



Gorham Technical Associates, Inc.

The 15th Annual Gorham PMA- DER Conference PMA Parts Training

DERS Group Svc LLC

Tracy R. Ourhaan
Managing Member
March 13-14, 2013



FAA DER DISCLAIMER

- The Federal Aviation Administration is not in any way responsible for the data, or the opinions presented in this presentation.
- The opinions and data presented herein are those of the presenter.
- The audience is responsible for confirming all data relative to Applicable CFR's, National Policies, Orders, and Advisory Circulars for their accuracy and in their being the latest amendment or revision.
- The FAA Delegate is functioning as a Consultant DER as defined in 14 CFR 183.29, following the established policies and procedures of FAA Orders 8110.37E & 8100.8D and the Guidance of Multiple ACs.
- FAA data may be obtained on FAA Home, at www.FAA.gov.

About the Instructor

Tracy R. Ourhaan – (818) 620 8444



- Education
 - **BSME - University of Miami**
 - **MBA – Nova Southeastern**
- Patent – 5,192,192 Turbine Engine Airfoil Blade and Vane Cap Cooling
- Principal DERS Group Svc LLC, 2004
 - **FAA DER-T Parts 23, 25 & 33, Chart B & E Full Authority,**
 - Special Functions: Major Alteration; Major Repair; PMA Identity Findings.
 - **30 Years in Aviation**
 - P&W, Honeywell, Parker Hannifin, GE, Gulfstream, Spirit AeroSystems, ITT Aerospace Controls, Zodiac, Rexnord, Timco.
 - Specialties:
 - Engines & Engine Components,
 - Powerplant Installations,
 - Mechanical Systems & Accessories: APU, ECS, ,Combustion, Fuel Controls, Hydraulic & Pneumatic Actuation.
 - Component Repairs: Hot Section, Valves, Pumps, ATS, ACMSStarters, Interior Seating Systems, Flammability & Dynamic Testing.
 - Certification Capabilities: Major Changes to TC, New STCs, ASTCs, TSOs, PMAs, DER Repairs and Alterations, ISO Compliance, PC and RS Establishment, Design, Development, and Test Engineering Services..
 - Business Capabilities: Strategy Creation Surrounding PMA and DER activities, Growth ID, Pricing, for OEMs and Independent Repair Facilities



Definitions

Term / Acromym	Definition
AC	Advisory Circular
Accepted	When data is determined to be suitable for its intended function but is not 'Approved'
ACE	Aircraft Certification Engineer [FAA- ACO]
ACO	Aircraft Certification Office [a FAA Branch]
ACSEP	Aircraft Certification Systems Evaluation Program [FAA Audit]
AD	Airworthiness Directive - Issued by FAA
AEG	Aircraft Equipment Group [a FAA Branch]
AFM	Airplane Flight Manual
AML	Approved Materials List / Approved Model List
AMM	Aircraft Maintenance Manual
APIS	Approved Production Inspection System
Approved	Approved by the FAA or his Authorized Designee
AR	Authorized Representative [an ODA Member (Engineering or Manufacturing)]
Article	A material, part, component, process, or appliance.
AS	National Aerospace Standards
ASI	Alrworthiness Safety Inspector
BAA	Bilateral Alrworthiness Agreement
BASA	Bilateral Aviation Safety Agreement
C of A	Certificate of Airworthiness
CA	Certificating Authority
CAA	Civil Aviation Authority
CAR	Civil Air Regulation
Certification Lab Test	Test conducted on conformed equipment installed in laboratories, fixtures, etc.
Certification Plan	Document that describes how Applicant intends to demonstrate compliance of the design to the CFRs
Certification Test	Test conducted on an aircraft to find compliance with a TIA or Certificate of Conformity
CFR	Code of Federal Regulations
Change Product Rule	Certification process defined in 14 CFR §21.101
CMM	Component Maintenance Manual

Term / Acromym	Definition
Company Testing	Test conducted to show compliance on an aircraft prior to issuance of a TIA
Compliance Checklist	A formal method of documenting compliance to all applicable regulations during certification
Conformity Inspections	Inspections to verify and provide objective documentation that test articles, parts, installations, and test set-ups conform to the design.
Conformity Plan	Describes the actions necessary to ensure required inspections are accomplished
CPN	Certification Project Notification
DAR	Designated Alrworthiness Representative
DAR-F	Designated Alrworthiness Representative (Manufacturing)
DAR-T	Designated Alrworthiness Representative (Maintenance)
DAS	Designated Alteration Station
DER	Designated Engineering Representative
DER-T	Designated Engineering Representative (Consultant)
DER-Y	Designated Engineering Representative (Company)
Development Testing	Tests to determine feasibility of a change
DMIR	Designated Manufacturin g Inspection Representative
EASA	European Aviation Safety Administration
eCOA	Electronic Certificate of Authority Letter for a designee specifying authorized functions
ELOS	Equivalent Level of Safety
FAA	Federal Aviation Administration
FAI	First Article Inspection
FAR	Federal Aviation Regulations
Finding	A show of compliance
FIS	Fabrication Inspection System
FOIA	Freedom of Information Act
FSDO	Flight Standard District Office [a FAA Branch]
ICA	Instructions for Continued Airworthiness
IFCAW	Instructions for Continued Alrworthiness [a k a : ICA]
IP	Issue Paper
IPC	Illustrated Parts Catalog

Definitions

Term / Acromym	Definition
Major Change	A type design change that has an appreciable effect on weight, balance, structural strength, reliability, operational characteristics or other characteristics affecting airworthiness of the product per 14 CFR §21.93
MARPA	Modification and Replacement Parts Association
MCO	Military Certification Office
MIDO	Manufacturing Inspection District Office [a FAA Branch]
Minor Change	Any type design change that is not a Major Change as defined above per 14 CFR §21.93
MIS	Manufacturing Inspection Specialist [a FAA Staff Position]
MMEL	Master Minimum Equipment List
MRP	Modification and Replacement Parts [14 C F R Part 21.303)
MS	Military Standard
NPRM	Notice of Proposed Rule Making
ODA	Organization Designation Authorization
ODAR	Organizational Designated Alrworthiness Representative
ODAR-F	Organizational Designated Alrworthiness Representative [Manufacturing]
ODAR-T	Organizational Designated Alrworthiness Representative [Maintenance]
OEM	Original Equipment Manufacturer
Orders	FAA Orders Issued to define methods or procedures to accomplish rules
PACO	Project Aircraft Certification Office
PAH	Production Approval Holder
PC	Production Certificate
PM 's	Policy Memo's - FAA driven guidance to accomplish FAR , Orders, AC's
PMA	Parts Manufacturing Approval
PMI	Principle Maint Inspector [FAA FSDO]
Product	Aircraft, Engine or Propeller
PSCP	Project Specific Certification Plan
PSP	Partnership for Safety Plan
RFC	Request For Conormlty Issued by ACO to MIDO or FSDO
RGL	Regulatory and Guidance Library

Term / Acromym	Definition
SB	Service Bulletin [Issued by OEM, TC, STC, TSO, or PMA]
Significant Change	A change to the type certificate, a new STC, or an existing STC, to the extent that it changes the general configuration, principles of construction, or the assumptions used for certification, but not to the extent to be considered a substantial change per 14 CFR §21.101 (b)(1)
SME	Subject Matter Expert
SRM	Structural Repair Manual
STC	Supplernental Type Certificate
Substantial Change	An change requiring a complete investigation of compliance with the applicable regulations in support of a new type certificate
Summary Compliance Report	Document informing the FAA of a completed Certification Project by describing how the applicable airworthiness requirements were shown to be in compliance. Contains the Compliance Checklist
TC	Type Certificate
TCDS	Type Certificate Data Sheet [Approved FAA document defining a Configuration of a Type Certificated Product
Test Plan/ Procedure	Document defining method to be used to verify and ensure a product meets a rule.
Test Report	Document memorializing test results achieved by executing a test plan/procedure
TIA	Type Inspection Authorization, Official conformity prior to flight tests
TIR	Type Inspection Report
TSO	Technical Standard Order

Which Branches of The FAA are Responsible for which Designee's

7

FAA Headquarters



MIDO

- NEW PARTS MFG INSPECTION
- DAR-F
- DMIR
- FAR 21
- FAR 45
- TC
- STC
- PMA
- TSO



ACO

- ALL DESIGN ENGINEERING
- DER-T, DER-Y
- FAR 21, 23, 25, 27, 29, 33, & 39 etc.
- TC
- STC
- PMA
- TSO
- Repairs, Alterations
- DAS, DOA



FSDO

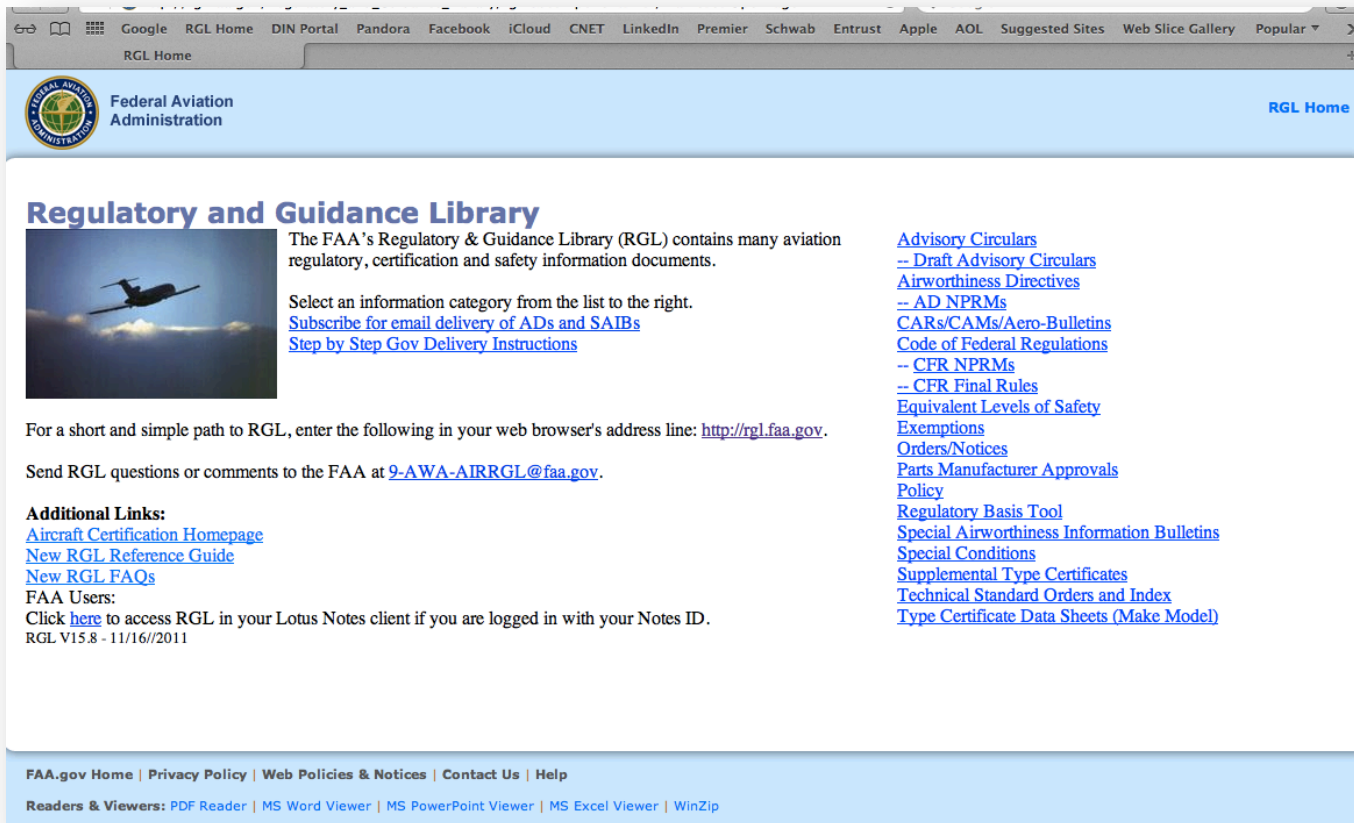
- MAINTENANCE AND FLIGHT STANDARDS
- DAR-T
- FAR 43, 45
- FAR 91, 121, 125
- FAR 129, 133, 135
- FAR 145
- DAS



AEG


- ICA

Regulations - RGL.FAA.GOV



Google RGL Home DIN Portal Pandora Facebook iCloud CNET LinkedIn Premier Schwab Entrust Apple AOL Suggested Sites Web Slice Gallery Popular >>


RGL Home

 Federal Aviation Administration RGL Home

Regulatory and Guidance Library

The FAA's Regulatory & Guidance Library (RGL) contains many aviation regulatory, certification and safety information documents.

Select an information category from the list to the right.
[Subscribe for email delivery of ADs and SAIBs](#)
[Step by Step Gov Delivery Instructions](#)



For a short and simple path to RGL, enter the following in your web browser's address line: <http://rgl.faa.gov>.

Send RGL questions or comments to the FAA at 9-AWA-AIRRGL@faa.gov.

Additional Links:
[Aircraft Certification Homepage](#)
[New RGL Reference Guide](#)
[New RGL FAQs](#)

FAA Users:
 Click [here](#) to access RGL in your Lotus Notes client if you are logged in with your Notes ID.
 RGL V15.8 - 11/16/2011

[Advisory Circulars](#)
[-- Draft Advisory Circulars](#)
[Airworthiness Directives](#)
[-- AD NPRMs](#)
[CARs/CAMs/Aero-Bulletins](#)
[Code of Federal Regulations](#)
[-- CFR NPRMs](#)
[-- CFR Final Rules](#)
[Equivalent Levels of Safety](#)
[Exemptions](#)
[Orders/Notices](#)
[Parts Manufacturer Approvals](#)
[Policy](#)
[Regulatory Basis Tool](#)
[Special Airworthiness Information Bulletins](#)
[Special Conditions](#)
[Supplemental Type Certificates](#)
[Technical Standard Orders and Index](#)
[Type Certificate Data Sheets \(Make Model\)](#)

FAA.gov Home | Privacy Policy | Web Policies & Notices | Contact Us | Help

Readers & Viewers: [PDF Reader](#) | [MS Word Viewer](#) | [MS PowerPoint Viewer](#) | [MS Excel Viewer](#) | [WinZip](#)

Regulations - RGL.FAA.GOV

Search:

[Search Help](#)

Current CFR by Part

[Search](#) [Previous](#) [Next](#) [Expand All](#) [Collapse All](#) [Print View](#)

▶ Part 21 - CERTIFICATION PROCEDURES FOR PRODUCTS, ARTICLES, AND PARTS

- ▶ **Part 21 - CERTIFICATION PROCEDURES FOR PRODUCTS, ARTICLES, AND PARTS**
- ▶ Part 23 - AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES
- ▶ Part 25 - AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES
- ▶ Part 26 - CONTINUED AIRWORTHINESS AND SAFETY IMPROVEMENTS FOR TRANSPORT CATEGORY AIRPLANES
- ▶ Part 27 - AIRWORTHINESS STANDARDS: NORMAL CATEGORY ROTORCRAFT
- ▶ Part 29 - AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY ROTORCRAFT
- ▶ Part 31 - AIRWORTHINESS STANDARDS: MANNED FREE BALLOONS
- ▶ Part 33 - AIRWORTHINESS STANDARDS: AIRCRAFT ENGINES
- ▶ Part 34 - FUEL VENTING AND EXHAUST EMISSION REQUIREMENTS FOR TURBINE ENGINE POWERED AIRPLANES
- ▶ Part 35 - AIRWORTHINESS STANDARDS: PROPELLERS
- ▶ Part 36 - NOISE STANDARDS: AIRCRAFT TYPE AND AIRWORTHINESS CERTIFICATION
- ▶ Part 39 - AIRWORTHINESS DIRECTIVES
- ▶ Part 43 - MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION
- ▶ Part 45 - IDENTIFICATION AND REGISTRATION MARKING
- ▶ Part 47 - AIRCRAFT REGISTRATION
- ▶ Part 49 - RECORDING OF AIRCRAFT TITLES AND SECURITY DOCUMENTS
- ▶ Part 60 - Flight Simulation Training Device Initial and Continuing Qualification and Use
- ▶ Part 61 - CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS
- ▶ Part 63 - CERTIFICATION: FLIGHT CREWMEMBERS OTHER THAN PILOTS
- ▶ Part 65 - CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS
- ▶ Part 67 - MEDICAL STANDARDS AND CERTIFICATION

[Historical CFR](#)
[By Part](#)
[By Subpart](#)
[By Section](#)
[By Amendment](#)

[Future Effective CFR](#)
[By Part](#)

[Current SFAR](#)
[By Number](#)
[By CFR Part](#)

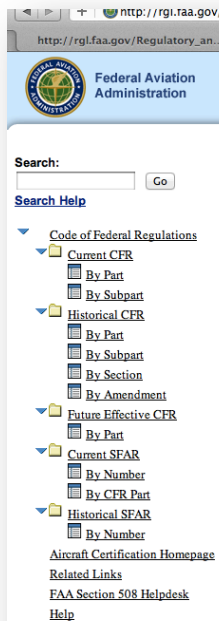
[Historical SFAR](#)
[By Number](#)

[Aircraft Certification Homepage](#)
[Related Links](#)
[FAA Section 508 Helpdesk](#)
[Help](#)

FAA.gov Home | Privacy Policy | Web Policies & Notices | Contact Us | Help

Readers & Viewers: [PDF Reader](#) | [MS Word Viewer](#) | [MS PowerPoint Viewer](#) | [MS Excel Viewer](#) | [Zip](#)

Regu



▼ Part 21 - CERTIFICATION PROCEDURES FOR PRODUCTS, ARTICLES, AND PARTS

- ▶ Subpart A--General
- ▶ Subpart B--Type Certificates
- ▶ Subpart C--Provisional Type Certificates
- ▶ Subpart D--Changes to Type Certificates
- ▶ Subpart E--Supplemental Type Certificates
- ▶ Subpart F--Production Under Type Certificate
- ▶ Subpart G--Production Certificates
- ▶ Subpart H--Airworthiness Certificates
- ▶ Subpart I--Provisional Airworthiness Certificates
- ▶ Subpart J--[Removed and Reserved]
- ▶ Subpart K--Parts Manufacturer Approvals
- ▶ Subpart L--Export Airworthiness Approvals
- ▶ Subpart M--[Removed and Reserved]
- ▶ Subpart N--Acceptance of Aircraft Engines, Propellers, and Articles for Import
- ▶ Subpart O--Technical Standard Order Approvals
- ▶ Subpart P--Special Federal Aviation Regulations

▶ Part 33 - AIRWORTHINESS STANDARDS: AIRCRAFT ENGINES

▶ Part 34 - FUEL VENTING AND EXHAUST EMISSION REQUIREMENTS FOR TURBINE ENGINE POWERED AIRPLANES

