A150.5017(001)
If an airplane category is listed as utility, it would mean that this airplane could be operated in which of the following maneuvers?
   a. **Limited acrobatics, including spins (if approved).**
   b. Limited acrobatics, excluding spins.
   c. Any maneuver except acrobatics or spins.

J27.5750(002)
Choose the correct statement regarding wake turbulence.
   a. **The primary hazard is loss of control because of induced roll.**
   b. Vortex generation begins with the initiation of the takeoff roll.
   c. The greatest vortex strength is produced when the generating airplane is heavy, clean, and fast.

J27.5751(003)
During a takeoff made behind a departing large jet airplane, the pilot can minimize the hazard of wingtip vortices by:
   a. **Being airborne prior to reaching the jet's flightpath until able to turn clear of its wake.**
   b. Maintaining extra speed on takeoff and climbout.
   c. Extending the takeoff roll and not rotating until well beyond the jet's rotation point.

J27.5752(004)
Which procedure should you follow to avoid wake turbulence if a large jet crosses your course from left to right approximately 1 mile ahead and at your altitude?
   a. Make sure you are slightly below the path of the jet and perpendicular to the course.
   b. Slow your airspeed to VA and maintain altitude and course.
   c. Make sure you are slightly above the path of the jet.

J27.5753(005)
To avoid possible wake turbulence from a large jet aircraft that has just landed prior to your takeoff, at which point on the runway should you plan to become airborne?
   a. Past the point where the jet touched down.
   b. At the point where the jet touched down, or just prior to this point.
   c. Approximately 500 feet prior to the point where the jet touched down.

J27.5754(006)
When landing behind a large aircraft, which procedure should be followed for vortex avoidance?
   a. Stay well below its final approach flightpath and land at least 2,000 feet behind.
   b. Stay below and to one side of its final approach flightpath.
   c. **Stay above its final approach flightpath all the way to touchdown.**

5013(007)
Which is the correct symbol for the stalling speed or the minimum steady flight speed in a specified configuration?
   a. \( V_{S1} \).
   b. \( V_S \).
   c. \( V_{SO} \).
5014(008)
Which is the correct symbol for the stalling speed or the minimum steady flight speed at which the airplane is controllable?

a. $V_S$

b. $V_{St}$

c. $V_{SO}$

5015-1(009)
14 CFR part 1 defines $V_F$ as:

a. maximum flap extended speed.

b. **design flap speed.**

c. flap operating speed.

5015-2(010)
14 CFR part 1 defines $V_{NO}$ as:

a. maximum structural cruising speed.

b. normal operating speed.

c. maximum operating speed.

5016-1(011)
14 CFR part 1 defines $V_{LE}$ as:

a. maximum landing gear operating speed.

b. maximum leading edge flaps extended speed.

c. **maximum landing gear extended speed.**

5016-2(012)
14 CFR part 1 defines $V_{NE}$ as:

a. **never-exceed speed.**

b. maximum nose wheel extend speed.

c. maximum landing gear extended speed.

5016-3(013)
14 CFR part 1 defines $V_Y$ as:

a. speed for best angle of climb.

b. speed for best rate of descent.

c. **speed for best rate of climb.**

5177(014)
Which airspeed would a pilot be unable to identify by the color coding of an airspeed indicator?

a. The never-exceed speed.

b. The power-off stall speed.

c. **The maneuvering speed.**

5114(015)
What altimeter setting is required when operating an aircraft at 18,000 feet MSL?

a. Current reported altimeter setting of a station along the route.

b. **29.92” Hg.**

c. Altimeter setting at the departure or destination airport.
5020(016)
Does a commercial pilot certificate have a specific expiration date?
   a. No, but commercial privileges expire if a flight review is not satisfactorily completed each 12 months.
   b. **No, it is issued without a specific expiration date.**
   c. Yes, it expires at the end of the 24th month after the month in which it was issued.

5018(017)
Commercial pilots are required to have a valid and appropriate pilot certificate in their personal possession or readily accessible in the aircraft when:
   a. **acting as pilot in command.**
   b. piloting for hire only.
   c. carrying passengers only.

5111(018)
No person may operate an aircraft in simulated instrument flight conditions unless the:
   a. other control seat is occupied by at least an appropriately rated commercial pilot.
   b. pilot has filed an IFR flight plan and received an IFR clearance.
   c. **other control seat is occupied by a safety pilot, who holds at least a private pilot certificate and is appropriately rated.**

5126(019)
A person with a Commercial Pilot certificate may act as pilot in command of an aircraft carrying persons or property for compensation or hire, if that person:
   a. is qualified in accordance with 14 CFR part 61 and has passed a pilot competency check given by an authorized check pilot.
   b. holds appropriate category, class ratings, and meets the recent flight experience requirements of 14 CFR part 61.
   c. **is qualified in accordance with 14 CFR part 61 and with the applicable parts that apply to the operation.**

5023(020)
Unless otherwise authorized, the pilot in command is required to hold a type rating when operating any:
   a. multiengine airplane having a gross weight of more than 12,000 pounds.
   b. **aircraft of more than 12,500 pounds maximum certificated takeoff weight.**
   c. aircraft that is certificated for more than one pilot.

5039(021)
What limitation is imposed on a newly certificated commercial pilot - airplane, if that person does not hold an instrument rating? The carriage of passengers:
   a. or property for hire on cross-country flights at night is limited to a radius of 50 NM.
   b. **for hire on cross-country flights in excess of 50 NM, or for hire at night is prohibited.**
   c. for hire on cross-country flights is limited to 50 NM for night flights, but not limited for day flights.

5019(022)
Which of the following are considered aircraft class ratings?
   a. Airplane, rotorcraft, glider, and lighter-than-air.
   b. **Single-engine land, multiengine land, single-engine sea, and multiengine sea.**
   c. Transport, normal, utility, and acrobatic.
A20.5021(023)
A second-class medical certificate issued to a commercial pilot on April 10, this year, permits the pilot to exercise which of the following privileges?

a. **Commercial pilot privileges through April 30, next year.**

b. Commercial pilot privileges through April 10, 2 years later.

c. Private pilot privileges through, but not after, March 31, next year.

A20.5026(024)
What flight time must be documented and recorded by a pilot exercising the privileges of a commercial certificate?

a. All flight time flown for compensation or hire.

b. **Flight time showing training and aeronautical experience to meet requirements for a certificate, rating or flight review.**

c. Only flight time for compensation or hire with passengers aboard which is necessary to meet the recent flight experience requirements.

A20.5025(025)
What flight time may a pilot log as second in command?

a. Only that flight time during which the second in command is the sole manipulator of the controls.

b. All flight time while acting as second in command in aircraft configured for more than one pilot.

c. **All flight time when qualified and occupying a crewmember station in an aircraft that requires more than one pilot.**

A20.5024(026)
To act as pilot in command of an airplane that is equipped with retractable landing gear, flaps, and controllable-pitch propeller, a person is required to:

a. hold a multiengine airplane class rating.

b. make at least six takeoffs and landings in such an airplane within the preceding 6 months.

c. receive and log ground and flight training in such an airplane, and obtain a logbook endorsement certifying proficiency.

A20.5106(027)
To act as pilot-in-command of an airplane with more than 200 horsepower, a person is required to:

a. obtain an endorsement from a qualified pilot stating that the person is proficient to operate such an airplane.

b. receive and log ground and flight training from an authorized instructor in such an airplane.

c. receive and log ground and flight training from a qualified pilot in such an airplane.

A20.5107(028)
To serve as pilot in command of an airplane that is certified for more than one pilot crewmember, and operated under part 91, a person must:

a. **complete a pilot-in-command proficiency check within the preceding 12 calendar months in an airplane that is type certificated for more than one pilot.**

b. receive and log ground and flight training from an authorized flight instructor.

c. complete a flight review within the preceding 24 calendar months.
A20.5108(029)
To serve as second in command of an airplane that is certificated for more than one pilot crewmember, and operated under part 91, a person must:
   a. hold at least a commercial pilot certificate with an airplane category rating.
   b. receive and log flight training from an authorized flight instructor in the type of airplane for which privileges are requested.
   c. within the last 12 months become familiar with the required information, and perform and log pilot time in the type of airplane for which privileges are requested.

A21.5128(030)
To act as pilot in command of a tailwheel airplane, without prior experience, a pilot must:
   a. pass a competency check and receive an endorsement from an authorized instructor.
   b. receive and log flight training from an authorized instructor.
   c. log ground and flight training from an authorized instructor.

A21.5027(031)
If a pilot does not meet the recency of experience requirements for night flight and official sunset is 1900 CST, the latest time passengers should be carried is:
   a. 1900 CST.
   b. 1800 CST.
   c. 1959 CST.

A21.5028(032)
Prior to carrying passengers at night, the pilot in command must have accomplished the required takeoffs and landings in:
   a. the same category, class, and type of aircraft (if a type rating is required).
   b. the same category and class of aircraft to be used.
   c. any category aircraft.

A21.5031(033)
To act as pilot in command of an aircraft under 14 CFR part 91, a commercial pilot must have satisfactorily accomplished a flight review or completed a proficiency check within the preceding:
   a. 12 calendar months.
   b. 24 calendar months.
   c. 6 calendar months.

A21.5030(034)
No pilot may act as pilot in command of an aircraft under IFR or in weather conditions less than the minimums prescribed for VFR unless that pilot has, within the past 6 months, performed and logged under actual or simulated instrument conditions, at least:
   a. six instrument approaches, holding procedures, intercepting and tracking courses, or passed an instrument proficiency check in an aircraft that is appropriate to the aircraft category
   b. three instrument approaches and logged 3 hours of instruments
   c. six instrument flights and six approaches
A20.5032(035)
Pilots, who change their permanent mailing address, and fail to notify the FAA Airmen Certification Branch of this change, are entitled to exercise the privileges of their pilot certificate for a period of:
   a. 90 days.
   b. **30 days.**
   c. 60 days.

B12.5055(036)
Which is required to operate an aircraft towing an advertising banner?
   a. A certificate of waiver issued by the Administrator.
   b. A safety link at each end of the towline which has a breaking strength not less than 80 percent of the aircraft's gross weight.
   c. Approval from ATC to operate in Class E airspace.

A21.5033(037)
To act as pilot in command of an airplane towing a glider, the tow pilot is required to have:
   a. a logbook endorsement from an authorized glider instructor certifying receipt of ground and flight training in gliders, and be proficient with techniques and procedures for safe towing of gliders.
   b. at least a private pilot certificate with a category rating for powered aircraft, and made and logged at least three flights as pilot or observer in a glider being towed by an airplane.
   c. a logbook record of having made at least three flights as sole manipulator of the controls of a glider being towed by an airplane.

A21.5034(038)
To act as pilot in command of an airplane towing a glider, a pilot must have accomplished, within the preceding 12 months, at least:
   a. ten flights as pilot in command of an aircraft while towing a glider.
   b. **three actual or simulated glider tows while accompanied by a qualified tow pilot.**
   c. three actual glider tows under the supervision of a qualified tow pilot.

B07.5044(039)
What action must be taken when a pilot in command deviates from any rule in 14 CFR part 91?
   a. Advise ATC of the pilot in command's intentions.
   b. Upon landing, report the deviation to the nearest FAA Flight Standards District Office.
   c. Upon the request of the Administrator, send a written report of that deviation to the Administrator.

B07.5047(040)
A pilot in command (PIC) of a civil aircraft may not allow any object to be dropped from that aircraft in flight:
   a. **if it creates a hazard to persons and property.**
   b. unless the PIC has permission to drop any object over private property.
   c. unless reasonable precautions are taken to avoid injury to property.

A01.5011(041)
Regulations which refer to "operate" relate to that person who:
   a. **causes the aircraft to be used or authorizes its use.**
   b. acts as pilot in command of the aircraft.
   c. is the sole manipulator of the aircraft controls.
A01.5012(042)
Regulations which refer to the "operational control" of a flight are in relation to:
   a. exercising authority over initiating, conducting, or terminating a flight.
   b. the specific duties of any required crewmember.
   c. acting as the sole manipulator of the aircraft controls.

A01.5010(043)
Regulations which refer to "commercial operators" relate to that person who:
   a. for compensation or hire, engages in the carriage by aircraft in air commerce of persons
      or property, as an air carrier.
   b. for compensation or hire, engages in the carriage by aircraft in air commerce of persons
      or property, other than as an air carrier.
   c. is the owner of a small scheduled airline.

B07.5109(044)
What person is directly responsible for the final authority as to the operation of the airplane?
   a. Pilot in command.
   b. Airplane owner/operator.
   c. Certificate holder.

A20.5141(045)
A pilot convicted of operating a motor vehicle while intoxicated by, impaired by, or under the influence of alcohol or a drug is required to provide a:
   a. Written report to the FAA Civil Aeromedical Institute (CAMI) within 60 days after the motor vehicle action.
   b. Written report to the FAA Civil Aviation Security Division (AMC-700) not later than 60 days after the conviction.
   c. Notification of the conviction to an FAA Aviation Medical Examiner (AME) not later than 60 days after the motor vehicle action.

A20.5142(046)
A pilot convicted of a motor vehicle offense involving alcohol or drugs is required to provide a written report to the:
   a. nearest FAA Flight Standards District Office (FSDO) within 60 days after such action.
   b. FAA Civil Aeromedical Institute (CAMI) within 60 days after the conviction.
   c. FAA Civil Aviation Security Division (AMC-700) within 60 days after such action.

A20.5143(047)
A pilot convicted for the violation of any Federal or State statute relating to the process, manufacture, transportation, distribution, or sale of narcotic drugs is grounds for:
   a. a written report to be filed with the FAA Civil Aviation Security Division (AMC-700) not later than 60 days after the conviction.
   b. suspension or revocation of any certificate, rating, or authorization issued under 14 CFR part 61.
   c. notification of this conviction to the FAA Civil Aeromedical Institute (CAMI) within 60 days after the conviction.
A20.5144(048)
A pilot convicted of operating an aircraft as a crewmember under the influence of alcohol, or using drugs that affect the person's faculties, is grounds for a:
   a. written report to be filed with the FAA Civil Aviation Security Division (AMC-700) not later than 60 days after the conviction.
   b. denial of an application for an FAA certificate, rating, or authorization issued under 14 CFR part 61.
   c. written notification to the FAA Civil Aeromedical Institute (CAMI) within 60 days after the conviction.

B07.5045(049)
Who is responsible for determining if an aircraft is in condition for safe flight?
   a. The pilot in command.
   b. A certificated aircraft mechanic.
   c. The owner or operator.

B07.5046(050)
When operating a U.S.-registered civil aircraft, which document is required by regulation to be available in the aircraft?

B08.5049-1(051)
When is preflight action required, relative to alternatives available, if the planned flight cannot be completed?
   a. IFR flights only.
   b. Any flight not in the vicinity of an airport.
   c. Any flight conducted for compensation or hire.

B08.5049-2(052)
The required preflight action relative to weather reports and fuel requirements is applicable to:
   a. any flight conducted for compensation or hire.
   b. any flight not in the vicinity of an airport.
   c. IFR flights only.

B08.5050(053)
Before beginning any flight under IFR, the pilot in command must become familiar with all available information concerning that flight. In addition, the pilot must:
   a. list an alternate airport on the flight plan, and confirm adequate takeoff and landing performance at the destination airport.
   b. be familiar with the runway lengths at airports of intended use, and the alternatives available, if the flight cannot be completed.
   c. be familiar with all instrument approaches at the destination airport.

B08.5051-1(054)
Required flight crewmembers' safety belts must be fastened:
   a. while the crewmembers are at their stations.
   b. only during takeoff and landing.
   c. only during takeoff and landing when passengers are aboard the aircraft.
B08.5051-2(055)
Each required flight crewmember is required to keep his or her shoulder harness fastened:
  a. during takeoff and landing only when passengers are aboard the aircraft.
  b. during takeoff and landing, unless he or she is unable to perform required duties.
  c. while the crewmembers are at their stations, unless he or she is unable to perform required duties.

B08.5052(056)
With U.S.-registered civil airplanes, the use of safety belts is required during movement on the surface, takeoffs, and landings for:
  a. safe operating practice, but not required by regulations.
  b. commercial passenger operations only.
  c. each person over 2 years of age on board.

B08.5110-1(057)
Operating regulations for U.S.-registered civil airplanes require that during movement on the surface, takeoffs, and landings, a seat belt and shoulder harness (if installed) must be properly secured about each:
  a. person on board.
  b. flight and cabin crewmembers.
  c. flight crewmember only.

B07.5056-1(058)
Portable electronic devices which may cause interference with the navigation or communication system may not be operated on a U.S.- registered civil aircraft being flown:
  a. in air carrier operations.
  b. within the U.S.
  c. along Federal airways.

B07.5056-2(059)
Portable electronic devices which may cause interference with the navigation or communication system may not be operated on a U.S.- registered civil aircraft being flown:
under IFR.
  In passenger carrying operations
  Along Federal airways

B11.5060(060)
A coded transponder equipped with altitude reporting equipment is required for
1. Class A, Class B, and Class C airspace areas
2. all airspace of the 48 contiguous U.S. and the District of Columbia at and above 10,000 feet MSL (including airspace at and below 2,500 feet above the surface).
  a. 1.
  b. 2.
  c. Both 1 and 2

B11.5072-2(061)
What transponder equipment is required for airplane operations within Class B airspace? A transponder:
  a. is required for airplane operations when visibility is less than 3 miles.
  b. with 4096 code or Mode S, and Mode C capability.
  c. with 4096 code capability is required except when operating at or below 1,000 feet AGL under the terms of a letter of agreement.
B11.5061(062)
In the contiguous U.S., excluding the airspace at and below 2,500 feet AGL, an operable coded transponder equipped with Mode C capability is required in all airspace above:
   a. 10,000 feet MSL.
   b. 14,500 feet MSL.
   c. 12,500 feet MSL.

B11.5063(063)
In accordance with 14 CFR part 91, supplemental oxygen must be used by the required minimum flightcrew for that time exceeding 30 minutes while at cabin pressure altitudes of:
   a. 12,500 feet MSL up to and including 14,000 feet MSL.
   b. 12,000 feet MSL up to and including 18,000 feet MSL.
   c. 10,500 feet MSL up to and including 12,500 feet MSL.

B11.5064(064)
What are the oxygen requirements when operating at cabin pressure altitudes above 15,000 feet MSL?
   a. Oxygen must be available for the flightcrew.
   b. The flightcrew and passengers must be provided with supplemental oxygen.
   c. Oxygen is not required at any altitude in a balloon.

B11.5067(065)
Approved flotation gear, readily available to each occupant, is required on each airplane if it is being flown for hire over water:
   a. in amphibious aircraft beyond 50 NM from shore.
   b. beyond power-off gliding distance from shore.
   c. more than 50 statute miles from shore.

B12.5069(066)
The carriage of passengers for hire by a commercial pilot is:
   a. not authorized in a "limited" category aircraft.
   b. not authorized in a "utility" category aircraft.
   c. authorized in "restricted" category aircraft.

B12.5068-2(067)
Which is true with respect to operating limitations of a "restricted" category airplane?
   a. A pilot of a "restricted" category airplane is required to hold a commercial pilot certificate.
   b. A "restricted" category airplane is limited to an operating radius of 25 miles from its home base.
   c. No person may operate a "restricted" category airplane carrying passengers or property for compensation or hire.

B12.5068-3(068)
Which is true with respect to operating limitations of a "primary" category airplane?
   a. A pilot of a "primary" category airplane must hold a commercial pilot certificate when carrying passengers for compensation or hire.
   b. A "primary" category airplane is limited to a specified operating radius from its home base.
   c. No person may operate a "primary" category airplane carrying passengers or property for compensation or hire.
B11.5070(069)
The maximum cumulative time that an emergency locator transmitter may be operated before the rechargeable battery must be recharged is:
   a. 30 minutes.
   b. 60 minutes.
   c. 45 minutes.

B07.5071(070)
No person may operate a large civil aircraft of U.S. registry which is subject to a lease, unless the lessee has mailed a copy of the lease to the FAA Aircraft Registration Branch, Technical Section, Oklahoma City, OK, within how many hours of its execution?
   a. 24.
   b. 48.
   c. 72.

B08.5073(071)
Which is true with respect to formation flights? Formation flights are:
   a. not authorized when visibilities are less than 3 SM.
   b. **not authorized when carrying passengers for hire.**
   c. authorized when carrying passengers for hire, with prior arrangement with the pilot in command of each aircraft in the formation.

B08.5073-2(072)
Which is true with respect to operating near other aircraft in flight? They are:
   a. authorized when carrying passengers for hire, with prior arrangement with the pilot in command of each aircraft in the formation.
   b. not authorized, unless the pilot in command of each aircraft is trained and found competent in formation.
   c. **not authorized, when operated so close to another aircraft they can create a collision hazard.**

B08.5073-3(073)
Which is true with respect to formation flights? Formation flights are:
   a. **not authorized, except by arrangement with the pilot in command of each aircraft.**
   b. not authorized, unless the pilot in command of each aircraft is trained and found competent in formation.
   c. authorized when carrying passengers for hire, with prior arrangement with the pilot in command of each aircraft in the formation.

B08.5075(074)
Two aircraft of the same category are approaching an airport for the purpose of landing. The right-of-way belongs to the aircraft:
   a. at the higher altitude.
   b. that is more maneuverable, and that aircraft may, with caution, move in front of or overtake the other aircraft.
   c. at the lower altitude, but the pilot shall not take advantage of this rule to cut in front of or to overtake the other aircraft.

B08.5074(075)
While in flight a helicopter and an airplane are converging at a 90° angle, and the helicopter is located to the right of the airplane. Which aircraft has the right-of-way, and why?
   a. The airplane, because airplanes have the right-of-way over helicopters.
   b. The helicopter, because helicopters have the right-of-way over airplanes.
   c. The helicopter, because it is to the right of the airplane.
B08.5076-1(076)
Airplane A is overtaking airplane B. Which airplane has the right-of-way?
   a. Airplane B; the pilot should expect to be passed on the left.
   b. Airplane B; the pilot should expect to be passed on the right.
   c. Airplane A; the pilot should alter course to the right to pass.

B08.5076-2(077)
An airplane is overtaking a helicopter. Which aircraft has the right-of-way?
   a. Helicopter; the pilot should expect to be passed on the left.
   b. Airplane; the airplane pilot should alter course to the left to pass.
   c. Helicopter; the pilot should expect to be passed on the right.

B08.5076-3(078)
During a night operation, the pilot of aircraft #1 sees only the green light of aircraft #2. If the
aircraft are converging, which pilot has the right-of-way? The pilot of aircraft:
   a. #1; aircraft #1 is to the right of aircraft #2.
   b. #2; aircraft #2 is to the right of aircraft #1.
   c. #2; aircraft #2 is to the left of aircraft #1.

B08.5076-4(079)
A pilot flying a single-engine airplane observes a multiengine airplane approaching from the left.
Which pilot should give way?
   a. Each pilot should alter course to the right.
   b. The pilot of the single-engine airplane should give way; the other airplane is to the left.
   c. The pilot of the multiengine airplane should give way; the single-engine airplane is
to its right.

B08.5112(080)
If the minimum safe speed for any particular operation is greater than the maximum speed
prescribed in 14 CFR part 91, the:
   a. operator must have a Memorandum of Agreement (MOA) with the controlling agency.
   b. aircraft may be operated at that speed.
   c. operator must have a Letter of Agreement with ATC.

B08.5077(081)
What is the maximum indicated airspeed authorized in the airspace underlying Class B airspace?
   a. 230 knots.
   b. 200 knots.
   c. 156 knots.

B08.5078(082)
Unless otherwise authorized or required by ATC, the maximum indicated airspeed permitted
when at or below 2,500 feet AGL within 4 NM of the primary airport within Class C or D airspace
is:
   a. 200 knots.
   b. 230 knots.
   c. 180 knots.

B12.5079(083)
What is the minimum altitude and flight visibility required for acrobatic flight?
   a. 2,000 feet MSL and 2 miles.
   b. 3,000 feet AGL and 1 mile.
   c. 1,500 feet AGL and 3 miles.
If not equipped with required position lights, an aircraft must terminate flight:
   a. at sunset.
   b. 1 hour after sunset.
   c. 30 minutes after sunset.

If an aircraft is not equipped with an electrical or anticollision light system, no person may operate that aircraft:
   a. after sunset to sunrise.
   b. after dark.
   c. 1 hour after sunset.

Which is required equipment for powered aircraft during VFR night flights?
   a. Gyroscopic direction indicator.
   b. Anticollision light system.

Except when necessary for takeoff or landing or unless otherwise authorized by the Administrator, the minimum altitude for IFR flight is:
   a. 3,000 feet over designated mountainous terrain; 2,000 feet over terrain elsewhere.
   b. 2,000 feet above the highest obstacle over designated mountainous terrain; 1,000 feet above the highest obstacle over terrain elsewhere.
   c. 2,000 feet over all terrain.

Who is primarily responsible for maintaining an aircraft in an airworthy condition?
   a. Pilot in command or operator.
   b. Owner or operator of the aircraft.
   c. The lead mechanic responsible for that aircraft.

If an aircraft's operation in flight was substantially affected by an alteration or repair, the aircraft documents must show that it was test flown and approved for return to service by an appropriately-rated pilot prior to being operated:
   a. under VFR or IFR rules.
   b. for compensation or hire.
   c. with passengers aboard.

A standard airworthiness certificate remains in effect as long as the aircraft receives:
   a. an annual inspection and a 100-hour inspection prior to their expiration dates.
   b. required maintenance and inspections.
   c. an annual inspection.
B13.5099(091)
An aircraft carrying passengers for hire has been on a schedule of inspection every 100 hours of
time in service. Under which condition, if any, may that aircraft be operated beyond 100 hours
without a new inspection?
   a. The aircraft may be flown for any flight as long as the time in service has not exceeded
      110 hours.
   b. The 100-hour limitation may be exceeded by not more than 10 hours if necessary
to reach a place at which the inspection can be done.
   c. The aircraft may be dispatched for a flight of any duration as long as 100 hours has not
      been exceeded at the time it departs.

B13.5100(092)
Which is true concerning required maintenance inspections?
   a. An annual inspection is required even if a progressive inspection system has been
      approved.
   b. An annual inspection may be substituted for a 100-hour inspection.
   c. A 100-hour inspection may be substituted for an annual inspection.

B13.5101(093)
An ATC transponder is not to be used unless it has been tested, inspected, and found to comply
with regulations within the preceding:
   a. 24 calendar months.
   b. 30 days.
   c. 12 calendar months.

B13.5105(094)
If an ATC transponder installed in an aircraft has not been tested, inspected, and found to comply
with regulations within a specified period, what is the limitation on its use?
   a. It may be used when in Class G airspace.
   b. It may be used for VFR flight only.
   c. Its use is not permitted.

B13.5095(095)
After an annual inspection has been completed and the aircraft has been returned to service, an
appropriate notation should be made:
   a. on the airworthiness certificate.
   b. in the aircraft maintenance records.
   c. in the FAA-approved flight manual.

B13.5102(096)
Aircraft maintenance records must include the current status of the:
   a. life-limited parts of each airframe, engine, propeller, rotor, and appliance.
   b. applicable airworthiness certificate.
   c. life-limited parts of only the engine and airframe.

B13.5104(097)
A new maintenance record being used for an aircraft engine rebuilt by the manufacturer must
include previous:
   a. changes as required by Airworthiness Directives.
   b. operating hours of the engine.
   c. annual inspections performed on the engine.
B13.5098(098)
Which is correct concerning preventive maintenance, when accomplished by a pilot?
- a. Records of preventive maintenance must be entered in the FAA-approved flight
- b. **A record of preventive maintenance must be entered in the maintenance records.**
- c. A record of preventive maintenance is not required.

B13.5094(099)
Assuring compliance with an Airworthiness Directive is the responsibility of the:
- a. pilot in command of that aircraft.
- b. **owner or operator of that aircraft.**
- c. pilot in command and the FAA certificated mechanic assigned to that aircraft.

B13.5103(100)
Which is true relating to Airworthiness Directives (AD's)?
- a. Compliance with AD’s is the responsibility of maintenance personnel.
- b. **Noncompliance with AD's renders an aircraft unairworthy.**
- c. AD's are advisory in nature and are, generally, not addressed immediately.

G10.5001(101)
Notification to Notification to the NTSB is required when there has been substantial damage:
- a. **which adversely affects structural strength or flight characteristics.**
- b. which requires repairs to landing gear.
- c. to an engine caused by engine failure in flight.

G11.5002(102)
NTSB Part 830 requires an immediate notification as a result of which incident?
- a. **Any required flight crewmember being unable to perform flight duties because of illness.**
- b. Damage to the landing gear as a result of a hard landing.
- c. Engine failure for any reason during flight.

G11.5003-1(103)
Which incident would require that the nearest NTSB field office be notified immediately?
- a. Ground fire resulting in fire equipment dispatch.
- b. Fire of the primary aircraft while in a hangar which results in damage to other property of more than $25,000.
- c. **In-flight fire.**

G11.5003-2(104)
Which airborne incident would require that the nearest NTSB field office be notified immediately?
- a. **Flight control system malfunction or failure.**
- b. Cargo compartment door malfunction or failure.
- c. Cabin door opened in-flight.

G11.5004-1(105)
While taxiing for takeoff, a small fire burned the insulation from a transceiver wire. What action would be required to comply with NTSB Part 830?
- a. **No notification or report is required.**
- b. An immediate notification must be filed by the operator of the aircraft with the nearest NTSB field office.
- c. A report must be filed with the avionics inspector at the nearest FAA field office within 48 hours.
11.5004-2(106)
While taxiing on the parking ramp, the landing gear, wheel, and tire are damaged by striking ground equipment. What action would be required to comply with NTSB Part 830?
   a. No notification or report is required.
   b. A report must be filed with the nearest FAA field office within 7 days.
   c. An immediate notification must be filed by the operator of the aircraft with the nearest NTSB field office.

11.5005(107)
During flight a fire which was extinguished burned the insulation from a transceiver wire. What action is required by regulations?
   a. An immediate notification by the operator of the aircraft to the nearest NTSB field office.
   b. No notification or report is required.
   c. A report must be filed with the avionics inspector at the nearest FAA Flight Standards District Office within 48 hours.

11.5006(108)
When should notification of an aircraft accident be made to the NTSB if there was substantial damage and no injuries?
   a. Within 10 days.
   b. Within 30 days.
   c. Immediately.

11.5007(109)
The operator of an aircraft that has been involved in an incident is required to submit a report to the nearest field office of the NTSB:
   a. within 10 days.
   b. only if requested to do so.
   c. within 7 days.

11.5008(110)
How many days after an accident is a report required to be filed with the nearest NTSB field office?
   a. 10.
   b. 2.
   c. 7.

B08.5115(111)
After an ATC clearance has been obtained, a pilot may not deviate from that clearance, unless the pilot:
   a. requests an amended clearance
   b. is operating VFR on top
   c. receives an amended clearance or has an emergency

A66.5043(112)
Excluding Hawaii, the vertical limits of the Federal Low Altitude airways extend from:
   a. 1,200 feet AGL up to, but not including, 18,000 feet MSL.
   b. 1,200 feet AGL up to, but not including, 14,500 feet MSL.
   c. 700 feet AGL up to, but not including, 14,500 feet MSL.

B08.5082-1(113)
Which is true regarding flight operations in Class B airspace?
   a. The pilot must receive an ATC clearance before operating an aircraft in that area.
   b. Flight under VFR is not authorized unless the pilot in command is instrument rated.
   c. Solo student pilot operations are not authorized.
B08.5082-2(114)
Which is true regarding pilot certification requirements for operations in Class B airspace?
   a. The pilot in command must hold at least a private pilot certificate with an instrument rating.
   b. Solo student pilot operations are not authorized.
   c. The pilot in command must hold at least a private pilot certificate.

B08.5082-3(115)
Which is true regarding flight operations in Class B airspace?
   a. The pilot in command must hold at least a student pilot certificate.
   b. The aircraft must be equipped with an ATC transponder and altitude reporting equipment.
   c. The pilot in command must hold at least a private pilot certificate with an instrument rating.

J08.5009(116)
What designated airspace associated with an airport becomes inactive when the control tower at that airport is not in operation?
   a. Class D, which then becomes Class C.
   b. Class D, which then becomes Class E.
   c. Class B.

J37.5564(117)
Which is true concerning the blue and magenta colors used to depict airports on Sectional Aeronautical Charts?
   a. Airports with control towers underlying Class C, D, and E airspace are shown in magenta.
   b. Airports with control towers underlying Class A, B, and C airspace are shown in blue, Class D and E airspace are magenta.
   c. Airports with control towers underlying Class B, C, D, and E airspace are shown in blue.

B08.5117(118)
When operating an aircraft in the vicinity of an airport with an operating control tower, in Class E airspace, a pilot must establish communications prior to:
   a. 8 NM, and up to and including 3,000 feet AGL.
   b. 4 NM, and up to and including 2,500 feet AGL.
   c. 5 NM, and up to and including 3,000 feet AGL

B08.5118(119)
When approaching to land at an airport with an ATC facility, in Class D airspace, the pilot must establish communications prior to:
   a. 4 NM, up to and including 2,500 feet AGL.
   b. 10 NM, up to and including 3,000 feet AGL.
   c. 30 SM, and be transponder equipped.

B08.5119-1(120)
Which is true regarding flight operations to or from a satellite airport, without an operating control tower, within the Class C airspace area?
   a. Aircraft must be equipped with an ATC transponder.
   b. Prior to entering that airspace, a pilot must establish and maintain communication with the ATC serving facility.
   c. Prior to takeoff, a pilot must establish communication with the ATC controlling facility.
B08.5119-2(121)
Which is true regarding flight operations to or from a satellite airport, without an operating control
tower, within the Class C airspace area?
   d. Aircraft must be equipped with an ATC transponder.
   e. Prior to entering that airspace, a pilot must establish and maintain communication
      with the ATC serving facility.
   f. Prior to takeoff, a pilot must establish communication with the ATC controlling facility.

B08.5120-1(123)
Which is true regarding flight operations in Class A airspace?
   a. Must conduct operations under instrument flight rules.
   b. Aircraft must be equipped with an approved ATC transponder.
   c. Aircraft must be equipped with approved distance measuring equipment (DME).

B08.5120-2(124)
Which is true regarding flight operations in Class A airspace?
   a. Aircraft must be equipped with an ATC transponder and altitude reporting
      equipment.
   b. May conduct operations under visual flight rules.
   c. Aircraft must be equipped with approved distance measuring equipment (DME).

J37.5572(125)
(Refer to figure 54, point 1) What minimum altitude is required to avoid the Livermore Airport
(LVK) Class D airspace?
   a. 2,901 feet MSL.
   b. 2,503 feet MSL.
   c. 3,297 feet MSL.

J37.5583(126)
(Refer to figure 52, point 6) Mosier Airport is:
   a. a nonpublic use airport.
   b. an airport restricted to use by private and recreational pilots.
   c. a restricted military stage field within restricted airspace.

J37.5584(127)
(Refer to figure 54, point 2) After departing from Byron Airport (C83) with a northeast wind, you
discover you are approaching Livermore Class D airspace and flight visibility is approximately 2
1/2 miles. You must:
   a. stay below 700 feet to remain in Class G and land.
   b. stay below 1,200 feet to remain in Class G.
   c. contact Livermore ATCT on 119.65 and advise of your intentions.

J37.5587(128)
(Refer to figure 54, point 6) The Class C airspace at Metropolitan Oakland International (OAK)
which extends from the surface upward has a ceiling of:
   a. 2,100 feet AGL.
   b. 8,000 feet MSL.
   c. both 2,100 feet and 3,000 feet MSL.
J37.5576(129)
(Refer to figure 54, point 4) The thinner outer magenta circle depicted around San Francisco International Airport is:
   a. an area within which an appropriate transponder must be used from outside of the Class B airspace from the surface to 10,000 feet MSL.
   b. the outer segment of Class B airspace.
   c. a Mode C veil boundary where a balloon may penetrate without a transponder provided it remains below 8,000 feet MSL.

J37.5569(130)
(Refer to figure 53, point 1) This thin black shaded line is most likely:
   a. a state boundary line.
   b. a military training route.
   c. an arrival route.

J37.5575(131)
(Refer to figure 52, point 9) The alert area depicted within the blue lines is an area in which:
   a. the flight of aircraft is prohibited.
   b. the flight of aircraft, while not prohibited, is subject to restriction.
   c. there is a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft.

J37.5565(132)
(Refer to figure 52, point 1) The floor of the Class E airspace above Georgetown Airport (Q61) is at:
   a. 700 feet AGL.
   b. 3,823 feet MSL.
   c. the surface.

J37.5566(133)
(Refer to figure 52, point 7) The floor of Class E airspace over the town of Woodland is:
   a. 1,200 feet AGL over part of the town and no floor over the remainder.
   b. 700 feet AGL over part of the town and no floor over the remainder.
   c. both 700 feet and 1,200 feet AGL.

J37.5567(134)
(Refer to figure 52, point 5) The floor of the Class E airspace over University Airport (005) is:
   a. 700 feet AGL.
   b. 1,200 feet AGL.
   c. the surface.

J37.5568(135)
(Refer to figure 52, point 8) The floor of the Class E airspace over the town of Auburn is:
   a. 1,200 feet AGL.
   b. 1,200 feet MSL.
   c. 700 feet AGL.

J37.5570(136)
(Refer to figure 53, point 2) The 1° indicates:
   a. the minimum safe sector altitude for that quadrangle.
   b. an antenna top at 1,600 feet AGL.
   c. the maximum elevation figure for that quadrangle.
J37.5581(137)  
(Refer to figure 52, point 4) The highest obstruction with high intensity lighting within 10 NM of Lincoln Regional Airport (LHM) is how high above the ground?  
   a.  1,254 feet.  
   b.  **299 feet.**  
   c.  662 feet.  

J37.5585(138)  
(Refer to figure 52, point 4) The terrain at the obstruction approximately 8 NM east southeast of the Lincoln Airport is approximately how much higher than the airport elevation?  
   a.  835 feet.  
   b.  376 feet.  
   c.  1,135 feet.  

J37.5577(139)  
When a dashed blue circle surrounds an airport on a sectional aeronautical chart, it will depict the boundary of:  
   a.  **Class D airspace.**  
   b.  Special VFR airspace.  
   c.  Class B airspace  

B09.5088(140)  
When operating an airplane for the purpose of takeoff or landing within Class D airspace under special VFR, what minimum distance from clouds and what visibility are required?  
   a.  **Remain clear of clouds, and the ground visibility must be at least 1 SM.**  
   b.  Remain clear of clouds, and the flight visibility must be at least 1 NM.  
   c.  500 feet beneath clouds, and the ground visibility must be at least 1 SM.  

B09.5089(141)  
At some airports located in Class D airspace where ground visibility is not reported, takeoffs and landings under special VFR are:  
   a.  **authorized by ATC if the flight visibility is at least 1 SM.**  
   b.  authorized only if the ground visibility is observed to be at least 3 SM.  
   c.  not authorized.  

B09.5090(142)  
To operate an airplane under SPECIAL VFR (SVFR) within Class D airspace at night, which is required?  
   a.  The Class D airspace must be specifically designated as a night SVFR area.  
   b.  The pilot must hold an instrument rating, but the airplane need not be equipped for instrument flight, as long as the weather will remain at or above SVFR minimums.  
   c.  **The pilot must hold an instrument rating, and the airplane must be equipped for instrument flight.**  

B08.5116-1(143)  
When approaching to land at an airport, without an operating control tower, in Class G airspace, the pilot should:  
   a.  enter and fly a traffic pattern at 800 feet AGL.  
   b.  **make all turns to the left, unless otherwise indicated.**  
   c.  fly a left-hand traffic pattern at 800 feet AGL.  

B08.5083(144)  
The minimum flight visibility for VFR flight increases to 5 statute miles beginning at an altitude of:  
   a.  **10,000 feet MSL if above 1,200 feet AGL.**  
   b.  10,000 feet MSL regardless of height above ground.  
   c.  14,500 feet MSL.
B08.5121(145)  
When weather information indicates that abnormally high barometric pressure exists, or will be above _____ inches of mercury, flight operations will not be authorized contrary to the requirements published in NOTAMs.
  a. 31.00  
  b. 32.00  
  c. 30.50

B08.5085(146)  
What is the minimum flight visibility and proximity to cloud requirements for VFR flight, at 6,500 feet MSL, in Class C, D, and E airspace?
  a. 1 mile visibility; clear of clouds.  
  b. 5 miles visibility; 1,000 feet above and 1,000 feet below.  
  c. 3 miles visibility; 1,000 feet above and 500 feet below.

J37.5588(147)  
(Refer to figure 53)
GIVEN:
Location Madera Airport (MAE)
Altitude 1,000 ft AGL
Position 7 NM north of Madera (MAE)
Time 3 p.m. local
Flight visibility 1 SM
You are VFR approaching Madera Airport for a landing from the north. You:
  a. are in violation of the CFR’s; you need 3 miles of visibility under VFR.  
  b. may descend to 800 feet AGL (Pattern Altitude) after entering Class E airspace and continue to the airport.  
  c. are required to descend to below 700 feet AGL to remain clear of Class E airspace and may continue for landing.

J13.5748(148)  
Pilots are required to have the anti-collision light system operating:
  a. anytime an engine is in operation.  
  b. anytime the pilot is in the cockpit.  
  c. during all types of operations, both day and night.

J29.5749(149)  
When in the vicinity of a VOR which is being used for navigation on VFR flights, it is important to:
  a. pass the VOR on the right side of the radial to allow room for aircraft flying in the opposite direction on the same radial.  
  b. exercise sustained vigilance to avoid aircraft that may be converging on the VOR from other directions.  
  c. make 90° left and right turns to scan for other traffic.

J29.5758(150)  
To scan properly for traffic, a pilot should:
  a. concentrate on any peripheral movement detected.  
  b. use a series of short, regularly spaced eye movements that bring successive areas of the sky into the central visual field.  
  c. slowly sweep the field of vision from one side to the other at intervals.
J31.5757(151)
As hyperventilation progresses, a pilot can experience:
   a. decreased breathing rate and depth.
   b. Heightened awareness and feeling of well being
   c. Symptoms of suffocation and drowsiness.

H351-5759(152)
Which is a common symptom of hyperventilation?
   a. Drowsiness.
   b. Euphoria - sense of well-being.
   c. Decreased breathing rate.

H992.5760(153)
Which would most likely result in hyperventilation?
   a. Insufficient oxygen.
   b. Excessive carbon monoxide.
   c. Insufficient carbon dioxide.

J31.5761(154)
Hypoxia is the result of which of these conditions?
   a. Excessive carbon dioxide in the bloodstream.
   b. Excessive oxygen in the bloodstream.
   c. Insufficient oxygen reaching the brain.

H992.5762(155)
To overcome the symptoms of hyperventilation, a pilot should:
   a. increase the breathing rate.
   b. swallow or yawn.
   c. slow the breathing rate.

J31.5763(156)
Which is true regarding the presence of alcohol within the human body?
   a. A small amount of alcohol increases vision acuity.
   b. An increase in altitude decreases the adverse effect of alcohol.
   c. Judgment and decision-making abilities can be adversely affected by even small amounts of alcohol.

J31.5764(157)
Hypoxia susceptibility due to inhalation of carbon monoxide increases as:
   a. Humidity increases
   b. Altitude increases
   c. Oxygen demand increases

H351.5765(158)
To best overcome the effects of spatial disorientation, a pilot should:
   a. Rely on body sensations
   b. Increase the breathing rate
   c. Rely on aircraft instrument indications

L05.5941(159)
Risk management, as part of the Aeronautical Decision Making (ADM) process, relies on which features to reduce the risks associated with each flight?
   a. Situational awareness, problem recognition, and good judgment.
   c. The mental process of analyzing all information in a particular situation and making a timely decision on what action to take.
Aeronautical Decision Making (ADM) is a:
   a. systematic approach to the mental process used by pilots to consistently determine the best course of action for a given set of circumstances.
   b. mental process of analyzing all information in a particular situation and making a timely decision on what action to take.
   c. decision making process which relies on good judgment to reduce risks associated with each flight.

The Aeronautical Decision Making (ADM) process identifies the steps involved in good decision making. One of these steps includes a pilot:
   a. making a rational evaluation of the required actions.
   b. developing the "right stuff" attitude.
   c. identifying personal attitudes hazardous to safe flight.

Examples of classic behavioral traps that experienced pilots may fall into are: trying to...
   a. assume additional responsibilities and assert PIC authority.
   b. promote situational awareness and then necessary changes in behavior.
   c. complete a flight as planned, please passengers, meet schedules, and demonstrate the "right stuff."

The basic drive for a pilot to demonstrate the "right stuff" can have an adverse effect on safety, by:
   a. a total disregard for any alternative course of action.
   b. allowing events, or the situation, to control his or her actions.
   c. generating tendencies that lead to practices that are dangerous, often illegal, and may lead to a mishap.

Most pilots have fallen prey to dangerous tendencies or behavior problems at some time. Some of these dangerous tendencies or behavior patterns which must be identified and eliminated include:
   a. Deficiencies in instrument skills and knowledge of aircraft systems or limitations.
   b. Peer pressure, get-there-itis, loss of positional or situation awareness, and operating without adequate fuel reserves.
   c. Performance deficiencies from human factors such as, fatigue, illness or emotional problems.

An early part of the Aeronautical Decision Making (ADM) process involves:
   a. obtaining proper flight instruction and experience during training.
   b. understanding the drive to have the "right stuff."
   c. taking a self-assessment hazardous attitude inventory test.

What are some of the hazardous attitudes dealt with in Aeronautical Decision Making (ADM)?
   a. Poor decision making, situational awareness, and judgment.
   b. Antiauthority (don't tell me), impulsivity (do something quickly without thinking), macho (I can do it).
   c. Risk management, stress management, and risk elements.
L05.5050(167)
When a pilot recognizes a hazardous thought, he or she then should correct it by stating the corresponding antidote. Which of the following is the antidote for MACHO?
   a. Not so fast. Think first.
   b. Follow the rules. They are usually right.
   c. Taking chances is foolish.

L05.5951(168)
What is the first step in neutralizing a hazardous attitude in the ADM process?
   a. Dealing with improper judgment.
   b. Recognition of hazardous thoughts.
   c. Recognition of invulnerability in the situation.

L05.5952(169)
What should a pilot do when recognizing a thought as hazardous?
   a. Label that thought as hazardous, then correct that thought by stating the corresponding learned antidote.
   b. Avoid developing this hazardous thought.
   c. Develop this hazardous thought and follow through with modified action.

L05.5953(170)
To help manage cockpit stress, pilots must:
   a. avoid situations that will degrade their abilities to handle cockpit responsibilities.
   b. be aware of life stress situations that are similar to those in flying.
   c. condition themselves to relax and think rationally when stress appears.

L05.5954(171)
What does good cockpit stress management begin with?
   a. Good life stress management.
   b. Eliminating life and cockpit stress issues.
   c. Knowing what causes stress.

L05.5955(172)
The passengers for a charter flight have arrived almost an hour late for a flight that requires a reservation. Which of the following alternatives best illustrates the ANTIAUTHORITY reaction?
   a. The pilot can't help it that the passengers are late.
   b. Those reservation rules do not apply to this flight.
   c. If the pilot hurries, he or she may still make it on time.

L05.5956(173)
While conducting an operational check of the cabin pressurization system, the pilot discovers that the rate control feature is inoperative. He knows that he can manually control the cabin pressure, so he elects to disregard the discrepancy and departs on his trip. He will just handle the system himself. Which of the following alternatives best illustrates the INVULNERABILITY reaction?
   a. What is the worst that could happen.
   b. It's too late to fix it now.
   c. He can handle a little problem like this.

L05.5957(174)
The pilot and passengers are anxious to get to their destination for a business presentation. Level IV thunderstorms are reported to be in a line across their intended route of flight. Which of the following alternatives best illustrates the IMPULSIVITY reaction?
   a. They can't change the weather, so they might as well go.
   b. A thunderstorm won't stop them.
   c. They want to hurry and get going, before things get worse.
L05.5958(175)
While on an IFR flight, a pilot emerges from a cloud to find himself within 300 feet of a helicopter. Which of the following alternatives best illustrates the "MACHO" reaction?
   a. He quickly turns away and dives, to avoid collision.
   b. He is not too concerned; everything will be alright.
   c. **He flies a little closer, just to show him.**

L05.5959(176)
When a pilot recognizes a hazardous thought, he or she then should correct it by stating the corresponding antidote. Which of the following is the antidote for ANTIAUTHORITY?
   a. Don't tell me. Follow the rules. They are usually right.
   b. Not so fast. Think first.
   c. It won't happen to me. It could happen to me.

L05.5960(177)
A pilot and friends are going to fly to an out-of-town football game. When the passengers arrive, the pilot determines that they will be over the maximum gross weight for takeoff with the existing fuel load. Which of the following alternatives best illustrates the RESIGNATION reaction?
   a. He can't wait around to de-fuel, they have to get there on time.
   b. **Well, nobody told him about the extra weight.**
   c. Weight and balance is a formality forced on pilots by the FAA.

L05.5961(178)
Which of the following is the final step of the Decide Model for effective risk management and Aeronautical Decision Making?
   a. Estimate.
   b. Eliminate.
   c. **Evaluate.**

L05.5962(179)
Which of the following is the first step of the Decide Model for effective risk management and Aeronautical Decision Making?
   a. Evaluate.
   b. Identify.
   c. **Detect.**

L05.5963(180)
The Decide Model is comprised of a 6-step process to provide a pilot a logical way of approaching Aeronautical Decision Making. These steps are:
   a. **Detect, estimate, choose, identify, do, and evaluate.**
   b. Determine, evaluate, choose, identify, do, and eliminate.
   c. Determine, eliminate, choose, identify, detect, and evaluate.

J25.5402(181)
The remarks section of the Aviation Routine Weather Report (METAR) contains the following coded information. What does it mean?
   a. Wind shift at three zero due to frontal passage.
   b. **Freezing drizzle below 4,500 feet and wind shear.**
   c. Freezing drizzle with cloud bases below 4,500 feet.

H961.5403(182)
What is meant by the Special METAR weather observation for KBOI?
   a. Rain and overcast at 1200 feet AGL.
   b. **Rain and mist obstructing visibility; rain began at 1812Z.**
   c. Rain and fog obscuring two-tenths of the sky; rain began at 1912Z.
J25.5404(183)  
The station originating the following METAR observation has a field elevation of 3,500 feet MSL. If the sky cover is one continuous layer, what is the thickness of the cloud layer? (Top of overcast reported at 7,500 feet MSL). METAR KHOB 151250Z 17006KT 4SM OVC005 13/11 A2998:
  a. 500 feet.
  b. **3,500 feet.**
  c. 2,500 feet.

J25.5406(184)  
What significant cloud coverage is reported by this pilot report? KMOBUA/OV 15NW MOB 1340Z/SK OVC 025/045 OVC 090:
  a. Three (3) separate overcast layers exist with bases at 250, 7,500 and 9,000 feet.
  b. The top of the lower overcast is **2,500 feet**; base and top of second overcast layer is 4,500 and 9,000 feet, respectively.
  c. The base of the second overcast layer is 2,500 feet; top of second overcast layer is 7,500 feet; base of third layer is 9,000 feet.

J25.5409(185)  
What is the meaning of the terms PROB40 2102 +TSRA as used in a Terminal Aerodrome Forecasts (TAF):
  a. Between 2100Z and 0200Z there is a forty percent (40%) probability of thunderstorms with heavy rain.
  b. Probability of heavy thunderstorms with rain showers below 4000 feet at time 2102.
  c. Beginning at 2102Z forty percent (40%) probability of heavy thunderstorms and rain showers.

J25.5410(186)  
What does the contraction VRB in the Terminal Aerodrome Forecast (TAF) mean?
  a. Cloud base is variable.
  b. **Wind direction is variable.**
  c. Wind speed is variable throughout the period.

J25.5411(187)  
Which statement pertaining to the following Terminal Aerodrome Forecast (TAF) is true? TAFKMEM 091135Z 0915 15005KT 5SM HZ BKN060FM1600 VRB04KT P6SM SKC:
  a. Wind direction is from 160° at 4 KTS and reported visibility is 6 statute miles.
  b. **SKC in the valid period indicates no significant weather and sky clear.**
  c. Wind in the valid period implies surface winds are forecast to be greater than 5 KTS.

H975.5412(188)  
The visibility entry in a Terminal Aerodrome Forecast (TAF) of P6SM implies that the prevailing visibility is expected to be greater than:
  a. 6 nautical miles.
  b. **6 statute miles.**
  c. 6 kilometers.

H962.5413(189)  
Terminal Aerodrome Forecasts (TAF) are issued how many times a day and cover what period of time?
  a. **Four times daily and are usually valid for a 24 hour period.**
  b. Six times daily and are usually valid for a 24 hour period including a 4-hour categorical outlook.
  c. Four times daily and are valid for 12 hours including a 6-hour categorical outlook.
The Hazardous Inflight Weather Advisory Service (HIWAS) is a broadcast service over selected VORs that provides:

- **continuous broadcast of inflight weather advisories.**
- SIGMETs, CONVECTIVE SIGMETs and AIRMETs at 15 minutes and 45 minutes past the hour.
- SIGMETs and AIRMETs at 15 minutes and 45 minutes past the hour for the first hour after issuance.

The Telephone Information Briefing Service (TIBS) provided by AFSSs includes:

- weather information service on a common frequency (122.0 mHz).
- **continuous recording of meteorological and/or aeronautical information available by telephone.**
- recorded weather briefing service for the local area, usually within 50 miles and route forecasts.

To obtain a continuous transcribed weather briefing including winds aloft and route forecasts for a cross-country flight, a pilot could monitor:

- a high-frequency radio receiver tuned to En Route Flight Advisory Service.
- the regularly scheduled weather broadcast on a VOR frequency.
- a TWEB on a low-frequency and/or VOR receiver.

En route Flight Advisory Service (EFAS) is a service that provides en route aircraft with timely and meaningful weather advisories pertinent to the type of flight intended, route, and altitude. This information is received by:

- listening to en route VORs at 15 and 45 minutes past the hour.
- **contacting flight watch, using the name of the ARTCC facility identification in your area, your aircraft identification, and name of nearest VOR, on 122.0 MHz below 17,500 feet MSL.**
- contacting the AFSS facility in your area, using your airplane identification, and the name of the nearest VOR.

Weather Advisory Broadcasts, including Severe Weather Forecast Alerts (AWW), Convective SIGMETs, and SIGMETs, are provided by:

- selected low-frequency and/or VOR navigational aids.
- **ARTCCs on all frequencies, except emergency, when any part of the area described is within 150 miles of the airspace under their jurisdiction.**
- AFSSs on 122.2 MHz and adjacent VORs, when any part of the area described is within 200 miles of the airspace under their jurisdiction.

How should the pilot make a VOR receiver check when the aircraft is located on the designated checkpoint on the airport surface?

- Set the OBS on 180° plus or minus 4°; the CDI should center with a FROM indication.
- **Set the OBS on the designated radial. The CDI must center within plus or minus 4° of that radial with a FROM indication.**
- With the aircraft headed directly toward the VOR and the OBS set to 000°, the CDI should center within plus or minus 4° of that radial with a TO indication.
J01.5552(196)
When using VOT to make a VOR receiver check, the CDI should be centered and the OBS should indicate that the aircraft is on the:
   a. 360 radial.
   b. 180 radial.
   c. 090 radial.

J01.5553(197)
When the CDI needle is centered during an airborne VOR check, the omnibearing selector should read:
   a. within 6° of the selected radial.
   b. 0° TO, only if you are due south of the VOR.
   c. within 4° of the selected radial.

J15.5555(198)
For IFR operations off established airways, ROUTE OF FLIGHT portion of an IFR flight plan should list VOR navigational aids which are no more than:
   a. 40 miles apart
   b. 70 miles apart
   c. 80 miles apart

B10.5062(199)
What is the maximum bearing error (+ or -) allowed for an operational VOR equipment check when using an FAA-approved ground test signal?
   a. 8 degrees.
   b. 6 degrees.
   c. 4 degrees.

B10.5122-1(200)
When must an operational check on the aircraft VOR equipment be accomplished to operate under IFR? Within the preceding:
   a. 10 days or 10 hours of flight time.
   b. 30 days.
   c. 30 days or 30 hours of flight time.

B10.5122-2(201)
Which data must be recorded in the aircraft logbook or other record by a pilot making a VOR operational check for IFR operations?
   a. Date of check, place of operational check, bearing error, and signature.
   b. VOR name or identification, place of operational check, amount of bearing error, and date of check.
   c. VOR name or identification, amount of bearing error, date of check, and signature.

J42.5561(202)
(Refer to figure 26) The final approach fix for the ILS precision approach is located at:
   a. ROMEN intersection/locator outer marker.
   b. DENAY intersection.
   c. glide slope intercept.

J42.5594(203)
(Refer to figure 27.) In the DEN ILS RWY 35R procedure, the glide slope intercept altitude is:
   a. 11,000 feet MSL.
   b. 9,000 feet MSL.
   c. 7,000 feet MSL.
J42.5595(204)  
(Refer to figure 27.) The symbol [9200] in the MSA circle of the ILS RWY 35R procedure at DEN represents a minimum safe sector altitude within 25 NM of:  
   a. Denver VORTAC.  
   b. Cruup I-AQD DME fix.  
   c. Dymon outer marker.

J42.5596(205)  
(Refer to figure 28.) During the ILS RWY 31R procedure at DSM, the minimum altitude for glide slope interception is:  
   a. 3,000 feet MSL.  
   b. 2,400 feet MSL.  
   c. 2,365 feet MSL.

J42.5597(206)  
(Refer to figure 28) If the glide slope becomes inoperative during the ILS RWY 31R procedure at DSM, what MDA applies?  
   a. 1,320 feet.  
   b. 1,360 feet.  
   c. 1,157 feet.

J42.5598(207)  
(Refer to figure 29) When approaching the ATL ILS RWY 8L, how far from the FAF is the missed approach point?  
   a. 12.0 NM.  
   b. 5.2 NM.  
   c. 4.8 NM.

J42.5599(208)  
(Refer to figure 30) When approaching the VOR/DME-A, the symbol [2800] in the MSA circle represents a minimum safe sector altitude within 25 NM of:  
   a. White Cloud VORTAC.  
   b. Baldwin Municipal Airport.  
   c. DEANI intersection.

J42.5600(209)  
(Refer to figure 30.) What minimum navigation equipment is required to complete the VOR/DME-A procedure?  
   a. One VOR receiver and DME.  
   b. One VOR receiver.  
   c. Two VOR receivers and DME.

B10.5123-1(210)  
For an airport with an approved instrument approach procedure to be listed as an alternate airport on an IFR flight plan, the forecasted weather conditions at the time of arrival must be at or above the following weather minimums.  
   a. Ceiling 800 feet and visibility 2 SM for nonprecision.  
   b. Ceiling 600 feet and visibility 2 NM for precision.  
   c. Ceiling 800 feet and visibility 2 NM for nonprecision.
B10.5123-2(211)
For an airport without an approved instrument approach procedure to be listed as an alternate airport on an IFR flight plan, the forecasted weather conditions at the time of arrival must have at least a:
   a. ceiling of 1,000 feet and visibility 3 NM.
   b. ceiling of 2,000 feet and visibility 3 SM.
   c. ceiling and visibility that allows for a descent, approach, and landing under basic VFR.

B10.5124-1(212)
On an instrument approach where a DH or MDA is applicable, the pilot may not operate below, or continue the approach unless the:
   a. flight visibility and ceiling are at, or above, the published minimums for that approach.
   b. aircraft is continuously in a position from which a descent to a normal landing, on the intended runway, can be made.
   c. approach and runway lights are distinctly visible to the pilot.

B10.4124-2(213)
Pilots are not authorized to land an aircraft from an instrument approach unless the:
   a. visual approach slope indicator and runway references are distinctly visible to the pilot.
   b. flight visibility and ceiling are at, or exceeds the minimums prescribed in the approach being used.
   c. flight visibility is at, or exceeds the visibility prescribed in the approach procedure being used.

B10.4124-3(214)
A pilot performing a published instrument approach is not authorized to perform a procedure turn when:
   a. receiving a radar vector to a final approach course or fix.
   b. maneuvering at minimum safe altitudes.
   c. maneuvering at radar vectoring altitudes.

B10.4125-1(215)
The pilot in command of an aircraft operated under IFR, in controlled airspace, not in radar contact, shall report by radio as soon as possible when:
   a. passing each designated reporting point, to include time and altitude.
   b. passing FL 180.
   c. changing control facilities.

J16.5556(216)
Which is true regarding the use of an Instrument Departure Procedure (DP) chart?
   a. At airfields where DP's have been established, DP usage is mandatory for IFR departures.
   b. To use a DP, the pilot must possess both the textual and graphic form of the approved standard departure.
   c. To use a DP, the pilot must possess at least the textual description of the approved standard departure.

J35.5591(217)
(Refer to figure 55) En route on V112 from BTG VORTAC to LTJ VORTAC, the minimum altitude crossing GYMME intersection is:
   a. 6,400 feet.
   b. 7,000 feet.
   c. 6,500 feet.
J35.5592(218)
(Refer to figure 55) En route on V448 from YKM VORTAC to BTG VORTAC, what minimum navigation equipment is required to identify ANGOO intersection?
   a. One VOR receiver.
   b. Two VOR receivers.
   c. One VOR receiver and DME.

J35.5593(219)
(Refer to figure 55) En route on V468 from BTG VORTAC to YKM VORTAC, the minimum en route altitude at TROTS intersection is:
   a. 7,100 feet.
   b. 10,000 feet.
   c. 11,500 feet.

J18.5557(220)
Which is true regarding STARs? STARs are:
   a. used to separate IFR and known VFR traffic.
   b. to facilitate transition between en route and instrument approach procedures.
   c. used at certain airports to relieve traffic congestion.

J18.5558(221)
While being radar vectored, an approach clearance is received. The last assigned altitude should be maintained until:
   a. established on a segment of a published route or instrument approach procedure.
   b. advised to begin descent.
   c. reaching the FAF.

**HElicopter Supplement (Fixed Wing Students Disregard The Following Questions)**

001. (34.) A20 COM
To act as pilot in command of a gyroplane carrying passengers, what must the pilot accomplish in that gyroplane to meet recent daytime flight experience requirements?
A. Make three takeoffs and landings to a full stop within the preceding 90 days.
B. Make nine takeoffs and landings within the preceding 30 days.
*C. Make three takeoffs and landings within the preceding 90 days.*

002. (52.) B07 COM
When operating a U.S.-registered civil aircraft, which document is required by regulation to be available in the aircraft?
*A. A current, approved Rotorcraft Flight Manual.*
C. A manufacturer’s Operations Manual.

003. (69.) B09 COM
To begin a flight in a rotorcraft under VFR, there must be enough fuel to fly to the first point of intended landing and, assuming normal cruise speed, to fly thereafter for at least
A. 30 minutes.
B. 45 minutes.
*C. 20 minutes.*
004. (80.) B12 COM
Which is true with respect to operating limitations of a "restricted" category helicopter?
A. A "restricted" category helicopter is limited to an operating radius of 25 miles from its home base.
*B. No person may operate a "restricted" category helicopter carrying passengers or property for compensation or hire.
C. A pilot of a "restricted" category helicopter is required to hold a commercial pilot certificate.

005. (86.) B11 COM
What transponder equipment is required for helicopter operations within Class B airspace? A transponder
*A. with 4096 code and Mode C capability.
B. is required for helicopter operations when visibility is less than 3 miles.
C. with 4096 code capability is required except when operating at or below 1,000 feet AGL under the terms of a letter of agreement.

006. (111.) B08 COM
Which minimum flight visibility and distance from clouds is required for a day VFR helicopter flight in Class G airspace at 3,500 feet MSL over terrain with an elevation of 1,900 feet MSL?
*A. Visibility-1 mile; distance from clouds-500 feet below, 1,000 feet above, and 2,000 feet horizontally.
B. Visibility-3 miles; distance from clouds-1,000 feet below, 1,000 feet above, and 1 mile horizontally.
C. Visibility-3 miles; distance from clouds-500 feet below, 1,000 feet above, and 2,000 feet horizontally.

007. (112.) B08 COM
Basic VFR weather minimums require at least what visibility for operating a helicopter within Class D airspace?
*A. 3 miles.
B. 2 miles.
C. 1 mile.

008. (136.) B08 COM
Operating regulations for U.S.-registered civil helicopters require that during movement on the surface, takeoffs, and landings, a seat belt and shoulder harness (if installed) must be properly secured about each
A. flight crew member only.
*B. flight and cabin crew members.
C. person on board.

009. (139.) B08 COM
Minimum safe altitude rules require that helicopter pilots
A. not fly lower than 500 feet, except when necessary for takeoff or landing.
*B. comply with routes and altitudes prescribed by the FAA.
C. not fly closer than 500 feet to any person, vessel, vehicle, or structure.
010. (140.) B08 COM
Minimum safe altitude rules authorize helicopter pilots to
*A. fly at less than 500 feet if they do not create a hazard to persons or property on the surface.
B. fly closer than 500 feet to any person, vehicle, vessel, or structure on the surface.
C. fly at less than 500 feet.

011. (144.) B08 COM
When approaching to land at an airport, without an operating control tower, in Class G airspace, a helicopter pilot should
*A. avoid the flow of fixed-wing aircraft.
B. enter and fly a traffic pattern at 800 feet AGL.
C. make all turns to the left, unless otherwise indicated.*
FIGURE 27.—ILS/DME RWY 35R (DEN).
**FIGURE 28.**—ILS RWY 31R (DSM).
MISSED APPROACH
Climbing left turn to 2600 via HIC R-345 to Hoppr 14 DME and hold.

ELEV 828

VOR/DME-A

FIGURE 30.—VOR/DME-A (7D3).
Figure 52—Sectional Chart Excerpt.
FIGURE 55.—En Route Low Altitude Chart Segment.