

To my fellow Aviators:

I hope the following information aids pilots in training. The Federal Aviation Regulations (FAR's) are important in the fact that they provide order to operating within the United States Civil Airspace. Regulations are written by bureaucrats in Washington D.C. and these lawmakers use the Code of Federal Regulations as templates in designing the FAR's. These FAR's are full of "legalese". You would think that the Federal Aviation Administration believes that pilots are qualified as lawyers by the way that the rules are designed for aviation.

I have tried to translate the FAR's by working the logic paths of the rules into a method understandable to the average pilot.

Please use this information as a study guide. I believe my experience as a pilot since 1984 and an instructor since 1990 has afforded me a practical understanding of these rules.

In today's litigious society, I feel I must include this disclaimer. This translation of the FAR's is to be used only for informational or training purposes. This translation is not a legal document. I can not be held responsible for your use of this information.

I am always open for fellow aviators to critically discuss these translations with me. Should you have a better, more logical way of translating a particular regulation, please contact me to discuss it.

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Blue Skies,

David K. Wright, sdc

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Preface

When I started flying over a quarter of a century ago, my FAR/AIM book was, as I recall, barely an inch thick. A half-century ago, when Captain Jeppesen began writing airspace procedures in his “little black book,” flying was even far less complicated but far less reliable as well. So today, the demand for dependable schedules and safety in increasingly congested airspace has forced pilots to give up the “romance” of flying in favor of complex, but sometimes confusing regulations.

Intended to increase safety and make common sense of the law, the Federal Aviation Regulations have become so detailed, complex and burdensome that pilots have found themselves saying “I know what it says, but what does it mean?” David Wright’s book is a successful endeavor on his part to help the pilot answer the question “what does it mean” by, in part, providing a broad interpretation to help the pilot see the regulatory “big picture.”

Serious pilots will want this book to be part of their permanent library today even though Captain Jeppesen would be astounded by its size.

Robert B. Watts
Houston, Texas
April 2006

Special Notice

Any information noted by blue type face and (*Note:*) in italics is information that is not discussed in the specific regulation. However, It is information directly related to the regulation. It is included to help you understand the regulation in greater scope and how it applies to normal operations as a pilot.

Contractions and Acronyms Used in this Document

ADM- Aeronautical Decision Making
Aero- Aeronautical
AGL- Above Ground Level
AIM- Airmen's Information Manual
ATC- Air Traffic Control
ATP- Airline Transport Pilot
CFI- Certificated Flight Instructor
CFI-A- Certified Flight Instructor for Airplanes
CFI-G- Certified Flight Instructor for Gliders
CFII- Certificated Instrument Flight Instructor
Comm- Commercial
CRM- Cockpit Resource Management
DME- Distance Measuring Equipment
DU- Dual
ETA- Estimated Time of Arrival
FAA-OKC-Oklahoma City Headquarters
FAR's- Federal Aviation Regulations
FOI- Fundamentals of Instruction
FSDO- Flight Standards District Office
FSS- Flight Service Station
GTW- Gross Takeoff Weight
H.P.- Horsepower
IAF- Initial Approach Fix
IAS- Indicated Airspeed
IM- Inner Marker

LTA- Lighter Than Air
LOA- Letter of Authorization
ME- Multiengine
MEI- Multiengine Flight Instructor
MEL-Multiengine Land
MM- Middle Marker
MSL- Mean Sea Level
NDB- Non Directional Beacon
NM- Nautical Mile
NTSB- National Transportation Safety Board
NWS- National Weather Service
OM- Outer Marker
Ops- Operations
PIC- Pilot in Command
POH- Pilot Operating Handbook
PTS - Practical Test Standards
SE- Single Engine
SEL- Single Engine Land
SIC- Second in Command
Sim/FTD- Simulator or Flight Training Device
SM- Statute Mile
TT- Total Time
VOR- VHF Omnidirectional Range
Vx- Best Angle of Climb
Vy- Best Rate of Climb
W&B- Weight & Balance
XC- Cross Country

Part 1 Definitions and Abbreviations

◆ This Part allows you to see how the F.A.A. defines terms appropriate to aviation.

Part 43 Maintenance, Preventative Maintenance, Rebuilding, and Alteration

43.1 Applicability

◆ This part gives the rules detailing aircraft maintenance. It is relevant to pilots in the fact that it details the maintenance ***that any PILOT can perform***.

43.3 Persons authorized to perform maintenance, preventative maintenance

◆ Subpart (g) — *Any pilot* holding a pilot certificate can perform preventative maintenance.

Appendix A to Part 43

Subpart (c) — Preventative Maintenance Specified

◆ These are the only types of work a certified pilot is allowed to perform.

- 1- Removal, installation, and repair of landing gear tires.
- 2- Replacing elastic landing gear shock absorbers.
- 3- Servicing landing gear struts with air and/or oil.
- 4- Servicing landing gear bearings.
- 5- Replacing defective safety wire or cotter keys.
- 6- Lubrication not requiring disassembly other than cowlings, covers, or fairings.
- 7- Making simple fabric patches.
- 8- Refilling hydraulic fluids.
- 9- Refinishing the decorative coatings (i.e. paint) as long as removal or disassembly of control surfaces is not required.
- 10- Repairing upholstery as long as removal or disassembly of control surfaces is not required.
- 11- Simple repairs to fairings, non structures, reinforcements
- 12- Replacing side windows as long as removal or disassembly of control surfaces is not required.
- 13- Replacing Safety Belts.
- 14- Replacing Seats as long as removal or disassembly of control surfaces is not required.
- 15- Troubleshooting landing light circuits.
- 16- Replacing bulbs, reflectors, lenses of landing and/or position lights.
- 17- Replacing wheels or skis not involving weight and balance changes.
- 18- Replacing cowlings as long as removal or disassembly of control surfaces or propellers is not required.
- 19- Replacing or cleaning or setting gap of spark plugs.
- 20- Replacing hose connections, except for hydraulic connections.
- 21- Replacing prefabricated fuel lines.
- 22- Replacing and servicing batteries.
- 23- Replacing or adjusting nonstructural fasteners incidental to operations.
- 24- Installing anti-misfueling devices
- 25- Removing, checking, replacing chip detectors
- 26- Preventative Maintenance specified in an aircraft's type certificate
- 27- Removing self contained panel mounted navigation or communication devices.
- 28- Updating navigational databases so long as no disassembly of the device is required.

Part 61 Certification Rules for Pilots SUBPART A – GENERAL

61.1 Applicability and definitions

- ◆ Part 61 spells out the requirements to become a pilot or instructor.

Definitions:

- Authorized Instructor*---- holding a valid certificate obtained using Part 61 rules.
- Cross Country*----- includes a landing at a spot other than takeoff, uses navigation. For Private, IFR or Commercial- at least one landing must exceed 50 nm from departure airport. For ATP- must fly minimum straight line 50 nm from departure.
- Examiner*----- a person authorized by the FAA to conduct flight tests.
- Flight Simulator*----- cockpit replica, must have 3D movement.
- Flight Training* ----- not ground training, performed by an authorized instructor
- Flight Training Device* - evaluated by FAA, cockpit replica, movement is not required.
- Ground Training* ----- any training other than flight training from an authorized instructor.
- Instrument Approach* --- any approach defined by Part 97.
- Instrument Training* ---- any time instrument training is received from an authorized instructor.
- Knowledge Test* ----- a test in written or computer form testing aero. knowledge.
- Pilot Time* ----- any time the person serves as flight crew or receives training.

61 .3 Requirement for certificates, ratings, and authorizations

- ◆ A Pilot in Command or Required Crewmember must hold a pilot certificate and have it readily available.
- ◆ A Pilot in Command or Required Crewmember must hold a current medical certificate and have it readily available.
- ◆ A Flight Instructor, while acting as an instructor, must hold a flight instructor certificate and have it readily available.
- ◆ A valid flight instructor is permitted to give instruction for solo flight and endorse logbooks for pilot applicants.
- ◆ A Flight Instructor Certificate is not required for Commercial LTA as instructor, Part 142 Instructors, Ground Training given by Ground Instructors.
- ◆ An Instrument Rating is required to act as a Pilot in weather less than VFR.
- ◆ Category II Authorization is required to operate in IFR Conditions below 200' AGL and/or 1/2 mile visibility.
- ◆ A Ground Instructor while acting as an instructor, must hold a Ground Instructor certificate and have it readily available.
- ◆ A valid ground instructor is permitted to give ground instruction for solo flight and endorse logbooks to show ground training required.
- ◆ A ground instructor certificate is not required by Commercial LTA as instructor, Part 121 or 135 or 142 ground instruction.
- ◆ Upon inspection by the Administrator, an authorized representative, a NTSB representative, or a law enforcement officer, the pilot must present their certificates, medical certificates and photo identification.

61.4 Approval of Flight Simulators or Training Device

- ◆ A flight simulator or training device must be qualified by the FAA for use by flight instructors to give training.

61.5 Certificates and Ratings Issued by Part 61

- ◆ Pilot Certificates-----Student, Recreational, Private, Commercial, ATP, Flight Instructors, Ground instructors.
- ◆ Aircraft Ratings-----Airplane, Rotorcraft, Glider, LTA, Powered Lift.
- ◆ Class Ratings-----SEL, MEL, SES, MES
- ◆ Type Ratings-----Large A/C(>12,500 lbs GTW), Turbojet powered Aircraft
- ◆ Instrument Ratings-----Airplane, Helicopter, Powered Lift
- ◆ Flight Instructor Ratings
Aircraft - Airplane, Rotor, Glider, Powered Lift
Class - SE, ME
Instrument - Airplane, Helicopter, Powered Lift
- ◆ Ground Instructor Ratings
Basic
Advanced
Instrument

61.14 Refusal to submit to a drug or alcohol test

- ◆ A pilot can be denied any application for certificate(s) or rating(s) for period of 1 year, if a drug / alcohol test is refused by the applicant to be administered

61.15 Offense involving alcohol or drugs

- ◆ A drug conviction is grounds for a 1 year denial, suspension, or revocation of a certificate or rating.
- ◆ A motor vehicle action (due to drugs or alcohol) must be reported to the FAA within 60 days of initial arrest.
- ◆ A repeat motor vehicle action within 3 years of a previous action is grounds for a 1 year denial, suspension, or revocation of a certificate or rating.
- ◆ Failure to report the initial motor vehicle action is grounds for a 1 year denial, suspension, or revocation of a certificate or rating.

61.16 Refusal to submit to an alcohol test or furnish results of a test

- ◆ Should a pilot refuse a law enforcement alcohol test or refuse to provide the results of a test, it is grounds for 1 year denial, suspension, or revocation of a certificate or rating.

61.17 Temporary Pilot Certificate

- ◆ A temporary certificate is valid for up to 120 days. The temporary certificate expires on its published expiration date or receipt of the permanent certificate or notice of denial or revocation.

61.19 Duration of certificates

- ◆ A student pilot certificate expires after 24 calendar months.
- ◆ A pilot certificate and ground instructor certificate have no expiration dates.
- ◆ A flight instructor certificate expires after 24 calendar months.

61.23 Medical Certificates: requirements and duration.

- ◆ ATP Operations require a 1st class Medical Certificate.
- ◆ Commercial Operations require a 2nd class Medical Certificate.
- ◆ Student, Recreational, Private Operations require a 3rd Class Medical Certificate.
- ◆ Operations not requiring a medical certificate: Glider Ops, Balloon Ops, CFI-G Ops, Ground Instructor Ops, CFI-A Ops not requiring the CFI to act as PIC, Examiner Ops in a Simulator.

Duration of Certificates:

- 1st Class
 - 6 months for ATP ops,
 - 12 months for Commercial ops
 - 24 calendar months for Student, Rec, or Private Pilot ops
- 2nd Class
 - 12 months for Commercial ops
 - 24 calendar months for Student, Rec, or Private Pilot ops
- 3rd Class
 - 24 calendar months for Student, Rec, or Private Pilot ops
 - 36 months if the pilot is < 40 years old

Part 91 GENERAL OPERATING AND FLIGHT RULES

◆ There are special operation rules in regards to the following exceptions: Grand Canyon Air Tours, Vicinity of Los Angeles International Airport, ATC Emergency Ops, [Prohibitions to Iraq, Libya, North Korea, Ethiopia], Hawaiian Air Tours, Rocky Mountain Nat'l Park Air Tours, Enhanced Security Procedures for certain Washington D.C. Area Airports.

SUBPART A - GENERAL

91.1 Applicability

◆ This section of the regulations applies to the operation of aircraft within the United States, including within 3 nm of the U.S. coast. Generally these rules also apply to aircraft within U.S. territorial airspace within 12 of the coast.

91.3 Responsibility and authority of the Pilot in Command (PIC)

◆ The Pilot-in-Command has the ultimate authority as related to the operation of the aircraft. Should an emergency require a deviation from any of the Part 91 rules, the PIC is allowed to meet the extent of the emergency. The FAA can request from the PIC a detailed report of any emergency deviation of the rules. *(This does not mean that all emergencies will require a filed report, only the ones that the FAA requests. Basically, do not be hesitant to declare an emergency. Let ATC be a part of the "resources" you incorporate into CRM)*

91.5 PIC of a Two Pilot Crew Aircraft

◆ The PIC of an aircraft requiring two pilots must be current according to an annual proficiency check in that aircraft.

91.7 Civil Aircraft Airworthiness

◆ To be operated, An aircraft must be in an airworthy condition. It is the PIC's responsibility to determine the aircraft is airworthy and safe to fly. The flight will be discontinued when any unsafe mechanical, electrical or structural condition occurs. *(The PIC must determine that the owner or operator of the aircraft has complied with all the maintenance requirements, airworthiness directives, and if required, service bulletins, see 91.403)*

91.9 Flight Manual, Marking, and Placard Requirements

◆ An aircraft must be flown within its approved Operating Limitations as specified in the Airplane Flight Manual, Markings, and Placards. The current, approved Flight Manual must be readily available in the aircraft. Additionally, the approved Markings and Placards must be visible and/or included. The aircraft must be marked for identification with minimum 12 inch symbols. *(The Letter*

"O" in AROW)
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91.11 Prohibition on interfering with crewmembers

◆ A crewmember must never be intimidated, threatened, or assaulted

91.13 Careless or reckless operation

◆ No person may operate an aircraft in a careless or reckless manner. *(This generic, non specific rule is often applied easily by the FAA towards pilots that act recklessly or stupidly)*

91.15 Dropping objects

◆ A pilot may drop objects out of an aircraft as long as reasonable precautions are taken to avoid injury or damage to persons or property.

91.17 Alcohol and drugs

◆ A person is prohibited from acting as a pilot under the following criteria:

- within 8 hours of alcohol consumption
- with a Blood Alcohol Content (BAC) of $\geq .04\%$ by weight
- under the influence of alcohol or drugs (that affect mental faculties) No passenger that appears to be intoxicated by alcohol or drugs may be carried in flight, unless under a doctor's care.

◆ A pilot is required to comply with a law enforcement request for blood alcohol levels, based on a reasonable suspicion of violating 8 hour/BAC rule. A pilot is required to comply with a FAA's request for BAC within 4 hours of acting as pilot. Any test information can be used in FAA legal proceedings.

91.19 Carriage of illegal or controlled substances

◆ A pilot is prohibited from the known act of carrying drugs/controlled substances defined in federal or state statutes.

91.21 Portable electronic devices

◆ Portable electronic devices are prohibited on air carrier or IFR aircraft. The following devices are exempt from this rule:

- voice recorders
- hearing aids
- pacemakers
- shavers
- devices the operator and/or PIC has determined as non interfering

91.23 Truth-in-leasing clause requirement and conditional sales contracts

◇ *(This rule is very complex)* Basically, When a party leases (the lessee) an aircraft from another party (the lessor), certain rules apply. The aircraft must have been maintenance current within the preceding 12 months of the signed lease. The Lessee acquires operational control of the aircraft. A copy of the lease becomes a required document to be carried on the aircraft. A copy of the lease must be sent to FAA-OKC at least 24 hours prior and to the local FSDO at least 48 hours prior to the Lessee's first flight. *(Part 91 Commercial Operations require operational control of the aircraft to be well defined so as not to be construed as a "Common Carriage" operation)*

91.25 NASA's Aviation Safety Reporting Program(ASRP): Prohibited Use of Report Information in FAA enforcement actions

◇ If a pilot volunteers information to the NASA ASRP, that information *(i.e. self-incrimination)* will not be used against that pilot in enforcement actions. (except in accidents and criminal offenses). *(This rule makes it more inviting for pilots to reveal to the NASA Safety Reporting Program mistakes made. NASA studies these mistakes and makes available its findings to pilots and the aviation industry)*

SUBPART B - FLIGHT RULES

91.101 Applicability

◇ These rules apply to operating aircraft within the United States, including within 12 nm of the coast.

91.103 Preflight Action

- ◇ Prior to all flights the pilot must be familiar with:
- All pertinent information related to this flight
 - Runways lengths of intended use
 - Takeoff and Landing Performance data based on current conditions Prior to IFR Flights and/or any flights not in the area of an airport, pilots must be familiar with:
 - Weather reports and forecasts
 - Fuel Requirements
 - Alternatives Available
 - Known traffic delays
- ◇ *(A memory aid to help remember this rule is A.D.W.A.R.F. ('A'll pertinent info, 'D'elays, 'W'eather, 'A'lternatives, 'R'un way lengths/Takeoff/Landing Distances, 'F'uel requirements)*

91.105 Crewmembers at stations

- ◇ A required crewmember is required to be at their station (i.e. seat), wearing the safety belt, for takeoff, en route, and landing. The only exemption this rule allows the pilot to meet physiological needs *(i.e. using the little boys/girls room)*.
- ◇ The shoulder harness is required to be worn for takeoff and landing. The shoulder harness need not be worn if:
- The pilot deems it too restrictive to full movement, thus unable to perform duties.
 - It's not required to be installed *(duh!, shoulder harnesses were only required after 1978)*

91.107 Use of Seat belts

Prior to aircraft movement, the PIC must:

- Brief the passengers on the use of safety belts
- Determine each passenger is seated in an approved seat
- Inform each passenger to engage their safety belts

The following criteria are applied to children:

- If under 2 years of age, can be held by a properly restrained adult
- Must be properly restrained in an approved child system
- Must be properly accompanied by an attendant adult
- The child seat system must be placarded as "Certified for Motor Vehicles and Aircraft"

91.109 Simulated Instrument Instruction and Flight Tests

- ◇ Flight instruction must be given in aircraft with functional dual controls, except for:
- flights where the Instructor has determined the flight can be made safely
 - the pilot holds at least a private pilot with appropriate category and class ratings
- ◇ Simulated Instrument Flight requires:
- Safety pilot that is at least a private pilot with appropriate category and class ratings
 - Safety pilot to have adequate vision
 - Dual flight controls or a single throw over yoke with these provisions
 - The safety pilot has determined the flight can be made safely
 - The control manipulator is at least a private pilot with the appropriate category and class ratings

VISUAL FLIGHT RULES

91.151 Fuel requirements for VFR

◇ Considering weather and winds, No VFR flight can begin unless the PIC has determined that the flight can meet the required fuel criteria:

- Under **Day VFR** conditions
 - be able to fly from departure airport to the destination airport and continue flying at normal cruise power for **30 additional minutes**.
- Under **Night VFR** conditions
 - be able to fly from departure airport to the destination airport and continue flying at normal cruise power for **45 additional minutes**.

91.153 Required Information for VFR Flight Plans

◇ The following information is required when filing a VFR flight plan:

- Aircraft identification number
- Aircraft type
- PIC's full name and address
- Departure Point and Estimate Time of Departure
- Route, Cruising Altitude, and True Airspeed
- First point of intended landing
- Fuel on Board (in hours)
- Souls on Board
- Any additional information the PIC deems necessary for ATC use

◇ It is mandatory to cancel an activated VFR flight plan with FSS or ATC (*Note: Search and Rescue procedures will be initiated 30 minutes after your flight plan's Estimated Time of Arrival if you fail to cancel your flight plan after landing.*)

91.155 Basic VFR Weather Minimums

◇ To maintain VFR flight conditions, the pilot must maintain the following visibility and cloud clearances:

Controlled Airspace	Uncontrolled Airspace
◀----- 5 sm visibility	-----▶
◀----- 1000 ft above Clouds	-----▶
◀----- 1000 ft below Clouds	-----▶
◀----- 1 sm horizontal from clouds	-----▶
Above 10,000 ft SL-----	
3 sm visibility 1000 ft above (3-152 Rule) 500 ft below 2000 ft horizontal see Note "A"	Daytime: 1 sm visibility I 1000 ft above (1-152 Rule) 500 ft below 2000 ft horizontal [at Nite: 3 -152 Rule] see Note "C"
Above 1,200 ft AGL-----	
3- 152 Rule see Note "A"	Daytime: 1 sm visibility Clear of Clouds
3 sm visibility Clear of Clouds see Note "B"	[at Nite: 3 -152 Rule] See note "D"
Above Surface-----	
Note A: Class C, D, E Airspace	
Note B: Class B Airspace	
Note C: Class G Airspace stopping at 10000 ft MSL	
Note D: Class G Airspace stopping at 1200 ft AGL	
<i>(Airspace memory aids 3 Cessna 152 Rule - 3/152, 1 Cessna 152 Rule - 1/152, 5 F 111's Rule - 5/111, FYI, the F111 is a variable sweep wing fighterjet)(Below 10,000 ft MSL, At night, regardless of the airspace the 3-152 Rule applies)</i>	

◇ Class B, C, D and E (surface upward) Airports require 1000 ft ceilings and 3 miles visibility to be considered VFR for takeoffs, landings and transition. If weather is less than 1000/3, it is considered to be IFR, However, "Special VFR" can be requested by the pilot (*see 91.157*) at most of these airports. Certain Class B Airports prohibit "Special VFR" clearances.

91.307 Parachutes and Parachuting

- ◇ Only FAA approved parachutes may be used. Appropriate parachute riggers must repack parachutes every 120 days (synthetic materials) or 60 days (natural fibers).
- ◇ Parachute operations must comply with FAR 105.
- ◇ Parachutes are required to be worn by all occupants for any of the following scenarios:
 - Bank attitudes > 60°
 - Pitch attitudes > +/- 30°
- ◇ Exemptions from this rule include:
 - Flight tests for a certificate or rating
 - Spin or required maneuver instruction for a certificate or rating when given by a CFI or ATP.

91.309 Towing Gliders

- ◇ A pilot towing gliders must meet the following criteria:
 - must meet requirements of FAR 61.69
 - the aircraft must be equipped with an approved tow hitch
 - towline or tow link meets 80% breaking strength
- ◇ The pilot must notify the Control Tower, if within the lateral boundaries of Class B, C, D or E prior to making the flight
- ◇ Both the tow pilot and the glider pilot must brief and concur on the general course of action, communication signals, and emergency procedures.

91.313 Limitations for Restricted Category aircraft

- ◇ Restricted Category aircraft are mandated to comply with the following criteria:
 - must operate only in its certificated special purpose
 - flight training, only if for its certificated purpose
 - prohibited from carrying persons/property for hire
 - only required crewmembers are allowed in flight
 - prohibited from operating over dense populations, on an airway, or near airports with commercial passenger ops.
- ◇ The front seats must have shoulder harnesses to prevent serious head injury and designed for ultimate crashworthiness.

91.315 Limitations for Limited Category aircraft

- ◇ Limited Category aircraft are prohibited from carrying persons or property for compensation or hire.

91.317 Limitations for Provisionally Certificated Aircraft

- ◇ Provisionally Certified aircraft are mandated to comply with the following criteria:
 - the pilot must meet eligibility requirements
 - the aircraft must remain in the United States
 - the aircraft is prohibited to be used for air carrier ops
 - may be used for simulated air carrier ops such as training crews, demonstration flight by the manufacturer, market surveys, checking instruments and navigation equipment
- ◇ Provisional Aircraft must be operated within the prescribed limitations.
- ◇ When the Provisional Aircraft must be used for Type or Supplemental Type Certification, it must be operated under Experimental Aircraft limitations.
- ◇ Standard operating procedures must be established and followed for:
 - guidance for flight and ground crews
 - operations at airports where flights over populated areas are required.
- ◇ Flight Crewmembers must be properly certificated and have adequate knowledge of the aircraft and procedures.
- ◇ Manufacturer or FAA mandated safety design changes or operation changes must be complied with prior to flight.
- ◇ The following persons can be carried on a Provisional Aircraft:
 - required crewmembers
 - persons who have proper interests in the operations
 - persons who are authorized by the manufacturer or FAA
 - these persons must be advised that the aircraft is provisionally certificated.
 - The FAA may place additional limitations on the number of persons that can be carried.

Subpart F – Large & Turbine Powered Multiengine Aircraft (and Fractional Ownership Program Aircraft)

91.501 Applicability

- ◇ This subpart of rules applies to the following aircraft
 - U.S. Registered (“N” numbered)
 - Large and Turbine Powered
 - Non *Common Carriage* Fractional Aircraft operating under Subpart K

- ◇ Aircraft must meet Inspection Programs specified by 91.409.
- ◇ These rules do not apply to FAR Part 121,125,129,135 and 137 Operations.

- ◇ Non *Common Carriage* Flights include the following types:
 - Ferry Flights
 - Training Flights
 - Aerial Photography
 - Aerial Survey
 - Pipeline Patrol
 - Demo Flights of Aircraft For Sale (certain \$ transactions are authorized for operating expenses)
 - Personal Transportation Flights by the Operator
 - Non \$ transactioned Transportation of Guests
 - Company Transport (including Company Subsidiaries) of employees, guests, or Company Property
 - Subsidiaries can be charged for operating costs
 - No Guests can be charged for flights
 - Company Flights of employees or guests operating under a Time Share or Interchange or Joint Ownership.
 - Interchange Operating Hours and Expenses must be properly equally accounted for All Fractional Owners
 - Carriage of property (excluding Mail) when the Flight is within the scope and incidental to the Business
 - Certain \$ transactions are authorized for operating expenses
 - Non \$ transactioned Carriage of Social Groups (re: Sports Teams)
 - Fractional Ownership Programs
 - Fractional Ownership Programs DO NOT include Interchange Agreements.
 - Aerial Firefighting Flights ARE EXCLUDED from these rules

◇ Definitions:

- Time Share Agreement:
 - Operator leases an aircraft, including Flight Crew, with no \$ transaction except for authorized operating expenses.
- Interchange Agreement:
 - Operator leases an aircraft, including Flight Crew in exchange for equal time in the other person's aircraft.
 - Only Operating Expense \$ differences can be transacted.
- Joint Ownership
 - at least one owner acts as Operational Control, supplying aircraft and flight crew
 - Joint owners share in the operating costs
- Authorized Operating Costs/Expenses
 - For Demonstration Flights, Carriage of Property, or Time Share
 - ◇ Fuel
 - ◇ Lubricants
 - ◇ Crew Expenses (food, lodging, ground transportation)
 - ◇ Hangar and Tiedown fees away from Home Base
 - ◇ Flight Insurance
 - ◇ Landing Fees
 - ◇ Airport Taxes and similar charges
 - ◇ Customs and foreign fees
 - ◇ Inflight food and beverages
 - ◇ Passenger ground transportation fees
 - ◇ Flight Planning and Weather Service Fees
 - ◇ An additional Charge equal to 100% of Fuel and Lubricants

NTSB 830

NOTIFICATION AND REPORTING OF AIRCRAFT ACCIDENTS, INCIDENTS OR OVERDUE AIRCRAFT, AND PRESERVATION OF WRECKAGE, CARGO AND RECORDS

830.1 Applicability

- ◆ These rules apply to the initial notification and later reporting of accidents, incidents and certain other occurrences in the operation of aircraft.

- ◆ These rules address the preservation of aircraft wreckage, mail, cargo, and records of civil aircraft accidents.

830.2 Definitions

- ◆ **Aircraft accident:** an occurrence that takes place between embarking (with the intention of flight) to disembarking that entails a **fatal injury, serious injury** or in which **substantially damages** the aircraft.

- ◆ **Fatal injury:** any injury that results in death within 30 days of the accident.

- ◆ **Serious injury:** any injury that results in:
 - hospitalization > 48 hours, within 7 days of the injury
 - bone fracture (exempt: fingers, toes, or nose)
 - severe hemorrhages
 - nerve, muscle, or tendon damage
 - 2nd or 3rd degree burns > 5% bodily surface

- ◆ **Substantial damage:** any damage or failure that adversely affects structural strength, performance or flight characteristics. This type of damage requires major repair or replacement.
 - The following items are **not considered** to be substantial damage:
 - Engine failure
 - Damage to one engine, if associated with an engine failure
 - Bent Fairings or Cowlings
 - Dented Skin
 - Small holes in the skin or fabric
 - Ground damage to prop blades
 - Damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips