CIVIL AVIATION AUTHORITY
OF NEW ZEALAND
Te Mana Rererangi Tūmatanui o Aotearoa

Advisory Circular
AC21-8 Appendix A

Revision 0

Project Specific Certification Plan Template

02 September 2016

Table of Contents

Appendix A: PSCP Template 2
A1. Scope 2
A2. Design Change Description 2
A3. Project Stakeholders 2
A4. Certification Schedule 3
A5. Certification Basis 4
A6. Method of Compliance 5
A7. Certification Documentation 6
A8. Continuing Airworthiness Responsibility 6
A9. Agreement of Certification Plan 7

Appendix A1: Compliance Checklist 8
Methods of Compliance 8

Appendix A: PSCP Template

Project Specific Certification Plan (PSCP)

Title....

CAA Reference X/21E/X

A1. Scope

A1.0 The purpose of this PSCP is to define and document a certification programme between the Civil Aviation Authority of New Zealand (CAANZ) and applicant to expedite the issue of a Supplemental Type Certificate in accordance with Part 21 Subpart E.

A1.1 This PSCP must become effective upon endorsement by the CAANZ and the applicant's Project Manager in section A9. It will continue in effect throughout all phases of the project unless it is superseded, revised, or terminated. This PSCP may be amended by mutual agreement in accordance with agreed procedures.

A1.2 CAA work request covering the STC project is X/21E/X.

A2. Design Change Description

A2.1 **Model effectivity.** Include the product type and models that the design change is to be installed on. For one-off modifications, include the applicable registration or serial number.

A2.2 **Description of the design change**. Identify the product to be changed (with reference to the TC), the affected structure/systems and include relevant photographs, drawings, and schematics to fully describe the change

A2.3 **Description of any novel or unusual design features.**

A2.4 **Intended regulatory operating environment (Parts 91, 121, 137 etc).** This should include the kinds of operation (day/night, VFR/IFR, restricted category) and any likely limitations on the type design operation. It should highlight any changes to the operation or maintenance from the aircraft's intended purpose.

A3. Project Stakeholders

A3.0. The applicant for the STC is:

Applicant's name

Applicant's address

(CAA Client No. ……..)

Phone: ……..

A3.1. The design organisation is:

Design organisation's name

Design organisation's address

(CAA Client No. ……..)

Phone: ……..

A3.2. The applicant's designated Project Manager is……The Project Manager is the applicant's point of contact for all administrative matters concerning the STC. Technical issues may be dealt with directly with Project Design Engineer ……

A3.3. The CAA's nominated Project Engineer is …… The Project Engineer is responsible for the day-to-day conduct of the certification activities on behalf of the Director. All contact on certification matters, including supply of documentation and the scheduling of visits and tests, must be addressed through the Project Engineer. (Direct phone 64-4-……., or e-mail at ……@caa.govt.nz).

A3.4. Changes to the above project personnel must be notified to all parties, and a replacement nominated and agreed upon within 5 working days.

A3.5. The applicant must be responsible for the following.

(a) Proposing the means of compliance with the nominated airworthiness design standards.

(b) Demonstrating that the supplemental type design complies with the airworthiness design standards.

(c) Notifying the CAA Project Engineer as soon as practicable of the dates and locations of all compliance tests, including flight tests, with at least 5 day notice.

(d) Supplying to the CAA all necessary data, including the compliance checklist and all the documentation referenced in section 7.

A4. Certification Schedule

A4.0. **The supplemental type certificate (STC) assessment process** will follow as closely as practicable CAA Aircraft Certification Unit (ACU) Procedure 3.6 with reference to advisory circular AC21-8 and FAA Order 8110.4, as appropriate for a STC application.

A4.1. **Certification Board Meetings**. It is depending on the scope of the STC project the CAA or the applicant may convene a Certification Board (CB) meeting at significant stages of the project. Refer to advisory circular AC21-8 and ACU Procedure 3.6 for a full description of CB requirements. Required CB meetings are detailed in the STC project schedule below.

A4.2. **The applicant and Director have agreed the following proposed schedule for the STC project.**

Action	Required		Date
	Yes	No	
STC Application / Draft PSCP Submitted to the Director			
Familiarisation CB Meeting			
PSCP Finalised			
Preliminary Data Submitted to the Director with an MDL			
Interim CB Meeting			
Request for conformity submitted to CAA			
Conformity Inspections			
Test plans submitted to CAA			
Certification Tests			
Compliance Inspections			
Pre-flight CB Meeting			
Flight Tests (including Conformity Inspections)			
Statement of Compliance and final descriptive and substantiating data submitted to the Director			
Final CB Meeting			
STC Issue			

A5. Certification Basis

A5.0. Type Certificate…….. lists the affected type's certification basis and applicable as……including amendments…… through…….. and applicable special conditions, equivalent level of safety and exemptions as ……..

A5.1. In accordance with the FAA AC21.101-1B *Changed Product Rule*, the design change is classified as …….

A5.2. The agreed certification basis for this STC is …….. including amendments …….. through …….

A5.3. The applicant has identified the following unique or unusual design characteristics which may require the application of special conditions to this STC application: ……

A5.4. The applicant has applied for the following equivalent level of safety findings with respect to the certification basis of this STC: ……

A6. Method of Compliance

A6.0. **Include a description of how compliance will be shown against each applicable airworthiness requirements.** This section may refer to the method of compliance detailed in the attached Compliance Checklist (include reference and revision if not part of this PSCP).

A6.1. **Certification Tests.** For all proposed certification tests – a Test Plan detailing the proposed test method, the test requirements (i.e. loads, test cases), conformity inspections, and the criteria by which the test article will pass or fail should be supplied to the CAA Project Engineer in accordance with the certification schedule (at least ten working days prior to the test). Refer to advisory circular AC21-8 for a full description of certification test requirements. The following tests are planned to show compliance with the applicable airworthiness requirements.

Test Description (including Test Plan ref)*	Witness	Date of Test

* If specific details of proposed tests are not available, provide a summary of the test plan(s) with information on proposed test aircraft type/model, equipment configuration, and minimum flight test personnel qualifications etc.

A6.2. **Conformity Inspections.** Inspections are required to confirm test articles conform to descriptive data; compliance inspection articles conform to descriptive data; and the design change can be replicated. The CAA Project Engineer should be notified **five working days** before the scheduled inspection date.

Requirement for Conformity Inspection	Signatory	Date of Insp.

A CAA Form 8130-9 Statement of Conformity must be provided for all test articles, signed by an authorized person (refer to AC21-8).

A6.3. **Compliance Inspections.** An engineering compliance inspection should be done for any aspect of product design and installation where compliance with the certification requirements cannot be determined through the review of drawings or reports. The following compliance inspections are planned to show compliance with the applicable airworthiness requirements.

Details of Compliance Inspection	Signatory	Date of Insp.

A7. Certification Documentation

A7.0. **A separate master document list** is required as part of the STC data package to define all documents, and their issue status, to embody, maintain and substantiate the design change. The master document list should clearly identify between **descriptive data** (manufacturing drawings, maintenance & operating documentation etc.) and **substantiating data** (technical assessments, test reports etc.). Detailed information on Substantiating Data requirements are included in AC21-8.

The following list includes the documents to be approved by the CAA (master document list, flight manual supplement and Instructions for Continued Airworthiness).

Document ref	Revision	Date

A8. Continuing Airworthiness Responsibility

A8.0. The applicant shall be responsible for providing continuing airworthiness support for the aircraft to all owners and all national airworthiness authorities in countries in which the aircraft is operated, in accordance with rules 21.123(a)(1) and 146.61.

A8.1. The applicant should detail the procedures and systems in place to achieve this or refer to the applicable rule part for which the STC applicant is certificated that meets these requirements:

Part …… Certificate No. ……

A8.1.1. Procedure for collecting, investigating, and analysing information relating to defects in the design produced by the applicant and distributing that information to—

(a) each manufacturer of a product, component, or appliance to that design; and

(b) each person who receives that design from the design organization:
…….

A8.1.2. Procedure for providing defect incident information to the Authority in accordance with Part 12:…….

A8.1.3. Procedure to ensure that all records are legible and of a permanent nature:
…….

A8.1.4 Procedure to ensure that all records are retained for a period of 2 years from the date the last example of the product type is permanently withdrawn from service:…….

A9. Agreement of Certification Plan

A9.0. The ACU and applicant agree to the provisions of this PSCP as indicated by the signature of their duly authorised representatives.

Applicant Project Manager:		
Name:	Signed:	Date:
CAA Project Engineer:		
Name:	Signed:	Date:

Appendix A1: Compliance Checklist

The following pages detail the airworthiness design standards used to show compliance for this STC.

"Applicable guidance, references & remarks" – this column should include reference to the guidance material followed. The guidance material must be applicable to the regulation (i.e. FAA AC's for 14CFR, EASA AMC for CS specifications) and specific to the aircraft category (i.e. FAA AC27-1 cannot be used for 14CFR Part 23).

Methods of Compliance

Flight test (FT). A test of the aircraft in the air or on the ground when the nature of the test requires a flight test pilot.

Ground test (GT). Includes component bench testing, testing of simulated aeronautical product systems, and ground testing of the product. These tests may precede a flight test, or be used to show compliance when appropriate.

Analysis (A). Includes a quantitative or qualitative assessment, as appropriate, of structures, systems, components, or the entire product. Should be validated using published previous experience or appropriate testing to be accepted for showing compliance to the regulations.

Design review (D). Encompasses the features of structures, systems, or components. Inspection of hardware, drawings, bill of materials, or other documentation such as material specifications, shows compliance with the applicable regulations.

Inspection (I). This method of compliance is used when an engineering compliance inspection of a component, installation or the product itself is required to establish compliance with the applicable requirements.

Similarity (S). Comparison between a previously certificated design and the proposed design. The intent is to show that these designs are the same in all ways relative to showing compliance with the applicable regulation, so the proposed design will perform the same or better than the previously certificated design. The applicant must account for any differences in the regulations if the amendment levels of the regulations are not the same for the two designs. To determine this, access to the technical data being compared to will be required.

Equivalent Level of Safety Finding (ELOS). Only CAA can issue an ELOS when the applicant cannot show literal compliance with a regulation, but shows to CAA satisfaction that compensating factors achieve a safety level equal to that of the applicable regulation. An applicant may propose the use of an ELOS in writing to the ACU. Make all proposals for ELOSs to the CAA early in the project to allow time for processing.

Not Applicable (N/A). Means the specific regulation does not apply to the design or modification for this STC; therefore, a showing of compliance is not necessary. Enter the reason the rule is not applicable in the "Applicable Guidance, References, and Remarks" column of the checklist.

Regulation	Amendment	Method(s) of Compliance*	Plan, Drawing, Report number	Applicable guidance, references & remarks
14 CFR part 23	xx unless otherwise specified			
Subpart A – General				
Section				
23.1 Applicability				
23.2 Special retroactive requirements				
23.3 Airplane categories				
Subpart B – Flight				
General				
23.21				
Etc.				
Special Conditions				
Etc.				
Noise & Emissions				
Etc.				

NZ Part 26				
Etc.				
Other applicable NZ rules				
Etc.				
Airworthiness Directives				
Etc.				

*Methods of Compliance: FT = Flight Test, GT = Ground Test, A = Analysis, D = Design review, S = Similarity, I = Inspection, ELOS = Equivalent Level of Safety Finding, N/A = Not Applicable