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| ENG 1.4.018 |  CAAI | ENG Handbook |
| Review and Approval of Design Drawings | | Revision 0 |
| | | 18 June 2013 |

1. Objective

- 1.1 The objectives of this procedure are to:
- 1.1.1 Describe the means of communication with the applicant for engineering certification (Type or Supplement Type Certificates, Provisional Type Certificate, or Certificate of Airworthiness in the 'experimental' category, or amendments to these certificates in accordance with the Air Navigation Regulations (Procedures for Documentation of Aircraft and Aircraft parts), 1977 – hereinafter – the ANR.DOC)) regarding submittal of drawings for approval.
 - 1.1.2 Define the method for approval of Engineering Drawings and Engineering Reports.
 - 1.1.3 Establish the CAAI follow up system for these activities.

2. General

- 2.1 Design drawings submitted for approval by an applicant should be complete, and in a logical format for review by CAAI.
- 2.2 CAAI and CAAI Designated Engineering Representatives (DERs) shall review and approve assembly drawings, system and installation drawings developed by the applicant.
- 2.3 CAAI is responsible only for the review of data submitted by the applicant, NOT for approval of the supporting methods or calculations.
- 2.4 CAAI review determines compliance of the submitted data with specific paragraphs of the Applicable Airworthiness Requirements as defined by regulation 1 of the ANR.DOC
- 2.5 CAAI DERs participating in compliance reviews will act under the supervision of, and in coordination with, CAAI specialist engineers, and in accordance with their delegated authorities (Ref. ENG 1.4.011).

3. Reference Material & Forms

- 3.1 Reference:
- 3.1.1 CAAI Procedure ENG 1.4.011 – Representatives of the Administrator (Designees);
 - 3.1.2 CAAI Procedure ENG 1.4.013 - Engineering Evaluation of Data and Tests
 - 3.1.3 CAAI Procedure ENG 1.4.034 - Management of Airworthiness Approval Records.
 - 3.1.4 Regulations 1, 3, 5, 8, 12, 14, 31(1), 32(c)(1), 33(c)(1), 35, 36, and 40, 85 of the ANR.DOC
- 3.2 Forms:
- 3.2.1 CAAI Form 8110-3 - Statement of Compliance with the Civil Aviation Regulations;

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4. Method

4.1 Initial application

- 4.1.1 Applicants shall provide CAAI with a Master Drawing List (MDL) for each new certification project.
- 4.1.2 The information contained in the MDL will be stored by the CAAI project certification manager in CAAI's computerized system.
- 4.1.3 The CAAI certification project manager will classify on that list which systems, assembly and installation drawings will be approved by CAAI engineers or CAAI DERs, and which will be accepted by CAAI based on the applicant's approval.
- 4.1.4 A link will be distributed to each CAAI specialist engineer and electronic copies will be provided to each CAAI DER involved in the project and to the applicant's certification project engineer.
- 4.1.5 The applicant's certification project engineer will update the status of data approval according to the approval classifications.
- 4.1.6 CAAI may request additional data for review.

4.2 Drawing approval

- 4.2.1 Drawings submitted for CAAI review and approval will be approved in accordance with CAAI Procedure ENG 1.4.013.

4.3 Statement of Compliance

- 4.3.1 Form 8110-3 (Statement of Compliance) should be submitted by the applicant for compliance findings of design drawings and reports, referred to as "Means of Compliance" by the projects' approved compliance checklist.
- 4.3.2 Form 8110-3 may include a list of reports or design drawings, included on a single approval form.

4.4 Engineering Compliance Inspection

- 4.4.1 Any aspect of product design for which compliance with the certification requirements cannot be ascertained through the review of drawings or reports, should be the subject of an engineering compliance inspection.
- 4.4.2 An engineering compliance inspection is intended to assure that an installation complies with the applicable airworthiness requirements, and provides an opportunity to review an installation, and its relationship with other installations on a product.
- 4.4.3 When an engineering compliance inspection is determined to be

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necessary, this must be stated on the relevant CAAI Document Approval Status Report (DASR), and its accomplishment shall be coordinated with the applicant.

- 4.4.4 Results of the compliance inspection will be reported through a compliance inspection report.

NOTE: This inspection should not be confused with Conformity Inspections performed by manufacturing inspectors (whose purpose is determination of a part's compliance with its approved design requirements).

4.5 Retention of Documents

- 4.5.1 Engineering Reports, Design Drawings, Engineering Orders and any other applicant's substantiation data submitted to CAAI for review shall be processed, subsequent to the product certification, in accordance with CAAI Procedure ENG 1.4.034.