Applicant Showings & Los Angeles ACO Process Improvement Initiative

Presented by:

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DER TECHNOLOGIES, INC.

Overview

- □ AIR Project Prioritization Process
- □ AIR-100 Guidance for Recognition and Use of Applicant Showings on Standard
 Certification Projects
- **□ LAACO Process Improvement Initiative**

AIR Project Prioritization Process

	AIR-100 Standard Operating Procedure	SOP # AIR-100-ALL-005	Revision 0
Title: AIR Project Prioritization and Resource Management		Effective Date: 9/15/2014	Page 1 of 23

Standard Operating Procedure Aircraft Certification Service Project Prioritization and Resource Management

Purpose

This standard operating procedure (SOP) describes the Federal Aviation Administration (FAA) Aircraft Certification Service (AIR) process for prioritizing certification projects and managing certification project resources when local resources are not available or are working on higher priority projects such as continued operational safety. The process for managing certification resources will henceforth be referred to as the AIR Project Prioritization Process.

Scope

This SOP applies to AIR personnel involved in aircraft certification in the Aircraft Certification Offices (ACO) and the AIR oversight offices, and to all activities AIR personnel perform in support of certification project prioritization and resource management. This SOP establishes the requirements and best practices for: 1) prioritizing aircraft certification projects, 2) determining individual project task response times, and 3) obtaining resources for certification projects when local resources are not excitable.

This document provides requirements and best practices for prioritization of certification projects including type certificates (TC), amended type certificates (ATC), supplemental type certificates (STC), and test and computation parts manufacturer approvals (PMA). This process does not include technical standard order authorization (TSOA) projects and changes to TSOA approvals.

Note: This SOP does not apply to validation projects or projects managed by the Military Certification Office (MCO). For projects managed by the MCO refer to FAA Order 8110.101, Type Certification Procedures for Military Commercial Delivative Algorith.

The following documents are used in this process and are available on the AIR Quality Management System (QMS) website or Regulatory Guidance Library (RGL):

- FAA Order 8110.4, Type Certification
- FAA Order 8100.15, Organization Designation Authorization Procedures
- FAA Order 8110.42, Parts Manufacturer Approval Procedures
- · QMS Procedure AIR-002-050, AIR Type Certification
- · QMS Procedure AIR-001-080, AIR Parts Manufacturer Approval

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AIR Project Prioritization Process

AIR-100 Standard Operating Procedure

SOP # AIR-100-ALL-005 (9/15/2014)

- Step I. Determine the Safety Index (SI).
- Step 2: Determine the Applicant Showing or Designee Finding (ASDF) Rating.
- Step 3: Determine project priority from SI and ASDF.

Use of Applicant Showings



Memorandum

Date: September 30, 2015
To: See Distribution

From: Susan J. M. Cabler, Acting Manager, Design. Manufacturing, &

Airworthiness Division, AIR-100 SWM Caller

Prepared by: Mike Reinert, Manager, AIR-150

Subject: Guidance for Recognition and Use of Applicant Showings on Standard

Certification Projects

Memo No. AIR100-15-150-PM16

Overview

The purpose of this memo is to describe how Aircraft Certification Offices (ACO) can recognize an applicant's showing of compliance for specific requirements using criteria defined below. This memo applies to domestic, non-organizational delegation applications for "new" or amended type certificate (TC), supplemental type certificate (STC), amended STC, or parts manufacturer approval (PMA).

Background

This memo provides a standardized method to allow the Federal Aviation Administration (FAA) to exercise discretion and redirect resources to higher risk areas. Currently, most substantiating and type design data submitted by the applicant to show compliance is reviewed by either an FAA designated DER or, for retained items, by the FAA. In either case there is a record in the form of an 8110-3 from the DER or a correspondence from the FAA for the specific finding of compliance. In limited cases the ACOs have relied upon the applicant data without review to support a showing of compliance to a specific requirement. Historically this has occurred more often in the flight test area due to the specific requirement under 14 CFR 21.35 for the applicant to submit a report prior to FAA involvement decisions. However, the FAA can exercise discretion for all areas of a project and determine what individual data submittals need specific review. Therefore, the FAA may refrain from review of specific submittals recognizing the applicant showings for those applicants that have demonstrated the ability to develop and provide competent compliance data.

Order 8110.4 prescribes the FAA Type Certification design approval process. However, the Order does not specify the methodologies in which "all" tasks and requirements must be accomplished. This memo formalizes a standard method for how ACOs exercise discretion to

Use of Applicant Showings

AIR100-15-150-PM16 (9/30/2015):

Describes how ACOs can recognize an applicant's showing of compliance for specific requirements.

Applicable to

Domestic, non-organizational delegation applications for;

- > New or amended Type Certificate (TC)
- Supplemental Type Certificate (STC)
- > Amended STC
- > Parts Manufacturer Approval (PMA)

Use of Applicant Showings

The FAA may refrain from review of specific submittals recognizing the applicant showings for those applicants that have demonstrated the ability to develop and provide competent compliance data.

- ACOs exercise discretion to determine their Level of Project Involvement (LOPI)
- ACOs use an approved risk based decision making (RBDM) tool
- LOPI decisions are made on a case by case basis by the FAA

Applicant Showing Only - Criteria

- Per the AIR "Applicant Showing Only" Policy Memo, ASO authorized when RBRTa recommends Applicant Showing Only, and:
 - The applicant has evidence of successfully obtaining FAA approval for that type of specific compliance data on past projects, including projects of comparable complexity and,
 - The applicant's compliance methodology is the same as on past FAA projects and,
 - The applicant uses the same person(s) in making the applicant showing, or an auditable documented company process for the compliance methodology is used to develop the specific substantiating data and,
 - The company provides a signed written statement of compliance for each regulation that applicant showing was authorized

LAACO Process Improvement Initiative

103L-15-26 (December 2015)

Domestic, non-organizational delegation applications for;

- Project Prioritization
- Using new Project Specific Certification Plan (PSCP) templates
- Including LAACO "control numbers" in your submittals
- Including standard correspondence types in submittals.

Project Prioritization

- □ FAA has limited resources
- Project prioritization allows ACO to allocate those resources based on safety risk
- Based on Applicants certification experience, FAA may retain fewer compliance findings
- As FAA gains confidence in applicants certification experience, they may be able to delegate more findings of compliance.

New PSCP Template

Table of Contents

- 1.0 Scope
- 2.0 Project Description
- 3.0 Project Schedule
- 4.0 Basis for Design Approval
 - 4.1 Airworthiness Directives
 - 4.2 Determination of Critical and/or Life Limited Parts
 - 4.3 Eligibility
- 5.0 Compliance Checklist ←
- 6.0 Certification Document Matrix <
- 7.0 Tests
- 8.0 Conformity Inspections
- 9.0 Communication and Coordination
- 10.0 Delegation
- 11.0 Certification Summary Report

List of Tables

- Table 1. Compliance Checklist
- Table 2. Deliverables
- Table 3. Designees Authorized for this Project

Two new PSCP drafts

- 1. For TC and STC
- 2. For PMA

New/Revised Items

- Compliance Checklist
- Certification Document Matrix (*Deliverables*)
- Certification Summary Report

PSCP

PSCP is now considered a contract rather than a continuously changing, "living" document

- Applicant makes commitments related to the certification basis, compliance showings, deliverables and schedule
- LA ACO accepts the PSCP, making commitments to respond to submittals within standard flow times and not add additional requirements beyond those defined in the PSCP

PSCP

PSCP will now include

- Listing each regulation and the associated amendment level
- Listing the method of compliance for each regulation
- Listing who will find compliance (DER, FAA or Applicant)
- Listing all deliverables
- Documenting the expected submittal time for each deliverable
- Documenting the time line for FAA responses using standard FAA response times as a baseline
- Section 12, which adds a certification summary report to allow documentation of the final version of the PSCP that reflects last minute changes before the project completed
- Listing tracking numbers for each deliverable.

Compliance Checklist

	7	Table 1 Complia	ance Checklist		
Regulation/Title	Applicable Amendment	Method of Compliance (Analysis, Flight Test, Ground Test, etc.)	Document Name & Number	FAA/ DER (Name) Finding of Compliance or Applicant Showing Only (Name of applicant representative)	Guidance Reference & Remarks
25.303 Factor of Safety	25-23	A	Loads Report XX-002	DER - Bob Engineer	
25.305(a), (b), (c) and (f) Strength and deformation	25-86	GT	Test report XX-003	FAA	
25.1307 Miscellaneous equipment	25-72	Α	Drawing XX-004	James Applicant	
21.303(5) Statement of Compliance	21-92	Letter	Doc xx-007	Jane Applicant	
Etc.					

Deliverables

Table 2. De liverables

Document Title	Do c um e nt	FAA Tracking	FAA /DER ⁴	Comments
	N umber	Numb e r 3	(Name) Findin g of Compliance or Applicant Showin g Only (Nameof applicant representative)	
PSCP	XX-001	IXOL/xxx/13		1
Design Drawings	3	/	×	
Master Data/DrawingList				
Process Specifications	1			1
AnalysisMethodology	1		2	-
Static Loads Analysis				
Static Analysis				
Electrical loads Analysis				
Failure Modes and	1			1
Effects Analysis				
(FMEA)				1
Damage Tolerance Analysis				
Test Plans				
Test Reports				
ConformityRequest		NIA		
ConformityReport		NIA		
Compliance Report				ľ
Instructions for Continued Airworthiness (!CA)				
EligibilityReport				
Criticality Report including Safety Assessment				
Type Inspection Authorization	Draft	N/A		
Statement of Compliance				

³ NOTE: The Control numbers will be provided by the FAA project manager

⁴ NOTE: A= Approve, RA= DER Recommend Approval on 8110-3 with FAA Approval

LA ACO Control Numbers

LAACO uses a Work Tracking System (WTS)

- Track response times to defined metrics
- LA ACO reviews open items weekly to ensure that projects progress normally
- The LA ACO acceptance letters will now include these control numbers associated with each deliverable listed in PSCP

Deliverables

List the documents to be submitted to show compliance to the regulations

- Identify compliance items;
 - retained by the FAA,
 - delegated to DER,
 - or to be found in compliance by the applicant only
- Submitted documents include a cover letter that describes the submittal and includes the FAA Control Number
- With each submittal, the applicant will provide a signed written statement of compliance for each regulation that applicant showing is authorized

Deliverables

At the end of the project, the applicant will still provide a statement certifying that the applicant has complied with all of the applicable regulations (reference 14 CFR 21.303(a)(5)).

Certification Summary Report

Not in the PSCP submitted by the Applicant

- Prepared by the FAA at the end of a project if the project deviated from the PSCP.
- A copy of this Certification Summary Report (CSR) remains in the project file.
- A copy of the CSR is also transmitted to the applicant to document the project and to facilitate continuous improvement of future projects.

If the applicant followed the PSCP with no changes



LAACO work tracking system process to log, route, and track all incoming correspondences to a timely completion

Applicants should

- Use new Project Specific Certification Plan (PSCP) templates
- Include LAACO "control numbers" in your submittals
- Include standard correspondence types in submittals.

The LA ACO has established a general email box for your electronic submittals of <u>no more than ten pages</u>:

LAACO-certification@FAA.gov

Anything more than ten pages must be received by hard copy. Choose only one method to submit correspondence to avoid double entries.

LAACO Correspondence Type Listing in the subject lines of the cover letters or emails for all correspondence

- Correspondence Type as identified on the CTL list
- Project Number All documents should include a project number
- Project type (TC/STC/PMA)

Below are some examples of subject lines:

- Subject: CERT Compliance Applicant Certifying Statement of Compliance "ABC Report Name" STC Project No. STX:XXXXLA-T (make/model)
- Subject: FCAA Foreign Validation Request (Name of Foreign Authority, STC No.)
- Subject: CERT Minor Design Changes (Except TSO) (identify applicable TC/STC/PMA or TSO number)

Correspondence Type	Office FlowTime	Details		
ADMIN - STC Reissuance Request	30	Use when requesting reissuance of STC due to address, holder change or typo correction.		
ADMIN - TC Reissuance and TCDS Revision Request	90	Use to request reissuance of TC (likely also necessitating a Type Certificate Data		
CERT - Application - Amended STC	15	Use when submittina an Amended STC.		
CERT - Application - Amended Type Certificate (ATC)	15	Use when submittina an Amended TC (ATC).		
CERT - Application - New STC	15	Use when submittina a new Supplemental Type Certificate (STC).		
CERT - Annlication - New Type Certificate	15	Use when submitted a new TC.		
CERT - Application -PMA Added Eliaibility	90	Use when requestina to add eliaible aircraft or enaine models to a PMA.		
CERT - Application - PMA Identicality	90	Use when submittina all identicality PMA applications.		
CERT - Application - PMA Streamline Process	30	Use when submitting PMA applications that meet streamline process criteria. See Order 8110.119, Streamline Process for PMA Approval.		
CERT -Application - PMA Test and Computation (Basic)	90	Use when submitting complete data packages for Basic PMA applications. A Basic PMA application is one in which all compliance data is included with the application with no expectation of additional data requiring submittal. Basic PMA applications Itypically require no PSCP.		
CERT -Application - PMA Test and Computation (Complex)	15	Use when submitting data related to a Complex PMA. A Complex PMA application is one in which additional compliance data will be submitted separate from the PMA application. Complex PMA applications are typically submitted with a PSCP.		
CERT - Application - TSO Authorization Application IIBasic\	30	Use when submitting an application for Basic TSO Authorization. A Basic TSO is one in which all or most data is submitted with the application with no expectation of additional data submittals. Most TSO applications are Basic.		
CERT - Application - TSO Authorization Application (Complex) or TSO Authorization for new Comoanv	60	Use when submitting an application for Complex TSO Authorization, or if this application is the applicant's First request for TSO Authorization with the Los Angeles ACO. A Complex TSO is one in which additional data is anticipated to be submitted in order to aain approval.		
CERT - Compliance - Applicant Certifying Statement of Compliance	0	Use when submittina the certified Statement of Compliance (21.20 statement).		
CERT - Compliance - Applicants Showina Accepted	0	Use when submitting compliance data (with no 8110-3 or 8100-9), where the Level of Project Involement (LOPI) is Applicant Showing Only (ASO). Reference PSCP to		
CERT - Compliance - Conformity Inspection Plan (CIP)	45	Use when submittina a new or revised CIP for TC/STC/PMA.		
CERT - Compliance - DER (or other Designee) Approved	0	Use when submitting DER-approvedcompliance data (with 8110-3 or 8100-9 that has accroved box checked),		
CERT - Compliance - DER (or other designee) Recommend	15	Use when submitting compliance data recommended for approval (with 8110-3 or 8100-9 that has recommend annroval box checked).		
CERT - Compliance - FAA Retained	30	Use when submittina FAA Retained compliance data.		
CERT - Compliance - Instructions for Continued Airworthiness (ICAs)	35	Use when submittina new or revised Instructions for Continued Airworthiness (ICA\.		

References

 SOP # AIR-100-ALL-005: AIR-100 Standard Operating Procedure (9/15/2014)

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgPolicy.nsf/0/fbb1d726066a5ff386257d510063f3a9/\$FILE/AIR-100-ALL-005.pdf

 AIR100-15-150-PM16: Memo - Guidance for Recognition and Use of Applicant Showings on Standard Certification Projects (9/30/2015)

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgPolicy.nsf/0/C5A5867FD4BA36D186257ED0005D1998?OpenDocument

 LA ACO 103L-15-26: LAACO Process Improvement Initiative (12/2015)

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Thank You

Questions?

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