14 CFR and Publications

Objective

To understand the governing documents for safe and legal flight, where to find them, and how they are updated over time.

Motivation

Pilots need to understand the scope and organization of regulatory information that pertain to their flight. Flight instructors need to understand the scope and level of information found in the various handbooks, advisory circulars, and other documents.

Overview

- 1. Overview of 14 CFR
- 2. 14 CFR Part 1
- 3. 14 CFR Part 61
- 4. 14 CFR Par 91
- 5. 49 CFR part 830: NTSB Reporting Information
- 6. Aeronautical Information Manual (AIM)
- 7. Advisory Circulars, INFOs, and SAFOs
- 8. Airman Certification Standards or Practical Test Standards.

Title 14 of the Code of Federal Regulations (14 CFR)

- Relevant parts:
 - Part 1: Definitions and General Requirements
 - Part 21: Airworthiness Standards, Normal Category
 - Part 43: Maintenance
 - Part 61: Airmen Certification, Pilots and Instructors
 - Part 67: Medical Standards
 - Part 91: General Operating and Flight Rules
- Where to find the FARs
 - eCFR Website
 - ForeFlight documents
 - ASA FAR/AIM App

14 CFR Part 1: Definitions

- Part 1 defined acronyms and terms used throughout
 - Aircraft "category": E.g. Airplane; rotorcraft; glider; and lighter-than-air
 - Aircraft "class": E.g. Single engine; multiengine; land; water; gyroplane
 - Weather "ceilings": Overcast or broken cloud or sky obscuration
 - Controlled airspace: Any airspace where ATC is provided to IFR/VFR flight

14 CFR Part 61

- Subpart A General: 61.1 61.60
 - $\circ~$ 61.23 Medical durations
 - 61.31 Type ratings, complex, tailwheel, high-performance
 - \circ 61.53 Medical deficiencies
 - \circ 61.56 Flight reviews
 - 61.57 Currency
 - 61.51 Pilot logbooks

14 CFR Part 61 (cont.)

- Subpart B Aircraft Ratings and Pilot Authorizations: 61.61 61.77
 - 61.63 Additional category/class ratings
 - 61.75 Foreign pilot license

14 CFR Part 61: Pilot Qualifications

- Subpart C Student Pilots: 61.81 61.95
- Subpart D Recreational Pilots: 61.96 61.101
- Subpart E Private Pilots: 61.102 61.120
- Subpart F Commercial Pilots: 61.121 61.141
- Subpart G Airline Transport Pilots: 61.151
 69.171

- For each license:
 - Applicability
 - Eligibility
 - Aeronautical experience
 - Flight proficiency
 - Privileges and limitations

14 CFR Part 61: Instructor Qualifications

- Subpart H Instructors Other than Sport 61.181
 61.201
- Subpart I Ground Instructors: 61.211 61.217
- Subpart J Sport Pilots: 61.301 61.327
- Subpart K Flight Instructors With a Sport Pilot Rating: 61.401 – 61.429

- For each license:
 Applicability
 - Eligibility
 - Aeronautical experience
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 proficiency
 - Privileges and limitations

14 CFR Part 91

- Contains general operating rules applicable to all aircraft
- Subparts
 - General
 - Flight rules
 - VFR Operations
 - IFR Operations
 - Equipment and Instruments
 - Special Flight Operations
 - Maintenance and Preventative Maintenance

14 CFR Part 91 - General Rules

- 91.3: Responsibility and authority of PIC
- 91.7: Aircraft airworthiness
- 91.9: Flight manuals, markings, placards
- 91.15: Dropping objects
- 91.17: Alcohol and drugs

14 CFR Part 91 - Flight Rules

- 91.103 Preflight items
- 91.107 Use of seatbelts
- 91.111 Operating near other aircraft
- 91.113 Right of way rules
- 91.117: Speed limits
- 91.119: Minimum safe altitude
- 91.121: Altimeter settings
- 91.123: ATC instructions
- 91.125 ATC light signals

14 CFR Part 91 - Flight Rules, Airspace

- 91.126: Operations in Class G airspace
- 91.126: Operations in Class E airspace
- 91.129: Operations in Class D airspace
- 91.130 Operations in Class C airspace
- 91.131: Operations in Class B airspace
- 91.133: Restricted and prohibited areas
- 91.135: Operations in Class A airspace

14 CFR Part 91 - Flight Rules, VFR

- 91.151: Fuel requirements for VFR
- 91.153: VFR flight plan required information
- 91.155: VFR weather minimums
- 91.157: SVFR weather minimums
- 91.159: VFR cruising altitude

14 CFR Part 91 - Equipment, Instrument, Certification

- 91.203: Airworthiness and registration certificates
- 91.205: Required VFR and IFR equipment (ATOMATOFLAMES)
- 91.207: ELTs
- 91.209: Aircraft lights
- 91.211: Supplemental oxygen
- 91.213: Inoperative equipment
- 91.215: Transponder requirements
- 91.225: ADS-B Out requirements

14 CFR Part 91 - Special Flight Operations

- 91.303: Aerobatic flight
- 91.309: Glider towing
- 91.319: Experimental aircraft

14 CFR Part 91 - Maintenance and Preventative Maintenance

- 91.407: Return to service by A&P mechanic, test flight after large operation
- 91.409: Annual and 100 hour inspections
- 91.411: Altimeter and Mode C inspections
- 91.413: Transponder inspections
- 91.417: Maintenance records

49 CFR Part 830 - NTSB

Definition Aircraft Accidents, Incidents, Overdue Aircraft

- Accident: Death or serious injury, or aircraft receives substantial damage
- Serious injury:
 - $\circ\,$ Hospitalization of more than 48 hours
 - Bone fractures, severe bleeding, nerve, muscle or tendon damage
 - Internal organ damage
 - 2nd/3rd degree burns
- Aircraft incident: Anything other than an accident which could affect safety of operations

49 CFR Part 830 - NTSB

Requires *immediate* notification of accident, or the following serious incidents:

- Flight control failure/malfunction
- Flight crewmember unable to perform duties due to illness or injury
- In-flight fire
- Aircraft collision in flight
- Damage to property > \$25,000
- Release of a propeller blade
- Complete loss of EFIS display information
- Aircraft is overdue and believed to be involved in an accident

49 CFR Part 830 - NTSB

Report Requirements

- After an accident: A report must be filed within 10 days
- After an overdue is aircraft is missing: A report must be filed after 7 days
- After an aircraft incident: A report is only needed if requested

Aeronautical Information Manual

- Information about basic flight procedure and ATC services within the National Airspace System
- Non-regulatory in nature
- Contains things like:
 - Traffic patterns
 - ATC phraseology
 - Human factors
 - \circ IFR operations
- Issued annually and revised several times per each

AIM - Explanation of Changes

Explanation of Changes

Effective: February 20, 2025

a. 3-5-5. PUBLISHED VFR ROUTES

9-1-4. GENERAL DESCRIPTION OF EACH CHART SERIES This change updates the names to three visual flight rules (VFR) charted products published by Aeronautical Information Services via the Terminal Area Chart (TAC) and VFR Flyway Planning Chart. These charts contain the VFR Flyway and VFR Transition Routes developed where applicable due to traffic volume and airspace complexity. The descriptions for each route are updated to better describe the products and the compliance requirements for each. A new section covering the Helicopter Route Chart is added to include a description and example of this charted VFR product.

b. 4-7-1. INTRODUCTION AND GENERAL POLICIES This change removes subparagraph f that previously instructed pilots to use Strategic Lateral Offset Procedures (SLOP) when flying in airspace over the Gulf of America. We have revised the general guidance on SLOP in the U.S. AIP, ENR 7.1, accordingly.

c. 5-1-3. NOTICE TO AIRMEN (NOTAM) SYSTEM This change removes mention of Chart Update Bulletin and replaces it with a description and link to the AJV-A website containing Safety Alerts, Charting Notices and Digital Product Notices.

d. 5-2-5. LINE UP AND WAIT (LUAW) This change moves the cautionary statement "Line Up and Wait (LUAW) is not an authorization to takeoff" to the first paragraph for emphasis. This change also adds a note advising readers of the increased number of instances where pilots correctly read back LUAW instructions yet depart without a takeoff clearance. It reminds pilots of the need for vigilance during LUAW operations. This change emphasizes situational awareness and vigilance to subparagraphs respectively.

e. 5-4-5. INSTRUMENT APPROACH PROCEDURE (IAP) CHARTS This change clarifies the "Fly Visual" guidance by adding the recommendation that the visual segment should be flown with flight

- Lists changes for the latest edition of the AIM
- Where to find the AIM
 - FAA.gov website
 - ForeFlight documents
 - ASA FAR/AIM App

Advisory Circulars (ACs)

- Advisory circulars are official FAA documents published to delivery non-regulatory information to the aviation community
- They contain guidance for things like:
 - $\circ\,$ Airworthiness compliance
 - Pilot certification
- Give recommendations for complying with FARs
- Help resolve misunderstandings resulting from the FARs
- Organized by CFR part (00, 61, 91), given a new letter after each revision
 E.g. 61-65J
- Where to find ACs
 - FAA.gov AC page

Example Advisory Circulars

- 60-28B: FAA English Language Standards
- 61-65J: Guidance for instructors and pilot applications, list of endorsements
- 68-1A: Guidance for BasicMed
- 90-48E: Pilots Role in Collision Avoidance
- 43-12A: Preventative Maintenance



U.S. Department of Transportation Federal Aviation Administration SAFO 24001 DATE: 01/21/24

SAFO Safety Alert for Operators

Flight Standards Service Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Subject: Boeing 737-900ER Mid-Cabin Door Plug Inspection.

Purpose: This SAFO informs aircraft operators under Title 14 of the Code of Federal Regulations (14 CFR) Parts 91, 91 subpart K (Part 91K), 121, 125, 129, and 135 about information pertaining to the Boeing 737-900ER fuselage plug assembly. This SAFO also recommends that operators perform key portions of the Boeing 737-900ER Fuselage Plug Assembly Maintenance Planning Document (MPD) Inspection Tasks, related to the 4 locations where a bolt/nut/pin installation is used to secure the door to the airframe, as soon as possible. This information is applicable to all operators under 14 CFR that operate the Boeing 737-900ER aircraft. The Federal Aviation Administration (FAA) continues to evaluate data involving the mid-cabin door plug and will determine additional action as necessary.

Background: Following the in-flight loss of a mid-cabin door plug on a Boeing 737-9 MAX airplane, on January 5, 2024, the FAA began collecting data on the incident airplane and related airplanes to scope the applicability of any action to mitigate risk to the fleet. On January 6, 2024, the FAA determined an unsafe condition existed with the Boeing 737-9 MAX and an Emergency Airworthiness Directive (EAD) was warranted.

Safety Alert for Operators (SAFOs)

A Safety Alert for Operators (SAFO) is an information tool that alerts, educates, and makes recommendations to the aviation community. This community includes air carrier certificate holders, fractional ownership.

Example:

- SAFO 25001: Risks Associated with Visual Approaches
- SAFO 24001: Boeing 737ED Exit door plugs

Find on the FAA.gov SAFO page



U.S. Department of Transportation **Federal Aviation** Administration

Flight Standards Service Washington, DC

Information for Operators

InFO

DATE: 05/09/24

InFO 24005

http://www.faa.gov/other visit/aviation industry/airline operators/airline safety/info/all infos

An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements, with relatively low urgency or impact on safety. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Subject: Instrument Approach Operations with a Visual Guidance Fix (VGF) and an Extended Visual Segment.

Purpose: This InFO serves to inform Title 14 of the Code of Federal Regulations (14 CFR) part 91, 91K, 121, 125, 129, 135 Operators, and part 142 Training Centers, of interim information on flying public part 97 standard instrument approaches with an extended visual segment.

Background: In 2019, as a response to a Commercial Aircraft Safety Team request, the Federal Aviation Administration (FAA) established public Required Navigation Performance Approach (RNP APCH) procedures that uniquely offer the flightcrew continuous advisory lateral and vertical guidance in an extended visual segment leading to the landing runway threshold. Examples include Area Navigation (RNAV) (Global Positioning System (GPS)) runway (RWY) 33 at Ronald Reagan Washington National Airport (KDCA), RNAV (GPS) Z RWY 13L and RNAV (GPS) Z RWY 13R at John F. Kennedy International Airport (KJFK), and the RNAV (GPS) X RWY 31 at LaGuardia Airport (KLGA).

Information For Operators (InFOs)

InFOs contain information for operators that help them meet certain administrative, regulatory, or operational requirements with low urgency or impact on safety.

Similar to SAFOs, but less urgent and not safety-related.

Find on the FAA.gov InFOs page

Letters of Interpretation

- Letters in response to airmen questions, providing legal interpretation
- Used to define gray-areas in the regulations
- Examples:
 - Logging vs acting PIC time: Many letters have dealt with this topic in various scenarios

Find with the FAA Interpretation Search

Airmen Certification Standards and Practical Test Standards

- Both are used are the rubric for evaluating pilots during a checkride
- Practical Test Standards (PTS)
 - Legacy standards
 - Contain "special emphasis areas"
- Airmen Certifications Standards (ACS)
 - $\circ\,$ New form of the standard
 - Includes risk management section for each task
 - Also includes knowledge test standards
- Many PTS have been rewritten into ACS documents

Available on FAA.gov ACS/PTS pages

Summary

- 1. Overview of 14 CFR
- 2. 14 CFR Part 1: Definition
- 3. 14 CFR Part 61: Airmen certification, medicals, currency
- 4. 14 CFR Par 91: Flight rules, inspections, airworthiness
- 5. 49 CFR part 830: NTSB Reporting Information
- 6. Aeronautical Information Manual (AIM): Non-regulatory guidance
- 7. Advisory Circulars, INFOs, and SAFOs: Non-regulatory guidance with different purposes
- 8. Airman Certification Standards or Practical Test Standards

Where would you find information about the required equipment needed for VFR operations?

Where would you find the the amount of flight hours needed to obtain a private pilot certificate?

You overhear a flight that had a rudder failure during landing. Will this require any notification to the NTSB? What about a report?

Where would you find information about annual inspections?