


January 2, 2015

To whom it may concern,

On September 11, 2014, I gave Rick Sexton a Flight Review. I recorded in my logbook that we performed slow flight, power on and power off stalls, emergency procedures, and 5 landings in the visual traffic pattern. We flew for 1.3 hours.

Attached is the document I use for the ground training portion of the Flight Review. I review this document with the individual and provide them with a copy for reference.

At the time of the Flight Review, I deemed Rick Sexton competent to act as pilot-in-command during day Visual Meteorological Conditions (VMC).



Howard C. Wilson  
Flight Instructor

## **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. The expiration of the 24-month period for the flight review falls on the last day of the 24<sup>th</sup> month after the month of the examination date.
  - a. A Flight Review consists of a minimum of 1 hr of flight training and 1 hr of ground training.
  - b. A proficiency check or flight test for a pilot certificate, rating, or other operating privileges will also satisfy this requirement.
  - c. The reviewer must endorse satisfactory completion of the review or flight test in the pilot's logbook.
  - d. The completion of one or more phases of an FAA sponsored pilot proficiency award program in the preceding 24 months may replace the flight review.

## **61.23 Medical Certificates**

1. First Class Medical Certificate is good for 6 months if over 40, 12 months if under 40 years old.
2. Second Class Medical Certificate is good for 12 months.
3. Third Class Medical Certificate is good for 24 months, unless obtained prior to your 40<sup>th</sup> birthday, and then it's good for 60 months.

## **61.57 Recent Flight Experience**

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 on the same category and class.

Night in this case is defined as the period beginning 1 hr. after sunset and ending 1 hr. before sunrise.
3. Instrument experience- to act as pilot in command under IFR or weather conditions less than prescribed for VFR, within the 6 calendar months preceding the flight you must perform the following under actual or simulated instrument conditions.
  - a. Six instrument approaches.
  - b. Holding procedures and tasks.
  - c. Intercepting and tracking courses through the use of nav electronic systems.

If you don't meet the instrument currency requirements during the previous 6 calendar months prior to flight you must complete an Instrument Proficiency Check prior to acting as PIC on an IFR flight.

## **91.3 Responsibility and Authority of Pilot in Command**

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

### **91.7 Civil Aircraft Airworthiness**

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

### **91.9 Civil Aircraft Flight Manual, Markings, 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, not the FAA, requires the radio station license for international flights.

A irworthiness certificate

R egistration certificate

R adio station license (if operating outside the U.S.)

O perating limitations, including (POH)

W eight and balance

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.

### **91.13 Careless or reckless operation**

No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

### **91.15 Dropping objects**

No pilot may allow any object to be dropped from that aircraft in flight that creates a hazard to persons or property. However, it does not prohibit dropping an 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 a .04 percent by weight or more alcohol in the blood or any alcoholic beverages have been consumed within the preceding 8 hrs.
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 unless the person is a medical patient under proper care or in an emergency.
4. You must submit to a blood alcohol test if requested by Law Enforcement.
5. If suspected of violating the above, you must submit to the FAA any blood test taken within 4 hrs after attempting to or acting as a crewmember.

### **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. Alternative available if the planned flight cannot be completed, and
    4. Any known traffic delay.

#### **91.105 Flight Crewmembers at Stations**

1. During takeoff and landing and while enroute, each required flight crewmember shall be at their stations and keep their safety belt fastened except to go to the bathroom and perform crewmember duties.
2. During takeoff and landing, shoulder harnesses must be fastened.

#### **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 safety belts, and if installed, shoulder harnesses.
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 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 so close to another as to create a collision hazard.
2. No pilot may operate an aircraft in formation without arrangement with the pilot of the other aircraft.
3. No person may operate an aircraft in formation when carrying passengers for hire.

#### **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 right, regardless of category.
3. When two aircraft of different categories are converging, the right-of-way depends upon who is the least maneuverable. 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.
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. 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.

#### **91.117 Aircraft Speed**

1. The speed limit is 250 kt. (286 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 kts.

#### **91.119 Minimum Safe Altitudes**

1. Over congested areas (cities, town, 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 feet. of the airplane.
2. The minimum altitude over other than congested areas is 500 ft. AGL. 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**

Below 18,000 MSL, altimeter must be set to a reported altimeter setting within 100nm along the route. Above 18,000, use 29.92.

#### **91.123 Compliance with ATC clearances and instructions**

When an ATC clearance has been obtained, no pilot in command may deviate from that clearance unless and amended clearance is obtained, and emergency exists, or the deviation is in response to a traffic alert and collision avoidance system resolution advisory. When not in Class A airspace and in VFR conditions, a pilot may cancel IFR flight plan. When a pilot is uncertain of an ATC clearance, that pilot shall immediately request clarification from ATC. Each pilot who is given priority by ATC in an emergency shall submit a detailed written report within 48 hrs to the manager of that ATC facility if requested by ATC.

#### **91.126 Operating on or in the vicinity of an airport in Class G Airspace.**

When approaching to land, make all turns to the left unless otherwise indicated.

#### **91.127 Operating on or in the vicinity of an airport in Class E Airspace.**

The correct departure procedure at a non-controlled airport is the FAA-approved departure procedure for that airport.

#### **91.129 Operations in Class D Airspace**

1. A turbine-powered or large airplane is required to enter an airport traffic pattern at an altitude of at least 1,500 ft. AGL. All aircraft must establish two-way communications with the controlling ATC facility.
2. When an airport without a control tower lies within the controlled airspace of an airport with an operating tower, two-way radio communications with ATC are required to for landing clearance at the tower-controlled airport only, as well as to fly through the area. Establish communications with ATC as soon as practical after departure from a satellite airport.
3. You must have clearance to taxi or takeoff from the tower controlled airport.

#### **91.130 Operations in Class C Airspace**

1. To operate in Class C airspace, you must have two-way radio communications and a transponder with encoding altimeter.
2. When departing a satellite airport in Class C airspace without an operating control tower, you must establish two-way contact with ATC as soon as practicable after takeoff.

### **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 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 altitude readout on their radar screen.
  - d. A VOR receiver or suitable RNAV system 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 takeoff or land at the following airports:
 

Atlanta-Hartsfield	Newark Int.
Boston Logan	New York Kennedy
Chicago O'Hara Int.	New York La Guardia
Dallas/Ft. Worth Int.	San Francisco Int.
Los Angeles Int.	Ronald Reagan Int.
Miami Int.	Andrews AFB

### **91.137 Temporary Flight Restrictions in the Vicinity of Disaster/Hazard areas.**

1. The Administrator will issue a NOTAM designating an area within which temporary flight restrictions apply and specifying the hazard or condition requiring their imposition, when ever he determines it is necessary.
2. NOTAMs will specify the hazard or condition that requires the imposition of temporary flight restrictions.
3. If operating on or under ATC clearance on an approved IFR flight plan you may operate in the designated area.

### **91.139 Emergency Air Traffic Rules**

Whenever the Administrator determines that an emergency condition exists, or will exist, relating to the FAA's ability to operate the ATC system and during which normal flight operations cannot be conducted with the required levels of safety and efficiency:

- a. The Administrator issues an immediately effective air traffic rule or regulation in response to that emergency condition, and
- b. The Administrator or the Associate Administrator for Air Traffic may utilize the NOTAM system to provide notification of the issuance of the rule or regulation.

#### **91.141 Flight restrictions in the proximity of the Presidential and other parties.**

No person may operate an aircraft over or in the vicinity of any area to be visited or traveled by the President, the Vice President, or other public figures contrary to the restrictions established by the Administrator and published in a NOTAM.

#### **91.145 Management of Aircraft Operations in the vicinity of Aerial Demos and Major Sporting Events.**

The FAA will issue a NOTAM designating the area of airspace in which a temporary flight restriction applies and when it applies (UT vs. Ohio, Olympics, Thunderbirds).

#### **91.146 Passenger Carrying Flights for Charity.**

1. You can only fly for a charity event 4 times per year.
2. You must take off and land at the same public airport and remain within 25 nm under Day VFR.
3. Reimbursement can only cover the cost of the flight.
4. Private pilots acting as PIC must have at least 500 hrs.

#### **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 VRF Weather Minimums**

Airspace	Flight Visibility	Distance from Clouds	Airspace	Flight Visibility	Distance from Clouds
<b>Class A</b>	N/A	N/A	<b>Class G</b>		
<b>Class B</b>	3 SM	Clear of Clouds	1,200 ft. or less AGL, regardless of MSL		
<b>Class C</b>	3 SM	500 ft below 1,000 ft above 2,000 ft horiz	Day, except as provided in 1. Below	1 SM	Clear of Clouds
<b>Class D</b>	3 SM	500 ft below 1,000 ft above 2,000 ft horiz	Night, except as provided in 1. Below	3 SM	500 ft below 1,000 ft above 2,000 ft horiz
<b>Class E</b>			Above 1,200 ft AGL, but below 10,000 ft MSL		
Less than 10,000 ft MSL	3 SM	500 ft below 1,000 ft above 2,000 ft horiz	Day Night	1 SM 3 SM	500 ft below 1,000 ft above 2,000 ft horiz
At or above 10,000 ft MSL	5 SM	1,000 ft below 1,000 ft above 1 SM horiz	Above 1,200 ft AGL, and above 10,000 ft MSL	5 SM	1,000 ft below 1,000 ft above 1 SM horiz

1. An airplane may be operated clear of clouds in uncontrolled (Class G) airspace at night below 1,200 ft. AGL when the visibility is less than 3 SM but no less than 1 SM in an airport traffic pattern and within ½ NM of the runway.
2. The basic VFR weather minimums for operating an aircraft within Class B, Class C, Class D, or Class E airspace are a ceiling of 1,000 ft. and 3 SM ground visibility. If the ground visibility is not reported, then the flight visibility must be 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. 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 ATC clearance from the appropriated air traffic control facility, must be below 10,000 MSL.

#### **91.159 VFR Cruising Altitude or Flight Level**

Specified altitudes are required for VFR cruising flight at more than 3,000 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 degrees to 170 degrees.
- d. Use an even thousand-foot MSL altitude plus 500 ft for magnetic courses of 180 degrees to 359 degrees.

#### **91.167 IFR Fuel Requirements**

1. Fuel to fly to primary airport, fly to the alternate, and then fly for 45 minutes at normal cruise speed.
2. If a Standard Instrument Approach exists, and the forecast for +/- one hour is above a 2,000' ceiling and 3 miles visibility, fuel to fly to the alternate is not required.

#### **91.169 IFR Flight Plan**

1. Alternate weather requirements, if the primary airport forecast +/- one hour of the ETA is below 2000' and 3 miles, are a 600' ceiling and 2 miles visibility for a precision approach, or an 800' ceiling and 2 miles visibility for a non-precision approach at the ETA
2. If the alternate does not have a published approach, the ceiling and visibility minima are those for allowing descent, approach, and landing, from the MEA, under basic VFR.
3. Check IFR Alternate Airport Minimums in the front of the Terminal Procedures Pub.
4. Pilots must cancel activated flight plans with FSS or ATC.

#### **91.171 VOR Equipment Checks for IFR**

1. For IFR use, VORs must have operational checks within the 30 previous calendar days.
2. During ground checks at designated VOR checkpoints, the maximum permissible bearing error is +/- 4 deg.
3. Using a VOR test signal, the maximum permissible bearing error is +/- 4 deg.
4. If dual VOR systems are installed in an aircraft, and one system is checked against the other, the maximum difference in indicated bearing to the station is +/- 4 deg.
5. If a VOR is checked in flight, over a known terrain feature along a published airway, preferably at least 20 nm from the station, the maximum variation between the published radial and the indicated bearing is +/- 6 deg.
6. The person making the VOR check shall enter the date, place, bearing error, and his signature in the aircraft logbook.

#### **91.175 Takeoff and landing under IFR**



1. No pilot may operate an aircraft (except military) below the authorized MDA or continue an approach below the authorized DA/DH unless:
  - a. The aircraft is continuously in a position from which a descent to a landing on the intended runway can be made using a normal rate of descent using normal maneuvers.
  - b. The flight visibility is not less than the visibility prescribed in the standard instrument approach being used.
  - c. At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot: approach lighting system, threshold or markings or lights, REILs, VASIs, touchdown zone lights, the runway or markings, runway lights.
2. Take off minimums for aircraft with 2 engines or less is 1 NM vis., more than 2 engines is ½ NM.

#### **91.177 Minimum Altitudes for IFR Operation.**

1. In mountainous areas maintain a minimum of 2,000' above the highest obstacle within 4 nm of the course to be flown. In any other case, a minimum of 1,000' above the highest obstacle within 4 nm of the course to be flown.
2. MEA (Minimum Enroute Altitude) and MOCA (Minimum Obstruction Clearance Altitude) apply when published.

#### **91.179 IFR Cruising Altitudes.**

1. In Controlled airspace, maintain the altitude assigned by ATC.
2. In Uncontrolled airspace, below 18,000 ft. MSL, if your Magnetic Course is between:
  - a. 000-179 deg., maintain odd thousands at or above 3,000 ft.
  - b. 180-359 deg., maintain even thousands at or above 4,000 ft.

#### **91.183 IFR Radio Communications**

1. Maintain a continuous watch on the assigned ATC frequency.
2. Report time and altitude at reporting points except when under radar control.
3. Report unforecast weather and anything related to safety of flight.

#### **91.185 IFR Radio Failure**

1. If VFR, maintain VFR and land as soon as practical. Set transponder to 7600.
2. If IFR, continue assigned route, expected route, or filed route.
3. If IFR, maintain assigned altitude, MEA or expected altitude. Leave the clearance limit/approach fix at the EFC time or as close as possible to the ETA.

#### **91.203 Civil Aircraft: Certifications Required**

The aircraft's Airworthiness Certificate, Registration Certificate, and operating limitations must be aboard an aircraft. The Airworthiness Certificate must be displayed at the cabin or cockpit entrance so it is visible to passengers or crew.

#### **91.205 U.S airworthiness certificates: Instrument and equipment requirements**

#### VFR (day)

1. Airspeed indicator
2. Altimeter
3. Magnetic direction indicator
4. Tachometer for each engine
5. Oil pressure gauge for each engine when using pressure system
6. Temperature gauge for each liquid cooled engine
7. Oil temperature gauge for each air-cooled engine
8. Manifold pressure gauge for each altitude engine
9. Fuel gauge indicating the quantity of fuel in each tank
10. Landing gear position indicator, if the aircraft has retractable landing gear
11. Approved red or white anti-collision lights if certificated after Mar 11, 1996
12. Approved flotation if flown for hire over water and not within gliding distance of land.
13. Approved seatbelt with metal latching for each occupant over 2 yrs.
14. Approved shoulder harnesses for small aircraft front seats if manufactured after July 18, 1978
15. Emergency locator transmitter if required by 91.207
16. For normal, utility, and acrobatic category aircraft with 9 seats or less (not including pilots), shoulder harnesses for pilots and approved seatbelts for passengers
17. Rotorcraft manufactured after Sept 16, 1992, shoulder harnesses for each seat

#### VFR (night)

1. All the day VFR equipment
2. Approved position lights
3. Approved anti-collision lights
4. If operated for hire, an approved electric landing light
5. Adequate source of electrical energy for installed electrical and radio equipment.
6. One spare set of fuses, or three spare fuses of each type required, accessible to the pilot

#### IFR

1. Day VFR equipment and if operating at night, night VFR equipment
2. Two-way radio and navigation equipment suitable for the route to be flown
3. Gyroscopic rate-of-turn indicator (unless 3<sup>rd</sup> attitude indicator installed)
4. Slip-Skid indicator
5. Sensitive altimeter with barometric adjustment
6. Clock with hours, minutes, and seconds
7. Generator or alternator
8. Gyroscopic pitch and bank indicator (artificial horizon)
9. Gyroscopic direction indicator
10. At or above FL 240, DME or a suitable RNAV system

#### **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. Inspections are required every 12 months.
2. ELTs may only be tested on the ground during the first 5 minutes after the hour. 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
2. Anti-collision lights must be used if equipped, but may be off, at the pilot's discretion, for safety

### **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.
2. 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 minutes without supplemental oxygen.
3. Pilots and crewmembers must use supplemental oxygen at cabin pressure altitudes above 14,000 Ft. MSL.

### **91.213 Inoperative instruments and equipment**

Comply with Minimum Equipment List, Airworthiness Certificate, and Airworthiness Directive requirements. An aircraft may be operated with inoperative equipment if not required for day VFR operation and the equipment is removed or placarded 'inoperative'

### **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 2500 AGL.

### **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 degrees of bank or
  - b. A nose-up or nose-down attitude of 30 degrees.
2. A chair-type parachute must be packed by a certificated and appropriately rated parachute rigger within the preceding 60 or 180 days, depending on the material of the parachute.

### **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). 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**

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**

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 and the flight must be logged in the aircraft records. 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 12<sup>th</sup> 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. 100-hr. inspections are due every 100-hr. from the prior due time, regardless of when the inspection was actually performed.

### **91.411 Altimeter System and Altitude Reporting Equipment Tests and Inspections.**

1. No person may operate in controlled airspace under IFR unless:
  - a. Within the preceding 24 calendar months each static pressure system, each altimeter instrument, and each automatic pressure altitude reporting system has been tested and found to comply with Appendices E and F of Part 43.
  - b. The tests can be performed by the aircraft manufacturer or a certified repair shop.

### **91.413 ATC Transponder Tests and Inspections**

1. No person may use an ATC Transponder unless it has been tested within the last 24 calendar months and found to comply with Appendix F of FAR Part 43.
2. The test must be done by a certified repair shop.

### **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. The annual inspection expires after one 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. The documentation should include the current status of airworthiness directives and the method of compliance.

## **AIM**

### **1-1-12 NAVAID Identifier during maintenance:**

During periods of routine or emergency maintenance, coded identification is removed from certain FAA NAVAIDS. Removal serves as a warning to pilots that the facility is officially off the air.

### **1-1-18 GPS Systems**

A TSO-C129 (RAIM, no WAAS) aircraft may plan a GPS approach at the destination or the alternate, but not both. One airport must have an approved instrument approach procedure other than GPS that is anticipated to be operational and available at the estimated time of arrival, and which the aircraft is equipped to fly.

With WAAS (TSO-C145 and TSO-C146), a GPS approach can be planned at the destination or alternate. If a VDP is part of the approach, it will not be one of the approach waypoints. Installation of WAAS avionics does not require the aircraft to have any other equipment appropriate to the route being flown.

GPS Databases must be current for IFR flights.

### **1-1-19 Wide Area Augmentation System (WAAS)**

- b.1. Approach with Vertical Guidance (APV) includes LNAV/VNAV but these do not meet the more stringent standards of a precision approach.
- b.2. A new APV called LPV (localizer performance with vertical guidance) may have decision altitudes as low as 200' and visibility requirements as low as ½ mile.

b.3 A new non-precision WAAS approach called Localizer Performance (LP) is being added in locations where the terrain or obstructions do not allow publication of vertically guided LPV procedures.

c.7 Installation of WAAS avionics does not require the aircraft to have other equipment appropriate to the route to be flown.

### **1-2-3 Use of Suitable RNAV Systems.**

A suitable RNAV system may be used in place of a VOR/DME/ADF if it is out of service or the equipment is not installed or working in the aircraft. The pilot may fly a procedure or route with GPS, but not the final approach segment of an approach.

### **3-4-3 Restricted Areas**

If the restricted area is not active and had been released to the controlling agency (FAA), the ATC facility will allow the aircraft to operate in the restricted airspace without issuing specific clearance to do so.

### **3-4-5 Military Operations Areas**

When a MOA is being used, non-participating IFR traffic may be cleared through a MOA if IFR separation can be provided by ATC.

### **4-1-19 Transponder Operation.**

Transponders should be turned on to the altitude reporting position prior to movement on the airport surface.

### **4-3-2 Airports with an Operating Control Tower**

Pilots are reminded that it is not necessary to request permission to leave the tower frequency once outside of Class B, C, and D surface areas

### **4-4-8 IFR Clearance VFR-on-Top**

A pilot on an IFR flight plan operating in VFR weather conditions, may request VFR-on-Top in lieu of an assigned altitude. This permits a pilot to select an altitude or flight level of their choice (subject to ATC restrictions). Pilots must fly at appropriate VFR altitudes and advise ATC of altitude changes. Operation may be above, below, or between layers, must maintain VFR cloud clearances and have appropriate visibility. It does not imply cancellation of your IFR clearance and can't be in Class A.

### **5-1-8 Flight Plans**

Pilots should file IFR flight plans at least 30 min prior to estimated time of departure and 4 hrs in advance for operations above FL230.

To receive IFR clearances at non-tower, non-FSS, and outlying airports, ask the nearest FSS the most appropriate means.

RNAV/GPS area navigation procedures

- a. file airport to airport
- c. plan the random route to begin and end over appropriate arrival and departure transition fixes or nav aids (SID and STAR if appropriate)
- e. define the random route by waypoints using degree-distance fixes based on nav aids.
- f. file a minimum of one route description waypoint for each ARTCC and within 200 NM of the preceding center's boundary.
- g. file an additional waypoint for each turnpoint in the route.
- i. plan the route to avoid prohibited and restricted airspace by 3 NM.

### **5-1-13 Change in proposed departure time:**

Flight plans that have not been activated will be deleted a minimum of 1 hr after planned departure.

#### **5-1-14 Closing VFR flight plans**

If you fail to report or cancel your flight plan within ½ hr after your ETA, search and rescue procedures are started.

#### **5-1-15 Canceling IFR Flight Plan:**

If operating on an IFR flight plan to a towered airport the flight plan is automatically closed. If there is no functioning control tower, the pilot must initiate cancellation of the IFR flight plan.

#### **5-2-8 Instrument Departures.**

Departure Procedures (DP) – two types, Obstacle Departure Procedures (ODP) and Standard Instrument Departures (SID). Both provide obstruction clearance. SIDs are primarily designed for system enhancement and to reduce pilot/controller workload. Unless specified otherwise, all are based on crossing the departure end of the runway at least 35' AGL, climbing to 400' AGL before making the first turn, and climbing a minimum of 200'/mile. They required a ceiling of 300' and 1 nm vis.

#### **5-3-1 ARTCC Communications:**

With frequency changes, always report 'level', 'climbing to' or 'descending to' and current altitude within 100'.

#### **5-3-2 Position Reports:**

When not in radar contact, report current position, time, and flight level, then next reporting point and ETA, then subsequent reporting point. Make the report at the time of station passage (To/From change).

#### **5-3-3 Additional Reports:**

- a. When vacating any previously assigned altitude.
- b. When an altitude change will be made when VFR on top.
- c. When unable to climb/descend at a rate of at least 500 fpm.
- d. When going missed approach and include request/intentions.
- e. When TAS changes by more than 5% or 10 kts, which ever is greater.
- f. When reaching a clearance limit or holding fix, with time and altitude.
- g. When leaving an assigned holding fix or point.
- h. Any loss of navigation receiver capability when in controlled airspace.
- i. Any information related to safety of flight

f. and g. may be omitted when conducting instrument training when radar service is provided.

When not in radar contact:

- a. When leaving a final approach fix inbound on final
- b. When an ETA changes by more than 3 min.

#### **5-3-7 Holding**

Inbound Leg – at or below 14,000', 1 min, above 14,000', 1 ½ min, right turns standard.

Outbound Timing – wings level abeam the fix, whichever is later.

All turns Standard Rate.

Drift corrections – single drift inbound, triple drift outbound.

#### **5-4-5 Instrument Approach Procedure Charts**

VDPs are being added. This is where you can begin a normal decent to the touchdown point.

Approaches without VDPs have not been assessed for terrain clearance below the MDA.

Descent to a straight-in landing from the MDA at the MAP may inadvisable or impossible.

Circling Approaches:

- Category A, speed less than 91 kts, 1.3 NM clearance
- Category B, speed less than 121 kts, 1.5 NM clearance
- Category C, speed less than 141 kts, 1.7 NM clearance
- Category D, speed less than 166 kts, 2.3 NM clearance
- Category E, speed above 166 kts, 4.5 NM clearance