be validated by CAAM.
- 2.6 Modifications embodied using design data originating from aeronautical product manufacturers are considered approved by CAAM subject to the following conditions:
  - a) the modification design approval holder is the TC, STC, technical standard order (TSO) authorisation or product approval holder of the product;
  - b) the modification design is explicitly identified as approved by the State of Design or design organisation approved by the State of Design (e.g. EASA Part-21 Subpart J DOA, FAA DAH or TCCA DAO); and
  - c) the modification design is transmitted via service bulletins (SB) or equivalent documents.

- 2.7 Repairs embodied using design data originating from the holder of the TC, STC, TSO authorisation or product approval are considered approved by CAAM subject to the conditions specified in the Civil Aviation Directives (CAD) 8110 Installation of Repairs.
- 2.8 Where modifications or repairs require embodiment of parts of appliance, such parts or appliances must comply with the requirements in CAD 8204 Parts and Appliances.

#### Maintenance Programme

- 2.9 To qualify for Malaysian CofA, the aircraft must be maintained according to CAAM approved aircraft maintenance programme (AMP). Where the AMP implemented under the current State of Register is not aligned with CAAM approved AMP, prospective owner should identify the gap and perform bridging check to realign the aircraft to CAAM approved AMP.
- 2.10 Prospective owner should review the records to ensure they provide the current maintenance information necessary to phase the aircraft into CAAM approved maintenance programme. This includes records such as the documentation of the last scheduled inspection, current status of Airworthiness Directives (AD), life-limited parts and components, Supplemental Structural Inspection Document (SSID), damage-tolerance inspection status, Certification Maintenance Requirements (CMR), major repairs and major modifications.
- 2.11 Previous operator's maintenance scheduling and record-keeping system should be evaluated to ensure the validity of the records. The available records may vary, depending on the State of origin. Therefore, a means of assuring the integrity of the previous operator's records system may be necessary.

### Aircraft Inspection and Record Review

- 2.12 It is very important for prospective owner to perform comprehensive inspection on the aircraft and its records before concluding aircraft ownership transfer to avoid any discrepancies that can lead to ineligibility for Malaysian CofA.
- 2.13 Typical issue related to imported used aircraft are as follows:
  - a) The embodied STC has not been validated by CAAM;
  - b) The installed modifications/repairs have not been approved by CAAM;
  - c) Missing Instructions for Continued Airworthiness (ICA) documents or applicable Flight Manual Supplement (FMS);
  - d) Missing maintenance and continuing airworthiness records for example:
    - record of incorporated modifications/repairs or AD, or
    - airframe, engine or propeller log books.
  - e) Scanned copy of aircraft records cannot be traceable to original copy;
  - f) Aircraft records using language other than English;
  - g) Illegible aircraft records.
- 2.14 Aircraft owner shall ensure, when an aircraft is permanently transferred from one owner to another, that all continuing airworthiness records as required by CAD 6801 Continuing Airworthiness of Aircraft are so transferred.

## 3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to note the information contained in this Paper.

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