

FEDERAL AVIATION REGULATIONS

FAR PART 1

1.1 General Definitions

1. **Night** means the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac converted to local time.
 - a. Note that for "recency of experience" (FAR 61.57), night is defined as from 1 hr. after sunset to 1 hr. before sunrise.
 - b. Be careful; there are questions on both definitions.
2. **Aircraft categories** (for certification of airmen); broad classifications of aircraft
 - a. Airplane
 - b. Rotorcraft
 - c. Glider
 - d. Lighter-than-air
3. **Airplane classes** (for certification of airmen)
 - a. Single-engine land
 - b. Multiengine land
 - c. Single-engine sea
 - d. Multiengine sea
4. **Rotorcraft classes** (for certification of airmen)
 - a. Helicopter
 - b. Gyrocopter
5. **Lighter-than-air classes** (for certification of airmen)
 - a. Airship
 - b. Free balloon
 - c. Hot air balloon
 - d. Gas balloon
6. Note the above category and class definitions are for certification of airmen purposes. For certification of aircraft there are different definitions:
 - a. **Category** (for certification of aircraft purposes) is based on intended use or operating limitations.
 - 1) Transport
 - 2) Normal
 - 3) Utility
 - 4) Limited
 - 5) Restricted
 - 6) Acrobatic
 - 7) Provisional
 - b. **Classes** as used for certification of aircraft are the same as, or very similar to, categories for certification of airmen, e.g., airplane, rotorcraft, glider, lighter-than-air.
7. **Air traffic control (ATC) clearance** means an authorization to proceed under specific traffic conditions in controlled airspace.

Abbreviations and Symbols

1. V_{FE} means maximum flap extended speed.
2. V_{LE} means maximum landing gear extended speed.
3. V_{NO} means maximum structural cruising speed.
4. V_A means design-maneuvering speed.
5. V_{SO} means the stalling speed or the minimum steady flight speed in the landing configuration.
6. V_X means speed for best angle of climb.
7. V_Y means speed for best rate of climb.

FAR PART 21

21.181 Duration of Airworthiness Certificates

1. Airworthiness certificates remain in force as long as maintenance and alteration of the aircraft are performed per FARs.

FAR PART 43

43.9 Maintenance Records

1. After preventive maintenance has been performed, the signature, certificate number, and kind of certificate held by the person approving the work and a description of the work must be entered in the aircraft maintenance records.

Part 43, Appendix A. Major Alterations and Repairs and Preventive Maintenance

1. Preventive maintenance means simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations. Examples include
 - a. Replenishing hydraulic fluid, and
 - b. Servicing landing gear wheel bearings.

FAR PART 61

61.3 Requirements for Certificates, Ratings, and Authorizations

1. When acting as a pilot in command or as a required pilot flight crewmember, you must have a valid pilot certificate and a current and appropriate medical certificate in your personal possession or readily accessible in the airplane.
2. You must present your pilot certificate or medical certificate upon the request of the Administrator of the FM or his/her representative, or the NTSB, or any federal, state, or local law enforcement officer.

61.23 Medical Certificates: Requirement and Duration

1. For operations requiring a private, recreational, or student pilot certificate, a first-, second-, or third-class medical certificate issued
 - a. Before September 16, 1996, expires at the end of the last day of the month, 2 years after the date of examination shown on the certificate.
 - b. On or after September 16, 1996, expires at the end of the last day of the month either
 - 1) 3 years after the date of examination shown on the certificate, if you have not reached your 40th birthday on or before the date of examination or
 - 2) 2 years after the date of examination shown on the certificate, if you have reached your 40th birthday on or before the date of examination.

61.31 Type Rating Requirements, Additional Training, and Authorization Requirements

1. To act as pilot in command of a complex airplane, you must receive and log ground and flight training and receive a logbook endorsement.
 - a. A complex airplane is defined as an airplane with retractable landing gear, flaps, and a controllable pitch propeller.
2. To act as pilot in command of a high-performance airplane, you must receive and log ground and flight training and receive a logbook endorsement.
 - a. A high-performance airplane is defined as an airplane with an engine of more than 200 horsepower.
3. A person may not act as pilot in command of any of the following aircraft unless (s)he holds a type rating for that aircraft:
 - a. A large aircraft (i.e., over 12,500 lb. gross weight)
 - b. A turbojet-powered airplane
 - c. Other aircraft specified by the FM through aircraft type certification procedures

61.56 Flight Review

1. A flight review must have been satisfactorily completed within the previous 24 calendar months to act as pilot in command of an aircraft.
 - a. A proficiency check or flight test for a pilot certificate, rating, or other operating privileges will also satisfy this requirement.
 - b. Satisfactory completion of the review or flight test must be endorsed in the pilot's logbook by the reviewer.
2. The expiration of the 24-month period for the flight review falls on the last day of the 24th month after the month of the examination date (i.e., 24 calendar months).

61.57 Recent Flight Experience: Pilot in Command

1. To carry passengers, you must have made three landings and three takeoffs within the preceding 90 days.
 - a. All three landings must be made in aircraft of the same category, class, and, if a type rating is required, the same type as the one in which passengers are to be carried.
 - 1) The categories are airplane, rotorcraft, glider, and lighter-than-air.
 - 2) The classes are single-engine land, single-engine sea, multiengine land, and multiengine sea.
 - b. The landings must be to a full stop if the airplane is tailwheel (conventional) rather than nosewheel.
2. To carry passengers at night, you must, within the last 90 days, have made three takeoffs and three landings to a full stop at night in an aircraft of the same category, class, and type, if required.
 - a. Night in this case is defined as the period beginning 1 hr. after sunset and ending 1 hr. before sunrise.

61.60 Change of Address

1. You must notify the FAA Airman Certification Branch in writing of any change in your permanent mailing address.
2. You may not exercise the privileges of your pilot certificate after 30 days from moving unless you make this notification.

61.69 Glider Towing: Experience and Training Requirements

1. Any person may tow a glider if that person has
 - a. At least a private pilot certificate
 - b. 100 hr. of pilot in command time in the aircraft category, class, and type, if required, that the pilot is using to tow a glider
 - c. Within the preceding 12 months
 - 1) Made at least three actual or simulated glider tows while accompanied by a qualified pilot, or
 - 2) Made at least three flights as pilot in command of a glider towed by an aircraft

61.113 Private Pilot Privileges and Limitations: Pilot in Command

1. Private pilots may not pay less than an equal (pro rata) share of the operating expenses of a flight with the passengers.
 - a. These operating expenses may involve only fuel, oil, airport expenditures, or rental fees.
2. Private pilots may operate an aircraft carrying passengers on business only if the flight is incidental to that business or employment and the pilot is not paid as a Pilot.
 - a. For example, a CPA who IS a private pilot might fly an aircraft carrying CPAs to a client. Such flight is incidental to the CPA's professional duties or business.
3. A pilot may act as a pilot in command of an aircraft used in a passenger-carrying airlift sponsored by a charitable organization for which passengers make donations to the organization if
 - a. The local FSDO (FAA Flight Standards District Office) is notified at least 7 days before the flight,
 - b. The flight is conducted from an adequate public airport,
 - c. The pilot has logged at least 200 hr.,
 - d. No acrobatic or formation flights are performed,
 - e. The aircraft complies with the 100-hr. inspection rule, and
 - f. The flight is day-VFR.

RECREATIONAL PILOT RELATED FARs

NOTE: This section is not tested on the private pilot knowledge test.

61.101 Recreational Pilot Privileges and limitations

1. A recreational pilot may carry only one passenger.
 - a. A recreational pilot may not pay less than the pro rata (equal) share of the operating expenses of a flight with a passenger, provided the expenses involve only fuel, oil, airport expenses, or aircraft rental fees.
2. A recreational pilot may act as pilot in command of an airplane
 - a. Only when the flight is within 50 NM of an airport at which the pilot has received ground and flight training from an authorized flight instructor
 - 1) The pilot must have in his/her personal possession while aboard the airplane a logbook endorsement that permits flight within 50 NM from the departure airport.
 - b. When the flight exceeds 50 NM if (s)he receives ground and flight training on the cross-country training requirements for a private pilot and has his/her logbook endorsed certifying proficiency in cross-country flight by an authorized instructor
3. A recreational pilot may NOT act as pilot in command of an aircraft
 - a. Certificated for more than four occupants, with more than one engine, with an engine of more than 180 horsepower, or with retractable landing gear
 - b. Classified as a multiengine airplane, powered-lift, glider, airship, or balloon
 - c. Carrying a passenger or property for compensation or hire
 - d. For compensation or hire
 - e. In furtherance of a business
 - f. Between sunset and sunrise (e.g., night time)
 - g. In airspace in which communication with ATC is required
 - h. At an altitude of more than 10,000 ft. MSL or 2,000 ft. AGL, whichever is higher
 - i. With flight or surface visibility of less than 3 SM
 - 1) In Class G airspace, the cloud clearance requirement is
 - a) Clear of clouds when 1,200 ft. AGL or less
 - b) 1,000 ft. above, 500 ft. below, and 2,000 ft. horizontally from clouds when more than 1,200 ft. AGL but less than 10,000 ft. MSL
 - j. Without visual reference to the surface
 - k. On a flight outside the U.S.
 - l. For demonstration of that aircraft in flight to a prospective buyer
 - m. Used in a passenger-carrying airlift and sponsored by a charitable organization
 - n. Towing any object

4. A recreational pilot may NOT act as a required pilot flight crewmember on any aircraft for which more than one pilot is required.
5. A recreational pilot who has logged fewer than 400 flight hr. and who has not logged pilot-in-command time in an aircraft within the preceding 180 days may not act as pilot in command of an aircraft until the pilot has received flight training from an authorized flight-instructor who certifies in the pilot's logbook that the pilot is competent to act as pilot in command.
6. The recreational pilot certificate states, "Holder does not meet ICAO requirements."
7. For the purpose of obtaining additional certificates or ratings, while under the supervision of an authorized flight instructor, a recreational pilot may fly as sole occupant of an aircraft
 - a. For which the pilot does not hold an appropriate category or class rating
 - b. Within airspace that requires communication with air traffic control
 - c. Between sunset and sunrise, provided the flight or surface visibility is at least 5 SM
 - d. In excess of 50 NM from an airport at which flight instruction is received

NOTE: For any of these situations, the recreational pilot shall carry the logbook that has been properly endorsed for each flight by an authorized flight instructor.

8. When flying a transponder-equipped aircraft, a recreational pilot should set that transponder on code (squawk) 1200, which is the VFR code.

FAR PART 71

71.75 Extent of Federal Airways

1. Federal airways include that Class E airspace
 - a. Extending upward from 1,200 ft. AGL to and including 17,999 ft. MSL
 - b. Within parallel boundary lines 4 NM each side of the airway's centerline

FAR PART 91

91.3 Responsibility and Authority of the Pilot in Command

1. In emergencies, a pilot may deviate from the FARs to the extent needed to maintain the safety of the airplane and passengers.
2. The pilot in command of an aircraft IS directly responsible for, and IS the final authority as to, the operation of that aircraft.
3. A written report of any deviations from FARs should be filed with the FAA upon request.

91.7 Civil Aircraft Airworthiness

1. The pilot in command is responsible for determining that the airplane is airworthy prior to every flight.

91.9 Civil Aircraft Flight Manual, Marking, and Placard Requirements

1. The airworthiness certificate, the FAA registration certificate, and the aircraft flight manual or operating limitations must be aboard.
2. The acronym ARROW can be used as a memory aid. The FCC (Federal Communications Commission), not the FAA, requires the radio station license. As of January 1, 1997, the radio station license is required only for international flights.

Airworthiness certificate

Registration certificate

Radio station license (FCC requirement for international flight)

Operating limitations, including

Weight and balance data

3. The operating limitations of an airplane may be found in the current FAA-approved flight manual, approved manual material, markings, and placards, or any combination thereof.

91.15 Dropping Objects

1. No pilot in command of a civil aircraft may allow any object to be dropped from that aircraft in flight that creates a hazard to persons or property.
 - a. However, this section does not prohibit the dropping of any object if reasonable precautions are taken to avoid injury or damage to persons or property.

91.17 Alcohol or Drugs

1. No person may act as a crewmember of a civil airplane while having .04 percent by weight or more alcohol in the blood or if any alcoholic beverages have been consumed within the preceding 8 hr.
2. No person may act as a crewmember of a civil airplane if using any drug that affects the person's faculties in any way contrary to safety.
3. Pilots may not allow a person who is obviously intoxicated or under the influence of drugs to be carried in a civil airplane
 - a. Unless the person is a medical patient under proper care or in an emergency.

91.103 Preflight Action

1. Pilots are required to familiarize themselves with all available information concerning the flight prior to every flight, and specifically to determine
 - a. For any flight, runway lengths at airports of intended use and the airplane's takeoff and landing requirements, and
 - b. For IFR flights or those not in the vicinity of an airport,
 - 1) Weather reports and forecasts,
 - 2) Fuel requirements,
 - 3) Alternatives available if the planned flight cannot be completed, and
 - 4) Any known traffic delays.

91.105 Flight Crewmembers at Stations

1. During takeoff and landing, and while en route, each required flight crewmember shall keep his/her safety belt fastened while at his/her station.
 - a. If shoulder harnesses are available they must be used for takeoff and landing.

91.107 Use of Safety Belts, Shoulder Harnesses, and Child Restraint Systems

1. Pilots must ensure that each occupant is briefed on how to use the safety belts and, if installed, shoulder harness.
2. Pilots must notify all occupants to fasten their safety belts before taxiing, taking off, or landing.
3. All passengers of airplanes must wear their safety belts during taxi, takeoffs, and landings.
 - a. A passenger who has not reached his/her second birthday may be held by an adult.
 - b. Sport parachutists may use the floor of the aircraft as a seat (but still must use safety belts).

91.111 Operating near Other Aircraft

1. No person may operate an aircraft in formation flight except by prior arrangement with the ,, pilot in command of each aircraft in the formation.

91.113 Right-of-Way Rules: Except Water Operations

1. Aircraft in distress have the right-of-way over all other aircraft.
2. When two aircraft are approaching head on or nearly so, the pilot of each aircraft should turn to his/her right, regardless of category.
3. When two aircraft of different categories are converging, the right-of-way depends upon who has the least maneuverability. Thus, the right-of-way belongs to
 - a. Balloons over
 - b. Gliders over
 - c. Airships over
 - d. Airplanes or rotorcraft.
4. When aircraft of the same category are converging at approximately the same altitude, except head on or nearly so, the aircraft to the other's right has the right-of-way.
 - a. If an airplane of the same category as yours is approaching from your right side, it has the right-of-way.
5. When two or more aircraft are approaching an airport for the purpose of landing, the aircraft at the lower altitude has the right-of-way.
 - a. This rule shall not be abused by cutting in front of or overtaking another aircraft.
6. An aircraft towing or refueling another aircraft has the right-of-way over all engine-driven aircraft.

91.115 Right-of-Way Rules: Water Operations

1. When aircraft, or an aircraft and a vessel, are on crossing courses, the aircraft or vessel to the other's right has the right-of-way.

91.117 Aircraft Speed

1. The speed limit is 250 kt. (288 MPH) when flying below 10,000 ft. MSL and in Class B airspace.
2. When flying under Class B airspace or in VFR corridors through Class B airspace, the speed limit is 200 kt. (230 MPH).
3. When at or below 2,500 ft. AGL and within 4 NM of the primary airport of Class C or Class D airspace, the speed limit is 200 kt. (230 MPH).

91.119 Minimum Safe Altitudes

1. Over congested areas (cities, towns, settlements, or open-air assemblies), a pilot must maintain an altitude of 1,000 ft. above the highest obstacle within a horizontal radius of 2,000 ft. of the airplane.
2. The minimum altitude over other than congested areas is 500 ft. AGL.
 - a. Over open water or sparsely populated areas, an airplane may not be operated closer than 500 ft. to any person, vessel, vehicle, or structure.
3. Altitude in all areas must be sufficient to permit an emergency landing without undue hazard to persons or property on the surface if a power unit fails.

91.121 Altimeter Settings

1. Prior to takeoff, the altimeter should be set to the current local altimeter setting.
 - a. If the current local altimeter setting is not available, use the departure airport elevation.
2. The altimeter of an airplane is required to be set to 29.92 at or above 18,000 ft. MSL,
 - a. To guarantee vertical separation of airplanes above 18,000 ft. MSL.

91.123 Compliance with ATC Clearances and Instructions

1. When an ATC clearance is obtained, no pilot may deviate from that clearance, except in an emergency, unless an amended clearance is obtained. If you feel a rule deviation will occur, you should immediately advise ATC.
2. If you receive priority from ATC in an emergency, you must, upon request, file a detailed report within 48 hr. to the chief of that ATC facility even if no rule has been violated.
3. During an in-flight emergency, the pilot in command may deviate from the FARs to the extent necessary to handle the emergency.
 - a. The pilot should notify ATC about the deviation as soon as possible.
 - b. If priority is given, a written report (if requested) must be submitted in 48 hr.

91.130 Operations in Class C Airspace

1. Class C airspace is controlled airspace which requires radio communication with ATC.
 - a. A pilot must establish two-way radio communication prior to entering Class C airspace and maintain it while within Class C airspace, regardless of weather conditions.

91.131 Operations in Class B Airspace

1. Class B airspace is controlled airspace usually found at larger airports with high volumes of traffic.
2. Requirements for operating within Class B airspace:
 - a. A pilot must hold at least a private pilot certificate or a student pilot certificate with the appropriate logbook endorsements.
 - b. Authorization from ATC, regardless of weather conditions.
 - c. The airplane must have a two-way communications radio and a transponder equipped with Mode C. Mode C permits ATC to obtain an altitude readout on their radar screen.
 - 1) A VOR receiver is required only when operating IFR.
3. Student pilot operations in Class B airspace are only permitted with appropriate logbook endorsements.
 - a. For flight through Class B airspace, the student pilot must
 - 1) Receive ground and flight instructions pertaining to that specific Class B airspace area.
 - 2) Have a CFI logbook endorsement within 90 days for solo flight in that specific Class B airspace area.

- b. For takeoffs and landings at an airport within Class B airspace, the student pilot must
 - 1) Receive ground and flight instructions pertaining to that specific Class B airspace area.
 - 2) Have a CFI logbook endorsement within 90 days for solo flight at that specific airport.

c. No student pilot may take off or land at the following airports:

Atlanta Hartsfield	Newark International
Boston Logan	New York Kennedy
Chicago O'Hare International	New York La Guardia
Dallas/Fort Worth International	San Francisco International
Los Angeles International	Washington National
Miami International	Andrews AFB

4. With certain exceptions, all aircraft within a 30-NM radius of a Class B primary airport and from the surface up to 10,000 ft. MSL must have an operable transponder with Mode C.

91.133 Restricted and Prohibited Areas

- 1. Restricted areas are a type of special use airspace within which your right to fly is limited.
 - a. Restricted areas have unusual and often invisible hazards to aircraft (i.e., balloons, military operations, etc.).
 - b. Although restricted areas are not always in use during the times posted in the legend of sectional charts, permission to fly in that airspace must be obtained from the controlling agency.
 - 1) The controlling agency is listed for each restricted area at the bottom of sectional charts.

91.135 Operations in Class A Airspace

- 1. Since Class A airspace requires operation under IFR at specific flight levels assigned by ATC, VFR flights are prohibited.

91.151 Fuel Requirements for Flight in VFR Conditions

- 1. During the day, FARs require fuel sufficient to fly to the first point of intended landing and then for an additional 30 min., assuming normal cruise speed.
- 2. At night, sufficient fuel to fly an additional 45 min. is required.

91.155 Basic VFR Weather Minimums

Basic VFR Weather Minimums

Airspace	Flight Visibility	Distance from Clouds
Class A	Not Applicable	Not Applicable
Class B	3 statute miles	Clear of Clouds
Class C	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
Class D	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
Class E Less than 10,000 feet MSL	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
At or above 10,000 feet MSL	5 statute miles	1,000 feet below 1,000 feet above 1 statute mile horizontal
Class G 1,200 feet or less above the surface (regardless of MSL altitude).		
Day, except as provided in section 91.155(b)	1 statute mile	Clear of clouds
Night, except as provided in section 91.155(b)	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
More than 1,200 feet above the surface but less than 10,000 feet MSL.		
Day	1 statute mile	500 feet below 1,000 feet above 2,000 feet horizontal
Night	3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal
More than 1,200 feet above the surface and at or above 10,000 feet MSL.	5 statute miles	1,000 feet below 1,000 feet above 1 statute mile horizontal

1. An airplane may be operated clear of clouds in Class G airspace at night below 1,200 ft. AGL when the visibility is less than 3 SM but more than 1 SM in an airport traffic pattern and within V2 NM of the runway.
2. Except when operating under a special VFR clearance
 - a. You may not operate your airplane beneath the ceiling under VFR within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport when the ceiling is less than 1,000 ft.
 - b. You may not take off, land, or enter the traffic pattern of an airport unless ground visibility is at least 3 SM. If ground visibility is not reported, flight visibility must be at least 3 SM.

91.157 Special VFR Weather Minimums

1. With some exceptions, special VFR clearances can be requested in Class B, Class C, Class D, or Class E airspace areas.
 - a. The flight requirements are to remain clear of clouds and have visibility of at least 1 SM.
2. Flight under special VFR clearance at night is only permitted if the pilot has an instrument rating and the aircraft is IFR equipped.
3. Special VFR is an ATIS clearance obtained from the control tower. If there is no control tower, obtain the clearance from the appropriate air traffic control facility.

91.159 VFR Cruising Altitude or Flight Level

1. Specified altitudes are required for VFR cruising flight at more than 3,000 ft. AGL and below 18,000 ft. MSL.
 - a. The altitude prescribed is based upon the magnetic course (not magnetic heading).
 - b. The altitude is prescribed in ft. above mean sea level (MSL).
 - c. Use an odd thousand-foot MSL altitude plus 500 ft. for magnetic courses of 0° to 179°, e.g., 3,500, 5,500, 7,500 ft.
 - d. Use an even thousand-foot MSL altitude plus 500 ft. for magnetic courses of 180° to 359°, e.g., 4,500, 6,500, or 8,500 ft.
 - e. As a memory aid, the "e" in "even" does not indicate east; i.e., on east heading of 0° through 179°, use odd rather than even.
 - 1) "East is odd, west is even odder."

91.203 Civil Aircraft: Certifications Required

1. The aircraft's airworthiness certificate, registration certificate, and operating limitations must be aboard an aircraft during flight.

91.207 Emergency Locator Transmitters

1. ELT batteries must be replaced (or recharged, if rechargeable) after 1 cumulative hr. of use or after 50% of their useful life expires.
2. ELTs may only be tested on the ground during the first 5 min. after the hour.
 - a. No airborne checks are allowed.

91.209 Aircraft Lights

1. Airplanes operating (on the ground or in the air) between sunset and sunrise must display lighted position (navigation) lights, except in Alaska.

91.211 Supplemental Oxygen

1. All occupants must be provided with oxygen in an airplane operated at cabin pressure altitudes above 15,000 ft. MSL.
 - a. Pilots and crewmembers may not operate an airplane at cabin pressure altitudes above 12,500 ft. MSL up to and including 14,000 ft. MSL for more than 30 min. without supplemental oxygen.
 - b. Pilots and crewmembers must use supplemental oxygen at cabin pressure altitudes above 14,000 ft. MSL.

91.215 ATC Transponder and Altitude Reporting Equipment and Use

1. All aircraft must have and use an altitude encoding transponder when operating
 - a. Within Class A airspace
 - b. Within Class B airspace
 - c. Within 30 NM of the Class B airspace primary airport
 - d. Within and above Class C airspace
 - e. Above 10,000 ft. MSL except at and below 2,500 ft. AGL

91.303 Aerobatic Flight

1. Aerobatic flight includes all intentional maneuvers that
 - a. Are not necessary for normal flight and
 - b. Involve an abrupt change in the airplane's attitude.
2. Aerobatic flight is prohibited
 - a. When visibility is less than 3 SM;
 - b. When altitude is less than 1,500 ft. above the ground;
 - c. Within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport;
 - d. Within 4 NM of the centerline of any Federal airway; or
 - e. Over any congested area or over an open-air assembly of people.

91.307 Parachutes and Parachuting

1. With certain exceptions, each occupant of an aircraft must wear an approved parachute during any intentional maneuver exceeding
 - a. 60° bank, or
 - b. A nose-up or nose-down attitude of 30°.
2. A chair-type parachute must be packed by a certificated and appropriately rated parachute rigger within the preceding 120 days.

91.313 Restricted Category Civil Aircraft: Operating Limitations

1. Restricted category civil aircraft may not normally be operated
 - a. Over densely populated areas,
 - b. In congested airways, or
 - c. Near a busy airport where passenger transport is conducted.

91.319 Aircraft Having Experimental Certificates: Operating Limitations

1. No person may operate an aircraft that has an experimental or restricted certificate over a densely populated area or in a congested airway unless authorized by the FAA.

91.403 General

1. The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition.
2. An operator is a person who uses, or causes to use or authorizes to use, an aircraft for the purpose of air navigation, including the piloting of an aircraft, with or without the right of legal control (i.e., owner, lessee, or otherwise).
 - a. Thus, the pilot in command is also responsible for ensuring that the aircraft is maintained in an airworthy condition and that there is compliance with all Airworthiness Directives.

91.405 Maintenance Required

1. Each owner or operator of an aircraft shall ensure that maintenance personnel make the appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service.

91.407 Operation after Maintenance, Preventive Maintenance, Rebuilding, or Alteration

1. When aircraft alterations or repairs change the flight characteristics, the aircraft must be test flown and approved for return to service prior to carrying passengers.
 - a. The pilot test flying the aircraft must be at least a private pilot and rated for the type of aircraft being tested.

91.409 Inspections

1. Annual inspections expire on the last day of the 12th calendar month after the previous annual inspection.
2. All aircraft that are used for compensation or hire including flight instruction must be inspected on a 100-hr. basis in addition to the annual inspection.
 - a. 100-hr. inspections are due every 100 hr. from the prior due time, regardless of when the inspection was actually performed.

91.413 A TC Transponder Tests and Inspections

1. No person may use an ATC transponder unless it has been tested and inspected within the preceding 24 calendar months.

91.417 Maintenance Records

1. An airplane may not be flown unless it has been given an annual inspection within the preceding 12 calendar months.
 - a. The annual inspection expires after 1 year, on the last day of the month of issuance.
2. The completion of the annual inspection and the airplane's return to service should be appropriately documented in the airplane maintenance records.
 - a. The documentation should include the current status of airworthiness directives and the method of compliance.

NTSB PART 830

830.5 Immediate Notification

1. Even when no injuries occur to occupants, an airplane accident resulting in substantial damage must be reported to the nearest National Transportation Safety Board (NTSB) field office immediately.
2. The following incidents must also be reported immediately to the NTSB:
 - a. Inability of any required crewmember to perform normal flight duties because of in-flight injury or illness
 - b. In-flight fire
 - c. Flight control system malfunction or failure
 - d. An overdue airplane that is believed to be involved in an accident
 - e. An airplane collision in flight
 - f. Turbine (jet) engine failures

830.10 Preservation of Aircraft Wreckage, Mail, Cargo, and Records

1. Prior to the time the Board or its authorized representative takes custody of aircraft wreckage, mail, or cargo, such wreckage, mail, or cargo may not be disturbed or moved except
 - a. To remove persons injured or trapped,
 - b. To protect the wreckage from further damage, or
 - c. To protect the public from injury.

830.15 Reports and Statements to Be Filed

1. The operator of an aircraft shall file a report on Board Form 6120.1/2 within 10 days after an accident.
 - a. A report must be filed within 7 days if an overdue aircraft is still missing.
2. A report on an incident for which immediate notification is required (830.5) shall be filed only when requested by an authorized representative of the Board.