TopFlight Aero, LLC

FLIGHT REVIEW TRAINING GUIDE

The Flight Review requirements and definitions are specified by FAR 61.56. When conducting a Flight Review, Flight Instructors are encouraged to reference FAA Advisory Circular 61-98C. This handout is designed to help meet the requirements for one hour of ground instruction and one hour of flight instruction.

The Flight Review should be a learning experience. If the instructor finds a weak area, the deficiency must be corrected before the Flight Review endorsement is issued. The main objective is the safety of you and your passengers.

Training Outline

GROUND PREFLIGHT DISCUSSION:

1. Go over FAR Questions
2. Review a VFR Sectional Chart and plan a cross-country flight to a nearby airport.
3. Review the latest procedures for obtaining preflight weather briefings and for filing flight plans.
4. Review the maneuvers that will be flown during the flight review.

FLIGHT:

1. Preflight procedures
2. Cockpit management
3. Flight maneuvers
4. Emergency procedures
5. Communications
6. Postflight procedures

POSTFLIGHT DISCUSSION:

1. Flight critique
2. Suggestions for further training or practice
3. Questions
4. Logbook endorsement

MANEUVERS (any or all of the following maneuvers may be performed during a Flight Review.)

- Preflight procedures
- Use of flow patterns, mental and written checklists
- Cockpit management
- Taxiing
- Distractions during critical phases of flight
- Takeoffs and departures:
  - Normal and crosswind
  - Short field
  - Soft field
- 360-degree steep turns
- Slow flight and Stalls
  - Power-on
  - Power-off
  - Spin awareness
- Instrument flight
  - Recovery from unusual attitudes
  - 180-degree turn
- Emergency Procedures
  - Alternator failure
  - Engine failure and simulated forced landing
- Approaches and landings:
  - Normal and crosswind
  - Short field
  - Soft field
  - Go-around
- Postflight procedures
- Traffic pattern procedures
- Communications
- Control coordination
- Scanning for collision avoidance
- Planning
- Awareness
- Judgment

Flight Review Questions

These questions are intended for use as a tool for use by a pilot and CFI for discussion of FARs and safe flying practices. There is no minimum score required.

The first 25 questions of this exam are from the ***Flight Review Prep Guide***, an online course offered for WINGS credit at FAASafety.gov. We recommend that you take this course and complete the exam for WINGS credit prior to taking a Flight Review. You can find the course at online at FAASafety.gov.

1. What is the most important thing to remember about being Pilot-in-Command?
   - ☐ A. The FAA holds you directly responsible for the flight, and considers you to be the final authority regarding its operation.
   - ☐ B. With a private pilot certificate, you can share expenses equally with passengers.
   - ☐ C. You can log flight time whenever you are acting as PIC of an aircraft.
   - ☐ D. You can log PIC flight time only when you are the sole manipulator of the controls.

2. During your preflight inspection, you verify that the airworthiness certificate is in the aircraft. Is this document sufficient to establish that the aircraft is airworthy?
   - ☐ A. Maybe. It depends on the issuance and validity dates of the airworthiness certificate.
   - ☐ B. No. It is necessary to determine that the aircraft conforms to its type certificate and that all required maintenance and inspections have been performed.
   - ☐ C. Yes. The airworthiness certificate proves that the aircraft is legally airworthy.
   - ☐ D. Not applicable. The preflight inspection is all that is required.

3. You are flying into a busy airport with intersecting runways in Class C airspace. The tower says, "cleared to land runway 35, hold short of runway 26." You have never been to this airport, and it is your first experience with a land-and-hold-short (LAHSO) clearance. What are your options?
   - ☐ A. You may accept, but only after the landing is assured since go-arounds are not permitted after you have accepted the LAHSO clearance.
   - ☐ B. As PIC, you have the final authority to accept or decline a LAHSO clearance. If you believe it would compromise safety, you must decline.
   - ☐ C. The regulations require you to adhere to all ATC clearances, including LAHSO, so you must accept, acknowledge, and comply.
   - ☐ D. You may accept, but use the full length of the runway if you determine after landing that you cannot safely stop at the hold short point.

4. It is a hot summer afternoon. As you taxi from the ramp, the controller instructs you to taxi to the intersection of taxiway Kilo and runway 34 for an intersection departure. She advises that you have 2,700 feet available. What are your options?
   - ☐ A. You may accept the intersection departure only in day VFR.
   - ☐ B. You must accept and comply with the intersection departure clearance.
   - ☐ C. You must decline an intersection departure clearance unless you have at least a commercial certificate.
   - ☐ D. If for any reason you prefer to use full length, you should inform ATC and request an amended clearance.

5. You are taking your family to the mountains on the last day of summer vacation. Weather for the outbound portion of your trip is excellent, but the forecast calls for a 50% chance of severe thunderstorms in the afternoon. You have an important meeting at work the following day, and it will be the first day of school for your children. They will be bitterly disappointed to miss the mountain trip, but driving is out of the question. What should you do?
   - ☐ A. Go ahead, but carry an overnight bag and phone numbers for school and work contacts if the storms prevent your scheduled return.
   - ☐ B. Go ahead, but plan to leave at least an hour before the storms are forecast to begin.
   - ☐ C. Go ahead, there is at least a 50% chance that the storms will not materialize.
   - ☐ D. Go ahead, but only if you have weather avoidance gear on board the aircraft.

6. Ground control issues a clearance to taxi via Delta to Runway 15, hold short of Runway 4. What do you have to do?
   - ☐ A. Read back only the hold short instruction.
   - ☐ B. Acknowledge and start your taxi.
   - ☐ C. Start your taxi and monitor ground; ATC will inform you if you make a wrong turn.
   - ☐ D. Read back the clearance, including hold short instructions, and start your taxi.

7. You own and fly a Cessna 210. You generously allow a select group of your friends to fly it from time to time. Who is responsible for what? (Choose the most complete answer).
   - ☐ A. The owner/operator - you, in this case - is responsible for verifying that the aircraft is in an airworthy condition before each flight.
   - ☐ B. The airframe & powerplant mechanic who performs the annual inspection is responsible for maintaining the aircraft in an airworthy condition.
   - ☐ C. The owner/operator is responsible for maintaining the aircraft in an airworthy condition, and the PIC is responsible for verifying that the aircraft is airworthy and in a condition for safe flight before operating it.
   - ☐ D. The PIC is responsible for maintaining the aircraft in an airworthy condition.

8. The shortest distance between two of the points on your route takes you through a restricted area. Can you penetrate this airspace?
   - ☐ A. Yes, but only if the restricted area is not active, or "hot," at the time of your flight.
   - ☐ B. No. Flying VFR through a restricted area is never authorized.
   - ☐ C. Yes, but it is better to avoid this airspace.
   - ☐ D. It depends. If the restricted area is not active and has been released to the controlling agency, the ATC facility may allow aircraft to operate in this airspace - but you must ask!

9. Your radio failed about 10 miles from your destination airport, which is in Class D airspace. You continue inbound and watch the tower for light gun signals. You see a steady red light. What is the controller trying to tell you?
   - ☐ A. Exercise extreme caution.
   - ☐ B. Return to starting point.
   - ☐ C. Give way to other aircraft and continue circling.
   - ☐ D. Airport unsafe - do not land.

10. As PIC, you know that it is your responsibility to ensure that the aircraft you intend to fly is airworthy and in a condition for safe flight. In reviewing the dispatch log, you find that it has been 45 days since the last VOR check was performed. Can you legally depart on a night VFR cross-country flight?
    - ☐ A. No. The VOR check must have been performed in the last 30 days.
    - ☐ B. No. If you are flying at night, it is not legal to fly without a current VOR check.
    - ☐ C. Yes, but only if you use ground-based facilities to perform the required VOR check before takeoff.
    - ☐ D. Yes. The VOR check is required only if the aircraft is being used for IFR.

11. You are preparing for a daytime pleasure flight in the local practice area. The weather is well above VFR minimums. During the preflight inspection, you discover that the magnetic compass is leaking fluid, and it does not appear that it can swing freely. Can you go?
    - ☐ A. Yes, as long as the weather is VFR and you fly only in the daytime.
    - ☐ B. No. The magnetic compass is a required item for day VFR flight.
    - ☐ C. Maybe. If you properly placard the malfunctioning instrument, you may legally proceed.
    - ☐ D. Yes, as long as the directional gyro is operational, you may fly without the magnetic compass.

12. You are preparing for a night VFR flight. Conditions are well above VFR minimums, and you plan to remain in the local practice area. What equipment must you have?
    - ☐ A. Flaps, lights, alternator, source of electricity.
    - ☐ B. Position lights, landing light, spare set of fuses.
    - ☐ C. Attitude indicator, heading indicator, rate of turn indicator, landing light.
    - ☐ D. Source of electricity, anticollision light, fuses, position lights, landing light (if used for hire).

13. You are flying a night VFR cross-country in a Cessna 182 that uses approximately 13 gph. You take off with 78 gallons of usable fuel. what is the longest time you can fly without using any of the legally required reserve fuel?
    - ☐ A. Five hours and thirty minutes.
    - ☐ B. Five hours and fifteen minutes.
    - ☐ C. Five hours.
    - ☐ D. Six hours.

14. Which of the following sets of items must be inspected every 24 calendar months?
    - ☐ A. Altimeter, pitot-static system, transponder
    - ☐ B. Pitot-static instruments
    - ☐ C. VOR, altimeter, transponder, gyro instruments
    - ☐ D. Gyro instruments

15. You are flying under VFR to an important meeting with a business colleague in a rented Piper Arrow. The weather is day VFR. In a routine scan, you notice that the attitude indicator has tumbled, and a glance at the suction gauge indicates that the vacuum pump has failed. Under what conditions can you continue?
    - ☐ A. You can legally continue, because the attitude indicator is not a required item for day VFR flight.
    - ☐ B. You can continue, but only if you cover the gyro instruments and placard the suction gauge as "inoperative."
    - ☐ C. You cannot legally continue, because the attitude indicator is a required item.
    - ☐ D. You can continue, but you must advise Flight Watch immediately of the instrument failure.

16. When reviewing the aircraft's logbooks and maintenance records, which of the following would cause concern about compliance with required inspections?
    - ☐ A. Altimeter and pitot-static system check performed 16 months ago.
    - ☐ B. Annual inspection performed 11 months and 15 days ago.
    - ☐ C. 100-hour inspection performed 76 hours ago.
    - ☐ D. Transponder checked 36 months ago.

17. Which kind(s) of airspace require(s) an explicit clearance from ATC?
    - ☐ A. Class A
    - ☐ B. Classes B and C
    - ☐ C. Classes A, B, and C
    - ☐ D. Classes A and B

18. Your airplane uses 8.5 gph and carries 40 gallons of usable fuel. You are making a day VFR cross-country flight, with an ETE of 3.5 hours. Strong headwinds have reduced your groundspeed. You have now been aloft for 4 hours and 5 minutes. Your destination is still 30 minutes away. Your GPS indicates that the nearest airport with fuel available is 15 minutes flying time behind you. What should you do?
    - ☐ A. The reserve is for planning purposes only. Since you still have more than 30 minutes of fuel remaining, continue to the destination.
    - ☐ B. You cannot cut into your fuel reserve, so you need to plan an off-field landing.
    - ☐ C. Since the nearest airport with fuel is now behind you, your only choice is to continue to the destination.
    - ☐ D. Turn back to the nearest airport with fuel. The strong headwinds will become tailwinds, and you will not have to worry about cutting into your reserve or running out of fuel.

19. You are flying VFR on a summer day with building cumulus all around. You have requested VFR flight following. The controller gives you a suggested heading to avoid penetrating a restricted area. It appears that the heading will take you into a cloud. What should you do?
    - ☐ A. Comply with the ATC clearance.
    - ☐ B. Request an IFR clearance.
    - ☐ C. Tell the controller that you are unable to comply, and suggest an alternative that will keep you clear of clouds.
    - ☐ D. Cancel VFR flight following.

20. You are planning a trip from your home airport, Denver Front Range Airport (FTG), to Colorado Springs (COS), which is about 59 miles away. You fly the route often, and the weather is VMC. Given these conditions, what information are you required to obtain before departing?
    - ☐ A. Just NOTAMs and TFRs
    - ☐ B. Weather, NOTAMs, TFRs, and runway lengths
    - ☐ C. Weather forecast
    - ☐ D. Weather, performance, traffic delays, fuel requirements, alternatives, and runway lengths.

21. You and two of your best friends have shared (equally, of course) the expense to rent a Cessna 182 for a day trip to the coast. You decide to have dinner, and you agree to be the "designated pilot" and abstain from alcohol. One friend has a couple of beers, but the other drinks enough to be noticeably intoxicated. What should you do?
    - ☐ A. You may not allow anyone who is under the influence of alcohol or drugs to be carried in your aircraft, except in an emergency, unless the person is under proper medical care.
    - ☐ B. Since you did not drink any alcohol yourself, there is no reason why you cannot fly your friends home as planned.
    - ☐ C. If, in your judgment as PIC, the intoxicated passenger will not pose a danger to the flight, and if he or she does not have access to the flight controls, you may carry him or her in the airplane.
    - ☐ D. If your non-intoxicated friend can safely restrain the intoxicated passenger, you may proceed.

22. Weather conditions for your flight are basic VFR: visibility is 5 miles in haze, and ceiling is 3,000 overcast. You are flying in Class E airspace. How high can you go without violating VFR cloud clearance requirements?
    - ☐ A. You must be at least 1,000 below, so you cannot exceed 2,000.
    - ☐ B. You must remain clear of clouds, so you can fly at 3,000 as long as you are not in a cloud at this altitude.
    - ☐ C. You must be at least 500 below, so you cannot exceed 2,500.
    - ☐ D. You must be at least 2,000 below, so you cannot exceed 1,000.

23. You have reserved a Cessna 172 for a day VFR cross-country trip. During your preflight, you notice that the turn coordinator has been placarded "inop." Can you legally operate the airplane?
    - ☐ A. Yes. The turn coordinator is not required for day VFR, and it has been placarded as required by regulations.
    - ☐ B. Yes. The minimum equipment list and kind of operation equipment list for the Cessna 172 does not require a functioning turn coordinator for day VFR.
    - ☐ C. No. The turn coordinator is required for day and night VFR.
    - ☐ D. No. The turn coordinator is required if you are flying anywhere away from the vicinity of the airport.

24. Visibility for your VFR flight is 6 miles, and the ceiling is reported as 5,000 broken. You are flying northbound on a Victor airway at 3,500 MSL. What are the applicable cloud clearance requirements for this flight.
    - ☐ A. 1,000 ft below, 500 ft above, and 3 sm horizontal distance from clouds.
    - ☐ B. Clear of clouds and 1 sm visibility.
    - ☐ C. 1,000 ft below, 1,000 ft above, and 1 sm horizontal distance from clouds.
    - ☐ D. 500 ft below, 1,000 ft above, and 2,000 ft horizontal distance from clouds.

25. You are approaching Class C airspace that you want to transit. When you call Approach Control, the initial response is, "Centurion 4752K, standby." What does this response mean?
    - ☐ A. The controller is too busy to work your flight right now, so you must remain clear of Class C until further advised.
    - ☐ B. The use of the word "standby" means that two-way communications have not been established, so you must remain clear of Class C.
    - ☐ C. You may not proceed into Class C until you receive an explicit clearance into this airspace.
    - ☐ D. The use of your call sign indicates that two-way radio communications have been established, so you may proceed into Class C.

26. Requirements to fly as pilot-in-command include which of the following: (select all that apply)
    - ☐ A. Flight Review within the preceding 24 calendar months.
    - ☐ B. Current medical certificate.
    - ☐ C. 5 takeoffs and landings to a full stop within the previous 90 days.
    - ☐ D. Pilot certificate, medical, and a government issued photo I.D. in your possession.
    - ☐ E. Pilot's logbook in your possession.
    - ☐ F. If passengers are to be carried, 3 takeoffs and landings within the last 90 days in the same category and class of aircraft.
    - ☐ G. 6 hours as pilot-in-command during the previous 6 months.

27. You are 39 years old; your Third-Class Medical Certificate expires at the end of the last day of the ____ month after the month of the date of examination.
    - ☐ A. 12th
    - ☐ B. 24th
    - ☐ C. 36th
    - ☐ D. 48th
    - ☐ E. 60th

28. To fly as pilot-in-command of a high performance (more than 200 hp) airplane, you must:
    - ☐ A. have 5 hours in that type aircraft.
    - ☐ B. have 3 takeoffs and landings in that type aircraft.
    - ☐ C. have a high performance log book endorsement from a flight instructor.

29. To fly at night (defined here as between 1-hour after sunset and 1-hour before sunrise) with passengers, a pilot must have made at least:
    - ☐ A. 3 landings at night in the last 90 days in same make and model of aircraft.
    - ☐ B. 5 takeoffs and landings to a full stop in the last 90 days in the same type of aircraft.
    - ☐ C. 3 takeoffs and landings to a full stop at night in the last 90 days in the same category and class of aircraft.

30. Upon moving, the FAA must be advised of your new address within
    - ☐ A. 30 days
    - ☐ B. 60 days
    - ☐ C. 90 days
    - ☐ D. 120 days

31. For a flight not in the vicinity of an airport, your preflight planning must include all available information to include: (select all that apply.)
    - ☐ A. Weather reports and forecasts
    - ☐ B. Airport information and runway lengths.
    - ☐ C. Takeoff and landing distance considerations from the Pilot’s Operating Handbook
    - ☐ D. Aircraft performance relating to weight and balance, and all operating limitations.
    - ☐ E. Review of logbooks and other maintenance records.
    - ☐ F. A preflight inspection to determine that the airplane is safe for flight.

32. Which documents must be carried in the aircraft (select all that apply.)
   - ☐ A. Registration certificate.
   - ☐ B. Airworthiness certificate.
   - ☐ C. Operating limitations.
   - ☐ D. Airframe and engine logs.
   - ☐ E. Weight and balance information.
   - ☐ F. Radio station license.

33. The alcohol and drug rules require that no alcohol be consumed within _____hours before a flight, and the pilot's blood (or breath) alcohol concentration must be lower than _____.
   - ☐ A. 12 / 0.04
   - ☐ B. 8 / 0.08
   - ☐ C. 24 / 0.04
   - ☐ D. 8 / 0.04

34. No person may begin a VFR flight unless they have enough fuel to fly to the first point of intended landing and then fly for an additional _____ minutes at normal cruise during daylight hours or ____ minutes at normal cruise at night.
   - ☐ A. 45 / 90
   - ☐ B. 30 / 60
   - ☐ C. 30 / 45
   - ☐ D. 60 / 120

35. Safety belts are required by each occupant of an aircraft except for_____ when they are lap held, or for persons engaged in sport parachuting.
   - ☐ A. pets
   - ☐ B. children under 4 years old
   - ☐ C. children under 2 years old
   - ☐ D. grandparents

36. Before each flight, passengers must be briefed on _____and the pilot in command will insure that each passenger has been notified _____.
   - ☐ A. the smoking regulations / to be quiet while the pilot is talking.
   - ☐ B. how to fasten and unfasten the safety belt and, if installed, shoulder harness / to fasten his or her safety belt and, if installed, his or her shoulder harness.
   - ☐ C. how to fasten and unfasten the safety belt and, if installed, shoulder harness / that smoking is not allowed.
   - ☐ D. the expected weather conditions / about the airsickness equipment in the aircraft.

37. When approaching another aircraft head-on or nearly so, you should alter course
   - ☐ A. to the left.
   - ☐ B. to the right.
   - ☐ C. higher.
   - ☐ D. lower.
   - ☐ E. all of the above.

38. When overtaking another aircraft you should alter course
   - ☐ A. to the left to remain well clear.
   - ☐ B. to the right to remain well clear.
   - ☐ C. higher to remain well clear.
   - ☐ D. lower to remain well clear.
   - ☐ E. any of the above.

39. The maximum speed aircraft operating within 4 nm of the primary airport in Class C or D airspace is
   - ☐ A. 200 mph.
   - ☐ B. 200 kts.
   - ☐ C. 250 mph.
   - ☐ D. 250 kts.

40. When flying over congested area, except when necessary for takeoff or landing, you must fly at least _____ over the highest obstacle within _____.
   - ☐ A. 500 ft / 1000 ft
   - ☐ B. 1000 ft / 2 nm
   - ☐ C. 1000 ft / 2000 ft
   - ☐ D. 2000 ft / 2000 ft

41. Congested areas are indicated on VFR charts by
   - ☐ A. a magenta dashed line.
   - ☐ B. a blue dashed line.
   - ☐ C. yellow shading.
   - ☐ D. There is no indication of congested area on VFR charts.

42. Altimeter settings on a cross-country flight must be set to the current reported altimeter setting of a station along the route and within _____ nautical miles of the aircraft.
   - ☐ A. 50
   - ☐ B. 500
   - ☐ C. 200
   - ☐ D. 100

43. You are forced to land at a controlled airport without communications. Upon entering the pattern and turning final, you notice a flashing green light coming from the tower. This indicates that
   - ☐ A. you are cleared to land.
   - ☐ B. you may not land and must go to another airport.
   - ☐ C. you are to go-around and attempt another landing.
   - ☐ D. you are cleared to land and taxi to maintenance.

44. If planning to pass over and remain above Class D airspace, ATC contact is not necessary.
   - ☐ A. True
   - ☐ B. False

45. Operation within Class B airspace requires (select all that apply.)
    - ☐ A. Clearance from ATC.
    - ☐ B. Two-way communications radio.
    - ☐ C. At least a Private Pilot's Certificate.
    - ☐ D. A navigational receiver (VOR).
    - ☐ E. Transponder with altitude encoding capability.

46. Special VFR minimums are
    - ☐ A. 3 sm visibility and 2000 ft ceiling.
    - ☐ B. 1 sm visibility and clear of clouds.
    - ☐ C. 3 sm visibility and clear of clouds.
    - ☐ D. 5 sm visibility and 3000 ft ceiling.

47. Special VFR is applicable in
    - ☐ A. all airspace except Class A.
    - ☐ B. Class B, C, and D airspace.
    - ☐ C. controlled airspace.
    - ☐ D. controlled airspace below 10,000 ft MSL.

48. Specific VFR cruising altitudes apply
    - ☐ A. when in level cruising flight.
    - ☐ B. when in level cruising flight more than 3000 ft above the surface.
    - ☐ C. at all times when flying VFR.
    - ☐ D. only in controlled airspace.

49. You plan to fly over level terrain, which has an elevation of 2,800 ft. MSL, in Class E airspace. Your true course is 188 degrees and the magnetic variation is 12 degrees east. Airports along the route report a broken layer of clouds at 7,000 feet. The wind forecast indicates that you want to fly as high as possible. The highest you can legally fly is
    - ☐ A. 5,500 feet MSL.
    - ☐ B. 6,500 feet MSL.
    - ☐ C. 7,500 feet MSL.
    - ☐ D. 8,500 feet MSL.
    - ☐ E. 9,500 feet MSL.

50. Night flight requires that _____ lights be used from sunset to sunrise.
    - ☐ A. strobe.
    - ☐ B. position.
    - ☐ C. landing.
    - ☐ D. beacon (if installed) and position.

51. When flying unpressurized airplanes, supplemental oxygen for the pilot is required for all flights of more than _____ minutes whenever the altitude is greater than _____ MSL. Oxygen is required for the pilot at all times above _____ MSL. Oxygen must be available to everyone on board above _____ MSL.
    - ☐ A. 15 / 12,500 ft / 14,000 ft / 15,000 ft
    - ☐ B. 30 / 12,500 ft / 15,000 ft / 16,000 ft
    - ☐ C. 30 / 12,500 ft / 14,000 ft / 15,000 ft
    - ☐ D. 60 / 12,500 ft / 14,000 ft / 15,000 ft

52. With regard to inoperative instruments and equipment for light, piston-powered airplanes, which statements are correct? (select all that are correct.)
    - ☐ A. A minimum equipment list (MEL) must be developed for the airplane and approved by the FAA.
    - ☐ B. The airplane may not be operated if the inoperative instrument or equipment is part airplane's equipment list.
    - ☐ C. The airplane may not be operated if the inoperative instrument or equipment is required by FAR § 91.205.
    - ☐ D. The instrument or equipment must be removed from the airplane, or deactivated and placarded "inoperative," if maintenance is required to do so, it must logged in the appropriate maintenance record, and a determination must be made by the pilot or mechanic, that the inoperative instrument or equipment does not constitute a hazard to the aircraft.

53. An ADS-B out transmitter will be required after January 1, 2020 in which areas? (Select all that apply.)
    - ☐ A. Class A airspace.
    - ☐ B. Class B airspace.
    - ☐ C. Class C airspace.
    - ☐ D. Within 30 nm of specially designated airports, from the surface upward to 10,000
    - ☐ E. In all airspace above the ceiling and within the lateral boundaries of a Class B or Class C airspace area upward to 10,000 feet MSL.
    - ☐ F. In all airspace (48 contiguous states) at and above 10,000 feet MSL, excluding airspace at and below 2,500 feet above the surface.

54. Which statements are correct? (Select all that are true.)
    - ☐ A. All airplanes must have had an annual inspection within the preceding 18 calendar months which includes a 6-month grace period.
    - ☐ B. All airplanes must have had an annual inspection within the preceding 12 calendar months.
    - ☐ C. If an airplane is operated for hire (passengers or flight instruction), it must have had a 100-hour inspection within the previous 100 hours.
    - ☐ D. If an airplane is required to have 100-hour inspections, a 10-hour grace period is allowed if the airplane is en route to a place where the inspection can be performed.
    - ☐ E. An airplane can qualify for progressive maintenance inspections in lieu of annual and 100-hour inspections if the owner has a mechanic check the airplane before and after each flight.

PERFORMANCE COMPUTATIONS

Base your computations on the airplane that will be used for the Flight Review.

DEPARTURE PERFORMANCE: Airplane is at maximum gross weight at an airport elevation of 1,957 feet MSL. There is no wind and the temperature is 25° C. Compute the following information:

- ☐ Ground roll: _____ feet
- ☐ Total distance to clear a 50-ft obstacle: _____ feet
- ☐ Rate of climb: _____ feet per minute.
- ☐ If multiengine, the accelerate-stop distance for this takeoff is _____ ft.

EN ROUTE PERFORMANCE: Cruising altitude is 9,500 feet MSL, the temperature is -4° C, and you'll use 65 percent power. Compute the following information:

- ☐ Engine Speed: _____rpm
- ☐ Manifold Pressure (if applicable):_____in.
- ☐ True Airspeed: _____knots
- ☐ Fuel Burn:_____gph

DESTINATION AIRPORT PERFORMANCE: Airport elevation is 1,000 feet MSL, temperature is 23° C, a 15 knot quartering headwind exists, and you're using full flaps. Compute the following information:

- ☐ Ground roll _____ feet.
- ☐ Total landing distance over a 50 foot obstacle_____ feet

WEIGHT AND BALANCE COMPUTATION: All seats are full. The pilot weighs 200 lbs, copilot 150 lbs, and each remaining passenger weghs120 lbs. You have 100 lbs of baggage.

- ☐ How much fuel can you carry and still remain with the allowable gross weight? _____ gal.
- ☐ Is the airplane within its CG limits? _____
- ☐ What is the CG when all but 10 gallons of fuel have been consumed? _____

DENSITY ALTITUDE: Pressure altitude is 6,000 feet, temperature is 90 degrees F.

- ☐ What is the density altitude? _____ feet
- ☐ How much runway would be required for takeoff if your airplane was loaded to its maximum gross weight?_____ feet

ANSWERS

1. A
2. B
3. B
4. D
5. A
6. D
7. C
8. D
9. C
10. D
11. B
12. D
13. B
14. A
15. A
16. D
17. D
18. D
19. C
20. D
21. A
22. C
23. A
24. D
25. D
26. A, B, D, and F
27. E
28. C
29. C
30. A
31. A, B, C, D, E, and F.
32. A, B, C, and E (& F if operating internationally)
33. D
34. C
35. C
36. B
37. B
38. B
39. B
40. C
41. C
42. D
43. C
44. A
45. A, B, and E.
46. B
47. D
48. B
49. C
50. D
51. C
52. C and D
53. A, B, C, D, E, and F
54. B, C, and D