

APPENDIX 3**NUMERICAL LIST OF ADVISORY CIRCULARS****Important Notice**

This Advisory Circular Checklist, AC 00-2, is no longer sent automatically to addresses on free advisory circular mailing lists. Persons not now receiving AC 00-2 but who wish to receive it must specifically request to be placed on the AC 00-2 mailing list (see par. 5 for ordering information). Up to ten copies may be sent to any one address. Persons receiving this edition of AC 00-2 need not request AC 00-2 mailing list service as they have already been transferred to the new list.

General**Subject No. 00****00-1.1****Government Aircraft Operations
(4/19/95) (AFS -220)**

Provides guidance on whether particular government aircraft operations are public aircraft or civil aircraft operations under the new statutory definition of "public aircraft." This AC contains FAA's intended application of key terms in the new statutory definition. For operations that have lost public aircraft status under the new law, information is provided on bringing those operations into compliance with FAA safety regulations for civil aircraft and provides information on applying for an exemption.

→ 00-2.13**Advisory Circular Checklist
(6/15/00) (APF-100)**

Transmits the revised checklist of current FAA advisory circulars as of June 15, 2000.

00-6A**Aviation Weather
(3/3/75) (AFS -400)**

Provides an up-to-date and expanded text for pilots and other flight operations personnel whose interest in meteorology is primarily in its application to flying. SN 050- 007-00283-1. \$8.50 Supt. Docs.

→ 00-7D**State and Regional Disaster Airlift
(SARDA) Planning
(9/15/98) (ADA-20)**

Provides officials with guidance to access and utilize a broad range of aviation resources within the state, when needed to support civil emergency operations.

00-24B**Thunderstorms
(1/20/83) (AFS -400)**

Describes the hazards of thunderstorms to aviation and offers guidance to help prevent accidents caused by thunderstorms.

00-25**Forming and Operating a Flying Club
(3/24/69) (AFS -800)**

Provides preliminary information that will assist anyone or any group of people interested in forming and operating a flying club.

00-30B**Atmospheric Turbulence Avoidance
9/9/97 (AFS -400)**

Describes to pilots, aircrew members, dispatchers, and other operations personnel the various types of clear air turbulence (CAT) and some of the weather patterns associated with it. Also included are "Rules of Thumb" for avoiding or minimizing CAT encounters.

00-31A**United States (US). National Aviation
Standard for the VOR/DME/TAC
Systems****(9/20/82) (ANN-130)**

Informs the aviation community of the establishment and content of the United States (US). National Aviation Standard for the Very High Frequency Omnidirectional Radio Range (VOR)/Distance Measuring Equipment(DME)/Tactical Air Navigation (TACAN) Systems.

00-33B**Nickel-Cadmium Battery Operational,
Maintenance, and Overhaul Practices
(7/9/97) (AFS -400)**

Provides guidelines for more reliable nickel-cadmium battery operation through proper operational and maintenance practices, and has been reissued to include reconditioning information.

00-34A**Aircraft Ground Handling and Servicing
(7/29/74) (AFS -340)**

Contains information and guidance for the servicing and ground handling of aircraft.

00-41B**FAA Quality Control System
Certification Program
(10/10/89) (ASU-430)**

Describes the Federal Aviation Administration (FAA) Quality Control System Certification Program and the mechanics of implementation. It is intended for guidance and information only.

00-44II**Status of the Federal Aviation
Regulations
(4/97) (AGC-200)**

This circular sets forth the current publication status of Federal Aviation Regulations (FARs), any Changes issued to date, and provides a price list, and ordering instructions.

00-45D

**Aviation Weather Services
(2/7/95) (AFS-400)**

Supplements AC 00-6A, Aviation Weather, in that it explains the weather service in general and the use and interpretation of reports, forecasts, weather maps, and prognostic charts in detail.
SN 050-007-01082-6
\$12.00 Supt. Docs.

00-46D

**Aviation Safety Reporting Program
(2/26/97) (ASY-300)**

Describes the Federal Aviation Administration's Aviation Safety Reporting program which utilizes the National Aeronautics and Space Administration (NASA) as a third party to receive and analyze Aviation Safety Reports. This cooperative safety reporting program invites users of the National Aviation System to report to NASA actual or potential discrepancies and deficiencies involving the safety of aviation operations.

00-54

**Pilot Windshear Guide
(11/25/88) (AFS-200)**

Communicates key windshear information relevant to flightcrews. Appendix 1 of this advisory circular is the Pilot Windshear Guide, which is only one section of the two-volume Windshear Training Aid.

00-55

**Announcement of availability: FAA
Order 8130.21A, Procedures for
Completion and Use of FAA Form 8130,
Airworthiness Approval Tag
(1/19/94) (AIR-200)**

Announces availability of subject order.

00-56

**Voluntary Industry Distributor
Accreditation Program
(9/5/96) (AFS-350)**

Describes a system for the voluntary accreditation of civil aircraft parts distributors on the basis of voluntary industry oversight and provides information that may be used for developing accreditation programs. The FAA believes such programs will assist in alleviating lack of documentation and will improve traceability.

00-57

**Hazardous Mountain Winds and Their
Visual Indicators (9/10/97) (AND-720)**

Assists pilots involved in aviation operations to diagnose the potential for severe wind events in the vicinity of mountainous areas. It provides information on preflight planning techniques and on in-flight evaluation strategies for avoiding destructive turbulence and loss of aircraft control. Pilots, dispatchers, air traffic controllers, and other who must deal with weather phenomena and the routing of aircraft will benefit from the information contained in this advisory circular.

00-58

**Voluntary Disclosure Reporting
Program (5/4/98) (AFS-350)**

Replaces AC 120-56. Provides information and guidance that may be used by certificate holders, production approval holders, indirect air carriers, and foreign air carriers disclosing apparent violations to the FAA of regulations in 14 CFR parts 21, 107, 108, 109, 121, 125, 129 (security program violations only), 133, 135, 137, 141, 142, 145, & 147 under the self-disclosure program. The procedures outlined in this AC can be applied to all of the above. The procedures and practices outlined in this AC cannot be applied to those who are required to report failures, malfunctions and defects under 14 CFR part 21.3 and do not make those reports in the timeframe required by the regulation.

→ **00-59**

**Integrating Helicopter and Tiltrotor
Assets Into Disaster Relief Planning
(11/98) (AND-710)**

Provides guidance to state and local emergency relief planners on integrating

helicopters and tiltrotor aircraft into disaster relief planning efforts.

→ **00-60**

**North American Free Trade Agreement
and Specialty AIR Services Operations
(11/9/99) AFS-805)**

Provides information for aircraft operators from the United States who plan to conduct specialty air services (SAS) operations in Canada or Mexico in accordance with the North American Free Trade Agreement. It also provides information for aircraft operators from Canada or Mexico who plan to conduct SAS operations in the U.S.
SN 050-007-01281-1
\$2.50 Supt. Docs.

Procedural

Subject No. 10

11-2A

**Notice of Proposed Rulemaking
Distribution System
(7/26/84) (ABC-100)**

Provides the public with information relative to participation in the FAA rulemaking process and explains the availability of the Notices.

13-1

**Aviation Safety Inspector Work Site
Access
(12/28/95) (AFS-120/AFS-300)**

Explains the requirement and use of FAA Form 8000-39, Aviation Safety Inspector Identification Card, and its relation to the Aviation Safety Credential, FAA Form 110A. This AC is issued primarily to acquaint airport authorities and the airport security personnel with the FAA Form 8000-39 and the aviation safety inspector's need to be in restricted areas of the airport to perform official FAA business.

Aircraft

Subject No. 20

20-18A

Qualification Testing of Turbo-jet Engine Thrust Reversers (3/16/66) (ANE- 100)

Discusses the requirements for the qualification of thrust reversers and sets forth an acceptable means of compliance with the tests prescribed in Federal Aviation Regulations, Part 33, then run under nonstandard ambient air conditions.

20-24B Qualification of Fuels, Lubricants, and Additives (12/20/85) (ANE-110)

Provides acceptable procedures for approving the qualification of fuels, lubricants, and additives for use in certificated aircraft engines.

20-27D Certification and Operation of Amateur-Built Aircraft (6/22/90) (AIR-230)

Provides guidance and information relative to the airworthiness certification and operation of amateur-built aircraft.

20-29B Use of Aircraft Fuel Anti-icing Additives (1/18/72) (ANE-100)

Provides information on the use of anti-icing additives PFA-55MB and Mil-I-27686 as an acceptable means of compliance with the FARs that require assurance of continuous fuel flow under conditions where ice may occur in turbine aircraft fuel systems.

20-30B Aircraft Position Light and Anticollision Light Installation (7/20/81) (AIR- 120)

Sets forth acceptable means, but not the only means, of showing compliance with the Federal Aviation Regulations (FAR) applicable to installed position lights and anticollision lights.

20-32B Carbon Monoxide (CO) Contamination in Aircraft--Detection and Prevention (11/24/72) (ACE-110)

Provides information on the potential dangers of carbon monoxide contamination

from faulty engine exhaust systems or cabin heaters of the exhaust gas heat exchanger type.

20-33B Technical Information Regarding Civil Aeronautics Manuals 1, 3, 4a,4b, 5, 6, 7, 8, 9, 13 and 14 (5/1/75) (AIR-100)

Advises the public that policy information contained in the subject Civil Aeronautics Manuals may be used in conjunction with specific sections of the Federal Aviation Regulations.

20-34D Prevention of Retractable Landing Gear Failures (8/8/80) (AFS -340)

Updates statistical information related to landing accidents involving aircraft with retractable landing gear and suggests procedures to minimize those accidents.

20-35C Tie-Down Sense (7/12/83) (AFS -340)

Provides updated information of general use on aircraft tiedown techniques and procedures.

20-36S Index of Articles (Materials, Parts, Processes and Appliances) Certified Under the Technical Standard Order System (AFS -610)

AC canceled 11/99. Available in Access database as TSOA listing at <http://av-info.faa.gov>

20-37D Aircraft Metal Propeller Maintenance (8/15/89) (AFS -340)

Provides information and suggested procedures to increase service life and to minimize blade failures of metal propellers.

20-38A Measurement of Cabin Interior Emergency Illumination in Transport Airplanes (2/8/66) (ANM- 100)

Outlines acceptable methods, but not the only methods, for measuring cabin interior emergency illumination on transport airplanes, and provides information as to suitable measuring instruments.

20-40 Placards for Battery-Excited Alternators Installed in Light Aircraft (8/11/65) (ACE-100)

Sets forth an acceptable means of complying with placarding rules in Federal Aviation Regulations 23 and 27 with respect to battery excited alternator installations.

20-41A Substitute Technical Standard Order (TSO) Aircraft Equipment (4/5/77) (AIR- 120)

Sets forth an acceptable means for complying with rules governing aircraft equipment installations in cases involving the substitution of technical standard order equipment for functionally similar TSO approved equipment.

20-42C Hand Fire Extinguishers for use in Aircraft (3/7/84) (ACE-110)

Provides methods acceptable to the Administrator for showing compliance with the hand fire extinguisher provisions in Parts 25, 29, 91, 121, 125, 127, and 135 of the FAR and provides updated general information.

20-43C Aircraft Fuel Control (10/20/76) (AFS -340)

Alerts the aviation community to the potential hazards of inadvertent mixing or contamination of turbine and piston fuels, and provides recommended fuel control and servicing procedures.

20-44 Glass Fiber Fabric for Aircraft Covering (9/3/65) (ACE-100)

Provides a means, but not the sole means, for acceptance of glass fiber fabric for external covering of aircraft structure.

20-45

Safetizing of Turnbuckles on Civil Aircraft

(9/17/65) (ACE-100)

Provides information on turnbuckle safetizing methods that have been found acceptable by the FAA during past aircraft type certification programs.

20-47

Exterior Colored Band Around Exits on Transport Airplanes

(2/8/66) (ANM-100)

Sets forth an acceptable means, but not the only means, of complying with the requirement for a 2-inch colored band outlining exits required to be openable from the outside on transport airplanes.

20-48

Practice Guide for Decontaminating Aircraft

(5/5/66) (AFS-330)

The title is self-explanatory.

20-52

Maintenance Inspection Notes for Douglas DC-6/7 Series Aircraft (Consolidated Reprint. Includes Change 1).

(8/24/67) (AFS-310)

Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of DC-6/7 series aircraft.

20-53A

Protection of Aircraft Fuel Systems Against Fuel Vapor Ignition Due to Lightning

(4/12/85) (ACE-111)

Provides information and guidance concerning an acceptable means, but not the only means, of compliance with Parts 23 or 25 of the Federal Aviation Regulations (FAR) applicable to preventing ignition of fuel vapors due to lightning.

20-56A

Marking of TSO-C72b Individual Flotation Devices

(4/1/75) (AIR-120)

Outlines acceptable methods for marking individual flotation devices which also serve as seat cushions.

20-57A

Automatic Landing Systems (ALS) (1/12/71) (ANM-110)

Sets forth an acceptable means of compliance, but not the only means, for the installation approval of automatic landing systems in transport category aircraft which may be used initially in Category II operations. Approval of these aircraft for use under such conditions will permit the accumulation of data for systems which may be approved for Category IIIa in the future.

20-59

Maintenance Inspection Notes for Convair 240, 340/440, 240T, and 340T Series Aircraft (2/19/69) (AFS-330)

Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of Convair 240, 340/440, 240T, and 340T series aircraft.

20-59, Chg. 1

(8/24/72)

Provides additional material for Convair Models 240 and 600/240D; Models 340/440 and 640/340D/440D series aircraft maintenance inspection programs.

20-60

Accessibility to Excess Emergency Exits (7/18/68) (ANM-110A)

Sets forth acceptable means of compliance with the "readily accessible" revisions in the Federal Aviation Regulations dealing with excess emergency exits.

20-62D

Eligibility, Quality, and Identification of Aeronautical Replacement Parts (5/24/96) (AFS-340)

Provides information and guidance for use in determining the quality, eligibility and traceability of aeronautical parts and materials intended for installation on U.S. type-certificated products and to enable compliance with the applicable regulations.

20-64

Maintenance Inspection Notes for Lockheed L-188 Series Aircraft (8/1/69) (AIR- 3)

Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of Lockheed L-188 series aircraft.

20-64, Chg. 1

(10/26/73)

20-65

U.S. Airworthiness Certificates and Authorizations for Operation of Domestic and Foreign Aircraft (8/11/69) (AIR-200)

Provides general information and guidance concerning issuance of airworthiness certificates for U.S. registered aircraft, and issuance of special flight authorizations for operation in the United States of foreign aircraft not having standard airworthiness certificates issued by the country of registry.

20-66

Vibration Evaluation of Aircraft Propellers

(1/29/70) (ANE-100)

Outlines acceptable means, but not the sole means, for showing compliance with the requirements of the FARs concerning propeller vibration.

20-67B

Airborne VHF Communications Equipment Installations (1/16/86) (AIR-120)

Sets forth one means, but not the only means, of demonstrating compliance with the airworthiness rules governing the functioning of airborne VHF communications equipment.

20-68B

Recommended Radiation Safety Precautions for Ground Operation of Airborne Weather Radar (8/8/80) (AFS-600)

Sets forth recommended radiation safety precautions for ground operation of airborne weather radar.

20-69

**Conspicuity of Aircraft Instrument
Malfunction Indicators
(5/14/70) (AIR-120)**

Provides design guidance information on methods of improving conspicuity of malfunction indication devices.

20-71

**Dual Locking Devices on Fasteners
(12/8/70) (AIR-120)**

Provides guidance and acceptable means, not the sole means, by which compliance may be shown with the requirements for dual locking devices on removable fasteners installed in rotorcraft and transport category airplanes.

20-73

**Aircraft Ice Protection
(4/21/71) (AIR-120)**

Provides information relating to the substantiation of ice protection systems on aircraft.

20-74

**Aircraft Position and Anticollision Light
Measurements
(7/29/71) (AIR-120)**

Contains useful information concerning measurements for intensity, covering, and color of aircraft position and anti-collision lights.

20-76

**Maintenance Inspection Notes for
Boeing B-707/720 Series Aircraft
(10/21/71) (AFS-330)**

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of the B-707/720 series aircraft.

20-77

**Use of Manufacturers' Maintenance
Manuals
(3/22/72) (AFS-340)**

Informs owners and operators about the usefulness of manufacturers' maintenance manuals for servicing, repairing, and maintaining aircraft, engines and propellers.

20-78

**Maintenance Inspection Notes for
McDonnell Douglas DC-8 Series
Aircraft****(7/11/72) (AFS-330)**

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of the DC-8 series aircraft.

20-82

**Maintenance Inspection Notes for
Fairchild Hiller F-27/FH-227 Series
aircraft (Includes Change 1)****(12/5/72) (AFS-230)**

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of Fairchild Hiller F-27/FH-227 series aircraft.

20-83

**Maintenance Inspection Notes for
Boeing B-737 Series Aircraft (Includes
Changes 1 and 2)****(1/17/73) (AFS-330)**

Provides maintenance inspection notes which can be used for the maintenance support program for certain structural parts of the B-737 series aircraft.

20-84

**Maintenance Inspection Notes for
Boeing B-727 Series Aircraft.
(1/22/73) (AFS-300)**

Provides inspection notes which can be used for the maintenance support program for certain structural parts of the B-727 series aircraft.

20-84, Chg. 1

(8/8/74)

Updates material for the B-727 series aircraft maintenance inspection program. Inspection of selected areas of the wing, fuselage, empennage and landing gear of the B-727 series aircraft are presented supplementing information currently available in AC 20-84.

20-84, Chg. 2

(1/31/75)

20-88A

**Guidelines on the Marking of Aircraft
Powerplant Instruments (Displays),
(9/30/85) (ANM-112)**

Provides revised guidelines on the marking of aircraft powerplant instruments and electronic displays (cathode ray tubes, etc.). These guidelines offer acceptable, but not exclusive, methods of compliance with the powerplant instrument color marking requirements.

SN 050-007-00683-7.

\$1.50 Supt. Docs.

20-94

**Digital Clock Installation in Aircraft
(3/4/76) (AFS-350)**

Provides guidelines for operating and installing digital clocks in aircraft.

20-95

**Fatigue Evaluation of Rotorcraft
Structure
(5/18/76) (ASW-100)**

Sets forth acceptable means, not the only means, of compliance with the provisions of FAR sections 27.571 and 29.571 dealing with the fatigue evaluation of rotorcraft structure.

20-96

**Surplus Military Aircraft: A Briefing
for Prospective Buyers
(12/2/76) (AIR-200)**

Provides many answers to questions regarding the purchasing of surplus military aircraft (type certification, is the aircraft flyable, is it sold for spare parts, scrap?).

20-97A

**High-Speed Tire Maintenance and
Operational Practices
(5/13/87) (AFS-340)**

Provides information and guidance for maintaining aircraft tires to ensure their continued airworthiness.

20-99

**Anti-skid and Associated Systems
(5/27/77) (ANM-100)**

Provides an acceptable means, but not the only means, of complying with the requirement that anti-skid and associated systems must be designed so that no probable malfunction will result in a

hazardous loss of braking or directional control of an airplane.

20-100
General Guidelines for Measuring Fire-Extinguishing Agent Concentrations in Powerplant Compartments
(9/21/77) (AIR-120)

Describes the installation and use of a model GA-2A fire extinguisher agent concentration recorder in determining the distribution and concentration of fire-extinguishing agents when discharged in an aircraft powerplant compartment.

20-101C
Airworthiness Approval of Omega/VLF Navigation Systems for Use in the United States NAS and Alaska
(9/12/88) (ACE-130W/AIR-120)

Presents an acceptable means of compliance, but not the only means, for the approval of Omega and Omega/Very Low Frequency (VLF) Navigation Airborne Equipment as a means of Visual Flight Rules (VFR)/Instrument Flight Rules (IFR)/Area Navigation (RNAV) en route navigation within the conterminous United States and Alaska.
SN 050-007-00887-2.
\$1.50 Supt. Docs.

20-103
Aircraft Engine Crankshaft Failure
(3/7/78) (AFS-340)

Provides information and suggests procedures to increase crankshaft service life and to minimize failures.

20-104
Revised Powerplant Engineering Report No. 3, Standard Fire Test Apparatus and Procedure (for Flexible Hose Assemblies)
(4/12/78) (AIR-120)

Announces the availability of the subject report.

20-105B
Reciprocating Engine Power-loss Accident Prevention and Trend Monitoring
(6/15/98) (AFS-340)

Updates statistical information and brings to the attention of aircraft owners, operators, manufacturers, and maintenance personnel the circumstances surrounding engine power-loss accidents with recommendations on how those accidents can be prevented.

20-106
Aircraft Inspection for the General Aviation Aircraft Owner
(4/1/78) (AFS-340)

Describes techniques used in aircraft inspections. Designed to familiarize owner, pilots, student mechanics, and others with inspection procedures, it does NOT qualify an individual to make airworthiness determinations.
SN 050-007-00449-4.
\$5.00 Supt. Docs.

20-107A
Composite Aircraft Structure
(4/25/84) (AIR-103)

Sets forth an acceptable, but not the only, means of showing compliance with the provisions of FAR Parts 23, 25, 27, and 29 regarding airworthiness type certification requirements of composite aircraft structures involving fiber reinforced materials, e.g., carbon (graphite), boron, aramid (kevlar), and glass reinforced plastics. Guidance information is also presented on associated quality control and repair aspects.

20-109A
Service Difficulty Program (General Aviation)
(4/8/93) (AFS-620)

Describes the Service Difficulty Program as it applies to general aviation activities. Instructions for completion of the revised FAA Form 8010-4 (10-92), Malfunction or Defect Report, are provided.

→ **20-110K**
Index of Aviation Technical Standard Orders
(9/22/99) (AIR-120)

Describes the public procedure the Federal Aviation Administration (FAA) will use to develop and issue Technical Standard Orders (TSOs) for aeronautical articles to

be used on civil aircraft. Presents an index of the FAA TSOs which contain minimum performance standards for specific materials, parts processes, and appliances used in civil aircraft.

20-111
Communication Caused By Unintentional Keyed Microphones
(10/10/80) (AFS-350)

Alerts the aviation community to the potential hazards created by unintentional keying of microphones resulting in radio transmissions from airborne, mobile, and ground based radio transmitters and gives guidance on alleviating ensuing hazards.

20-112
Airworthiness and Operational Approval of Airborne Systems to be Used In Lieu of Ground Proximity Warning System (GWPS)
(2/19/81) (AIR-120)

Provides information and guidance regarding airworthiness and operational approval of airborne equipment/systems in accordance with FAR 135.153(b) and (c).

20-113
Pilot Precautions and Procedures to be taken in Preventing Aircraft Reciprocating Engine Induction System & Fuel System Icing Problems
(10/22/81) (ACE-100)

Provides information pertaining to aircraft engine induction system icing and the use of fuel additives to reduce the hazards of aircraft operation that may result from the presence of water and ice in aviation gasoline and aircraft fuel systems.

20-114
Manufacturers' Service Documents
(10/22/81) (AIR-100)

Suggests acceptable methods by which product manufacturers may indicate FAA approval of recommended actions prescribed in manufacturers' service documents.

20-115B

Radio Technical Commission for Aeronautics, Inc. Document RTCA/DO-178B**(1/11/93) (AIR-130)**

Calls attention to RTCA, Inc., (formerly the Radio Technical Commission for Aeronautics) Document RTCA/DO-178B, "Software Considerations in Airborne Systems and Equipment Certification," issued December 1992. It discusses how the document may be applied with FAA technical standard order (TSO), authorizations, type certification (TC), or supplemental type certification authorization (STC).

20-116**Marking Aircraft Fuel Filler Openings With Color Coded Decals****(9/17/82) (ACE-100)**

Discusses the conditions under which color coded decals may be used to comply with the requirements in FAR Parts 23, 25, 27, and 29 for marking fuel filler openings.

20-117**Hazards Following Ground Deicing and Ground Operations in Conditions Conducive to Aircraft Icing****(12/17/82) (AFS-200)**

Provides information on the identified hazards associated with ground deicing and ground operations in conditions conducive to aircraft icing.

20-117, Chg. 1**(4/15/83)**

Corrects an error in Figure 3-2, Appendix 3, regarding the values of "TIME TO CRYSTALLIZATION (MIN)."

20-118A**Emergency Evacuation Demonstration****(3/9/87) (ACE-100)**

Sets forth acceptable means, but not the only means, of showing compliance with the Federal Aviation Regulations (FAR) applicable to required emergency evacuation demonstrations from airplanes certified to the requirements of SFAR 23, SFAR 41, Appendix A of Part 135, or Part 23, commuter category.

20-119**Fuel Drain Valves****(2/7/83) (AIR-120)**

Provides an acceptable means, but not the only means, of compliance with the requirements of the FARs for positive locking of fuel drain valves in the closed position.

20-120**Nondirectional Beacon Frequency Congestion****(6/18/84) (ASM-500)**

Recommends several actions that the user can take to alleviate problems of frequency congestion in the 190-535 kHz frequency range.

20-121A**Airworthiness Approval of Airborne Loran-C Navigation Systems for Use in the U.S. National Airspace System (NAS)****(8/24/88) (AIR-120)**

Establishes an acceptable means, but not the only means, of obtaining airworthiness approval of airborne Loran-C navigation systems for use under VFR (visual flight rules) and IFR (instrument flight rules) within the conterminous United States, Alaska, and surrounding U.S. waters.

20-122A**Anti-misfueling Devices: Their Availability and Use****(1/29/91) (AFS-340)**

Includes information relating to the Society of Automotive Engineers (SAE) standard dimensions for fueling ports now being incorporated during new aircraft production by all General Aviation Manufacturer's Association member companies. It also makes recommendations to the fuel suppliers and Fixed Base Operators to change their fuel dispensing nozzles to meet the dimensions referenced in the SAE standard.

20-123**Avoiding Or Minimizing Encounters With Aircraft Equipped With Depleted Uranium Balance Weights During Accident Investigations****(12/20/84) (AFS-330)**

Provides information and guidance to individuals who come in contact with depleted uranium contained in aircraft control surfaces during accident investigations.

20-124**Water Ingestion Testing for Turbine Powered Airplanes****(9/30/85) (ANM-112)**

Describes a method of demonstrating compliance with the requirements of the FAR concerning the ingestion of water from the runway/taxiway surface into the airspeed system, the engine, and essential auxiliary power unit air inlet ducts of turbine engine power unit air inlet ducts of turbine engine powered airplanes.

20-125**Water in Aviation Fuels****(12/10/85) (AFS-340)**

Alerts the aviation community to the potential hazards of water in aviation fuels. Additionally, it outlines recommended procedures to prevent, detect, and eliminate water in the fuel systems of aircraft.

→ **20-126G****Aircraft Certification Service Field Office Listing****(11/30/99) (AFS-610)**

Provides the nearest points of contact for information regarding issuance of type and supplemental type certificates and changes, as well as issuances of production and/or airworthiness approvals.

20-127**Use of Society of Automotive Engineers (SAE) Class H11 bolts****(7/8/87) (ANM-110B)**

Provides guidance on the use of SAE Class H11 bolts in primary structure on all aircraft, including gliders and manned free balloons, and on aircraft engines and propellers.

20-128A**Design Considerations for Minimizing Hazards Caused by Uncontained Turbine Engine and Auxiliary Power Unit Rotor and Fan Blade Failures****(3/25/97) (ANM-114)**

Sets forth a method of compliance with the requirements of Sections 23.903(b)(1), 25.901(d) and 25.903(d)(1) of the FAR pertaining to design precautions taken to minimize the hazards to an airplane in the event of uncontained engine or auxiliary power unit rotor (compressor and turbine) failure and engine fan blade failures. It is for guidance and to provide a method of compliance that has been found acceptable.

20-129

Airworthiness Approval of Vertical Navigation (VNAV) Systems for use in the U.S. NAS and Alaska (9/12/88) (AIR-120)

Establishes an acceptable means, but not the only means, of obtaining airworthiness approval of an airborne vertical navigation system for use under visual flight rules (VFR) and instrument flight rules (IFR) within the conterminous United States, Alaska and surrounding U.S. waters.

20-130A

Airworthiness Approval of Navigation or Flight Management Systems Integrating Multiple Navigation Sensors (6/14/95) (AIR-130)

Establishes an acceptable means, but not the only means, of obtaining airworthiness approval of a multi-sensor navigation or flight management systems integrating data from multiple navigation sensors for use as a navigation system for oceanic and remote, domestic enroute, terminal, and non-precision instrument approach (except localizer, localizer directional aid (LDA) and simplified directional facility operations. This document does not address systems incorporating differential GPS capability.

20-131A

Airworthiness and Operational Approval of Traffic Alert and Collision Avoidance Systems (TCAS II) and Mode S Transponders (3/29/93) (ANM-111)

Provides guidance material for the airworthiness and operational approval of Traffic Alert and Collision Avoidance Systems (TCAS II) and Mode S transponders. Like all AC material, this AC

is not mandatory and does not constitute a regulation. Issued for guidance purpose and to outline a method of compliance with the rules.

20-132

Public Aircraft (12/21/88) (AIR-200)

Provides guidance that public aircraft status does not exist outside the territorial limits of the United States.

20-133

Cockpit Noise and Speech Interference Between Crewmembers (3/22/89) (AIR-121)

Provides information about the relationship between flight crew members cockpit voice communication and cockpit noise levels. Guidance, on speech interference levels, noise measurement and measurement systems, and methods to improve cockpit communication, is provided for those manufacturers, owners or operators who believe cockpit noise may be a problem on their aircraft. This guidance material is relevant to the operation of all types of civil aircraft.

20-134

Test Procedures for Maximum Allowable Airspeed Indicators (2/16/90) (AIR-120)

Provides guidance concerning test procedures which may be used in showing compliance with the standards in technical standards orders C 46a.

20-135

Powerplant Installation and Propulsion System Component Fire Protection Test Methods, Standards and Criteria (2/15/90) (ANM-112)

Provides guidance for use in demonstrating compliance with the powerplant fire protection requirements of the Federal Aviation Regulations (FAR). Included in this document are methods for fire testing of materials and components used in the propulsion engines and APU installations, and in areas adjacent to designated fire zones, as well as the rationale for these methods.

20-136

Protection of Aircraft Electrical/Electronic Systems Against the Indirect Effects of Lightning (3/5/90) (ANM-111)

Provides information and guidance concerning an acceptable means, but not the only means, of compliance with Parts 23, 25, 27, and 29 of the FAR as applicable for preventing hazardous effects, due to lightning, from occurring to electrical/electronic systems performing critical essential functions. This material is neither mandatory nor regulatory in nature and does not constitute a regulation. The applicant may elect to establish an alternative method of compliance that is acceptable to the FAA.

20-137

Dynamic Evaluation of Seat Restraint Systems & Occupant Restraint for Rotocraft (Normal and Transport) (3/30/92) (ASW-111)

Provides guidance regarding acceptable means but not the only means of compliance with Parts 27 and 29 of the Federal Aviation Regulations (FAR) applicable to dynamic testing of seats intended for use in Normal and Transport Category.

20-138

Airworthiness Approval of Global Positioning System (GPS) Navigation Equipment for Use as a VFR and IFR Supplemental Navigation System (5/25/94) (AIR-130)

Establishes an acceptable means, but not the only means, of obtaining airworthiness approval of Global Positioning System (GPS) equipment for use as a supplemental navigation system for oceanic and remote domestic en route, terminal, and non-precision instrument approach (except localizer directional aid (LDA) and simplified directional facility (SDF) operations.

20-139

Commercial Assistance During Construction of Amateur-Built Aircraft (4/3/96) (AIR-230)

Explains Federal Aviation Regulations and Federal Aviation Administration policy for the fabrication and assembly of amateur-built aircraft. Provides information and guidance in the construction of amateur-built aircraft, the manufacture of kits designed to be assembled into aircraft by amateur-builders, and aircraft fabricated from plans for certification as amateur-built.

→ 20-140

Guidelines for Design Approval of Aircraft Data Communications Systems (8/16/99) (AIR-130)

Provides guidelines for design approval of aircraft data communications systems and applications primarily used for air traffic services.

→ 20-141

Airworthiness and Operational Approval of Digital Flight Data Recorder Systems (10/5/99) (AIR-130)

Provides guidance on design, installation, and continued airworthiness of Digital Flight Data Recorder Systems. It outlines one method of compliance with Title 14 of the Code of Federal Regulations. This AC is not mandatory nor is it a regulation.

→ 20-142

Eligibility and Evaluation of U.S. Military Surplus Flight Safety Aircraft Parts, Engines, and Propellers (2/25/00) (AFS-307)

Provides information and guidance for use in evaluating and determining the eligibility of U.S. military surplus flight safety critical aircraft parts (FSCAP), engines, and propellers for installation on FAA type-certificated products.

21-1B

Production Certificates (5/10/76) (AIR-200)

Provides information concerning Subpart G of Federal Aviation Regulations (FAR) Part 21, and sets forth acceptable means of compliance with its requirements.

21-2H

Export Airworthiness Approval Procedures (9/6/95) (AIR-210/AFS-610)

Contains guidance and information on procedures for exporting aeronautical products and related special requirements submitted to the Federal Aviation Administration by other governments.

21-4B

Special Flight Permits for Operation of Overweight Aircraft (7/30/69) (AIR-200)

Furnishes guidance concerning special flight permits necessary to operate an aircraft in excess of its usual maximum certificated takeoff weight.

21-5N

Announcement of Availability of Summary of Supplemental Type Certificates, (Paper) January 1998 (AFS-610)

Announces the availability to the public of a revised paper edition of the Summary of Supplemental Type Certificates, dated January 1998. Also available at internet site <http://av-info.faa.gov>.

21-6A

Production Under Type Certificate Only (7/1/82) (AIR-200)

Provides information concerning Subpart F of FAR Part 21, and sets forth an acceptable means, not the sole means, of compliance with its requirements. SN 050-007-00636-5. \$1.75 Supt. Docs.

21-9A

Manufacturers Reporting Failures, Malfunctions, or Defects (5/26/82) (AIR-200)

Provides information to assist manufacturers of aeronautical products (aircraft, aircraft engines, propellers, appliances, and parts) in notifying the Federal Aviation Administration of certain failures, malfunctions, or defects, resulting from design or quality control problems, in the products which they manufacture.

21-10A

Flight Recorder and Cockpit Voice Recorder Underwater Locating Devices (4/19/83) (ANM-110)

This AC provides an acceptable means of showing compliance with the underwater locating device (ULD) requirements of the Federal Aviation Regulations for recorder ULD's.

21-12A

Application for U.S. Airworthiness Certificate, FAA Form 8130-6 (OMB 2120-0018) (3/26/87) (AIR-220)

Provides instructions on the preparation and submittal of subject form.

21-13

Standard Airworthiness Certification of Surplus Military Aircraft and Aircraft Built from Spare and Surplus Parts (4/5/73) (AIR-200)

Provides guidance and instruction on establishing eligibility and submitting application for civil airworthiness certification of surplus military aircraft and aircraft assembled from spare and surplus parts, under FAR 21. (d) when an FAA Type Certificate has been issued under FAR 21.21. or FAR 21.27.

→ 21-15L

Announcement of Availability: Aircraft, Aircraft Engines and Propeller Type Certificate Data Sheets and Specifications (4/12/99) (AFS-610)

Provides information concerning the availability of the 1999 edition of the subject publication.

21-16D

RTCA Document DO-160C (7/21/98) (AIR-130)

Calls attention to RTCA, Inc. (formerly Radio Technical Commission for Aeronautics) Document No. DO-160D, "Environmental Conditions and Test Procedures for Airborne Equipment," dated July 29, 1997, and discusses how the document may be used in showing compliance with airworthiness requirements.

21-17

Carriage of Cargo in Restricted Category Aircraft and Other Special Purpose Operations (3/15/82) (AIR-200)

Advises that the carriage of cargo in a restricted category aircraft is considered a restricted category special purpose operation and provides procedures for designating other special purpose operations under FAR 21.25(b) (7).
SN 050-007-00638-1.
\$1.75 Supt. Docs.

**21-18
Bilateral Airworthiness Agreements (8/20/82) (AIR-110)**

Makes available to interested persons copies of all current U.S. Bilateral Airworthiness Agreements (BAA) together with an explanation of their intent.
SN 050-007- 00614-4.
\$7.00 Supt. Docs.

**21-19
Installation of Used Engines In New Production Aircraft (4/26/82) (AIR-200)**

Advises that under certain specified criteria, used engines may be used in new production aircraft.

**21-20B
Supplier Surveillance Procedures (4/22/96) (AIR-230)**
Clarifies and revises methods acceptable to the Administrator for surveillance of suppliers by the Federal Aviation Administration Production Approval Holders. It applies to products and parts thereof, submitted for airworthiness certification or approval after design approval (e.g., type certificate) and a production approval has been granted.

**21-21
Use Of Automobile Gasoline In Agricultural Aircraft (8/24/84) (AIR-100)**
Sets forth acceptable conditions under which automobile gasoline (autogas) may be used in restricted category agricultural aircraft powered by Pratt and Whitney R-985 and R-1340 radial engines, and being

used in agricultural operations under Federal Aviation Regulations Part 137.

**21-22
Injury Criteria for Human Exposure to Impact (6/20/85) (AIR-120)**

Describes a range of impact trauma which may be used to establish bases for acceptance levels or performance criteria in the evaluation of occupant survivability characteristics in civil aircraft.

**21-23
Airworthiness Certification of Civil Aircraft Engine, Propellers, and Related Products (7/7/87) (AIR-4)**

Provides information on the Federal Aviation Administration's (FAA) objectives, regulations, and general practices for the United States of America airworthiness certification or acceptance of civil aeronautical products imported to the U.S.

**21-24
Extending a Production Certificate to a Facility Located in a Bilateral Airworthiness Agreement Country (4/14/89) (AIR-220)**

Contains information and guidance concerning: (1) FAA production certificate (PC) holders located in the U.S. that plan to extend their PC to include a facility located in another country; (2) and the issuance of a PC to an applicant located in the U.S. when the applicant is engaged in a multinational coproduction program whereby major manufacturing facilities will be located in other countries.

**21-25A
Approval of Modified Seats and Berths Initially Approved Under a Technical Standard Order (6/3/97) (AFS- 610)**

Provides information on approvals required for modifications to TSO'd seating systems. This revision incorporates guidance regarding TSO-C127 seating systems and additional information on marking and flammability testing requirements.

**21-26
Quality Control for the Manufacture of Composite Structures (6/26/89) (AIR-220)**

Provides information and guidance concerning and acceptable means, but not the only means, of demonstrating compliance with the requirements of FAR Part 21, Certification Procedures for Products and Parts, regarding quality control (QC) systems for the manufacture of composite structures involving fiber reinforced materials, e.g., carbon (graphite), boron, aramid (Kevlar), and glass reinforced polymeric materials. Provides guidance regarding the essential features of QC systems for composites as mentioned in AC 20-107.

**21-26, Chg. 1
(1/26/90)**

Modifies the term "Rheometrics Dynamic Spectroscopy (RDS)," which has been shown to be specific to one manufacturer, to "Dynamic Rheological Analysis," which is more generic term.

**21-27
Production Certification Multi-national/Multicorporate Consortia (7/14/89) (AIR-220)**

Provides information and describes criteria to be emphasized in evaluating and approving the quality control system of a multinational and/or multicorporate consortium seeking a production certificate (PC). This AC would not apply to a type certificate holds a PC. Production Certificated extensions are addressed in AC 21-24.

**21-28
Airworthiness Certification of U.S. Produced Aircraft and Engine Kits Assembled Outside the United States (6/20/90) (AIR-220)**

Provides information and guidance concerning airworthiness certification requirements for aircraft or aircraft engines, assembled from kits by aircraft or aircraft engine manufacturers located in other countries.

21-29B**Detecting and Reporting Suspected Unapproved Parts (2/20/98) (AVR-20)**

Provides information and guidance to the aviation community for detecting and reporting Suspected Unapproved Parts.

→ **21-29B, Chg. 1 (3/13/00) (AVR-20)**

Implements revised FAA Form 8120, Suspected Unapproved Parts Notification, dated 11/99.

21-31**Quality Control for the Manufacture of Non-Metallic Compartment Interior Components (11/15/91) (AIR-220)**

Provides information and guidance concerning compliance with the requirements of Federal Aviation Regulations (FAR) Part 21, Certification Procedures for Products and Parts.

21-32A**Control of Products and Parts Shipped Prior to Type Certificate Issuance (3/19/96) (AIR-230)**

Provides a means, but not the only means, to control products and parts shipped prior to the issuance of a type certificate or supplemental type certificate by a manufacturer with an approved production inspection system or production certificate. This AC broadens the scope of AC 21-32 by including completed aircraft, aircraft engines, propellers, and parts thereof ship prior to TC/STC issuance.

21-33**Quality Assurance of Software Used In Aircraft or Related Products (2/3/93) (AIR-220)**

Provides an acceptable means, but not the only means, to show compliance with the quality assurance requirements of FAR Part 21, Certification Procedures for Products and Parts, as applicable to the production of software used in type certificated aircraft or related products (airborne software). Also provides supplemental guidance for the establishment of a quality control or inspection to control the development and

production of software used in type certification aircraft.

21-34**Shoulder Harness-Safety Installations (6/4/93) (AIR-120)**

Provides information and guidance pertinent to an acceptable means, but not the only means, for installation of shoulder harness and safety belt restraint systems at all seat locations on all previously type certificated aircraft.

21-35**Computer Generated/Stored Records (6/4/93) (AIR-220)**

Provides information and guidance concerning controls for managing information systems that generate and store records used in the manufacture of products and parts. Describes an acceptable means, but not the sole means, of compliance with the Federal Aviation Regulations (FAR).

21-36**Quality Assurance Control for Products Acceptance Software. (8/11/93) (AIR-200)**

Provides information and guidance concerning control of software and related digital input/output data (used by production approval holders (PAH) and their suppliers during manufacture, inspection and/or test) designed for use in the acceptance of airborne products. Provides an acceptable means, but not the only means, of compliance with the applicable Federal Aviation Regulations.

21-37**Primary Category Aircraft (6/14/94) (AIR-110)**

Provides guidance for complying with Part 21 of Subchapter C, Chapter 1, Title 14 of the Code of Federal Regulations (CFR), which contains the certification procedures for products and parts.

21-38**Disposition of Unsalvageable Aircraft Parts and Materials (7/5/94) (AIR-230)**

Provides information and guidance to persons involved in the sale, maintenance,

or disposal of aircraft parts. It provides one means, but not the only means, of complying with 14 CFR Part 21, Certification Procedures for Products and Parts, requirements for control rejected parts and materials.

21-40**Application Guide for Obtaining a Supplemental Type Certificate (5/6/98) (AFS-610)**

Intended as a certification guide and checklist for obtaining a Supplemental Type Certificate (STC). Title 14 of the Code of Federal Regulations (14 CFR) and Federal Aviation Administration (FAA) Directives (orders and notices) are the final authority and take precedence over this document.

→ **21-41**

Continued Use of MIL-S-8879C, General Specification for Screw Threads (2/26/99) (AIR-120)

Provides information, clarification, and procedural guidance concerning the Inactivation of MIL-S-8879Cm Screw Threads, Controlled Radius Root with Increased Minor Diameter, as it relates to the civil aviation industry.

21.17-1A**Type Certification-Airships (9/25/92) (ACE-100)**

Describes two acceptable criteria for the type certification of airships that may be used by an applicant in showing compliance with section 21.17(b) of the Federal Aviation Regulations (FAR), Part 21. General guidance relative to airship type certification is also provided.

21.17-1A, Chg. 1 (10/30/92)

21.17-2A**Type Certification-Fixed Wing Gliders (Sailplanes) Including Powered Gliders (2/10/93) (ACE-112)**

Provides information and guidance concerning acceptable means of showing compliance with Section 21.17(b) of Part 21 of the Federal Aviation Regulations (FAR) for type certification of gliders and

powered gliders. General guidance relative to glider type certification is also provided.

21.17-3

Type Certification of Very Light Airplanes Under FAR 21.17(b) (12/21/92) (AIR-110)

Provides a means but not the only means for the type, production, and airworthiness certification of very light airplanes (VLA); and designates the “Joint Aviation Requirements for Very Light Aeroplanes” (JAR-VLA), issued April 25, 1990, by the Joint Aviation Authorities (FAA) of Europe as an acceptable airworthiness criteria that provides in equivalent level of safety under FAR 21.17(b) for Federal Aviation Administration (FAA) type certification of VLA as a special class of aircraft. Provides other acceptable uses of the JAR-VLA in the United States aircraft certification regulatory system.

21.25-1

Issuance of Type Certificate: Restricted Category Agricultural Airplanes (12/1/97) (ACE-111)

Provides information and guidance for obtaining a type certificate in the restricted category under Title 14 of the Code of Federal Regulations (14 CFR) Part 21, Section 21.25, for small single-engine piston and turbo-propeller driven airplanes, which will be used for agricultural special purpose operations. It also provides an acceptable means, but not the only means, of meeting the requirements of 14 CFR part 21 for the issuance of a type certificate in the restricted category.

21.303-2H

Announcement of Availability: Parts Manufacturer Approvals--1992 (Microfiche) (10/13/92) (AFS -610)

Provides information concerning how to obtain the latest edition of parts manufacturing approvals, which are valid through August 1992. PMAs since 1992 are available at internet site <http://av-info.faa.gov>.

21.431-1A

Designated Alteration Station Authorization Procedures (12/19/85) (AIR-110)

Updates the FAA Designated Alteration Station (DAS) authorization program; provides acceptable means of compliance with the DAS eligibility, personnel qualifications, and procedural requirements; provides information on FAA's participation in design change approval projects conducted under DAS procedures; and describes the FAA's DAS audit procedures.

23-2

Flammability Tests (8/20/84) (ACE-111)

Provides information and guidance concerning compliance with FAR Part 23 and CAR Part 3 applicable to flammability tests for various materials, components, and electrical wire.

23-3

Structural Substantiation of Secondary Structures (9/5/85) (ACE-111)

Provides information and guidance concerning acceptable means, but not the only means, of demonstrating compliance with the requirements of Part 23 of the Federal Aviation Regulations (FAR) applicable to the structural substantiation of secondary structures such as fairings, cowlings, antennae, etc.

23-4

Static Strength Substantiation of Attachment Points for Occupant Restraint System Installations (6/20/86) (ACE-111)

Provides information and guidance concerning an acceptable means, but not the only means, of compliance with Part 23 of the Federal Aviation Regulations (FAR) applicable to the static strength substantiation of the attachment points for occupant restraint system installations which have both a safety belt and shoulder harness.

23-5

Cutouts in a Modified Fuselage of Small Airplanes (8/6/86) (ACE-111)

Provides information and guidance concerning acceptable means of compliance with Part 23 of the Federal Aviation Regulations (FAR) applicable to the structural substantiation of a fuselage modified by incorporation of large or small cutouts.

23-6

Interpretation of Failure for Static Structural Test Programs (9/2/86) (ACE-111)

Provides information and guidance concerning the interpretation of failure for small airplanes for static structural test programs.

23-7

Substantiation for an Increase in Maximum Weight, Maximum Landing Weight, or Maximum Zero Fuel Weight (7/1/87) (ACE-100)

Provides information and guidance concerning acceptable means, but not the only means of compliance with Part 23 of the Federal Aviation Regulations (FAR) applicable to structural substantiation for an increase in maximum weight, maximum landing weight, or maximum zero fuel weight.

23-8A

Flight Test Guide for Certification of Part 23 Airplanes (2/9/89) (ACE-111)

Provides information and guidance concerning compliance with Part 23 of the Federal Aviation Regulations (FAR) concerning flight tests and pilot judgments. SN 050-007-00817-1
\$18.00 Supt. Docs.

23-8A, Chg. 1

(8/30/93)
SN 050-007-01013-3
\$8.50 Supt. Docs.

23-9

Evaluation of Flight Loads on Small Airplanes with T, V, +, or Y Empennage Configurations (1/27/88) (ACE-111)

Provides information and guidance concerning compliance with Part 23 of the Federal Aviation Regulations (FAR)

applicable to evaluation of empennage design flight loads on configurations where the horizontal tail surfaces are supported by the vertical tail, or have appreciable dihedral.

23-10

Auxiliary Fuel Systems for Reciprocating and Turbine Powered Part 23 Airplanes (8/5/91) (ACE-111)

Provides information and guidance concerning acceptable means of showing compliance with Part 23 of the Federal Aviation Regulations (FAR), applicable to auxiliary fuel systems in Part 23 airplanes. It is intended to be used for auxiliary fuel system installations in the airplane including fuselage, wing, or external configurations.

23-11

Type Certification of Very Light Airplanes with Powerplants and Propellers Certificated to Parts 33 and 35 of the Federal Aviation Regulations (FAR) (12/2/92) (ACE-111)

Provides an acceptable means of compliance with Part 23 of the FAR for type certification of certain small airplanes.

23-12

Structural Substantiation of Part 23 Airplane Modifications Involving Increased Engine Power (1/27/93) (ACE-111)

Provides information and guidance concerning acceptable means of demonstrating compliance with the requirements of Part 23 of the Federal Aviation Regulations (FAR) applicable to the structural substantiation of modifications involving increased engine power.

23-13

Fatigue and Fail-Safe Evaluation of Flight Structure and Pressurized Cabin for Part 23 Airplanes (4/15/93) (ACE-111)

Provides information and guidance concerning an acceptable means of demonstrating compliance with the requirements of Part 23 of the Federal

Aviation Regulations (FAR) regarding fatigue and fail-safe evaluation of metallic airplane structure.

23-14

Type Certification Basis for Conversion from Reciprocating Engine to Turbine Engine-Powered Part 23 Airplanes (9/30/93) (ACE-100)

Provides information and guidance concerning an acceptable means of showing compliance with Part 23 through amdt.23-45 of the Federal Aviation Regulations applicable to replacing reciprocating engines with gas turbine engines (turbopropeller, turbojet, or turbofan).

23-15

Small Airplane Certification Compliance Program (1/2/97) (ACE-111)

Provides a compilation of historically acceptable means of compliance to specifically selected sections of Part 23 of the Federal Aviation Regulations that have become burdensome for small low performance airplanes to show compliance. However, applicability of these means of compliance remains the responsibility of the certification manager for each specific project. Utilization of these means of compliance does not affect the applicability of any other certification requirements that fall outside the scope of this AC.

→ 23-16

Powerplant Guide for Certification in Part 23 Airplanes (9/21/99) (ACE-111)

Consolidates into a single document existing policy documents applicable to the powerplant installation in normal, utility, acrobatic, and commuter category airplanes; and, certain ACs that cover specific paragraphs of the regulations.
SN 050-007-01285-3
\$14.00 Supt. Docs

→ 23-17

Systems and Equipment Guide For Certification of Part 23 Airplanes (4/25/00) (ACE-100)

Provides information and guidance concerning an acceptable means, but not the

only means, for showing compliance with Title 14 Code of Federal Regulations (14 CFR) Part 23 for the certification of systems and equipment in normal, utility, acrobatic, and commuter category airplanes.
SN 050-007-01287-0
\$21.00 Supt. Docs.

23.562-1

Dynamic Testing of Part 23 Airplane Seat/Restraint Systems and Occupant Protection (6/22/89) (ACE-111)

Provides information and guidance regarding compliance with Part 23 of the Federal Aviation Regulations (FAR) applicable to dynamic testing of airplane seats.

23.607-1

Self-Locking Nuts on Bolts Subject to Rotation (8/24/84) (ACE-111)

Provides information and guidance concerning compliance with Part 23 for self-locking nuts used on bolts subject to rotation in operation.

23.629-1A

Means of Compliance with Section 23.629, "Flutter" (10/23/85) (ACE-111)

Presents information and guidance to provide one means, but not the only means, of complying with Section 23.629, Flutter (including flutter, airfoil divergence, and control reversal) of Part 23 of the Federal Aviation Regulations.

→ 23.1309-1C

Equipment, Systems, and Installations in Part 23 Airplanes (3/12/99) (ACE-111)

Provides guidance and information for an acceptable means, but not the only means, for showing compliance with the requirements of Section 23.1309(a) and (b) (amendment 23-49) for equipment, systems, and installations in Title 14 Code of Federal Regulations (14 CFR) Part 23 airplanes.

→ 23.1311-1A

Installation of Electronic Displays in Part 23 Airplanes

(3/12/99) (ACE-111)

Provides an acceptable means of showing compliance with Title 14 of the Code of Federal Regulations (14 CFR) applicable to the installation of electronic displays in Part 23 airplanes.

23.1419-2A

**Certification of Part 23 Airplanes for Flight in Icing Conditions
(8/19/98) (ACE-100)**

Sets forth an acceptable means, but not the only means, of demonstrating compliance with the ice protection requirements in 14 CFR Part 23. The FAA will consider other methods of demonstrating compliance that an applicant may present.

23.1521-1B

**Type Certification of Automobile Gasoline in Part 23 Airplanes with Reciprocating Engines
(3/2/95) (ACE-111)**

Sets forth acceptable means of compliance with Part 23 of the Federal Air Regulations (FAR), for approval/certification to use automobile gasoline with or without oxygenates (alcohol, ethers, etc.) in Part 23 airplanes. These procedures also apply to those airplanes approved/certificated under previous regulations superseded by Part 23.

23.1521-2

**Type Certification of Oxygenates and Oxygenated Gasoline Fuels in Part 23 Airplanes with Reciprocating Engines
(1/21/93) (ACE-111)**

Provides information and guidance concerning an acceptable means of compliance with Part 3 of the Civil Air Regulations (CAR) and Part 23 of the Federal Aviation Regulations (FAR), applicable to approval procedures for certification of alternate fuels. Also apply to those airplanes approved under Part 4a of the CAR and Aeronautics Bulletin 7a.

23.1521-2, Chg. 1

(4/24/96) (ACE-111)

Clarifies the Scope and makes the Scope and Purpose of this AC consistent with AC 23.1521-1B, Type Certification of Automobile Gasoline in Part 23 Airplanes with Reciprocating Engines.

25-4

**Inertial Navigation Systems (INS)
(2/18/66) (ANM-100)**

Sets forth an acceptable means for complying with rules governing the installation of inertial navigation systems in transport category aircraft.

25-5

**Installation Approval on Transport Category Airplanes of Cargo Unit Load Devices Approved as Meeting the Criteria in NAS 3610
(6/3/70) (AIR-120)**

Sets forth an acceptable means, but not the sole means, of complying with the requirements of the Federal Aviation Regulations (FAR's) applicable to the installation on transport category airplanes of cargo load devices approved as meeting the criteria in NAS 3610.

25-7A

**Flight Test Guide for Certification of Transport Category Airplanes
(3/31/98) (ANM-111)**

Provides guidelines for the flight test evaluation of transport category airplanes. SN 050-007-01214-4. \$33.00 Supt. Docs.

→ 25-7A, Chg 1

(6/3/99) (ANM-111)

Provides updated guidance to ensure consistent application of certain airworthiness requirements adopted by Amendments 25-92 and 25-98

25-8

**Auxiliary Fuel System Installations
(5/2/86) (ANM-112)**

Sets forth acceptable means, but not the sole means, by which compliance may be shown with auxiliary fuel system installation requirements in accordance with the Federal Aviation Regulations identified within. SN 050-007-00741-8. \$4.00 Supt. Docs.

25-9A

**Smoke Detection, penetrating, and Evacuation Tests and Related Flight Manual Emergency Procedures
(1/6/94) (ANM-111)**

Provides guidelines for the conduct of certification tests relating to smoke detection, penetration, and evacuation and to evaluate related Airplane Flight Manual (AFM) procedures. These guidelines may be used to reduce the number of decisions based solely on judgment in conducting tests and evaluating test results. While not mandatory this AC offers a method of demonstrating compliance with the applicable airworthiness requirements.

25-10

**Guidance for Installation of Miscellaneous Nonrequired Electrical Equipment
(3/6/87) (ANM-110)**

Sets forth a method of compliance with the requirements of Part 25 of the Federal Aviation Regulations pertaining to installations of miscellaneous, nonrequired electrical equipment in transport category airplanes. Provides an example of a method of compliance that has been found acceptable.

25-11

**Transport Category Airplane Electronic Display Systems
(7/16/87) (ANM-110B)**

Provides guidance for acceptance of cathode ray tube (CRT) based electronic display systems used for guidance, control, or decision-making by the pilots of transport category airplanes.

25-12

**Airworthiness Criteria for the Approval of Airborne Windshear Warning Systems in Transport Category Airplanes
(11/2/87) (ANM-111)**

Provides guidance for the airworthiness approval of airborne windshear warning systems in transport category airplanes.

25-13

**Reduced and Derated Takeoff Thrust (Power) Procedures
(5/4/88) (ANM-112)**

Provides guidance for the certification and use of reduced thrust (power) for takeoff and derated takeoff and derated thrust on turbine powered transport category airplanes. Serves as a ready reference for those involved with airplane certification and operation.

25-15

Approval of Flight Management Systems in Transport Category Airplanes

(11/20/89) (ANM-111)

Provides guidance material for the airworthiness approval of flight management systems (FMS) in transport category airplanes. Is issued for guidance purposes and to outline a method of compliance with the rules. In lieu of following this method without deviation, the applicant may elect to follow an alternate method, provided the alternate method is also found by the FAA to be an acceptable means of complying with the requirement of Part 25.

25-16

Electrical Fault and Fire Prevention and Protection

(4/5/91) (ANM-111)

Provides information and guidance on electrically caused faults, overheat, smoke, and fire in transport category airplanes. Acceptable means are provided to minimize the potential for these conditions to occur, and to minimize or contain their effects when they do occur.

25-17

Transport Airplane Cabin Interiors Crashworthiness Handbook

(7/15/91) (ANM-114)

Provides acceptable certification methods, but not necessarily the only acceptable methods, for demonstrating compliance with the crashworthiness requirements of Part 25 of the FAR for transport category airplanes.

SN 050-007-00915-1.

\$14.00 Supt. Docs.

25-18

Transport Category Airplanes Modified for Cargo Service

(1/6/94) (ANM-114)

Provides guidance for demonstrating compliance with the FAR pertaining to transport category airplanes converted for use in all-cargo or combination passenger/cargo (combi) service and the relationship of those regulations to the requirements of Parts 121 and 135 of the FAR.

25-19

Certification Maintenance Requirements

(11/28/94) (ANM-113)

Provides guidance on the selection, documentation, and control of Certification Maintenance Requirements (CMR's).

25-20

Pressurization, Ventilation, and Oxygen Systems Assessment for Subsonic Flight Including High Altitude Operation

(9/10/96) (ANM-111)

Provides guidance on methods of compliance with the requirements of part 25 of the Federal Aviation Regulations pertaining to pressurization, ventilation, and oxygen systems, especially as they pertain to high altitude subsonic flight. As with all AC material, it is not mandatory and does not constitute a regulation. The applicant may elect to follow alternate methods provided that these methods are also found by the FAA to be an acceptable means of complying with the requirements of part 25. Because the guidance on the methods of compliance presented in this AC are not mandatory, the terms "shall" and "must" when used herein, apply only to an applicant that chooses to follow a particular method without deviation.

→ 25-21

Certification of Transport Airplane Structure

(9/1/99) (ANM-110)

Provides guidance to airplane manufacturers, modifiers, foreign regulatory authorities, and FAA transport airplane type certification engineers and their designees.

→ 25-22

Certification of Transport Category Airplane Mechanical Systems

(3/14/00) (ANM-112)

Provides methods acceptable to the Administrator for showing compliance with the type certification requirements for transport airplane mechanical systems and equipment installations.

→ 25-23 Airworthiness Criteria for the Installation Approval of a Terrain Awareness and Warning System (TAWS) for Part 25 Airplanes

(5/22/00) (ANM-130L)

Describes an acceptable means for obtaining FAA airworthiness approval for the installation of a Terrain Awareness and Warning System (TAWS) that has been approved under Technical Standard Order (TSO)-C151a.

25.253-1A

High-Speed Characteristics (12/27/76) (ANM-110A)

Sets forth an acceptable means, but not the only means, by which compliance may be shown with FAR 25.253 during certification flight tests.

25.335-1

Design Dive Speed (10/20/97) (ANM-115)

Sets forth an acceptable means, but not the only means, of demonstrating compliance with the provisions of part 25 of the Federal Aviation Regulations (FAR) related to the minimum speed margin between design cruise speed and design dive speed for transport category airplanes.

25.562-1A

Dynamic Evaluation of Seat Restraint Systems & Occupant Protection on Transport Category Airplanes (1/19/96) (ANM-14)

Provides information and guidance regarding compliance with the provisions of Part 25 of the Federal Aviation Regulations applicable to dynamic testing of seats intended for use in transport category airplanes.

25.571-1C

**Damage-Tolerance and Fatigue
Evaluation of Structure
(4/29/98) (ANM-115)**

Provides guidance for compliance with the provisions of 14 CFR Part 25 of the Federal Aviation Regulations (FAR) pertaining to the damage-tolerance and fatigue evaluation requirements for transport category aircraft structure. It also provides guidelines for the evaluation of scatter factors for the determination of life for parts categorized as safe-life.

**25.629-1A
Aeroelastic Stability Substantiation of
Transport Category Airplanes
(7/23/98) (ANM-115)**

Provides guidance material for acceptable means for demonstrating compliance with the provisions of part 25 of the FAR dealing with the design requirements for transport category airplanes to preclude the aeroelastic instabilities of flutter, divergence and control reversal.

**25.672-1
Active Flight Controls
(11/15/83) (ANM-110B)**

Sets forth an equivalent means of complying with the provisions of Part 25 of the Federal Aviation Regulations (FAR) pertaining to the certification requirements of active flight controls. The procedures set forth herein apply to load alleviation systems (SAS), and flutter suppression systems (FSS). These procedures provide compliance with Part 25 under the equivalent safety provisions of Section 21.21(b)(1) in addition to compliance with the applicable sections of Part 25.

**25.703-1
Takeoff Configuration Warning
Systems
(3/17/93) (ANM-111)**

Provides guidance for the certification of takeoff configuration warning systems installed in transport category airplanes.

**25.773-1
Pilot Compartment View for Transport
Category Airplanes
(1/8/93) (ANM-111)**

Provides guidance for demonstrating compliance with the airworthiness standards for transport category airplanes pertaining to pilot compartment view. These criteria include the properties of transport materials necessary to assure adequate visibility from the flight deck.

**25.783-1
Fuselage Doors, Hatches, and Exits
(12/10/86) (ANM-110)**

Sets forth acceptable means of compliance with the provisions of Part 25 of the Federal Aviation Regulations (FAR) dealing with the certification requirements of fuselage doors. Guidance information is provided for showing compliance with structural and functional safety standards for doors and their operating systems. The intent of the requirements and some acceptable means of compliance are discussed. Other means are acceptable if they meet the intent of the regulations. For the purpose of showing compliance with section 25.783 of FAR, hatches and exits are also considered to be doors.

**25.785-1A
Flight Attendant Seat and Torso
Restraint System Installations
(1/6/94) (ANM-114)**

Provides information and guidance regarding an acceptable means, but not the only means, of compliance with the portions of Sections 25.785 and 121.311 of the FAR which deals with flight attendant seats.

**25.803-1
Emergency Evacuation Demonstrations
(11/13/89) (ANM-114)**

Provides guidance material on a means, but not the only means, of compliance with the FAR concerning (1) conduct of full-scale emergency evacuation demonstrations, and (2) use analysis and tests for emergency evacuation demonstrations in lieu of conducting an actual demonstration.

**25.807-1
Uniform Distribution of Exits
(8/13/90) (ANM-114)**

Provides guidance material for acceptable means, but not the only means, of demonstrating compliance with the

requirements for distributing required passenger emergency exits uniformly. Addresses only those passenger-carrying airplanes, including mixed passenger/cargo ("combi") configurations, with a type certification basis for Amendment 25-15 or later with respect to Section 25.807(c) or airplanes with an earlier type certification basis required by Section 25.2 to meet Section 25.807, Amendment 25-15. Does not address airplanes with only one pair of required exits.

**25.812-1A
Floor Proximity Emergency Escape Path
Marking
(5/22/89) (ANM-114)**

Provides guidance material for use in demonstrating compliance with the provisions of Part 25 of the FAR requiring floor proximity emergency escape path markings.

**25.812-2
Floor Proximity Emergency Escape Path
Marking Systems Incorporating
Photoluminescent Elements
(7/24/97) (ANM-114)**

Provides guidance for use in demonstrating compliance with the provisions of part 25 of the Federal Aviation Regulations (FAR) regarding floor proximity emergency escape path marking systems (FPEEPMS) which incorporate photoluminescent elements. Although mandatory terms such as "shall" or "must" are used in this AC, because the AC method of compliance is not itself mandatory, these terms apply only to applicants who seek to demonstrate compliance by use of the specific method described by this AC.

**25.853-1
Flammability Requirements for Aircraft
Seat Cushions
(9/17/86) (ANM-110)**

Provides guidance material for demonstrating compliance with the Federal Aviation Regulations (FAR) pertaining to flammability of aircraft seat cushions.

**25.939-1
Evaluating Turbine Engine Operating
Characteristics**

(3/19/86) (ANM-112)

Provides guidelines for the evaluation of turbine engine (turbojet, turboprop, and turboshaft) operating characteristics for subsonic transport category airplanes.

25.963-1**Fuel Tank Access Covers****(7/29/92) (ANM-112)**

Sets forth a means of compliance with the provisions of Part 25 of the FAR dealing with the certification requirements for fuel tank access covers on turbine powered transport category airplanes. Guidance information is provided for showing compliance with the impact and fire resistance requirements of Section 25.963(e).

25.981-1A
Guidelines for Substantiating Compliance With the Fuel Tank Temperature Requirements (1/20/71) (AIR-110E)

Sets forth some general guidelines for substantiating compliance with fuel tank temperature airworthiness standards section 25.981.

25.994-1
Design Considerations to Protect Fuel Systems During a Wheel-Up Landing (7/24/86) (ANM-111)

Presents guidelines and methods for complying with the requirements of section 25.994 of the Federal Aviation Regulations (FAR). These guidelines pertain to protecting fuel system components located in the engine nacelles and the fuselage from damage which could result in spillage of enough fuel to constitute a fire hazard as a consequence of a wheels-up landing on a paved runway. This material is not mandatory and does not constitute a regulation.

25.1309-1A
System Design Analysis (6/21/88) (ANM-112)

Describes various acceptable means for showing compliance with the requirements of section 25.1309(b), (c), and (d) of the Federal Aviation Regulations (FAR). These means are intended to provide guidance for

the experience engineering and operational judgment that must form the basis for compliance findings.

25.1329-1A
Automatic Pilot Systems Approval (7/8/68) (ANM-110A)

Sets forth an acceptable means by which compliance with the automatic pilot installation requirements of FAR 25.1329 may be shown.

25.1357-1
Circuit Protective Device Accessibility (9/20/88) (ANM-111)

Describes acceptable means of compliance with the requirements of section 25.1357(d) and (f) of the FAR with respect to the accessibility of circuit protection devices (CPD), such as circuit breakers or fuses. An applicant may elect to use any alternative means found to be acceptable by the FAA for compliance with the FAR.

→ 25.1419-1
Certification of Transport Category Airplanes for Flight in Icing Conditions (8/18/99) (ANM-12)

Provides guidance for certification of airframe ice protection systems on transport category airplanes.

25.1455-1
Waste Water/Potable Water Drain System Certification (3/11/85) (ANM-112)

Sets forth a specific method of compliance with the requirements of section 25.1455 of the FAR pertaining to draining of fluids through drain masts when the fluids are subject to freezing. This method is designed to verify that draining fluids will not accumulate as ice in sufficient quantity to be hazardous. Is for guidance purposes and to set forth one method of compliance that has been found acceptable.

25.1457-1A
Cockpit Voice Recorder Installations (11/3/69) (ANM-110A)

Sets forth one acceptable means of compliance with provisions of FAR 25.1457 (b), (e), and (f) pertaining to area

microphones, cockpit voice recorder location, and erasure features.

25.1523-1
Minimum Flight Crew (2/2/93) (ANM-111)

Sets forth a method of compliance with the requirements of Section 25.1523 of the FAR which contains the certification requirements for minimum flight crew on transport category airplanes.

25.1529-1
Instructions for Continued Airworthiness of Structural Repairs on Transport Airplanes (8/1/91) (ANM-112)

Provides instructions to ensure continued airworthiness of structural repairs on transport category airplanes. It addresses the approval procedures to follow when making structural repairs to structure certificated under the damage tolerance requirements of Section 25.571 of FAR, Amendment 25-45, and to type designs with Supplemental Inspection Documents which were based on these criteria.

25.1581-1
Airplane Flight Manual (7/14/97) (ANM-111)

Identifies the information that must be provided in Airplane Flight Manual (AFM) under the airworthiness regulations and provides guidance as to the form and content of the approved portion of an AFM.

→ 27-1B
Certification of Normal Category Rotorcraft (9/30/99) (ASW-110)

Provides guidance regarding an acceptable means but not the only means of compliance with Part 27 of the Federal Aviation Regulations (FAR) applicable to certification of normal category rotorcraft. This revision rennumbers paragraphs to correspond with FAR numbering. Also, it is divided by Subparts and the page numbers reflect the relevant FAR Subpart. SN 050-007-01186-5 \$57.00 Sup.Docs.

29-1

Approval Basis for Automatic Stabilization Equipment (ASE) Installations in Rotorcraft (12/26/63) (AIR-160)

Gives means for compliance with flight requirements in various CAR's.

**29-1, Chg. 1
(3/26/64)**

Transmits revised information about the time delay of automatic stabilization equipment.

→ **29-2C**

Certification of Transport Category Rotorcraft (9/30/99) (ASW-110)

Provides guidance regarding an acceptable means but not the only means of compliance with Part 29 of the Federal Aviation Regulations (FAR) applicable to certification of transport category rotorcraft. This revision renumbers paragraphs to correspond with FAR numbering. Also, it is divided by Subparts and the page numbers reflect the relevant FAR Subpart.

SN 050-007-01187-3

\$67.00 Supt.Docs.

33-1B

Turbine-Engine Foreign Object Ingestion and Rotor Blade Containment Type Certification Procedures (4/22/70) (ANE-100)

Provides guidance and acceptable means, not the sole means, by which compliance may be shown with the design and construction requirements of Part 33 of the Federal Aviation Regulations.

33-2B

Aircraft Engine Type Certification Handbook (6/30/93) (ANE-110)

Contains guidance relating to type certification of aircraft engines which will constitute acceptable means, although not the sole means, of compliance with the Federal Aviation Regulations.

33-3

Turbine and Compressor Rotors Type Certification Substantiation Procedures (9/9/68) (ANE-100)

Sets forth guidance and acceptable means, not the sole means, by which compliance may be shown with the turbine and compressor rotor substantiation requirements in FAR Part 33.

33-4

Design Considerations Concerning The Use Of Titanium In Aircraft Turbine Engines (7/28/83) (ANE-110)

Provides guidance and acceptable means, not the sole means, by which compliance may be shown with the design requirements of Part 33 to minimize the probability of the occurrence of an internal fire when titanium is used in aircraft turbine engines.

33-5

Turbine Engine Rotor Blade Containment/Durability (6/18/90) (ANE-110)

Provides guidance and acceptable methods, but not the only methods, that may be used by an applicant in showing compliance with the turbine engine rotor blade containment requirements of Part 33 of the Federal Aviation Regulations (FAR).

33-6

Weld Repair of Aluminum Crankcases and Cylinders of Piston Engines (12/20/94) (ANE-110)

Provides information and guidance concerning acceptable means, but not the only means, for the development of process specifications for weld repairs on crankcases and cylinders of piston engines.

→ **33.4-1**

Instructions for Continued Airworthiness (8/27/99) (ANE-110)

Provides guidance on acceptable methods, but not the only methods, of compliance with section 33.4 of the Federal Aviation Regulations, Title 14, Code of Federal Regulations.

→ **33.15-1**

Manufacturing Process of Premium Quality Titanium Alloy Rotating Engine Components (9/22/98) (ANE-110)

Provides guidance for compliance with the provisions under Title 14 under the Code of Federal Regulations, Part 33 (14 CFR 33) pertaining to the materials suitability and durability requirements, 33.15, as applicable to the manufacture of titanium alloy high energy rotating parts of aircraft engines.

33.47-1

Detonation Testing In Reciprocating Aircraft Engines (6/27/88) (ANE-110)

Provides guidance material for acceptable means of demonstrating compliance with the requirements of FAR Part 33, relating to detonation testing for reciprocating aircraft engines.

33.65-1

Surge and Stall Characteristics of Aircraft Turbine Engines (12/6/85) (ANE-110)

Provides guidance material for acceptable means of demonstrating compliance with the requirements of Part 33 of the Federal Aviation Regulations (FAR) relative to surge and stall characteristics and thrust response of turbine engines. These guidelines do not constitute a regulation and are therefore not mandatory.

33.74-92

Turbine Engine Continued Rotation and Rotor Locking (2/14/97) (ANE-110)

Provides guidance and acceptable methods, but not the only methods, that may be used to demonstrate compliance with the continued rotation and rotor locking requirements of part 33 of the Federal Aviation Regulations (FARs).

→ **33.78-1**

Turbine Engine Power-Loss and Extreme Conditions of Rain and Hail (2/8/00) (ANE-110)

Provides guidance and acceptable methods, but not the only methods, that may be used to demonstrate compliance with the requirements contained under Title 14 of

the Code of Federal Regulations (14 CFR), part 33, sections 33.78(a)(2) and 33.78(c).

33.83

Turbine Engine Vibration Survey (2/14/97) (ANE-110)

Provides information and guidance concerning acceptable means, but not the only means, of compliance with part 33 of the Federal Aviation Regulation (FAR) applicable to vibration tests.

35.37-1

Composite Propeller Blade Fatigue Substantiation (5/11/93) (ANE-110)

Provides guidance and an acceptable method, but not the only method, by which composite propeller blades can be fatigue for determination of safe vibrating loading, as required by FAR Part 35.37.

35.37-1, Chg. 1

(9/7/93) (ANE-110)

36-1G

Noise Levels for U.S. Certificated and Foreign Aircraft (8/27/97) (AEE-110)

Provides noise level data for airplanes certificated under FAR Part 36. Noise level data for foreign airplanes certificated to ICAO Annex 16 standards are also provided in a separate appendix for informational purposes.

36-2C

Measured or Estimated (Uncertificated) Airplane Noise Levels (2/12/86) (AEE-110)

Provides estimates of noise levels or measured noise levels from airplanes not certificated to FAR Part 36.

36-3G

Estimated Airplane Noise Levels in A-Weighted Decibels (4/2/96) (AEE-110)

Provides lists of estimated airplane noise levels in units of A-weighted sound levels in decibels (dBA). A-weighted levels were estimated for each airplane as they might occur during type certification tests

conducted under Appendixes A,B, and C of Federal Aviation Regulations Part 36.

36-4B

Noise Certification Handbook (3/23/88) (AEE-3)

Promotes uniformity of implementation of the noise certification requirements of Part 36 of the Federal Aviation Regulations (FAR) by presenting technically acceptable test, analysis, and documentation procedures for subsonic turbojet airplanes that may be used by applicants for demonstrating compliance with Part 36. Where appropriate, FAA policy governing such certifications is reviewed.

39-1A

Jig Fixtures; Replacement of Wing Attach Angles and Doublers on Douglas Model DC-3 Series Aircraft Airworthiness Directive 66-18-2 (3/5/70) (AFS-340)

Describes methods of determining that jig fixtures used in the replacement of the subject attached angles and doublers meet the requirements of Airworthiness Directive 66-18-2.

→ 39-6S

Summary of Airworthiness Directives, Announcement of Availability (8/10/98) (AFS-610)

Announces the availability of the Summary of Airworthiness Directives 1998 edition in paper, microfiche, and electronic CD-ROM and bulletin board system, and also provides information for ordering these publications.

39-7C

Airworthiness Directives (11/16/95) (AFS-340/AFS-613)

Provides guidance and information to owners and operators of aircraft concerning their responsibility for complying with airworthiness directives (AD) and recording AD compliance in the appropriate maintenance records

43-2B

Minimum Barometry for Calibration and Test of Atmospheric Pressure Instruments

(10/16/80) (AFS-343)

Provides guidance material which may be used to determine the adequacy of barometers used in the calibration of aircraft static instruments and presents information concerning the general operation, calibration, and maintenance of such barometers.

43-3A

Nondestructive Testing in Aircraft (5/11/93) (AFS-330)

Reviews the basic principles underlying nondestructive testing. SN 5007-00208-4. \$4.50 Supt. Docs.

43-4A

Corrosion Control for Aircraft (7/25/91) (AFS-340)

Summarizes current available data regarding identification and treatment of corrosive attack on aircraft structure and engine materials. SN 050-007-01044-3. \$13.00 Supt. Docs.

43-6A

Automatic Pressure Altitude Encoding Systems and Transponders Maintenance and Inspection Practices (11/11/77) (AFS-310)

Provides information on the installation encoding altimeters based upon recently acquired operating experience and on the maintenance of ATC transponders.

43-7

Ultrasonic Testing for Aircraft (9/24/74) (AFS-310)

Describes methods used in ultrasonic nondestructive testing, discusses the many advantages, and points out the simplicity of the tests. Contains many illustrations. SN 050-007-00282-3. \$1.75 Supt. Docs.

43-9C

Maintenance Records (6/8/98) (AFS-340)

Describes methods, procedures and practices determined to be acceptable for showing compliance with the general aviation maintenance record-making and

record-keeping requirements of Title 14 of the Code of Federal Regulations (14 CFR) parts 43 and 91. This material is issued for guidance and outlines several methods of compliance with the regulations.

43-10A

Mechanical Work Performed on U.S. and Canadian registered Aircraft (2/25/83) (AFS-340)

Provides updated information and guidance to aircraft owners/operators and maintenance personnel concerning mechanical work performed on U.S. registered aircraft by Canadian maintenance personnel and on Canadian registered aircraft by U.S. maintenance personnel and on Canadian registered aircraft by U.S. maintenance personnel.

43-11

Reciprocating Engine Overhaul Terminology and Standards (4/7/76) (AFS-340)

Discusses engine overhaul terminology and standards that are used by the aviation industry.

43-12A

Preventive Maintenance (10/28/83) (AFS-340)

Provides information concerning preventive maintenance, who may perform it, the standards of performance applicable to it, authority for approving aircraft for return to service, and the applicable recording requirements. It also clarifies those areas most frequently misunderstood in the past, and explains the recent changes in the rules concerning preventive maintenance.

43-14

Maintenance of Weather Radar Radomes (2/24/77) (AFS-350)

Provides guidance material useful to repair facilities in the maintenance of weather radomes.

43-15

Recommended Guidelines for Instrument Shops (8/15/77) (AFS-350)

Provides guidelines concerning environmental conditions for instrument repair and overhaul shops and information on calibration of test equipment. Provides information on obtaining printed copies of this document or electronic access to it. Provides information on obtaining printed copies of this document or electronic access to it.

→ 43-16A

Aviation Maintenance Alerts. (9/3/99) (AFS-640)

Issued monthly, the Aviation Maintenance Alerts are prepared from information submitted by persons who operate and maintain civil aeronautical products. The Alerts provide a uniform means through which safety and service experience may be interchanged. The intent of this publication is to improve safety and service reliability of aeronautical products. (Available on a subscription basis from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954.)

43-17

Methods, Techniques, and Practices Acceptable to the Administrator Governing the Installation, Removal, or Changes of Identification Data and Identification Plates (9/5/79) (AFS-340)

Provides information and guidance concerning the installation, removal, or change of identification data and identification plates on aircraft, aircraft engines, propellers, and propeller blades and hubs.

43-203B

Altimeter and Static System Tests and Inspections (6/20/79) (AFS-350)

Contains acceptable methods for testing altimeters and static systems. Also provides general information concerning the test equipment used and precautions to be taken when performing such tests.

→ 43-205

Guidance for Selecting Chemical Agents and Process for Depainting and

General Cleaning of Aircraft and Aviation Products (9/25/98) (AFS-340)

Describes an acceptable means, but not the only means,, for selecting and testing alternatives to chemical agents and/or processes currently required by some manufacturers' maintenance instructions, including instructions for continuing airworthiness.

43.9-1E

Instructions for Completion of AA Form 337 (OMB No. 2120-0020), Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance) (5/21/87) (AFS-340)

Provides instructions for completing FAA Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).

→ 43.13-1B

Acceptable Methods, Techniques and Practices-- Aircraft Inspection and Repair (9/8/98) (AFS-610)

Contains methods, techniques, and practices acceptable to the Administrator for inspection and repair of nonpressurized areas of civil aircraft only when there are no manufacturer repair or maintenance instructions. SN 050-007-00806-6. \$55.00 Supt. Docs.

43.13-2A

Acceptable Methods, Techniques, and Practices Aircraft Alterations (Includes Chg. 1). (6/9/77) (AFS-340)

Contains methods, techniques, and practices acceptable to the Administrator for use in altering civil aircraft. SN 050-007-00625-0. \$9.00 Supt. Docs.

43.13-2A, Chg. 2 (10/30/89)

SN 050-007-00848-1. \$1.00 Supt. Docs.

45-2A

Identification and Registration Marking (4/16/92) (AIR-230)

Provides guidance and information concerning the identification and marking requirements of Federal Aviation Regulations (FAR) Part 45, and describes an acceptable means, but not the sole means, of compliance with the regulations.

45-3

Installation, Removal, or Change of Identification Data and Identification Plates on Aircraft Engines, (11/6/85) (AIR-200)

Provides information and guidance concerning the installation, removal, or change of identification data and identification plates on aircraft engines, and identifies an acceptable means, but not the only means, of compliance with FAR Part 45.

Airmen

Subject No. 60

60-4A

Pilot's Spatial Disorientation (2/9/83) (AFS-840)

Acquaints pilots with the hazards of disorientation caused by loss of visual reference with the surface.

60-6B

Airplane Flight Manuals (AFM), Approved Manual Materials, Markings, and Placards Airplanes (9/25/80) (AFS-820)

Calls attention to the regulatory requirements relating to the subject and provides information to aid pilots to comply with these requirements.

→ 60-11C

Test Aids and Materials That May Be Used by Airman Knowledge Testing Applicants (4/26/99) (AFS-630)

Provides information concerning test aids and materials that may be used by applicants taking airman knowledge tests.

60-22

Aeronautical Decision Making (12/13/91) (AFS-800)

Provides introductory material, background information, and reference material on aeronautical decision making. Provides a systematic approach to risk assessment and stress management in aviation, illustrates how personal attitudes can influence decision

→ 60-25D

Reference Materials and Subject Matter Knowledge Codes for Airman Knowledge Testing (6/9/00) (AFS-630)

Appendixes 1 and 2 contain the latest list of reference materials and subject matter knowledge codes for airman knowledge testing.

→ 60-26B

Announcement of Availability: Flight Standards Service Airman Training and Testing Information (6/8/00) (AFS-630)

Provides Flight Standards Service on airman training and testing materials website information. The airman certification knowledge and skill testing information is critical to flight safety and comprises the FAA's standards for airman certification testing.

60-28

English Language Skill Standards Required by 14 CFR Parts 61,63, and 65 (9/23/97) (AFS-630)

Provides guidance for airman applicants, training organizations, designated examiners, and aviation safety inspectors in determining English language skills required for airman certification under Title 14 of the Code of Federal Regulations (14 CFR) parts 61,63 and 65.

→ 60-29

Renumbering of Airman Training and Testing Publications (2/1/99) (AFS-630)

Announces the renumbering of airman training and testing materials published by the Airman Testing Standards Branch, AFS-630, Oklahoma City, OK.

61-9B

Pilot Transition Courses for Complex

Single Engine and Light, Twin-Engine Airplanes

(1/15/74) (AFS-630)

A guide to the procedures and standards to be followed for a thorough and comprehensive checkout in modern single- and twin-engine aircraft.
SN 050-007-00226-2.
\$3.00 Supt. Docs.

61-10A

Private and Commercial Pilots Refresher Courses (9/27/72) (AFS-630)

Provides a syllabus of study requirements and describes the areas of training that should be emphasized.
SN 050-011-00060-7.
\$3.75 Supt. Docs.

61-23C

Pilot's Handbook of Aeronautical Knowledge (7/10/97) (AFS-630)

Provides basic knowledge that is essential for pilots. Introduces pilots to the broad spectrum of knowledge that will be needed as they progress in their pilot training. Except for the Code of Federal Regulations pertinent to civil aviation, most of the knowledge areas applicable to pilot certification are presented. This handbook is useful to beginning pilots, as well as those pursuing more advanced pilot certificates.
SN 050-011-00078-1.
\$13.00 Supt. Docs.

61-27C

Instrument Flying Handbook (Rev 1980). (11/5/79) (AFS-630)

Provides the pilot with basic information needed to acquire an FAA instrument rating. It is designed for the reader who holds at least a private pilot certificate and is knowledgeable in all areas covered in AC 61-23B, "Pilot's Handbook of Aeronautical Knowledge."
SN 050-007-00585-7.
\$11.50 Supt. Docs.

→ 61-65D

Certification: Pilot and Flight Instructors and Ground Instructors

(9/20/99) (AFS -840)

Provides guidance for pilots and flight instructors on the certification standards, written test procedures, and other requirements contained in FAR Part 61.

61-67B

Stall Spin Awareness Training

(5/17/91) (AFS -840)

Explains the stall and spin awareness training required under FAR Part 61 and offers guidance to flight instructors who provide that training. Informs pilots of the airworthiness standards for the type certification of small airplanes prescribed in FAR 23.221 concerning spin maneuvers and emphasizes the importance of observing restrictions which prohibit the intentional spinning of certain airplanes.

61-83D

Nationally Scheduled FAA-Approved Industry-Conducted Flight Instructor Refresher Clinics (FIRC)

(9/20/95) (AFS -840)

Provides guidance for the preparation of training course outlines (TCO) for FAA-approved industry conducted FIRC's under Amendment 61-25 to the FAR, which was adopted 4/13/94.

61-84B

Role of Preflight Preparation

(3/18/85) (AFS -840)

Modifies and updates the flight information available to pilots as a result of changes in the basic Airmen Information Manual format.

61-89D

Pilot Certificates: Aircraft Type Ratings
(2/21/91) (AFS -840)

Provides a generic type rating curriculum that may serve as a basis for schools to develop a training requirements of Federal Aviation Regulations Parts 61 and 141.

61-91H

Pilot Proficiency Award Program

(4/26/96) (AFS -800)

Expands the Pilot Proficiency Award Program to 20 phases and makes special provision for seaplane-rated pilots to obtain "seawings."

61-94

Pilot Transition Course For Self-Launching Or Powered Sailplanes (Motorgliders)

(7/31/84) (AFS -840)

Provides recommendations, but is not the only means, that may be used by glider pilots who desire to transition into sailplanes or gliders with self-launching capability.

61-98A

Currency and Additional Qualification Requirements for Certificated Pilots

(3/26/91) (AFS -840)

Provides information for certificated pilots and flight instructors to use in complying with flight review required by FAR Section 61.56, the recent flight experience requirements of FAR Section 61.57, and the general limitations contained in FAR Section 61.31(d), (e), and (g). It also provides guidance regarding transition to other makes and models of aircraft.

61-107

Operations of Aircraft at Altitudes Above 25,000 Feet MSL and/or MACH numbers (Mmo) Greater Than .75
(1/23/91) (AFS -820)

Alerts pilots transitioning to complex, high-performance aircraft which are capable of operating at high altitudes and high airspeeds of the need to be knowledgeable of the special physiological and aerodynamic considerations involved within this realm of operations.

→ 61-111A

Announcement of Availability:
FAA-S-8081-4C, Instrument Rating Practical Test Standards (PTS) for Airplane, Helicopter, Power Lift
(12/15/98) (AFS -630)

Provides information on obtaining printed copies of this document or electronic access to it.

→ 61-118A

Announcement of Availability:
FAA-S-8081-14, Private Pilot Practical Test Standards (Airplane)
(3/1/99) (AFS -630)

Provides information on obtaining printed copies of this document or electronic access to it

61-121

Announcement of Availability:
FAA-S-8081-10A, Aircraft Dispatcher Practical Test Standard
(5/17/95) (AFS -630)

Announces availability of this publication from the Superintendent of Documents.

→ 61-122C

Announcement of Availability:
FAA-S-8081-5C, Airline Transport Pilot and Aircraft Type Rating PTS for Airplane, Chg.1
(3/1/99) (AFS -630)

Provides information on obtaining printed copies of this document or electronic access to it.

61-123

Announcement of Availability: Practical Test Standards (Rotorcraft)
FAA-S-8081-7A, FAA-S-8081-15, FAA-S-8081-16
(3/5/96) (AFS -630)

Announces the availability of FAA-S-8081-7A, Flight Instructor Practical Test Standards for Rotorcraft; FAA-S-8081-15, Private Pilot Practical Test Standards for Rotorcraft; FAA-S-8081-16, Commercial Pilot Practical Test Standards for Rotorcraft; and, provides information on obtaining printed copies or electronic access to these documents.

61-124

Announcement of Availability:
FAA-S-8081-17, Private Pilot Practical Test Standards for Lighter-Than-Air (Balloon/Airship)
(5/15/96) (AFS -630)

Announces the availability of FAA-S-8081-17, Private Pilot Practical Test Standards for Lighter-Than-Air (Balloon/Airship), and provides information on obtaining printed copies or electronic access to this document.

61-125

**Announcement of Availability:
Commercial Pilot Practical Test
Standards: FAA-S-8081-18 and
FAA-S-8081-12A,
(4/30/97) (AFS-630)**

Announces the availability of FAA-S-8081-18, Commercial Pilot Practical Test Standards for Lighter-Than-Air, and FAA-S-8081-12A, Commercial Pilot Practical Test Standards for Airplane; and provides information on obtaining printed copies or electronic access to these documents.

**61-126
Qualification and Approval of Personal
Computer-Based Aviation Training
Devices
(5/12/97) (AFS-840)**

Provides information and guidance to potential training device manufacturers and aviation training consumers concerning a means, acceptable to the Administrator, by which personal computer-based aviation training devices (PCATD) may be qualified and approved for flight training toward satisfying the instrument rating training under the provisions of 14 CFR parts 61 and 141.

**61-127
Announcement of Availability:
FAA-S-8081-19, Recreational Pilot
Powered Parachute Practical Test
Standard
(6/2/97) (AFS-630)**

Announces the availability of FAA-S-8081-19, Recreational Pilot Powered Parachute Practical Test Standard and provides information on obtaining printed copies or electronic access.

**61-128
Announcement of Availability:
FAA-S-8081-6A, Flight Instructor
Practical Test Standard for Airplane,
with Change 1
(4/13/98) (AFS-630)**

Announces the availability of the reprint of FAA-S-8081-6A, Flight Instructor Practical Test Standards for Airplane (Single-Engine and MultiEngine) with Change 1, and provides information for obtaining printed copies or electronic access.

**61-129
Announcement of Availability:
FAA-S-8081-20, Airline Transport Pilot
Aircraft Type Rating PTS for Helicopter
(8/12/98) (AFS-630)**

Announces the availability of FAA-S-8081-20, Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Helicopter, from the Superintendent of Documents, and provides information on obtaining printed copies or electronic access.

**→ 61-130
Announcement of Availability:
FAA-S-8081-8A, Flight Instructor
Practical Test Standards for Glider
(4/26/99) (AFS-630)**

Provides information on obtaining printed copies of this document or electronic access to it.

**→ 61-131
Announcement of Availability:
FAA-S-88081-22, Private Pilot Practical
Test Standards for Gliders
(4/26/99) (AFS-630)**

Provides information on obtaining printed copies of this document or electronic access to it.

**→ 61-132
Announcement of Availability: FAA-S-
8081-23, Commercial Pilot Practical
Test Standards for Glider
(4/26/99) (AFS-630)**

Provides information on obtaining printed copies of this document or electronic access to it.

**→ 63-2
Announcement of Availability:
FAA-S-8081-21, Flight Engineer
Practical Test Standards
(3/1/99) (AFS-630)**

Provides information on obtaining printed copies of this document or electronic access to it.

**65-2D
Airframe and Powerplant Mechanics
Certification Guide**

(1/30/76) (AFS-640)

Provides information to prospective airframe and powerplant mechanics and other persons interested in FAA certification of aviation mechanics. SN 050-007-00331-5. \$8.50 Supt. Docs.

**65-5B
Parachute Rigger Senior/Master-
certification Guide
(7/25/88) (AFS-630)**

Provides information to persons interested in becoming certificated parachute riggers. Provides information on how to apply for a parachute rigger certificate and ratings, and assists the applicant in preparing for the written, oral, and practical tests. SN 050-007-00805-8. \$1.75 Supt. Docs.

**65-9A
Airframe and Powerplant Mechanics--
General Handbook
(4/12/76) (AFS-640)**

Designed as a study manual for persons preparing for a mechanic certificate with airframe or powerplant ratings. Emphasis in this volume is on theory and methods of application, and is intended to provide basic information on principles, fundamentals, and airframe and powerplant ratings. SN 050-007-00379-0. \$45.00 Supt. Docs.

**→ 65-9A, Chg. 1
(6/16/99) (AFS-640)**

This change accommodates NTSB's Safety Recommendation A-96-37. The "spot test" procedure that distinguishes between Inconel and stainless steel is replaced with an "electrochemical" procedure. SN 050-007-01255-1. \$1.25 Supt. Docs.

**65-11B
Airframe and Powerplant Mechanics
Certification Information
(4/17/87) (AFS-340)**

Assists applicants on the most frequently asked questions relating to the certification requirements for the airframe and powerplant mechanics tests. SN 050-007-00750-7.

\$1.25 Supt. Docs.

65-12A

**Airframe and Powerplant Mechanics
Powerplant Handbook
(4/12/76) (AFS-640)**

Designed to familiarize student mechanics with the construction, theory of operation, and maintenance of aircraft powerplants.
SN 050-007-00373-1.
\$26.00 Supt. Docs.

→ **65-13T**

**FAA Inspection Authorization Directory
(3/12/99) (AFS-640)**

Transmits a list of all certificated mechanics who held an inspection authorization as of February 11, 1999.
SN 050-007-01250-1
\$26.00 Supt. Docs.

65-15A

**Airframe and Powerplant Mechanics
Airframe Handbook
(4/12/76) (AFS-640)**

Designed to familiarize student mechanics with airframe construction, repair, and the operating theory of airframe systems.
SN 050-007-00391-9.
\$53.00 Supt. Docs.

65-23A

**Certification of Repairmen
(Experimental Aircraft Builders)
(7/22/87) (AFS-340)**

Provides guidance to builders of experimental aircraft concerning certification as repairmen.

65-24

**Certification Of A Repairman (General)
(2/1/83) (AFS-350)**

Provides information and guidance to the aviation public on the procedures for certification of a repairman.

→ **65-25B**

**Aviation Maintenance Technician
Awards Program
(8/26/99) (AFS-300)**

Outlines and upgrades the requirements for participation in the Federal Aviation Administration's Aviation Maintenance Technician Awards Program.

65-26B

**Charles Taylor "Master Mechanic
Award"**

(7/20/98) (AFS-340)

Presents changes to the Charles Taylor "Master Mechanic" award. This FAA award recognizes aviation maintenance personnel who have at least 50 years of experience in the aviation maintenance industry. The award is named for Charles Taylor, the mechanic who maintained the Wright Brothers airplane.

Airspace

Subject No. 70

70-2E

**Airspace Utilization Considerations in
the Proposed Construction, Alteration,
Activation & Deactivation of Airports
(11/29/95) (AAS-200)**

Advises persons proposing to construct, activate or deactivate a civil or joint-use (civil/military) airport of the requirements to notify the Federal Aviation Administration of their plan. It also outlines some of the airspace utilization factors which should be considered early in the planning stages.

→ **70/7460-1K**

**Obstruction Marking and Lighting
(2/3/00) (ATA-411)**

Describes the FAA standards for marking and lighting structures to promote safety.

→ **70/7460-2K**

**Proposed Construction or Alteration of
Objects that May Affect the Navigable
Airspace**

(2/3/00) (ATA-400)

Provides information to persons proposing to erect or alter an object that may affect the navigable airspace. Explains the need to notify FAA before construction begins and FAA's response to those notices as required by FAR 77.

73-2

**IFR Helicopter Operations in the
Northeast Corridor**

(6/11/79) (ATF-4)

Advises interested users of special Area Navigation (RNAV) helicopter routes between Washington, DC, and Boston, Massachusetts, (known as the "Northeast Corridor") and provides guidelines to operators for the safe use of these routes. The use of these routes is voluntary.

Air Traffic Control and General Operations

Subject No. 90

90-23E

Aircraft Wake Turbulence

(10/1/91) (AFS-430)

Alerts pilots to the hazards of aircraft wake turbulence and recommends related operational procedures.

90-34

**Accidents Resulting from
Wheelbarrowing In Tricycle Gear
Equipped Aircraft**

(2/27/68) (AFS-840)

Explains "wheelbarrowing", the circumstances under which it is likely to occur, and recommended corrective action.

90-42F

**Traffic Advisory Practices at Airports
Without Operating Control Towers
(5/21/90) (AFS-820)**

Contains good operating practices and procedures for use when approaching or departing airports without an operating control tower and airports that have control towers operating part time. Includes changes in radio frequencies and phraseology.

90-45A

**Approval of Area Navigation Systems for
Use in the U.S. National Airspace
System (Consolidated Reprint includes
Changes 1 and 2)**

(2/21/75) (AFS-400)

Provides guidelines for implementation of two-dimensional area navigation (2D RNAV) within the U.S. National Airspace System (NAS). Provides for both VOR/DME dependent systems and self-

contained systems such as Inertial Navigation Systems (INS).

90-48C

Pilots' Role in Collision Avoidance (3/18/83) (AFS-820)

Alerts all pilots to the potential hazards of midair collision and near midair collision, and to emphasize those basic problem areas related to the human causal factors where improvements in pilot education, operating practices, procedures, and improved scanning techniques are needed to reduce midair conflicts.

90-50D

Requirements for 760-Channel VHF Radio for Aeronautical Operations (4/9/92) (ASR-520)

Encourages aircraft owners to upgrade their air-ground radio communication systems. Describes and upgrades civil air traffic control frequencies in the very high frequency (118.000 to 136.975 MHz) band. The 136.000 to 136.975 MHz band became available for aeronautical use on January 1, 1990.

90-58C

VOR Course Errors Resulting from 50 kHz channel Mis-Selection (4/7/75) (AFS-310)

Provides information concerning a potentially hazardous situation when a 200 channel VOR receiver is inadvertently mistuned by 50 kHz from the frequency of a 100 kHz ground station.

90-66A

Recommended Standard Traffic Patterns and Practices for Aeronautical Operations at Airports without Operating Control Towers (8/26/93) (AFS-820)

Calls attention to regulatory requirements and recommended procedures for aeronautical operations at airports without operating control towers. It recommends traffic patterns and operational procedures for aircraft, lighter than air, glider, parachute, rotorcraft, and ultra-light vehicle operations where such use is not in conflict with existing procedures in effect at those airports.

90-67B

Light Signals from the Control Tower for Ground Vehicles, Equipment, and Personnel (8/25/94) (ATP-129)

Provides the aviation community with the meaning of the light signals used when communicating with ground vehicles, equipment, and personnel on the airport movement area from the control tower.

90-75

Strobe Light System Inspection Practices (2/10/77) (AFS-310)

Advises the general aviation community of the importance of proper maintenance of capacitive discharge strobe light systems which are installed within or near fuel systems.

90-79

Recommended Practices and Procedures for the Use of Electronic Long-Range Navigation (7/14/80) (AFS-400)

Presents recommended operational practices and procedures for the use of electronic long-range navigation equipment in oceanic or remote land areas.

→ 90-80B

Approval of Offshore Standard Approach Procedure (OSAP), Airborne Radar Approaches (ARA), and Helicopter En Route Areas (HEDA) Criteria (4/12/99) (AFS-420)

Provides criteria and describes methods for obtaining to use Offshore Standard Approach Procedures, Airborne Radar Approaches, and Helicopter Enroute Areas.

90-87

Helicopter Dynamic Rollover, (1/27/86) (AFS-840)

Familiarizes the helicopter pilot/instructor and pilot school personnel with the hazards, causes, and preventive measures associated with dynamic rollover in helicopters.

90-89A

Amateur-Built Aircraft Flight Testing Handbook

(5/24/95) (AFS-340)

Provides suggestions and safety-related recommendations to assist amateur and ultra-light builders in developing individualized aircraft flight test plans. It includes flight testing recommendations for canard-type and ultra-light aircraft. SN 050-007-01087-7 \$6.50 Supt. Docs.

→ 90-91E

North American Route Program (3/1/00) (ATT-200)

Provides guidance to users of the National Air Space System for participation in the North American Route Program (NARP).

90-92

Guidelines for the Operational Use of Loran-C Navigation Systems Outside the U.S. NAS (2/5/93) (AFS-430)

Contains guidance to be used by pilots for the operational use of Loran-C navigation systems under visual flight rules and instrument flight rules while operating outside the U.S. NAS and beyond the coverage of standard International Civil Aviation Organization navigation aids. These navigation aids include very high frequency omnidirectional beacons. Also contains guidance which is applicable for use while over the Gulf of Mexico and other coastal waters.

90-92, Chg. 1 (6/15/93)

→ 90-93A

Operating Procedures for Airport Traffic Control Towers (ATCT) That Are Not Operated by, or Under Contract with, the United States (Non-Federal) (11/15/99) (ATP-40)

Recommends publications, administrative and operational procedures that will assist in the management of a non-federal ATCT (NFCT).

90-94

Guidelines for Using GPS Equipment for IFR En Route & Terminal

**Operations & for Nonprecision
Instrument Approaches in the U.S.
National Airspace System
(12/14/94) (AFS -820)**

Contains guidance for pilots to use Global Positioning System (GPS) equipment during instrument flight rules navigation. Emphasis is placed on the GPS approach overlay program.

**90-95
Unanticipated Right Yaw in Helicopters
(12/26/95) (AFS -800)**

Examines the unanticipated right yaw phenomenon, the circumstances under which it may be encountered, how it can be prevented, and how the pilot should react if it is encountered.

→ **90-96
Approval of U.S. Operators and Aircraft
to Operate Under IFR in European
Airspace Designated for Basic Area
Navigation (BRNAV/RNP-5)
(3/20/98) (AFS -430)**

Provides guidance regarding on-board Area Navigation (BRNAV) equipment requirements for operators of U.S. registered civil aircraft, operating in a Basic Area Navigation (BRNAV) environment in the European region.

**91-6A
Water, Slush, and Snow on the Runway
(5/24/78) (AFS -430)**

Provides background and guidelines concerning the operation of turbojet aircraft with water, slush, and/or snow on the runway.

**91-13C
Cold Weather Operation of Aircraft
(7/24/79) (AFS -820)**

Provides background and guidelines relating to operation of aircraft in the colder climates where wide temperature changes may occur.

**91-14D
Altimeter Setting Sources
(4/9/79) (AFS -340)**

Provides the aviation public and industry with guidelines for setting up reliable altimeter setting sources.

**91-16
Category II Operations General
Aviation Airplanes
(8/7/67) (AFS -820)**

Sets forth acceptable means by which Category II operations may be approved in accordance with FAR Parts 23, 25, 61, 91, 97, and 135.

**91-22A
Altitude Alerting Devices/Systems
(12/23/71) (AFS -400)**

Provides guidelines for designing, installing, and evaluating altitude alerting systems.

**91-26
Maintenance and Handling of Air-
Driven Gyroscopic Instruments
(10/29/69) (AFS -310)**

Advises operators of general aviation aircraft of the need for proper maintenance of air-driven gyroscopic instruments and associated air filters.

**91-32B
Safety In and Around Helicopters
(2/18/97) (AFS -820)**

Provides suggestions to improve helicopter safety by means of acquainting flight and nonflight crew personnel and passengers with the precautions and procedures necessary to avoid undue hazards.

**91-33A
Use of Alternate Grades of Aviation
Gasoline for Grade 80/87 and Use of
Automotive Gasoline
(7/18/84) (ANE-110)**

Provides information relating to the use of alternate grades of gasoline when grade 80/87 aviation is not available and the resultant effects of the use of the alternate fuels which have higher TEL (tetraethyl lead) content. Suggestions are offered as acceptable means of avoiding engine operating difficulties when using alternate fuels. This circular also provides suggestions for added safety in the use of automotive gasoline in those aircraft engines and aircraft covered by Supplemental Type Certificates (STCs).

91-35

**Noise, Hearing Damage, and Fatigue in
General Aviation Pilots
(3/28/72) (AAM-620)**

Acquaints pilots with the hazards of regular exposure to cockpit noise. Especially pertinent are piston-engine, fixed-wing, and rotary-wing aircraft.

**91-36C
VFR Flight Near Noise-Sensitive Areas
(10/19/84) (ATA-300)**

Encourages pilots making VFR flights near noise-sensitive areas to fly at altitudes higher than the minimum permitted by regulation and on flight paths which will reduce aircraft noise in such area.

**91-37A
Truth in Leasing
(1/16/78) (AFS -820)**

Provides information and guidance for leasees and conditional buyers of U.S. registered large civil aircraft. If you are planning to charter an airplane take a moment to learn about chartered and leased aircraft.

**91-38A
Large and Turbine-Powered
Multiengine Airplanes, Part 91,
Subpart D
(11/27/78) (AFS -340)**

Sets forth guidelines and procedures to assist operators of large and turbine-powered multiengine airplanes in meeting the safety requirements of FAR, Part 91, Subpart D.

**91-42D
Hazards of Rotating Propeller and
Helicopter Rotor Blades
(3/3/83) (AFS -310)**

Updates statistical information on propellers-and rotor-to-person accidents and offers suggestions to reduce the frequency of such accidents.

**91-43
Unreliable Airspeed Indications
(6/26/75) (AFS -223)**

Alerts pilots to the possibility of erroneous airspeed/Mach indications that may be caused by blocking or freezing of the pilot

system and advises of corrective action that can be taken.

91-44A
Operational and Maintenance Practices for Emergency Locator Transmitters and Receivers
(12/12/80) (AIR-120)

Combines and updates material in several Advisory Circulars on the subject of emergency locator transmitters (ELT) receivers for airborne service.

91-45C
Waivers: Aviation Events
(2/1/90) (AFS-810)

Provides prospective aviation event sponsors and other interested parties with information necessary to assist in planning and conducting a safe aviation event. In addition, it provides information on the application process for a certificate of Waiver or Authorization.

91-46
Gyroscopic Instruments. Good Operating Practices
(2/4/77) (AFS-350)

Issued to re-emphasize to general aviation instrument-rated pilots the need to determine the proper operation of gyroscopic instruments, the importance of instrument cross-checks and proficiency in partial-panel operations.

91-48
Acrobatics--Precision Flying With a Purpose
(6/29/77) (AFS-820)

Provides information to persons who are interested in acrobatic flying to improve their piloting skills as recreation, sport, or as a competitive activity.

91-49
General Aviation Procedures for Flight in North Atlantic Minimum Navigation Performance Specifications Airspace
(8/23/77) (AFS-820)

Sets forth acceptable means, but not the only means, of obtaining authorization to operate within specified airspace over the North Atlantic, designated as the NAT (North Atlantic) MNPS (Minimum

Navigation Performance Specifications) airspace, after 0001 Greenwich Mean Time, Dec. 29, 1977. This requirement applies to persons operating under FAR Part 91 and for FAR Part 135 certificate holders, except those operating under Section 135.2.

91-49, Chg. 1
(2/6/78)

91-50
Importance of Transponder Operation and Altitude Reporting
(8/24/77) (AFS-820)

Provides information and guidance concerning the importance of transponder operation and altitude reporting in the National Airspace System.

91-51A
Effect of Icing on Aircraft Control and Airplane Deice and Anti-Ice Systems
(7/19/96) (AFS-820)

Provides information for pilots regarding the hazards of aircraft icing and the use of airplane deice and anti-ice systems.

91-53A
Noise Abatement Departure Profile
(7/22/93) (AFS-430)

Describes acceptable criteria for safe noise abatement departure profiles (NADP) for subsonic turbojet-powered airplanes with a maximum certificated gross takeoff weight of more than 75,000 pounds. These procedures provide the user with one means, although not the only means, of establishing acceptable NADP's. These departure profiles are consistent with the airworthiness standards required by the Federal Aviation Regulations Part 25 for type certification and Part 91 for general airplane operations.

91-54
Automatic Reporting Systems--Altimeter Setting and Other Operational Data
(2/26/79) (AFS-820)

Provides guidelines for the development and installation of automatic reporting systems for altimeter setting and other operational

data intended for use in connection with IFR operations.

91-55
Reduction of Electrical System Failures Following Aircraft Engine Starting
(10/28/80) (AFS-310)

Warns general aviation aircraft owner/pilots and maintenance personnel of possible total electrical system failure following aircraft engine starting.

91-56A
Program For Large Transport Category Airplanes
(4/29/98) (ANM-115)

Provides guidance material to manufacturers and operators of transport category airplanes for use in developing a continuing structural integrity program to ensure safe operation of older airplanes throughout their operational lives. This guidance material applies to large transport airplanes which were certified under the fail-safe and fatigue requirements of Civil Air Regulations (CAR) 4b or 14 CFR part 25 of the Federal Aviation Regulations (FAR), prior to Amendment 25-45, and which have a maximum gross weight greater than 75,000 pounds. Guidance material on this subject for other transports is provided in AC 91-60. The procedures set forth by this AC are applicable to the large transport category airplanes operated under Subpart D of part 91, and parts 121 and 125.

91-57
Model Aircraft Operating Standards
(6/9/81) (ATO-220)

Outlines, and encourages voluntary compliance with, safety standards for model aircraft operators.

→ **91-58A**
Use of Pyrotechnic Visual Distress Signaling Devices in Aviation
(2/10/00) (AFS-820/AFS-630)

Suggests standards and procedures for the acquisition, use, and storage of pyrotechnic visual distress signaling devices that are intended for use in aircraft emergencies.

91-59

Inspection and Care of General Aviation Aircraft Exhaust Systems (8/20/82) (AFS-340)

Emphasizes the safety hazards of poorly maintained single-engine aircraft exhaust systems (reciprocating powerplants) and highlights points at which exhaust system failures occur. Further, it provides information on the kind of problems to be expected and recommends the performance of ongoing preventive maintenance and maintenance by pilots and mechanics, respectively.

**91-60
Continued Airworthiness of Older Airplanes, The (6/13/83) (AFS-310)**

Provides information and recommendations to manufacturers and airplane owners/operators for the development and use of programs to assure the continued airworthiness of older airplanes not covered under AC 91-56, Supplemental Structural Inspection Program for Large Transport Category Airplanes.

**91-61
A Hazard in Aerobatics: Effects of G-Forces on Pilots (2/28/84) (AFS-800/AAM-500)**

Provides background information on G-forces, their effect on the human body and their role in safe flying, and offers suggestions for avoiding problems caused by acceleration encountered in aerobatic maneuvers.

**91-62A
Use of Child Seats in Aircraft (10/15/92) (AIR-121)**

Provides information to assist the public in the proper use of child seats aboard aircraft and provides precautions so all occupants are able to exit rapidly from aircraft during emergencies.

**91-63B
Temporary Flight Restrictions (TFR) (10/9/96) (ATO-120)**
Describes the types of conditions under which the FAA may impose a temporary flight restriction. Also explains which elements have been delegated authority by

the Administrator to issue TFR's and lists the types of responsible agencies/offices from which the FAA will accept requests to establish TFR's. Examples of NOTAM's for each type of TFR are also provided.

**91-65
Use of Shoulder Harness in Passenger Seats (8/4/86) (AFS-820)**
Provides guidance and information to pilots, passengers, and maintenance personnel regarding the crash survivability aspects of small aircraft equipped with shoulder harnesses and the hazards of modifying seats, adding appendages to seats, and storage of articles, beneath the seats. Recommends inspection and maintenance of seats, lap belts and shoulder harnesses to enhance their effectiveness for crash survivability.

**91-66
Noise Abatement for Helicopters (6/4/87) (AFS-840)**
Presents guidelines intended to assist pilots, operators, managers, and other interested persons in the establishment of effective noise reduction procedures when operating helicopters.

**91-67
Minimum Equipment Requirements for General Aviation Operations Under FAR Part 91 (6/28/91) (AFS-820)**
Describes acceptable methods for the operation of aircraft under Federal Aviation Regulations Part 91 with certain inoperative instrument and equipment, which are not essential for safe flight.

**91-68
Pilot Qualification and Operation of all Surplus Military Turbine-Powered Airplanes (2/25/92) (AFS-820)**
Provides information and guidance to pilots who wish to become qualified to operate surplus military turbine-powered airplanes under a letter of authorization, as required by operating limitations issued for this type of aircraft.

→ **91-69A
Seaplane Safety for FAR Part 91 Operators**

(11/19/99) (AFS-820)
Provides revised information to FAR Part 91 seaplane operators regarding seaplane preflight, oral briefings for seaplane passengers, the use of safety belts and shoulder harnesses in seaplanes, escape/egress after capsizing, water survival, and flotation gear for seaplane occupants. This AC generally covers seaplanes engaged in not-for-hire operations. Most for-hire seaplane operations are subject to 14 CFR part 135, as well as part 91.

**91-70
Oceanic Operations, An Authoritative Guide to Oceanic Operations (9/6/94) (AFS-400)**
Contains information and guidance to be used by operators and pilots planning oceanic flights.
050-007-01081-8
\$17.00 Supt. Docs.

**91-71
Operation of Hot Air Balloons with Airborne Heaters (6/13/96) (AFS-820)**
Provides guidance for the safe and practical operation of hot air balloons with airborne heaters in compliance with appropriate portions of 14 CFR 91.

**91-72
Waivers of Provisions of Title 14 of the Code of Federal Regulations Part 91 (11/8/96) (AFS-820)**
Provides information concerning the submission of applications for the issuance of waivers of certain sections of Title 14 of the Code of Federal Regulations (14 CFR) part 91.

**91.11-1
Guide to Drug Hazards in Aviation Medicine (7/19/63) (AAM-620)**
Lists all commonly used drugs by pharmacological effect on airmen with side effects and recommendations.
SN 050-009-00001-7.

\$5.50 Supt. Docs.

91.21-1

Use of Portable Electronic Devices Aboard Aircraft (8/20/93) (AFS-350)

Provides aircraft operators with information and guidance for assistance in the compliance of FAR Section 91.21.

97-1A

Runway Visual Range (RVR) (9/28/77) (AFS-400)

Describes RVR measuring equipment and its operating use.

97-2

Data Base Standardization for the Global Positioning System (GPS) Overlay Program (11/19/93) (AFS-420)

Contains information and guidance to be used by data base vendors that develop data for use in the National Airspace System (NAS) for the nonprecision GPS overlay program.

99-1C

Security Control of Air Traffic (4/20/89) (ATP-140)

Provides civil aviation with recommended practices for operating aircraft within air defense identification zone or when penetrating an air defense identification zone (ADIZ) during peacetime conditions. Specifies the procedures for use during an air defense emergency/defense emergency or prior to these declarations when procedures for Security Control of Air Traffic and Navigation Aids are in effect. Also provides information for airmen to use when area/sector/regional Emergency Security Control of Air Traffic procedures.

103-4

Hazard Associated with Sublimation of Solid Carbon Dioxide (Dry Ice) Aboard Aircraft (5/1/74) (AAM-620)

Discusses the potential hazard associated with the sublimation of dry ice aboard aircraft. Precautionary measures and simple rules of thumb are indicated in order to preclude environmentally hazardous

conditions affecting crews and passengers aboard aircraft.

103-6

Ultralight Vehicle Operations-Airports, ATC, and Weather (6/23/83) (AFS-820)

Provides guidance for the operation of ultralight vehicles in the U.S. Information includes airport and flight park operations, how to work with ATC, and the availability of weather services.

103-7

Ultralight Vehicle, The (1/30/84) (AFS-820)

Provides guidance to the operators of ultralights in the United States. It discusses the elements which make up the definition of ultralight vehicles for the purposes of operating under Federal Aviation Regulation (FAR) Part 103. It also discusses when an ultralight must be operated as an aircraft under the regulations applicable to certificated aircraft.

105-2C

Sport Parachute Jumping (1/2/91) (AFS-340/820)

Provides suggestions to improve sport parachuting safety and disseminates information to assist all parties associated with sport parachuting in complying with FAR Part 105, Parachute Jumping. It also contains a list of aircraft which may be operated with one cabin door removed and includes procedures for obtaining FAA authorization for flight with door removal.

107-1

Aviation Security--Airports (5/19/72) (ACS-100)

Furnishes guidance to those individuals and organizations having responsibilities under Part 107 of the Federal Aviation Regulations. It also provides recommendations for establishing and improving security for restricted or critical facilities and areas as the security of which is not dealt with in Part 107.

108-1

Air Carrier Security (10/16/81) (ACS-3)

Provides information and guidance for implementation of new FAR 108, Airplane Operator Security.
SN 050-007-00642-0.
\$3.75 Supt. Docs.

108-2

Security Rules--Carriage of Weapons and Escorted Persons (10/16/81) (ACS-3)

Provides information and guidance for implementation of FARs 108.11 and 108.21 concerning the carriage of weapons and passengers under the control of armed law enforcement escorts.

108-3

Screening of Persons Carrying U.S. Classified Material (11/6/81) (ACS-100)

Provides instructions for the screening of passengers carrying classified material in order to maintain the integrity of the screening process and prevent the compromise of classified material.

109-1

Aviation Security--Acceptance and Handling Procedures Indirect Air Carrier Security (3/3/82) (ACS-100)

Provides information and guidance which should be used by "indirect air carriers" when accepting and handling property to be carried by "air carriers" or by the operator of any civil aircraft for transportation in air commerce.
SN 050-007-00643-8.
\$2.25 Supt. Docs.

Air Carrier and Commercial Operators and Helicopters

Subject No. 120

120-12A

Private Carriage Versus Common Carriage of Persons or Property (4/26/86) (AFS-820)

Furnishes FAA personal and interested segments of industry with general guidelines for determining whether current or

proposed transportation operations by air constitute private or common carriage.

120-16C
Continuous Airworthiness Maintenance Programs
(8/8/80) (AFS-350)

Provides information and guidance on continuous airworthiness maintenance programs for operators subject to the provisions of FAR Parts 121, 127, or 135.

120-17A
Maintenance Control by Reliability Methods
(3/27/78) (AFS-330)

Provides information and guidance materials which may be used to design or develop maintenance reliability programs utilizing reliability control methods.

120-26H
International Civil Aviation Organization Three-Letter and Radio Telephony Designators
(6/21/91) (ATP-215)

Defines the criteria and procedures required for an International Civil Aviation Organization (ICAO) three-letter and/or telephony designator assignment.

120-27C
Aircraft Weight and Balance Control
(11/7/95) (AFS-330)

Provides one means, but not the only means, for obtaining approval of a weight and balance control system. It provides guidance to certificate holders that are required to have an approved weight and balance program by Title 14, Code of Federal Regulations (14 CFR) Part 121 or choose to have an approved program under 14 CFR Part 135.

→ **120-28D**
Criteria for Approval of Category III Landing Weather Minima for Takeoff, Landing, and Rollout
(7/13/99) (AFS-400)

States an acceptable means, not the only means, for obtaining approval of Category III Landing Weather Minima and low visibility takeoff, including the installation and approval of associated aircraft systems.

120-29
Criteria for Approving Category I and Category II Landing Minimal for FAR 121 Operators
(9/25/70) (AFS-400)

Sets forth criteria used by FAA in approving turbojet landing minimal of less than 300-3/4 or RVR 4,000 (Category I) and Category II minimal for all aircraft.

120-29, Chg. 1
(12/15/71)
Revises Appendix 1 and deletes statement in Appendix 2 regarding 19-foot criteria (does not apply when using an approved automatic landing system).

120-29, Chg. 2
(7/26/72)
Clarifies the airborne system evaluation by stressing the necessity for meeting maintenance program requirements.

120-29, Chg. 3
(12/3/74)
Outlines the recent change in FAR Part 121 wherein both initial and recurrent pilot qualification for both Category I and II proficiency checks may be performed in a visual simulator.

120-30A
Reporting Requirements of Air Carriers, Commercial Operators, Travel Clubs, and Air Traffic
(9/8/76) (AFS-330)
Clarifies the mechanical reliability reporting requirements contained in Parts 121, 127, and 135 of the Federal Aviation Regulations (FAR) and the accident and incident reporting requirements of Part 830 (old Part 430) of the National Transportation Safety Board (NTSB), Safety Investigation Regulations.

120-31A
Operational and Airworthiness Approval of Airborne Omega Radio Navigation Systems as a Means of Updating Self-Contained Navigation Systems
(4/21/77) (AFS-260)
Set forth an acceptable means, but not the only means, of obtaining airworthiness and

operational approval of airborne OMEGA navigation systems used in updating self-contained navigation systems such as Doppler and Inertial Radar for operations outside the United States under FAR Part 121.

120-32
Air Transportation of Handicapped Persons
(3/25/77) (AFS-223)
Identifies some of the problems handicapped air travelers face and provides some guidelines to airline personnel to help alleviate these problems.

120-33
Operational Approval of Airborne Long-Range Navigation Systems for Flight Within the North Atlantic Minimum Navigation Performance Specifications Airspace
(6/24/77) (AFS-400)
Sets forth acceptable means, but not the only means, for operators certificated under FAR Parts 121 and 123 and operators utilizing large aircraft under FAR 135.2, to obtain approval to operate within a specific airspace over the NAT (North Atlantic) MNPS (Minimum Navigation Performance Specifications) airspace after 0001 Greenwich Mean Time, Dec. 29, 1977.

120-34
Air Transportation of Mental Patients
(6/29/77) (AFS-223)
Provides guidelines to organizations and persons responsible for transportation of mental patients and outlines the responsibilities of those escorting such persons.

120-35B
Line Operational Simulations: Line-Oriented Flight Training, Special Purpose Operational Training, Line Operational Evaluation
(9/6/90) (AFS-210)
Presents guidelines for the design and implementation of subject advisory circular.

120-37
Operational and Airworthiness Approval of Airborne Omega Radio Navigational

Systems as a Sole Means of Long Range Navigation Outside the United States (10/10/78) (AIR-120)

Establishes an acceptable means of obtaining airworthiness and operational approval of Airborne Omega Navigational Systems as a sole means of long range navigation for operations conducted outside the United States in accordance with FAR 121, 123, or large aircraft operated under FAR 135.2.

120-38**Transport Category Airplanes Cabin Ozone Concentrations (10/10/80) (AFS -260)**

Provides guidance concerning acceptable means, but not the only means, for an air carrier to demonstrate compliance with the maximum permissible cabin ozone (O₃) concentrations established by Section 121.578 of the Federal Aviation Regulations.

120-39**Hazards of Waste Water Ice Accumulation Separating From Aircraft In Flight (10/31/80) (AFS -331)**

This advisory circular emphasizes the potential hazards to life and property due to lavatory fluid and potable water systems' ice accumulation and resultant separation from aircraft in flight.

120-40B**Airplane Simulator Qualification (7/29/91) (AFS -205)**

Provides an acceptable means, but not the only means, of compliance with the Federal Aviation Regulations (FAR) regarding the evaluation of and qualification of airplane simulators used in training programs or airmen checking under Title 14 Code of Federal Regulations (CFR).

120-40B, Chg. 1 (1/24/92) (AFS -205)**120-40B, Chg. 2 (6/9/93) (AFS -205)****120-41****Criteria For Operational Approval Of Airborne Wind Shear Alerting and Flight Guidance Systems (11/7/83) (AFS -400)**

Establishes an acceptable means, but not the only means, of obtaining operational approval of an airborne wind shear alerting and flight guidance system. It describes acceptable simulation test criteria, wind field modeling data, and minimum performance parameters for evaluating candidate systems.

120-42A**Extended Range Operation With Two-Engine Airplanes (ETOPS) (12/30/88) (AFS -400)**

States an acceptable means but not the only means for obtaining approval under FAR Section 121.161 for two-engine airplanes to operate over a route that contains a point farther than one hour flying time at the normal one-engine inoperative cruise speed (in still air) from an adequate airport.

120-43**Influence of Beards on Oxygen Mask Efficiency, The (1/27/87) (AFS -220)**

Provides information about the effects of beards on masks in continuous flow and demand oxygen systems.

120-44A**Air Carrier First Aid Programs (3/9/95) (AFS -220)**

Provides guidance about first aid program resources, subjects, equipment, and pertinent regulations. This revision adds information about bloodborne pathogen awareness programs.

120-45A**Airplane Flight Training Device Qualification (2/5/92) (AFS -205)**

Provides an acceptable means of ensuring compliance with the FAR regarding the evaluation and qualification of all training devices in which flight training, qualification, or certification of airmen under Title 14, Code of Federal Regulations, is accomplished. Specifies the criteria to be used by the FAA when qualifying a device

and determining what the qualification level should be.

120-47**Survival Equipment for Use In Overwater Operations (6/12/87) (AFS -220)**

Provides information regarding the survival items that should be carried during aircraft extended overwater operations. Provides a means, but not the only means, for compliance with the pertinent regulations.

120-48**Communication and Coordination Between Flight Crewmembers and Flight Attendants (7/13/88) (AFS -220)**

Presents information on common problems associated with crew coordination between flight crewmembers and flight attendants and how these problems can be avoided.

120-49**Certification of Air Carriers (11/23/88) (AFS -200)**

Provides information and guidance material on the certification process of air carriers under FAR Part 121 and Part 135. It provides information that can be used by applicants who desire to be certificated as an air carrier in accordance with FAR Part 121 and Part 135.

120-50A**Guidelines for Operational Approval of Windshear Training Programs (2/9/96) (AFS -210)**

Provides guidance for approval of low-altitude windshear training for operations under Title 14 of the Code of Federal Regulations, parts 121 and 135.

➔ 120-51C**Crew Resource Management Training (10/30/98) (AFS -210)**

Presents guidelines for developing, implementing, reinforcing, and accessing Crew Resource Management (CRM) training programs for flight crewmembers and other personnel essential to flight safety. These programs are designed to become an integral part of training and operations. Guidelines are primarily for

those operators subject to 14 CFR Part 121 and 135.

120-52
Radiation Exposure of Air Carrier
Crewmembers

(3/5/90) (CAMI-AAM-600)

Provides (a) information on cosmic radiation and or air shipments of radioactive material as sources of ionizing radiation exposure during air travel; (b) guidelines for exposure to radiation; (c) estimates of the amounts of galactic cosmic radiation received on air carrier flights on various routes to and from, or within, the contiguous United States (table 1); and (d) example calculations for estimating health risks from exposure to galactic cosmic radiation.

120-53
Crew Qualification and Pilot Type
Rating Requirements for Transport
Category Aircraft Operated Under FAR
Part 121

(5/13/91) (AFS-200)

Provides an acceptable means, but not the only means, of compliance with the FAR regarding qualification and type rating of flight crewmembers operating under FAR Part 121. Included are criteria for determination and approval of training, checking, and currency necessary for safe operation of aircraft in air carrier operations, particularly for pilots who frequently fly different variants of the same type aircraft. Describes the process by which the FAA determines "type rating" requirements applicable to the pilot in command of new or modified aircraft.

120-54
Advanced Qualification Program
(8/9/91) (AFS-210)

Provides FAA guidance for approval of an Advanced Qualification Program (AQP) under SFAR 58.

120-55A
Air Carrier Operational Approval and
Use of TCAS II
(8/27/93) (AFS-450)

Provides an acceptable means, but not the only means, to address Traffic Alert and

Collision Avoidance System (TCAS) issues related to installation of TCAS II regarding compliance with Federal Aviation Regulations Parts 121, 125, and 129 requirements for air carriers.

120-57A
Surface Movement Guidance and
Control System
(12/19/96) (AFS-400)

Describes the standards and provides guidance in the development of a Surface Movement Guidance and Control System (SMGCS) plan for U.S. airports where scheduled air carriers are authorized to conduct operations when the visibility is less than 1,200 feet runway visual range.

120-58
Pilot Guide for Large Aircraft Ground
Deicing
(9/30/92) (AFS-420)

Contains recommendations for ensuring safe operations of large airplanes during icing conditions and guidelines for the development of adequate procedures for the deicing of large airplanes.

120-59
Air Carrier Internal Evaluation
Programs
(10/26/92) (AFS-201)

Provides information and guidance material that may be used by air carrier certificate holders, operating under Federal Aviation Regulations (FAR) Parts 121 and 135, to design or develop an Internal Evaluation Program. The procedures and practices outlined in this (AC can be applied to maintenance, flight operations, and security aspects of an air carrier's organization. Internal evaluation guidance for certificate holders other than those operating under FAR Parts 121 and 135 may be issued separately in the future.

120-60
Ground Deicing and Anti-Icing Program
(5/19/94) (AFS-240)

Provides one means, but not the only means, for obtaining approval of a Ground Deicing and Anti-icing Program, and for ensuring compliance with FAR Section 121.629.

120-61
Crewmember Training on In-Flight
Radiation Exposure
(5/19/94) (AFS-203)

Recommends subject to be covered in air carrier programs designed to: (1) inform crewmembers about radiation exposure and known associated health risks; and (2) assist crewmembers in making informed decisions with regard to their work on commercial air carriers. This AC provides a possible outline of courses but actual subject material should be gathered by the air carriers.

120-62
Takeoff Safety Training Aid--
Announcement of Availability
(9/12/94) (AFS-210)

Announces the availability of a joint industry/FAA Takeoff Safety Training Aid to help air carriers and pilots increase safety during the takeoff phase of flight.

120-63
Helicopter Simulator Qualification
(10/11/94) (AFS-205)

Provides a suggested means of compliance with the FAR regarding the evaluation and qualification of helicopter simulators to be used in training and checking.

120-64
Operational Use & Modification of
Electronic Checklists
(4/24/96) (AFS-200N)

Provides an acceptable means, but not the only means, to address the processes for approval, operational use, and modification of electronic checklists (ECL) and ECL data by air carriers.

120-65
Interference With Crewmembers in the
Performance of Their Duties
(10/18/96) (AFS-200)

Provides information to air carriers, crewmembers, law enforcement officers, and the general public regarding methods which may be used to manage and reduce the instances of interference with crewmembers. This AC provides general information about the types of subjects

which could be included in an operator's program.

→ **120-66A**

Aviation Safety Action Programs (ASAP)

(3/17/00) (AFS-200)

Provides guidance for establishing Air Transportation Aviation Safety Action Programs, which enhance aviation safety through the prevention of accidents and incidents. Its focus is to encourage voluntary reporting of safety issues and events that come to the attention of employees of certain certificate holders.

120-67

Criteria For Operational Approval of Auto Flight Guidance Systems

(3/18/97) (AFS-400)

States an acceptable means, but not the only means, for obtaining operational approval of the initial engagement or use of an Auto Flight Guidance System (AFGS) under Title 14 CFR part 121, section 121.579(d); part 125, section 125.329(e); and part 135, section 135.93(e) for the takeoff and initial climb phase of flight.

120-68

Pilot Records Improvement Act of 1996 (5/8/97) (AFS-220)

Provides information and standard forms that may be used to comply with provisions of the Pilot Records Improvement Act of 1996, which requires air carriers, prior to hiring an individual as a pilot, to request and receive: from the FAA certain records pertaining to the individual concerning pilot certificates and rating; certain records from other air carriers or other persons for whom the individual may have been employed in the past 5-year period; and from the National Driver Register pertinent records concerning the motor vehicle driving record of the individual being considered for hiring.

120-69

Use of CD-ROM Systems (8/14/97) (AFS-350)

Provides guidance on the use of CD-ROM (compact disk read-only memory) systems for the preservation and retention of the

maintenance portion of a certificate holder's manual; also provides guidance on the use of CD-ROM systems for the retrieval of the technical data contained in a certificate holder's manual.

→ **120-70**

Initial Air Carrier Operational Approval For Use of Digital Communication Systems

(2/17/00) (AFS-430)

Provides an acceptable means, but not the only means, for operational approval to use digital communication systems, including data link and voice communications (e.g. via satellite), for air traffic service (ATS) and related capabilities for operators conducting operations under Title 14 of the Code of Federal Regulations (14 CFR), parts 121, 125, 129, and 135.

121-1A

Standard Operations Specifications Aircraft Maintenance Handbook (6/26/73) (AFS-330)

Provides procedures acceptable to the Federal Aviation Administration which may be used by operators when establishing inspection intervals and overhaul times.

121-1A, Chg. 1 (1/23/75)

Updates the overhaul and inspection/check period of selected airframes, powerplants, propellers, and appliances in relation to current industry standards.

121-1A, Chg. 2 (8/19/76)

121-1A, Chg. 3 (2/18/77)

121-1A, Chg. 4 (7/7/78)

121-6

Portable Battery-Powered Megaphones (1/5/66) (AIR-110)

Sets forth an acceptable means for complying with rules (applicable to various persons operating under Part 121 of the Federal Aviation Regulations) that prescribe the installation of approved megaphones.

121-13

Self-Contained Navigation Systems (Long Range)

(10/14/69) (AFS-224)

States an acceptable means, not the only means, of compliance with the referenced sections of the FAR as they apply to persons operating under Parts 121 or 123 who desire approval of Doppler RADAR navigation systems or Inertial Navigation Systems (INS) for use in their operations.

121-13, Chg. 1 (7/31/70)

Assures standardization of the Minimum Equipment List (MEL) with respect to Inertial Navigation Systems (INS) through the appropriate Flight Operations Evaluation Board (FOEB).

121-13, Chg. 2 (12/21/70)

Permits all flight training for Doppler and INS qualification, to be completed in a simulator or training device approved for conducting the required pilot training and qualifications in the use of these systems.

121-16

Maintenance Certification Procedures (11/9/70) (AFS-330)

Provides guidance for the preparation of an Operations Specification--Preface Page which will afford nominal and reasonable relief from approved service and overhaul time limits when a part is borrowed from another operator.

121-21B

Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials

(12/22/83) (ACS-130)

Provides certificate holders operating aircraft under Code of Federal Regulations (CFR) Title 14, Parts 121 and 135, Federal Aviation Regulations, with information relevant to CFR Title 49 and the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air.

121-22A

**Maintenance Review Board (MRB)
(3/7/97) (AFS-330)**

Provides guidelines that may be used by industry during its development and revision of the initial minimum scheduled maintenance/inspection requirements for derivative or newly type-certificated transport category aircraft and powerplants for submittal to the FAA for approval. These initial minimum scheduled maintenance/inspection requirements are referred to in this AC as the Maintenance Review Board Report (MRBR). The requirements, after approval by the FAA, become the framework around which each air carrier develops its own individual maintenance program.

→ **121-24B**

**Passenger Safety Information Briefing and Briefing Cards
(2/1/99) (AFS-220)**

Provides updated information regarding the items that are required to be covered in oral passenger briefings and on passenger briefing cards. Provides specific information about air carrier operations conducted under 14 CFR Part 121 and 135. It also provides suggestions for making this information interesting meaningful.

**121-25
Additional Weather Information:
Domestic and Flag Air Carriers
(9/16/77) (AFS-224)**

Provides guidance and standards to domestic and flag air carriers for approval of a system for obtaining forecasts and reports of adverse weather phenomena.

**121-26
Airports--Required Data
(6/29/81) (AFS-250)**

Provides guidance as to acceptable methods for compliance with changes to the Federal Aviation Regulations 121.97(b) and 121.117(b).

**121-27
Guide For Air Carriers, Freight Forwarders, and Shippers in Obtaining Information Dealing with the Transportation of Hazardous Materials by Air**

(1/3/84) (ACS-100)

Provides air carriers, freight forwarders, and shippers with sources of regulatory and training information and provides office locations and telephone numbers where technical assistance may be obtained dealing with the provisions of the appropriate regulations concerning the transportation by air of commodities which have been designated as regulated hazardous materials.

**121-28
Preparation and Loading of Magnetron Magnetic Materials for Air Transportation
(3/19/87) (ACS-120)**

Provides information relevant to the preparation and loading of magnetic materials for shipment in civil aircraft.

**121-29A
Carry-on Baggage
(6/25/98) (AFS-200)**

Provides information to the public, certificated air carriers, commercial operators, and airline personnel about FAA-approved carry-on baggage programs. It updates, provides clarification and additional information on how to comply with the carry-on baggage regulations.

**121-31
Flight Crew Sleeping Quarters and Rest Facilities
(9/30/94) (AFS-220)**

Provides methods acceptable to the FAA Administrator for FAR Part 121 certificate holders who conduct flag and supplemental operations to obtain an FAA finding regarding the adequacy of onboard sleeping quarters for compliance with FAR Sections 121.485(a) and 121.523(b). This AC also references FAA-acceptable criteria which may be used for the design and installation of flightcrew sleeping quarters and rest facilities on commercial transport aircraft capable of long-range operations with augmented or enlarged flightcrew complements.

**121-32
Dispatch Resource Management Training
(2/7/95) (AFS-210)**

This AC complements guidance already developed for flightcrew members and other groups with respect to training in resource management. Focus is on the aircraft dispatcher whose traditional role in air carrier operations is being changed by fundamental changes in aviation, notably advanced technology.

**121.195(d)-1A
Operational Landing Distances for Wet Runways; Transport Category Airplanes
(6/19/90) (AFS-430)**

Sets forth an acceptable means, but not the only means, of showing compliance with Federal Aviation Regulations Section 121.195(d) pertaining to operational landing distances on wet runways. It is for guidance purposes and provides an example of a method of compliance that has been found acceptable.

**121.445-1D
Pilot-In-Command Qualifications For Special Areas/Routes And Airports. FAR Section 121.445
(6/20/90) (AFS-220)**

Provides information for all Part 121 certificate holders concerning those area/routes and airports where the Administrator has determined that special qualifications are required of pilots in command as provided in FAR Section 121.445.

**125-1
Operations of Large Airplanes Subject to Federal Aviation Regulations Part 125
(1/22/81) (AFS-820)**

Sets forth one means that would be acceptable to the Administrator to assist persons in complying with the requirements of FAR Part 125. It also provides (in Chapter 1) a test of applicability for those operations which may be subject to Part 125.

**129-3
Foreign Air Carrier
(6/10/82) (ACS-120)**

Provides information and guidance for the implementation of Change 7 to FAR Part 129 (sections 129.25, 129.26, and 129.27) which became effective 9/11/81. The

sensitive nature of many security procedures precludes full discussion in this AC. FAA Security Inspectors located throughout the U.S., as well as Foreign Air Carrier Principal Security Inspectors, located at FAA offices in Brussels, Belgium, and at FAA Regional Headquarters in the U.S., having responsibility for those foreign air carriers operating within the FAA offices geographical area of responsibility, are available to discuss the many issues that may arise regarding implementation and procedural details of security safeguards. SN 050-007-00641-1.
\$2.50 Supt. Docs.

129-4

Maintenance Programs for U.S. Registered Aircraft Under FAR Part 129 (3/1/88) (AFS-300)
Provides information and guidance about acceptable maintenance programs for U.S. registered aircraft subject to FAR Part 129.

133-1A

Rotorcraft External-Load Operations in Accordance with FAR Part 133 (10/16/79) (AFS-824)
Provides information for persons interested in applying for a Rotorcraft External-Load Operator Certificate.

135-4A

Aviation Security: Air Taxi Commercial Operators (ATCO) (4/15/76) (ACS-100)
Provides recommended security measures applicable to ATCO operations that should minimize the effects of crimes directed against air transportation.

135-5B

Maintenance Program Approval for Carry-On Oxygen Equipment for Medical Purposes (9/26/83) (AFS-330)
Provides a means whereby air taxi operators may submit a maintenance program to comply with FAR Part 135, Section 135.91.

135-7

FAR 135: Additional Maintenance Requirements for Aircraft Type Certificated for Nine or Less Passenger Seats

(10/24/78) (AFS-350)

Provides information on establishing methods for compliance with additional maintenance requirements of FAR Part 135, Revised December 1, 1978, for certain air taxi operators and commercial operators (ATCO).

135-9

FAR Part 135 Icing Limitations (5/30/81) (AFS-220)

To provide guidance to commuter/air taxi operators to assist them to comply with Section 135.227.

135-10A

Approved Aircraft Inspection Program (12/22/93) (AFS-340)

Provides information and guidance which can be used to develop an approved aircraft inspection program (AAIP) for operators subject to provisions of FAR Section 135.419.

→ 135-13G

FAA Certificated Air Carriers Directory (6/16/99) (AFS-640)

Transmits a directory of air carriers certificated by the FAA under the provisions of Title 14 of the Code of Federal Regulations (14 CFR Part 135). The directory is current as of May 18, 1999.

SN 050-007-01267-5

\$10.00 Supt. Docs.

135-14A

Emergency Medical Services/Helicopter (EMS/H) (6/20/91) (AFS-250)

Provides information and guidance material which may be used by Air Ambulance and Emergency Medical Service/Helicopter (EMS/H) operators. It must be emphasized that this AC diminishes neither the force nor the effect of the FAR. The regulations, of course, are always controlling. This AC does not interpret the regulations; interpretations are issued only under established national FAA procedures.

135-15

Emergency Medical Service/Airplane (EMS/A)

(11/19/90) (AFS-250)

Provides information and guidance material which may be used by Air Ambulance and Emergency Medical Service/Airplane (EMS/A). These guidelines are applicable to EMS/A operations under FAR Part 135 and are also recommended for EMS operations conducted by public service and other operators.

135-16

Ground Deicing & Anti-icing Training & Checking (12/12/94) (AFS-250)

This AC provides one means, but not the only means, of complying with FAR Sections 135.227, 135.345, & 135.351 (referred to as the FAR Part 135 ground deicing rule).

135-17

Pilot Guide - Small Aircraft Ground Deicing (pocket) (12/14/94) (AFS-250)

Contains information and recommendations to assist pilots in conducting ground operations during weather conditions conducive to aircraft icing. Also contains information and guidance regarding deicing and anti-icing fluids and procedures for use and identifies the aircraft critical surfaces which must be free of contamination prior to takeoff.

135.169-1

Small Propeller-Driven Air Taxi Airplanes That Meet Sections 135.169 (formerly 135.144) (9/24/79) (AIR-110)

Provides a summary of and information on small propeller-driven air taxi airplanes that comply with section 135.169(b) and may continue operations under FAR 135 with ten or more passenger seats.

137-1

Agricultural Aircraft Operations (11/29/65) (AFS-820)

Explains and clarifies the requirements of FAR Part 137 and provides additional

information, not regulatory in nature, which will assist interested persons in understanding the operating privileges and limitations of this Part.

139.201-1

Airport Certification Manual (ACM) and Airport Certification Specifications (ACS) (7/15/88) (AAS-310)

Provides methods acceptable to the Administrator for showing compliance with the ACM and ACS requirements contained in Part 139 of the FAR.

Schools and Other Certificated Agencies

Subject No. 140

→ **140-2BB**

**FAA Certificated Pilot Schools
Directory (6/16/99) (AFS-640)**

Transmits a directory of all FAA Certificated Pilot Schools, current as of 5/26/99.

140-6C

Development and Use of Major Repair Data Under Provisions of Special Federal Aviation Regulation No. 36, The (2/3/84) (AFS-340)

Advises that SFAR 36 has been extended for an additional 5 years. Provides information related to the issuance of an authorization to allow repair stations, air carriers and air taxi/commercial operators of large aircraft to develop and use major repair data not specifically approved by the Administrator in accordance with the requirements of SFAR 36.

→ **140-7J**

**FAA Certificated Repair Stations
Directory (7/13/99) (AFS-640)**

Transmits a consolidated directory of all FAA Certificated Repair Stations certificated as of June 17, 1999, under the authority of Title 14 of the Code of Federal Regulations (14 CFR) Part 145. SN 050-007-01269-1

\$14.00 Supt. Docs.

140-8

Guide for Developing and Evaluating an SFAR 36 Engineering Procedures Manual (5/22/97) (AIR-110)

Sets forth an acceptable means for developing and evaluating a 14 Code of Federal Regulations (14 CFR) Special Federal Aviation Regulation (SFAR) 36 engineering procedures manual. As such, the terms “shall” and “must” used in this advisory circular pertain to an applicant who chooses to follow the method presented.

141-1A

Pilot School Certification (2/18/93) (AFS-840)

Sets forth guidelines to assist persons in obtaining a pilot school certificate and associated ratings under FAR Part 141.

145-2

Repair Station Limited Ratings Beech 18 Series Aircraft (4/21/76) (AFS-340)

Advises of a required limited repair station rating to perform X-ray inspection of the Beech 18 wing and center section spar, and of the procedures for application.

145-3

Guide For Developing and Evaluating Repair Station Inspection Procedures Manuals (2/13/81) (AFS-350)

An aid to the development of a repair station inspection procedures manual that adequately covers all pertinent FARs.

145-3, Chg. 1

(2/10/82) (AFS-3500)

145-4

Inspection, Retread, Repair and Alterations of Aircraft Tires (9/27/82) (AFS-340)

Provides guidance for the development, qualification, and approval of aircraft tire repair and retread process specifications, and the use of special nondestructive inspection (NDI) techniques. The information sets forth an acceptable means,

but not the only means of developing a process specification for approval.

145-5

Repair Station Internal Evaluation Programs (9/27/95) (AFS-350)

Provides information and guidance material that may be used by repair station certificate holders, operating under FAR Part 145, to design and implement an Internal Evaluation Program. The procedures and practices outlined in this AC can be applied to all of a repair station's operations. Establishing the type of program described in this AC is completely voluntary.

145-6

Repair Stations for Composite and Bonded Aircraft Structure (11/15/96) (AFS-350)

Provides information and guidance concerning an acceptable means, but not the only means, of demonstrating compliance with the requirements of 14 CFR parts 21, 43, 121, 125, 127, 135, and 145 regarding procedures and facilities for repairs and alterations of structures consisting of metal-bonded and fiber-reinforced materials (e.g., carbon, boron, aramid, and glass-reinforced polymeric materials mentioned in AC 20-107, Composite Aircraft Structures). Consideration will be given to any other method of compliance the applicant elects to present to FAA.

145-7

Issuance of Repair Station Certificates to JAA-Approved Maintenance Organizations Under the Maintenance Implementation Procedures of a Bilateral Aviation Safety Agreement (5/11/98) (AFS-350)

Provides information and guidance concerning an acceptable means, but not the only means, that may be used by a Joint Aviation Authorities (JAA) Approved Maintenance Organization (AMO) to obtain, renew, or amend a FAR Part 145 repair station certificate under the provisions of Maintenance Implementation Procedures (MIP) concluded pursuant to a

Bilateral Aviation Safety Agreement (BASA).

→ 145-8

Acceptance of Repair Stations by the JAA and JAA-Member NAAs Under the MIP of a Bilateral Aviation Safety Agreement (3/29/99) (AFS -350)

Provides information concerning an acceptable means, but not the only means, that should be used by repair station certificate holders in the U.S. to obtain Joint Aviation Authorities (JAA) and foreign National Aviation Authority (NAA) acceptance under the provisions of Maintenance Implementation Procedures (MIP) concluded pursuant to a Bilateral Aviation Safety Agreement.

145.101-1B

Application for Air Agency Certificate--Manufacturer's Maintenance Facility (11/30/83) (AIR-200)

Provides manufacturers with the procedures for obtaining a repair station certificate with a limited rating for a manufacturer (known as a manufacturer's maintenance facility (MMF)).

→ 147-2EE

Directory of FAA Certificated Aviation Maintenance Technician Schools (3/12/99) (AFS -640)

Transmits a directory of all FAA certificated aviation maintenance technician schools current as of 2/18/99.

147-3

Certification and Operation of Aviation Maintenance Technician Schools (AMTS) (5/22/91) (AFS -340)

Provides guidance to assist persons in obtaining and maintaining Federal Aviation Administration certification of an AMTS. FAR Part 147, Aviation Maintenance Technician Schools, specifies requirements for the certification and operation of an AMTS. The regulation includes both the curriculum requirements and operating rules for all certificated AMTS.

147-4

Guidelines for Evaluation of Military Aviation Training Courses.

(5/19/94) (AFS -340)

Provides guidelines to assist FAA-certificated aviation maintenance technician schools when crediting servicemen/women and veterans in the evaluation of aviation training completed while in the military.

Airports

Subject No. 150

AIRPORT PLANNING

150/5000-5C

Designated U.S. International Airports (12/3/96) (AAS -3)

Explains the different categories of U.S. airports designated to serve international air traffic and provides a list of these airports.

150/5000-6

Announcement of Availability--Micro-Paver, Pavement Management System (PMS) (4/16/87) (AAS -200)

Announces the availability of the Micro-Paver Program, Version 1.0.

150/5000-7

Announcement of Availability Report No. DOT/FAA/PP/87-1 Measuring the Regional Economic Significance of Airports (5/12/87) (APP-400)

Announces the availability of the report "Measuring the Regional Economic Significance of Airports."

150/5000-9A

Announcement of Availability Report No. DOT/FAA/PP/92-5, Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations (7/3/93) (APP-510)

Announces the availability of subject report.

150/5000-10A

Announcement of Availability Report No. DOT/FAA/PP-92-6, Estimating the

Regional Economic Significance of Airports

(7/3/93) (APP-400)

Announces the availability of subject report.

150/5000-11

Announcement of Availability All Cargo Carrier Activity Report (FAA Form 5100-108, Revised). (3/3/93) (APP-400)

Provides guidance for the submission of FAA Form 5100-108 (revised as of March 1993).

150/5000-12

Announcement of Availability--Passenger Facility Charge (PFC) Application Form 5500-1) (7/15/94) (APP-530)

Provides guidance for the submission of the PFC application.

150/5000-13

Announcement of Availability: RTCA Inc., Document RTCA-221 (9/7/94) (AAS -200)

Announces the availability of RTCA, Inc., Document RTCA/DO-221, Guidance and Recommended Requirements for Airport Surface Movement Sensors.

150/5000-14

Announcement of Availability--National Plan of Integrated Airport Systems (NPIAS) 1993-1997 (9/12/95) (APP-400)

Announces the availability of the National Plan of Integrated Airport Systems (NPIAS) 1993-1997.

NOISE CONTROL AND COMPATIBILITY PLANNING FOR AIRPORTS

150/5020-1

Noise Control and Compatibility Planning for Airports (8/5/83) (AEE-300)

Provides general guidance for noise control and compatibility planning for airports. Provides specific guidance for preparation

of airport noise exposure maps and airport noise compatibility programs by airport operators for submission under FAR Part 150 and the Aviation Safety and Noise Abatement Act of 1979. Contains an expanded Table of Land Uses Normally Compatible with Various Levels of Noise.

150/5050-3B

Planning the State Aviation System (1/6/89) (APP-400)

Provides general guidance in preparing a State airport system plan.
SN 050-007-00813-9.
\$6.00 Supt. Docs.

150/5050-4

Citizen Participation in Airport Planning (9/26/75) (APP-600)

Provides guidance for citizen involvement in airport planning. Although not mandatory for airport grant programs, it demonstrates the need for early citizen participation.

150/5050-7

Establishment of Airport Action Groups (6/23/87) (AAS-300)

Provides guidance on the establishment of airport action groups.

150/5060-5

Airport Capacity And Delay (Consolidated reprint includes Change 1).

(9/23/83) (AAS-100)

Explains how to compute airport capacity and aircraft delay for airport planning and design.

150/5060-5, Chg. 2

(12/1/95) (AAS-100)

Reflects the increased capacity resulting from the recent change in parallel runway separation criteria, adds a procedure for calculating savings associated with a reduction in aircraft delay, and updates the capacity and delay computer program references.

150/5070-3

Planning the Airport Industrial Park (9/30/65) (APP-400)

Provides guidance to communities, airport boards, and industrial developers for the

planning and development of Airport Industrial Parks.

150/5070-5

Planning the Metropolitan Airport System

(5/22/70) (APP-400)

Gives guidance in developing airport-system plans for large metropolitan areas. It may be used by metropolitan planning agencies and their consultants in preparing such system plans and by the FAA in reviewing same.
SN 050-008-00003-7.
\$7.50 Supt. Docs.

150/5070-6A

Airport Master Plans (6/1/85) (APP-400)

Provides guidance for the preparation of airport master plans, pursuant to the provisions of the Airport and Airway Improvement Act of 1982.
SN 050-007-00703-5.
\$5.50 Supt. Docs.

FEDERAL-AID AIRPORT PROGRAMS

150/5100-6D

Labor Requirements for the Airport Improvement Program (AIP)

(10/15/86) (APP-510)

Encompasses the basic labor and associated requirements for the Airport Improvement Program (ADAP). It is intended for sponsors using program assistance and for contractors and subcontractors working on projects under the program.

150/5100-10A

Accounting Records Guide for Airport Aid Program Sponsors

(4/13/76) (APP-500)

This advisory circular sets forth recordkeeping requirements imposed on sponsor of Airport Development Aid Program (ADAP) and the Planning Grant Program (PGP) projects by the Airport and Airway Development Act of 1970, as amended. In addition, the Federal Aviation Regulations (FARs) require a sponsor to establish and maintain a financial

management system that meets the standards set forth in FAR 152, Appendix K. This circular provides detailed explanations of these requirements.

→ 150/5100-13A

Development of State Standards for Non-Primary Airports (9/28/99) (AAS-200)

Provides guidelines for the development of state standards for nonprimary public-use airports as provided for in Title 49 United States Code, Section 47-05©.

150/5100-14C

Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects

(2/16/94) (AAS-200)

Provides guidance for airport sponsors in the selection and employment of architectural, engineering, and planning consultants under Federal Aviation Administration airport grant programs.

150/5100-15A

Civil Rights Requirements For The Airport Improvement Program (AIP)

(3/31/89) (APP-510)

Encompasses the basic civil rights requirements for the Airport Improvement Program (AIP). It is intended for sponsors using program assistance and for contractors and subcontractors working on projects under the program.

150/5100-16A

Airport Improvement Program Grant Assurance Number One--General Federal Requirements,

(10/4/88) (APP-510)

Describes the Federal requirements contained in Assurance 1 of the Grant Assurances required by the Airport and Airway Improvement Act of 1982, as amended. It is intended for sponsors receiving assistance under the Airport Improvement.

150/5100-17

Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects

(3/29/96) (APP-600)

Provides guidance to sponsors of airport projects developed under the Airport Improvement Program (AIP) to meet the requirements of the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (PL 91-646, as amended) and the regulations of the Office of the Secretary of Transportation, 49 CFR Part 24.

**150/5100-17, Chg. 1
(12/20/96) (APP-600)**

Change implements revised fixed moving expense schedule for residential displacements.

**150/5100-17, Chg. 2
(5/1/97) (APP-600)**

Update the AC by replacing with new Appendix 2 describing replacement housing payment options for mobile home displacement; modifying paragraph 8-3.

SURPLUS AIRPORT PROPERTY CONVEYANCE PROGRAMS

150/5150-2B

**Federal Surplus Personal Property for
Public Airport Purposes
(10/1/84) (APP-510)**

Attempts to Acquaint public airport owners and other interested parties with the Federal Surplus Personal Property Program for public airports and to outline procedures to be used in applying for and acquiring surplus personal property for this purpose.

AIRPORT COMPLIANCE PROGRAM

150/5190-1A

**Minimum Standards for Commercial
Aeronautical Activities on Public
Airports
(12/16/85) (AAS-310)**

Provides basic information and broad guidance material to assist the owners of public airports in developing and applying minimum standards for commercial aeronautical activities on public airports.

150/5190-2A

**Exclusive Rights at Airports .
(Consolidated reprint incorporates
Change 1).**

(4/4/72) (AAS-300)

Makes available to public airport owners, and to other interested persons, basic information and guidance on FAA's policy regarding exclusive rights at public airports on which Federal funds, administered by FAA, have been expended.

150/5190-4A

**Model Zoning Ordinance to Limit
Height of Objects Around Airports, A
(12/14/87) (AAS-100)**

Provides a model zoning ordinance to be used as a guide to control the height of objects around airports.

AIRPORT SAFETY— GENERAL

→ **150/5200-12B**

**Fire Department Responsibility in
Protecting Evidence at the Scene of an
Aircraft Accident
(9/3/99) (AAS-300)**

Furnishes general guidance on the proper preservation of evidence by airport employees, airport management and other personnel responsible for firefighting and rescue operations at the scene of an aircraft accident.

150/5200-18B

**Airport Safety Self-Inspection
(5/2/88) (AAS-310)**

Provides information to airport operators on airport self-inspection programs and identifies items that should be included in such a program.

150/5200-18B

**Autoinspeccion De Seguridad Para Los
Aeropuertos
(5/2/88) (AAS-310)
(Spanish Version).**

150/5200-28B

**Notices to Airmen (NOTAMS) for
Airport Operators**

(6/26/96) (AAS-310)

Provides guidance for use of the NOTAM system in airport condition reporting.

150/5200-30A

**Airport Winter Safety and Operations
(10/1/91) (AAS-100)**

Provides guidance to assist airport owners/operators in the development of an acceptable airport snow and ice control program and to provide guidance on appropriate field condition reporting procedures.

**150/5200-30A, Chg. 1
(11/22/91) (AAS-100)**

**150/5200-30A, Chg. 2
(3/27/95)**

Chapters 2 and 3 have been revised to incorporate additional guidance in conducting runway -friction surveys under winter operational conditions, and to provide a generic specification for fluid-based runway deicers/anti-icers that may be used on aircraft operational areas.

→ **150/5200-30A, Chg. 3
(11/30/98) (AAS-100)**

Provides guidance to assist airport operators in applying sand to runways under winter operational conditions; the use of runway and taxiway and taxiway edge light markers; and in reporting runway friction measurements taken under winter operational conditions.

→ **150/5200-30A, Chg. 4
(11/15/99) (AAS-100)**

Modifies guidance in reporting runway friction values measured under winter operational conditions.

→ **150/5200-31A**

**Airport Emergency Plan
(9/30/99) (AAS-310)**

Provides guidance for the preparation of emergency plans at civil airports.

150/5200-32

**Announcement of Availability: Bird
Strike Incident/Ingestion Report
(2/14/90) (AAS-310)**

Explains the nature of the revision of FAA Form 5200-7, Bird Strike Incident/Ingestion Report and how it can be obtained.

150/5200-33

**Hazardous Wildlife Attractants on or Near Airports
(5/1/97) (AAS-310)**

Provides guidance on locating certain land uses having the potential to attract hazardous wildlife to or in the vicinity of public-use airports.

**AIRPORT SAFETY
OPERATIONS
(RECOMMENDED
TRAINING, STANDARDS,
MANNING)**

150/5210-2A

**Airport Emergency Medical Facilities and Services
(11/27/84) (AAS-300)**

Provides information and advice so that airports may take specific voluntary preplanning actions to assure at least minimum first-aid and medical readiness appropriate to the size of the airport in terms of permanent and transient personnel.

150/5210-5B

**Painting, Marking, and lighting of Vehicles Used on an Airport
(7/11/86) (AAS-120)**

Provides guidance, specifications, and standards, in the interest of airport personnel safety and operational efficiency, for painting, marking, and lighting of vehicles operating in the airport air operations areas.

150/5210-6C

**Aircraft Fire and Rescue Facilities and Extinguishing Agents
(1/28/85) (AAS-100)**

Outlines scales of protection considered as the recommended level compared with the minimum level in Federal Aviation Regulation Part 139.49 and tells how these levels were established from test and experience data.

→ 150/5210-7C

**Aircraft Rescue and Firefighting Communications
(7/1/99) (AAS-300)**

Provides guidance for planning and implementing the airport Aircraft Rescue and Firefighting (ARFF) Communications Systems.

150/5210-13A

**Water Rescue Plans, Facilities, and Equipment
(5/31/91) (AAS-120)**

Provides guidance to assist airport operators in preparing for water rescue operations.

150/5210-14A

**Airport Fire and Rescue Personnel Protective Clothing
(7/13/95) (AAS-100)**

Identifies minimum standards for design, performance, testing, and safety of personnel protective equipment (PPE), frequently referred to as personnel protective clothing, for airport firefighting.

150/5210-15

**Airport Rescue and Firefighting Station Building Design
(7/30/87) (AAS-100)**

Provides standards and guidance for planning, designing, and constructing and airport rescue and firefighting station.

150/5210-17

**Programs for Training of Aircraft Rescue and Firefighting Personnel
(3/9/94) (AAS-100)**

Provides information on courses and reference materials for training of aircraft and firefighting (ARFF) personnel.

**150/5210-17, Chg. 1
(4/6/95)**

Changed to reflect a new source for the FAA Standard Basic Aircraft Rescue and Firefighting Curriculum, and to update other sources of training programs.

**150/5210-17, Chg. 2
(10/1/95) (AAS-100)**

Chapter 9 has been updated to reflect new course availability and new contact information for sources of training programs on aircraft rescue and firefighting.

150/5210-18

**Systems for Interactive Training of Airport Personnel
(4/13/94) (AAS-100)**

Provides guidance in the design of systems for interactive training of airport personnel.

150/5210-19

**Driver's Enhanced Vision System (DEVS)
(12/23/96) (AAS-100)**

Contains performance standards, specifications, and recommendations for DEVS.

**AIRPORT SAFETY
EQUIPMENT AND
FACILITIES**

150/5220-4B

**Water Supply Systems for Aircraft Fire and Rescue Protection
(7/29/92) (AAS-120)**

Provides guidance for the selection of a water source and standards for the design of a distribution system to support aircraft rescue and firefighting (ARFF) service operations on airports.

150/5220-9

**Aircraft Arresting System for Joint Civil/Military Airports
(4/6/70) (AAS-300)**

Updates existing policy and describes and illustrates the various types of military aircraft emergency arresting systems that are now installed at various joint civil/military airports. It also informs users of criteria concerning installations of such systems at joint civil/military airports.

150/5220-10B

**Guide Specification for Water/Foam Aircraft Rescue and Firefighting Vehicles
(10/20/97) (AAS-100)**

Provides new and additional guidance on selected topics; and provides clarification

relating to the sponsor's selection of various options and subsystem components presented in the original AC.

150/5220-13B

Runway Surface Condition Sensor Specification Guide (3/27/91) (AAS-100)

Provides guidance to assist airport operators, consultants, and design engineers in the preparation of procurement specifications for sensor systems which monitor and report runway surface conditions.

→ 150/5220-16C

Automated Weather Observing Systems (AWOS) for NonFederal Applications (12/13/99) (AUA-430)

Contains the FAA standard for nonFederal Automated Weather Observing Systems (AWOS)

150/5220-17A

Design Standards for an Aircraft Rescue and Firefighting Training Facility (1/31/92) (AAS-100)

Contains standards, specifications, and recommendations for the design of an aircraft rescue and firefighting training facility utilizing either propane or a flammable liquid hydrocarbon (FLH) as the fuel.

→ 150/5220-17A, Chg. 1 (11/24/98) (AAS-100)

Incorporates Chapter 4, Mobile ARTFF Training Devices, which provides the standards, specifications, and recommendations for the design of mobile RFF training devices.

150/5220-18

Buildings For Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials (10/15/92) (AAS-100)

Provides guidance for site selection, design and construction of buildings used to store and maintain airport snow and ice control equipment and materials.

150/5220-19

Guide Specification for Small Agent Aircraft Rescue and Fire Fighting Vehicles (12/7/93) (AAS-120)

Contains performance standards, specifications, and recommendations for the design, construction, and testing of a family of small, dual agent aircraft rescue and fire fighting (ARFF) vehicles

150/5220-20

Airport Snow and Ice Control Equipment (6/30/92) (AAS-120)

Provides guidance to assist airport operators in the procurement of snow and ice control equipment for airport use.

150/5220-20, Chg. 1 (3/1/94)

→ 150/5220-21B

Guide Specifications for Devices Used to Board Airline Passengers With Mobility Impairments (3/17/00) (AAS-100)

Contains performance standards, specifications, and recommendations for the design, construction, and testing of portable devices used in the boarding of airline passengers with mobility impairments.

→ 150/5220-22

Engineered Materials Arresting Systems (EMAS) for Aircraft Overruns (8/21/98)(AAS-100)

Contains standards for the planning, design, and installation of Engineered Materials Arresting Systems in runway safety areas. Engineered materials means high energy absorbing materials of selected strength, which will predictably crush under the weight of an aircraft.

150/5230-4

Aircraft Fuel Storage, Handling, and Dispensing On Airports (Consolidated reprint includes Changes 1 and 2). (8/27/82) (AAS-300)

Provides information on aviation fuel deliveries to airport storage and the handling, cleaning, and dispensing of fuel into aircraft.

150/5320-5B

Airport Drainage (7/1/70) (AAS-200)

Provides guidance for engineers, airport managers, and the public in the design and maintenance of airport drainage systems. SN 050-007-00149-5. \$5.50 Supt. Docs.

150/5320-6D

Airport Pavement Design and Evaluation (7/7/95) (AAS-200)

Provides guidance to the public for the design and evaluation of pavement at civil airports.

150/5320-6D, Chg. 1 (1/30/96) (AAS-200)

Corrects an error in the graph for Figure 2-4.

150/5320-12C

Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces (3/18/97) (AAS-100)

Contains guidelines and procedures for the design and construction of skid-resistant pavement; pavement evaluation, without or with friction equipment; and maintenance of high skid-resistant pavements.

150/5320-14

Airport Landscaping for Noise Control Purposes (1/31/78) (APP-400)

Provides guidance to airport planners and operators in the use of tree and vegetation screens in and around airports.

150/5320-15

Management of Airport Industrial Waste (2/11/91) (AAS-100)

Provides basic information on the characteristics, management, and regulations of industrial wastes generated at airports.

150/5320-15, Chg. 1 (4/22/97) (AAS-100)

Provides guidance on best management practices to eliminate, prevent, or reduce

pollutants in storm water runoff associated with airport industrial activities.

150/5320-16

**Airport Pavement Design for the Boeing 777 Airplane
(10/22/95) (AAS -200)**

Provides thickness design standards for pavements intended to serve the Boeing 777 airplane.

**DESIGN CONSTRUCTION,
AND MAINTENANCE—
GENERAL**

150/5300-7B

**FAA Policy on Facility Relocations
Occasioned by Airport Improvements or
Changes
(11/8/72) (ABU-10)**

Reaffirms the aviation community of the FAA policy governing responsibility for funding relocation, replacement and modification to air traffic control and air navigation facilities that are made necessary by improvements or changes to the airport.

150/5300-9A

**Predesign, Prebid, and Preconstruction
Conferences for Airport Grant Projects
(5/1/85) (AAS -200)**

Provides guidance for conducting predesign, prebid, and preconstruction conferences for projects funded under the FAA airport grant program.

150/5300-11

**Announcement of Availability Report
No. FAA-AAS -80-1, National Runway
Friction Measurement Program
(4/21/81) (AAS -200)**

Announces the availability of the National Runway Friction Measurement Program Final Report.

150/5300-13

**Airport Design (Consolidated reprint
includes Changes 1 thru 5).
(5/11/98) (AAS -110)**

Contains the FAA's standards and recommendations for airport design.
SN 050-007-01208-0
\$26.00 Supt. Docs.

150/5300-14

**Design of Aircraft Deicing Facilities
(8/23/93) (AAS -100)**

Provides standards, specifications, and guidance for designing aircraft deicing facilities.

→ 150/5300-14, Chg. 1

(8/13/99) (AAS -100)

Updates the definition of aircraft deicing facilities and holdover times of fluids,

design criteria for aircraft de/anti-icing fluid storage and transfer systems, information concerning recycling of glycols, and references.

**INFLUENCE OF AIRCRAFT
PERFORMANCE ON
AIRCRAFT DESIGN**

150/5325-4A

**Runway Length Requirements for
Airport Design (Consolidated reprint
includes Change 1 dtd 3-11-91).
(1/29/90) (AAS -110)**

Provides design standards and guidelines for determining recommended runway lengths.

150/5335-5

**Standardized Method of Reporting
Airport Pavement Strength PCN
(6/15/83) (AAS -200)**

Provides guidance for using the standardized International Civil Aviation Organization (ICAO) method to report airport pavement strength. The standardized method is known as the ACN/PCN method.

150/5335-5, Chg. 1

(3/6/87)

→ 150/5340-1H

**Standards for Airport Markings
(8/31/99) (AAS -300)**

Contains the Federal Aviation Administration (FAA) standards for markings used on airport runways, taxiways, and aprons.

150/5340-4C

**Installation Details for Runway
Centerline Touchdown Zone Lighting
Systems (Consolidated reprint includes
Changes 1 and 2).**

(5/6/75) (AAS -200)

Describes standards for the design and installation of runway centerline and touchdown zone lighting systems.

150/5340-5B

**Segmented Circle Airport Marker
System (Consolidated reprint includes
Change 1).**

(12/21/84) (AAS -200)

Sets forth standards for a system of airport marking consisting of certain pilot aids and traffic control devices.

**150/5340-14B
Economy Approach Lighting Aids
(Consolidated reprint includes Changes 1 and 2).**

(6/19/70) (AAS-200)

Describes standards for the design selection, siting, and maintenance of economy approach lighting aids.

→ **150/5340-14B, Chg. 3
(1/26/99) (AAS-200)**

Updates the location and height requirements for runway end identifier lights (REILS).

**150/5340-17B
Standby Power for Non-FAA Airport
Lighting Systems
(1/6/86) (AAS-200)**

Describes standards for the design, installation, and maintenance of standby power for nonagency owned airport visual aids associated with the National Airspace System (NAS) and the national system of airports.

**150/5340-18C
Standards for Airport Sign Systems
(Consolidated Reprint Incorporates Change 1)**

(7/31/91) (AAS-300)

Contains the Federal Aviation Administration standards for the siting and installation of signs on airport runways and taxiways.

**150/5340-21
Airport Miscellaneous Lighting Visual
Aids
(3/25/71) (AAS-200)**

Describes standards for the system design, installation, inspection, testing, and maintenance of airport miscellaneous visual aids; i.e., airport beacons, beacon towers, wind cones, wind tees, and obstruction lights.

**150/5340-23B
Supplemental Wind Cones
(5/11/90) (AAS-200)**

Describes criteria for the location and performance of supplemental wind cones.

**150/5340-24
Runway and Taxiway Edge Lighting
System (Consolidated reprint includes Change 1).**

(9/3/75) (AAS-200)

Describes standards for the design, installation, and maintenance of runway and taxiway edge lighting.

**150/5340-26
Maintenance of Airport Visual Aid
Facilities (Spanish Language Version
Available).**

(8/26/82) (AAS-200)

Provides recommended guidelines for maintenance of airport visual aid facilities.

**150/5340-26
Mantenimiento de Ayudas Visuales de
Aeropuertos
(8/26/82) (AAS-200)
Spanish Version**

**150/5340-27A
Air-to-Ground Radio Control of Airport
Lighting Systems
(3/4/86) (AAS-200)**

Contains the FAA standard operating configurations for air-to-ground radio control of airport lighting systems.

→ **150/5340-28
Low Visibility Taxiway
(9/1/98) (AAS-200)**

Describes the standards for design, installation, and maintenance of low visibility taxiway lighting systems, including taxiway centerline lights, stop bars, runway guard lights, and clearance bars.

→ **150/5340-29
Installation Details for Land and Hold
Short Lighting Systems
(12/30/99) (AAS-200)**

Contains the FAA's standard for the design and installation of land and hold short lighting systems.

**150/5345-1V
Approved Airport Equipment**

(6/6/97) (AAS-200)

Cancels AC 150/5345-1U, Approved Airport Equipment dated 2/20/89, and directs replacement of any reference of AC 150/5345-1 with AC 150/5345-53, Airport Lighting Equipment Certification Program.

→ **150/5345-3E
Specification for L-821 Panels for
Control to Airport Lighting
(9/1/98) (AAS-200)**

Provides the specification requirements for panels used for remote control of airport lighting and auxiliary systems.

**150/5345-5A
Circuit Selector Switch
(3/23/82) (AAS-200)**

This advisory circular contains a specification for a circuit selector switch for use in airport lighting circuits.

**150/5345-7D
Specification for L-824 Underground
Electrical Cable for Airport Lighting
Circuits (Consolidated reprint includes Change 1).
(5/19/81) (AAS-200)**

Describes the specification requirements for L-824 electrical cables.

**150/5345-10E
Specification for Constant Current
Regulators Regulator Monitors
(10/16/84) (AAS-200)**

Contains a specification for constant current regulators used on airport lighting circuits, and for a monitor that reports on the status of the regulator.

**150/5345-12C
Specification for Airport and Heliport
Beacon
(1/9/84) (AAS-200)**

Contains equipment specifications for light beacons which are used to locate and identify civil airports, seaplane bases, and heliports.

**150/5345-13A
Specification for L-841 Auxiliary Relay
Cabinet Assembly for Pilot Control of
Airport Lighting Circuits
(8/8/86) (AAS-200)**

Contains the specification requirements for a relay cabinet used to control airfield lighting circuits. The L-841 consists of an enclosure containing a DC power supply, control circuit protection and 20 pilot relays.

→ 150/5345-26C

Specification for L-823, Plug and Receptacle, Cable Connectors (4/17/00) (AAS-200)

Contains the specification for plug and receptacle (cable connectors) used with underground power cables, isolation transformer leads, and light fixture leads for airport lighting systems.

150/5345-27C

Specification for Wind Cone Assemblies (7/19/85) (AAS-200)

Contains a specification for wind cone assemblies to be used to provide wind information to pilots of aircraft.

150/5345-28D

Precision Approach Path Indicator Systems (PAPI) (Consolidated reprint includes Change 1) (1/3/91) (AAS-200)

Describes the specification requirements for precision approach path indicator (PAPI) and abbreviated precision approach path indicator (A-PAPI) equipment and accessories.

150/5345-39B

FAA Specification L-853, Runway and Taxiway Centerline Retroreflective Markers (Consolidated reprint includes Change 1). (12/9/80) (AAS-200)

Describes specification requirements for L-853 Runway and Taxiway Retroreflective markers, for the guidance of the public.

150/5345-42C

Specification for Airport Light Bases, Transformer Houses, Junction Boxes and Accessories (Consolidated Reprint includes Change 1) (6/8/89) (AAS-200)

Contains specification for containers designed to serve as airport light bases,

transformer housings, junction boxes and related accessories.

150/5345-43E

Specification for Obstruction Lighting Equipment (10/19/95) (AAS-200)

Contains FAA specification for obstruction lighting equipment.

150/5345-44F

Specification for Taxiway and Runway Signs (Consolidated reprint includes change 1) (1/5/94) (AAS-200)

Contains a specification for lighted and unlighted signs to be used on taxiways and runways.

150/5345-45A

Lightweight Approach Light Structure (12/9/87) (AAS-200)

Presents the specifications for lightweight structures for supporting lights as used in visual navigational aid systems.

→ 150/5345-46B

Specification for Runway and Taxiway Light Fixtures (9/1/98) (AAS-200)

Contains specifications for light fixtures to be used on airport runways and taxiways.

150/5345-47A

Isolation Transformers for Airport Lighting Systems (12/9/87) (AAS-200)

Contains the specifications requirements for series-to-series isolation transformers for use in airport lighting systems.

150/5345-49A

Specification L-854, Radio Control Equipment (8/8/86) (AAS-200)

Contains the specification for radio control equipment to be used for controlling airport lighting facilities.

150/5345-50

Specification for Portable Runway Lights (Consolidated reprint includes Change 1). (10/16/78) (AAS-200)

Contains a specification for a battery operated light unit to be used to outline a runway area temporarily.

150/5345-51

Specification for Discharge-Type Flasher Equipment (Consolidated reprint includes Change 1). (8/14/81) (AAS-200)

Contains the specifications for discharge-type flashing light equipment to be used for runway and identification lights (REIL) and for an omnidirectional approach lightning system (ODALS).

150/5345-52

Generic Visual Glideslope Indicators (GVGI) (6/21/88) (AAS-200)

Contains the FAA standards for generic visual glideslope indicators systems. GVGI systems provide pilots with visual glideslope guidance during approaches for landing at general aviation airports.

→ 150/5345-53B

Airport Lighting Equipment Certification Program (10/23/98) (AAS-200)

Describes the Airport Lighting Equipment Certification Program (ALECP).

→ 150/5345-54

Specification for L-1884 Power and Control Unit for Land and Hold Short (4/29/99) (AAS-200)

Contains the FAA standards for power and control units for Land and Hold Short Lighting Systems.

150/5360-8B

Announcement of Availability of Information on Foreign Airport Planning, Design, Construction, and Trade Opportunities (6/26/97) (AAS-102)

Provides information on trade opportunity programs and publications relating to foreign airport planning, design, and construction.

150/5360-9

Planning and Design of Airport Terminal Facilities at Non-Hub Locations

(4/4/80) (AAS -100)

This advisory circular provides guidance material for the planning and design of airport terminal buildings at non-hub locations.

150/5360-10

Announcement of Availability--Airport Landslide Simulation Model (ALSIM)

(4/24/84) (AAS -3)

Announces the availability and describes some of the features of a dynamic simulation computer model for use by airport planners, designers, and operators in evaluating and comparing the effectiveness of alternative airport terminal and landslide configurations and facilities.

150/5360-11

Energy Conservation for Airport Buildings

(5/31/84) (AAS -200)

Provides guidance for promoting energy conservation in the design and operation of airport buildings; for initiating energy conservation programs; and for conducting airport building energy assessments.

→ **150/5360-12B**

Airport Signing and Graphics

(3/5/99) (AAS -100)

Provides guidance on airport related signs and graphics.

150/5360-13

Planning and Design Guidelines for Airport Terminal Facilities

(4/22/88) (AAS -100)

Provides guidelines for the planning and design of airport terminal buildings and related access facilities.

150/5360-13, Chg. 1
(1/19/94) (AAS -100)

150/5370-2C

Operational Safety on Airports During Construction

(5/31/84) (AAS -300)

Concurring operational safety on airports with special emphasis on safety during

periods of construction activity, to assist airport operators in complying with Part 139.

150/5370-6B

Construction Progress and Inspection Report--Airports Grant Program

(8/7/89) (AAS -200)

Provides guidance for submission of a report on construction progress of Airport Development Aid Program (ADAP) projects.

→ **150/5360-14**

Access to Airports by Individuals with Disabilities (6/30/99) (AAS -100)

Assists airports in complying with the current laws and regulations regarding individuals with disabilities.

150/5370-10A

Standards for Specifying Construction of Airports

(2/17/89) (AAS -200)

Provides standards for construction of airports. Items covered include earthwork, drainage, paving, turfing, lighting, and incidental construction.
SN 050-007-00821-0.
\$26.00 Supt. Docs.

150/5370-10A, Chg. 1
(6/15/90)

Revised Item P-501, Portland Cement Concrete Pavement, to reflect the use of cementitious materials and chemical admixtures.

150/5370-10A, Chg. 2
(11/2/90)

Revised Items P-155, D-701, D-705, D-751, and F-162, have been revised to reflect changes in material specifications and new materials.

150/5370-10A, Chg. 3
(1/9/91)

Revised Item P-625, Coal-Tar Emulsion Sealcoat, is withdrawn.

150/5370-10A, Chg. 4
(7/7/92) (AAS -200)

Revised Item P-401, Plant Mix Bituminous Pavements to incorporate quality assurance provisions.

150/5370-10A, Chg. 5
(4/2/93) (AAS -200)

Revises Table 2 and deletes requirement for voids filled with asphalt.

150/5370-10A, Chg. 6
(1/25/94) (AAS -200)

Adds Section 100 and 110 to the General Provisions of the AC. The Notice to Users, Notice, and Item P-401 have been revised.

150/5370-10A, Chg. 7
(5/20/94) (AAS -200)

Item P-501, Portland Cement Concrete, has been revised to incorporate quality assurance provisions. Pay incentives have been added when strength exceeds design and acceptance requirements.

150/5370-10A, Chg. 8
(7/6/94)

Revised Item F-162, Chain Link Fences, to incorporate new materials.

150/5370-10A, Chg. 9
(9/10/96) (AAS -200)

Item P-620, Runway and Taxiway Painting, has been revised to specify waterborne, epoxy, methacrylate, and solvent based paints. Glass beads and silica sand have been given additional emphasis to increase conspicuity and friction characteristics of markings.
SN 050-007-008210
\$23.00

→ **150/5370-10A, Chg. 10**
(3/11/99) (AAS -200)

Clarifies PWL concepts and explains the degree of uncertainty (risk) associated with acceptance plans when small fractions of material are used to evaluate a day's production and informs the contractor, as a result, that production quality must be consistently equal to or higher than the lot acceptance criteria to consistently offset his/her risk.

→ **150/5370-10A, Chg. 11**
(5/20/99) (AAS -200)

Item P-626 Emulsified Asphalt Slurry Seal Surface Treatment has been revised to incorporate recent changes in material specifications, new materials, and construction practices for slurry seals.

→ **150/5370-10A, Chg. 12**
(2/22/99) (AAS -200)

Item P-620 Runway and Taxiway Painting has been revised to clarify AIP and PFC funded project requirements for drop-on glass beads in paint to improve conspicuity and friction characteristics, make minor technical corrections, and add tolerances to dimensions and spacings of markings.

150/5370-11
Use of Nondestructive Testing Devices
in the Evaluation of Airport Pavements
(Consolidated reprint includes
Change 1).
(6/4/76) (AAS -200)

Provides guidance to the public on the use of nondestructive testing devices as aids in the evaluation of the load-carrying capacity of airport pavements.

150/5370-12
Quality Control of Construction for
Airport Grant Projects
(9/6/85) (AAS -200)

Provides information to ensure the quality of construction accomplished under the FAA Airports grant program.

150/5370-13
Offpeak Construction of Airport
Pavements Using Hot-Mix Asphalt
(8/27/90) (AAS -200)

Provides guidance for the planning, coordination, management, design, testing, inspection, and execution of offpeak construction of airport pavements using hot mix asphalt paving materials.

150/5370-14
Hot Mix Asphalt Paving Handbook
(10/15/91) (AAS -200)

Provides guidance on asphalt paving operations including plant operations, transportation of materials, surface preparation, laydown and compaction. SN 050-007-00925-9.

\$17.00 Supt. Docs.

150/5380-5B
Debris Hazards at Civil Airports
(7/5/96) (AAS -100)

Discusses problems of debris at airports, gives information on foreign objects, and tells how to eliminate such objects from operational areas.

150/5380-6
Guidelines and Procedures for
Maintenance of Airport Pavements
(12/3/82) (AAS -200)

Provides guidelines and procedures for maintenance of rigid and flexible airport pavements. SN 050-007-00627-6. \$10.00 Supt. Docs.

150/5380-7
Pavement Management System
(9/28/88) (AAS -200)
Presents the concepts of a Pavement Management System, discusses the essential components of such a system, and outlines how it can be used in making cost-effective decisions regarding pavement maintenance and rehabilitation.

150/5390-2A
Heliport Design
(1/20/94) (AAS -100)
Provides recommendations and standards for heliport and helistop design.

150/5390-3
Vertiport Design
(5/31/91) (AAS -100)
Provides guidance to planners and communities interested in developing a civil vertiport or vertistop.

150/5395-1
Seaplane Bases
(6/29/94) (AAS -100)
Provides guidance to assist operators in planning, designing, and constructing seaplane base facilities.

170-6C
Use of Radionavigation Land Test
Station and Signal Generators
(2/13/81) (ASM-500)

Gives information as to the frequencies on which the FAA will authorize and the FCC will license radionavigation land test stations. It also discusses the interference potential of signal generators operating in aeronautical bands of the radio spectrum and how this interference can be alleviated.

170-9
Criteria for Acceptance of Ownership
and Servicing of Civil Aviation
Interest(s) Navigational and Air Traffic
Control Systems and Equipment
(11/26/68) (ASM-500)

Contains a revised FAA policy under which the FAA accepts conditional ownership of equipment and systems from civil aviation interests, without the use of Federal funds, and operates, maintains, and provides the logistic support of such equipment.

170-11
Amendment of Federal Aviation
Regulation Part 171 (FAR-171) Cost of
Flight and Ground Inspections
(9/17/70) (ASM-500)

Alerts the public to the amendment to FAR Part 171 pertaining to the payment of ground and flight inspection charges prior to the issuance of an approved IFR procedure.

170-13
Approach Lighting System
Configurations and Energy
Conservation
(9/6/77) (APS -440)

Advises interested persons of the agency's plan for the next several years to improve federally owned approach light systems installed on instrument approach runways by adding low-impact resistance structures and reducing energy consumption.

170-14
Implementation of 50 kHz/Y Channels
for ILS/VOR/DME
(7/30/92) (ASM-500)

Advises aircraft owners, operators, and radio equipment manufacturers of the FAA's continued implementation of 50 kHz/Y or Omnidirectional Range (VOR) frequency assignments.

ADMINISTRATIVE Subject No. 180

➔ 183-32J

Certificated Technical Personnel Examiners Directory (7/13/99) (AFS-640)

Transmits a consolidated directory of FAA Certificated Technical Personnel Examiners, current as of June 7, 1999, under the authority of Federal Aviation Regulation Part 183.

➔ 183-35H

Airworthiness Designee Function Codes and Consolidated Directory for DMIR/DAR/ODAR/DAS/DOA and SFAR No. 36 (9/21/98) (AFS-640)

Contains information concerning designee application, authorized functions, and initial and subsequent certificates of authority for DMIR/DAR/ODAR /DAS/DOA and SFAR No. 36.

➔ 183.29-1HH

Designated Engineering Representatives (3/1/00) (AFS-610)

Directory of Designated Engineering Representatives available for consulting work. Available electronically at internet site <http://av-info.faa.gov>.

187-1

Flight Standards Service Schedule of Charges Outside the United States (3/31/95) (AFS-50)

Transmits a schedule of charges for services of FAA Flight Standards aviation safety inspectors outside the U.S. The methodology for determining these charges and the initial charges developed by this methodology were established by rulemaking action to FAR Part 187, Docket No. 27809; Notice No. 94-24, Fees for Certification Services and Approvals Performed Outside the United States.

187-2

Aircraft Certification Service Fees for Providing Production Certification- Related Services Outside

(3/11/98) (AIR-230)

Provides information concerning applications and fees for production certification-related services provided outside the United States by Federal Aviation Administration (FAA) Aircraft Certification Service personnel. This AC provides a means of compliance with Title 14 Code of Federal Regulations (CFR) part 197, Fees (part 187), Appendix C, Fees for Providing Production Certification-Related Services Outside the United States.

FLIGHT INFORMATION Subject No. 210

210-5B

Military Flying Activities (8/8/90) (ATM-400)

Provides information about military flying activities in the National Airspace System, describes the various types of routes and areas allocated for this purpose, and explains how information on the location and status of these routes and areas can be obtained.

211-2

Recommended Standards for IFR Aeronautical Charts (3/20/67) (ATP-250)

Sets forth standards recommended by the Federal Aviation Administration for the guidance of the public in the issuance of IFR aeronautical charts for use in the National Airspace System (NAS).

APPLICATIONS Subject No. 413

➔ 413-1

Licensing Application Procedures (8/16/99) (AST-6)

Provides guidance to license applicants on the procedural aspects of the application process. These procedures apply to all applicants whether for a license to launch a launch vehicle, to reenter a reentry vehicle, or to operate a launch or reentry site.

FINANCIAL RESPONSIBILITY FOR LICENSED LAUNCH ACTIVITIES Subject No. 440

➔ 440-1, Part 440 Insurance Conditions (11/3/98) (AGC-250)

Describes how insurance policies obtained by licensees to meet the requirements of 14 CFR Part 440 may satisfy certain conditions of coverage.